

**HEALING PAWS: ANIMALS IN THE WORK-PLACE
ASSISTING WITH STRESS MANAGEMENT**

by

MICHELLE SANTOS CARSTENS

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Supervisor: Prof I Ferns

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Declaration

Student number: 33229570

I declare that **Healing Paws: Animals in the work-place assisting with stress management** is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Signature

(Michelle Santos Carstens)

Date

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Summary

The importance of stress management is emphasized throughout this study as well as the need to cater stress management programmes to the unique needs of individuals. The possibility of introducing an animal-assisted stress management programme into the work environment is explored by means of a qualitative study in order to test out the feasibility of such an intervention. The positive physical and psychological effects animals have on humans has been extensively researched and reported. Eleven participants were randomly chosen from within the same department by means of purposive sampling. Semi-structured interviews were held with each participant and thematic analysis was used to analyse the transcribed interviews. Various themes were identified and explored with the most prominent highlighting the need for privacy, respect and connection. Although animals do have positive effects on some employees, there are individual differences that need to be considered. An electronic animal-assisted stress management intervention is recommended.

Key words: occupational stress, burnout, stress management programmes, open-office, work overload, animal-assisted therapy, animal-assisted intervention, animal-assisted activities, pet therapy, animal-based therapy, companion animals, social support, anthropomorphism, biophilia hypothesis and human-animal bond.

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Chapter 1

Introduction

Animals are such agreeable friends. They ask no questions and they pass no criticism.

- George Eliot

A 12, 000-year-old tomb was recently discovered in modern Israel. The arrangement of its occupants, a person with an arm wrapped around a puppy (Davis & Valla cited in O'Haire, 2009) provides proof that affectionate relationships have existed for millennia between people and animals. This affection is still observable in today's fast-paced world suggesting that humankind finds bonding with animals beneficial. The advantages of the human-animal bond have been well researched (Allen, Blascovich & Mendes, 2002; Allen, Shykoff & Izzo, 2001; Dimitrijevic, 2009; Edney & Robinson, 1998; Headey, 1999; Pompeo, 2005; Sable, 1995; Serpell, 1990; Sobo, Eng & Kassity-Krich, 2006) and encompass various and numerous spectrums of both physical and psychological well-being. Yet this relationship with animals remains a largely untapped, positive resource that scientists are just beginning to fully appreciate: animals can help humans to reduce stress which has been described as the silent killer (Eliot, 1988).

In the 21st century, we live in a rapidly developing world that is constantly evolving and bursting with new-found ideas and technologies. This is a world where what was novel and innovative yesterday will most probably be practically obsolete tomorrow. We are poised on the edge of mind-blowing discoveries across a spectrum of scientific, medical and technological fields (for example, the creation of electronic book readers which are impacting on the publishing world or new experimental drugs and treatments that are being tested on cancer patients) and we can only begin to imagine the possibilities waiting in the not-too-distant future. In this constantly evolving world, rapid changes

have been made to the working environment: technological advancements, global competitiveness, changing economies as well as changes in organisational structures (Johnson, Cooper, Cartwright, Donald, Taylor & Millet, 2005) have resulted in greater workloads, increased job insecurity and lack of job clarity. Employees often find themselves in highly stressful situations where they are expected to carry out high volumes of work with fewer resources and tighter deadlines. Considering that most people spend almost 50% of their time at work and that 78% have reported that work is their biggest stressor (Farrell & Geist-Martin, 2005), it becomes clear that work-related stress plays a pivotal role in our physical and psychological well-being. If inadequately dealt with, stress can even result in burnout - a term coined by Freudenberger (1974) to describe workers' reactions to chronic stress resulting in long-term exhaustion and diminished interest in previously enjoyed activities.

1.1 A brief overview of stress

When too much stress is experienced, there is a possibility that the individual will stop functioning normally by experiencing sleep disturbances, erratic eating patterns and high levels of anxiety. In this way, the negative emotions associated with stress taint both our quality of life and sense of well-being (Cox, Griffiths & Rial-Gonzales, 2000). This is expounded upon by Maller (cited in O'Haire, 2009) who has reported that the incidence of stress-related disorders such as anxiety and depression are on the increase.

1.1.1 Definition of stress

Stress has been defined in countless ways by various researchers (Cohen, Tyrell & Smith, 1993; Cox et al., 2000; Francis & Barling, 2005; Gerdes, Louw, Van Ede & Louw, 1998; Lazarus, 1993; Neddermeyer, 2007). A common thread running through most definitions is that stress is the state experienced when a person encounters a situation that demands more from them than what they are able to deal with at that given point in time.

Lazarus and Folkman (cited in Rothmann, 2008) have defined psychological stress as the negative cognitive and emotional conditions provoked within a person when they

perceive that they lack the resources to cope with the pressures placed upon them. Stress entails an individual's perception that the environmental demands exceed his/her capacity. Stress, therefore, is a perception: what is perceived by one individual as a stressor might not be considered threatening by someone else (Nedermeyer, 2007). The individual's appraisal of both the situation and his/her ability to cope with it will, therefore, determine the degree to which an event is considered stressful.

Stress has been broken down into two categories: eustress and distress. Eustress has positive and beneficial effects whereas distress is negative and harmful (Haubenhofer & Kirchengast, 2007; Shigemi, Mino, Tsuda, Bavzono & Aoyama, 1997). Examples of eustress include getting a promotion at work, watching a scary movie, riding a rollercoaster, engaging in exercise and going on holiday.

For purposes of this research, the focus will remain on distress and, especially, on occupational stress which results when the equilibrium between the individual's emotional and cognitive resources and his/her environment are affected by extenuating circumstances (Rothmann, 2008). This stress consists of three components (Spielberger, Vagg & Wasala cited in Rothmann, 2008):

- sources of stress that are encountered in the work environment;
- the perception and appraisal of this particular stressor by the employee; and
- the emotional reactions evoked when the stressor is appraised as threatening.

According to Rothmann (2008), exhaustion (incapability to perform) and cynicism (unwillingness to perform) were found to be strongly related to occupational stress. These two aspects are also common in burnout which has been described as the reactions to chronic stress common in occupations involving numerous direct interactions with people (Jennings, 2008).

1.1.2 Physiological effects of stress

Seyle (cited in Fries, 2009) suggested that the human body reacts to stress in three stages and this response has been termed the General Adaption Syndrome (GAS):

- Alarm reaction - this is the initial response to any new situation.
- Resistance stage - the individual is continually exposed to the stressor and must learn how to cope.
- Stage of exhaustion - the individual's energy reserves are depleted leaving him/her feeling shattered.

Stress hormones, adrenaline and cortisol, are released into the blood stream in response to stress. If the person is exposed to high levels of stress for a prolonged period of time, these elevated hormonal levels will have long-term consequences for his/her health (Cox et al., 2000). Increases in cortisol levels have been correlated with suppression of the immune system, giving rise to chronic illnesses such as coronary heart disease and even depression (Fries, 2009).

Disorders usually associated with stress include bronchitis, coronary heart disease, mental illness, thyroid disorders, skin diseases, rheumatoid arthritis, peptic ulcers and ulcerative colitis, obesity, headaches and migraines, tuberculosis and diabetes (Cox, 1978).

As denoted by the Gestalt concept (Jordaan & Jordaan, 1998), we are more than the sum of our parts. Mind and body are intricately connected. Thus, when the physical side is afflicted, the psychological side is affected.

1.1.3 Psychological effects of stress

Stress is expressed in a variety of ways and involves changes in emotional, behavioural and cognitive functioning. In some cases, health-promoting behaviours are compromised (Cox et al., 2000; Sapolsky, 2004). These behaviours include sleeping, relaxing, good dietary habits and exercise. Conversely, health-risk behaviours such as smoking and excessive drinking are enhanced.

These behaviours, in turn, weaken an often already fragile coping system. The individual's available resources become even more inadequate at coping with stress

because he/she now has additional problems caused by the above-mentioned actions. This leads to even more dysfunctional behaviour resulting in a vicious cycle of destructive tendencies.

Fear, anxiety, aggression, hostility and social withdrawal are some of the psychological responses to the experience of stress (Gerdes et al., 1998). These are some of the common symptoms present when an individual reaches a state of complete exhaustion and mental breakdown.

1.1.4 Burnout

Burnout has been defined by Freudenberger and Richelson (1980) as the experience of an exhausted and/or frustrated person, triggered by devotion to a cause that has failed to meet certain expectations. It is a psychological term for the state of long-term exhaustion and diminished interest in activities that were previously important to the affected individual. Burnout has also been defined as a reaction to unrelieved stress (Jennings, 2008) whereas Brill (1984) has described burnout as a particular kind of prolonged job stress.

When the definitions proposed above are taken into consideration, it becomes apparent that not all researchers agree on how to conceptualise burnout. Maslach (1982), however, points out that there are three elements of burnout that underlie most of the proposed definition, namely that there is a general agreement that burnout:

- occurs at an individual level;
- entails an internal psychological experience involving feelings, motivations and expectations; and
- is a negative experience for the individual.

Whether burnout is a specific type of stress, an experience to chronic stress or a reaction to this stress is, however, not as important as the severe and debilitating implications that burnout has on affected individuals. The consequences of burnout have been recognised since the 1930s and 1940s when the American industry suffered a

widespread onslaught of heart disease amongst executives. The causes behind this rising epidemic were linked to hypertension, coronary disease, migraine and tension headaches, peptic ulcers, renal disease and asthma (Freudenberger, 1974) and it was suggested that the above conditions were aggravated, if not triggered, by the high levels of chronic stress that was experienced by these executives. These conditions are physical indications of burnout (Schaufeli & Enzmann, 1998) and, therefore, it was concluded that the increases in incidence of heart disease could be a result of burnout (Freudenberger, 1974). The effects of burnout on individuals will be discussed in greater depth in the next chapter.

The negative outcomes related to burnout are, therefore, numerous and, if unrelieved, can trigger the onset of depression and the breakdown of social functioning.

1.2 Animal-assisted therapy

The human-animal bond is a phenomenon that has been attracting quite a bit of attention within the scientific community over the last few decades. Researchers are acknowledging that animals might be the missing link in bringing about successful therapeutic treatments in some of the more resistant cases (for example, Reichert (1994) utilized case study designs to examine the effect of animals as an adjunct to individual and group therapy for girls who were sexually abused and found tentative evidence that animals were helpful in assisting the girls to work through their traumas).

1.2.1 Definition of animal-assisted therapy

Nimer and Lundahl (2007, p. 225) define animal-assisted therapy "as the deliberate inclusion of an animal in a treatment plan where the introduction of the animal is designed to accomplish predefined outcomes believed to be difficult to achieve otherwise or outcomes best addressed through exposure to an animal".

The Delta Society (www.deltasociety.org) is a non-profit organisation founded in 1977 which aims to assist people to live healthier lives by integrating therapy, service and companion animals into their lives. The Delta Society differentiates between animal-

assisted therapy (AAT), which revolves around specific, individualised goals, and animal-assisted activities (AAA), which have no specific treatment goals and can be used identically with many people. An example of AAT would be when a cat is brought into a rehabilitation centre to help an occupational therapist who is working with a child who has difficulty controlling fine motor skills. This session would be designed to improve the child's abilities by encouraging him/her to fasten leashes and collars. An example of AAA, on the other hand, would be when a group of volunteers take their pets to a nursing home on a monthly basis to visit. These visits would be influenced by facility staff's instructions but no treatment goals would be set. The positive effects animals have on people's physical and psychological well-being would serve as the motivation behind these visits.

Friesen (2010) has reported that thirty years of research indicates that therapy animals offer physiological, emotional, social and physical support to humans because they are perceived as non-judgemental participants not directly involved with the complications of human life. For this reason, animals can form part of a multidisciplinary treatment plan in the combat against rising stress levels and the aim of maintaining physical and mental health in humans (Le Roux & Kemp, 2009).

1.2.2 Health benefits resulting from the human-animal bond: A brief overview

Positive psychological and psychosocial benefits have been linked to the presence of companion animals (Dimitrijevic, 2009). A national survey conducted in Australia in 1994-95 reported that the health benefits provided by pets contributed to an estimated saving of \$988 million (Headey, 1999) with even limited contact with animals being beneficial (Pompeo, 2005).

1.2.2.1 Physical health benefits associated with animals

Decades of research have shed light on the numerous physical improvements pet-owners experience as a result of contact with their beloved animal. Today, it is more commonly embraced that a healthy body is just as important as a healthy mind in coping with stress.

Some of the more eminent findings in this regard include the discovery that pet owners have significant lower systolic blood pressure (Allen et al., 2001; Dimitrijevic, 2009; Edney & Robinson, 1998; Headey, 1999; Jennings 1995; Pompeo, 2005; Sable, 1995; Serpell, 1990; Sobo et al., 2006) than people who do not have pets. Researchers have speculated that the mere act of paying attention to a pet, and the physical act of petting, may reduce sympathetic arousal and result in decreases in blood pressure (Allen et al., 2001; Headey, 1999; Wells, 2009).

Allen, Blascovitch, Tomaka and Kelsey (1991) studied adult female dog owners. Participants were asked to perform a task under various conditions. Results showed that participants who had to carry out their task in the presence of a dog showed significant reductions in blood pressure and pulse rate when compared to participants in other conditions (for example performing a task in the presence of a close female friend). Perhaps this finding can be attributed to the perception that animals are non-judgemental and, therefore, the participants can focus on the task at hand, while receiving support and comfort from the dog's presence, without worrying about how they are being perceived.

Further research has also found that male pet owners have significantly lower cholesterol levels than female pet owners (Jennings, 1995) although pet owners in general have lower cholesterol levels than people who do not own pets (Wells, 2009). High cholesterol and blood pressure levels are risk factors for stress-related coronary heart disease. Wells confirms that pet owners have significantly lower risk factors than non-owners, thereby supporting the hypothesis that animals have a positive effect on our physical health.

This hypothesis is given more weight by Friedman's findings (cited in Headey, 1999) that pet owners who suffered a heart attack were much less likely to die in the following year than heart-attack sufferers who do not own pets. Dog owners were roughly 8.6 times more likely to be alive one year after their heart attack than patients who did not own a pet (Dimitrijevic, 2009; Halm, 2008; Somervill, Kruglikova, Robertson, Hanson & MacLin, 2008; Wells, 2009). Patronek and Glickman (cited in O'Haire, 2009) suggest that the effect pet ownership has on psychological risk factors acts as a buffer in times

of stress and, ultimately, protects owners to a certain degree from the negative effects of stress.

1.2.2.2 Positive psychological effects of animals on humans

Companion animals contribute to the psychological health of humans by assisting them in reducing their levels of stress, anxiety, depression and loneliness (Le Roux & Kemp, 2009). These are factors that leave human beings vulnerable to both physical and mental illnesses as well as diminish their quality of life.

Allen et al. (2002) found that both pet owners and non-owners have the same physiological response to stress when they are alone but pet owners exhibit lower responses in terms of heart rate and blood pressure levels when their pets were present. Pets can, therefore, buffer reactivity to the experience of acute stress. They speculate that pets encourage positive feeling states that may enhance a person's ability to cope with stress.

Companion animals create a more positive environment by offering unconditional love and affection (Pompeo, 2005; Wells, 2009) and this helps to create a diminished perception of stress. Lockwood's study (cited in O'Haire, 2009) lends support to this claim. In this experiment, participants were shown two sets of pictures which were identical except for the presence or absence of an animal. These pictures depicted provocative yet ambiguous situations. Participants consistently described those images with animals as friendlier, happier and less threatening. When an animal is present, people may experience the situation as less threatening and a person's perception of their circumstances influences his/her stress response.

Dimitrijevic (2009) supports this further by reporting that women who keep pets experience less loneliness. Animals also help humans to function better in daily activities and improve their social interaction. By fostering a feeling of sound mental health and improved daily functioning, animals can assist humans in changing their outlook on life. Companion animals can teach humans to live fully in the present moment and, by eliciting this feeling of meaningfulness, help people to appraise the

situation as it really is (devoid of our irrational thoughts and self-defeating behaviour). This sense of meaningfulness can prevent people from blowing things out of proportion and perceiving a threat where there is often none.

It is clear that animals may have profound effects on the physical and psychological health of humans. Both aspects are critical for well-being: a healthy mind in a healthy body is better able to cope with life's challenges without depleting available resources.

1.3 Research rationale

Taking the profound and severe effects of long-lasting stress on physical and emotional health into consideration, stress management tools are paramount to psychological well-being. People need successful ways in coping with their stress levels if they are to live full, rich lives. Research in this field should be devoted to exploring alternate ways in which to aide stressed individuals to adapt to rising demands.

The effects of stress (and the possible development of burnout) on people's physical and psychological well-being drive home the fact that effective stress management interventions are crucial. Stress has been regarded as an occupational health risk since the mid-1950s (Jennings, 2008) and, although personality is an important variable in the burnout equation, it is imperative that researchers explore alternative methods of stress management in order to ensure that every individual, with all their unique characteristics, has a plethora of viable options at hand. This will result in matching individuals' personalities with a stress intervention that caters for their particular needs.

1.3.1 The research problem

Research has shown that companion animals can act as a buffer in stressful situations (Allen et al., 2001; Allen et al., 2002; Dimitrijevic, 2009; Headey, 1999; Pompeo, 2005; Wells, 2009). But can non-companion animals in a work place ameliorate the effects of stress? Will different individuals, from different cultures and different backgrounds, experience the same affects? How will having an animal in the workplace affect

individual staff members? Will this be a viable approach in combating the effects of stress at work?

The answers to some of these questions could assist companies in reviewing their stress management programmes in the future. An understanding of employees' feelings, opinions and beliefs is a fundamental aspect of a successful campaign aimed at corporate wellbeing. With this in mind, the researcher will conduct an exploratory study within her own department in order to obtain information to answer the research question. Can animals in the workplace assist staff in reducing their stress levels?

1.3.2 The purpose of this study

The aim of this study is to determine how staff, within the same department, perceive their own stress levels and whether or not they believe that being in the presence of an animal or animals can reduce these stress levels. It is imperative that in-depth information is obtained in order to establish attitudes towards having animals in the work environment and these results will function as building blocks for future studies.

1.3.3 The motivation behind this study

In today's day and age, people spend the majority of their time at work. Unfortunately, a bad day at work can filter through to other aspects of people's lives and, often, it is their loved ones that bear the brunt of their frustration and exhaustion. The work environment, therefore, plays a pivotal role in psychological well-being. Stress experienced at work as a result of office politics, high job demands, pressure and work load affects people both physically and psychologically (Jennings, 2008; Rothmann, 2008; Shigemi et al., 1997). If inadequately dealt with, stress can even result in burnout.

Once the severe consequences of excessive and chronic stress on well-being are taken into consideration, there is no doubt that it is crucial to explore every possible avenue that can reduce stress levels or, at the very least, help people cope better with the effects of stress on both their physical and psychological health.

It would appear that animals can have a positive influence on our general health, including our stress levels, as well as our psychological well-being. The results reported above, however, may not be replicable in a South African context. South Africa is a country rich in culture and diversity. Would the same results be found in a country ripe with individuality?

The researcher will conduct an exploratory, qualitative study to determine how individuals working in the same department experience work-related stress and whether or not the presence of animals has an impact on their stress levels. Due to the various cultures and upbringings that characterise most offices in this country, it is important to first determine how people would react to the possibility of utilizing animal-assisted therapy/activities as a stress management method. The result of this study will help in determining the nature and scope of future research and may lay the groundwork for policies that will work for the benefit of the average worker in South Africa.

1.4 Presentation

In order to address these objectives, a more in-depth review of the existing literature is needed. The subsequent chapters will be devoted to exploring these concepts further.

Chapter 2 will explore the effects of stress on people's well-being. Various approaches to stress, causes of occupational stress and the physical and psychological impact of burnout will be discussed.

Chapter 3 will provide a brief history of animal-assisted therapy. The benefits of the human-animal bond will be expounded upon and theories as to why these effects are experienced will be deliberated. Ethical considerations will also be taken into consideration.

Chapter 4 will be dedicated to research methodology. Sample selection, data collection and analysis, reliability and validity as well as ethical considerations will be discussed.

Chapter 5 will cover the analysis and discussion of the researcher's results.

Chapter 6 will offer a conclusion as well as recommendations for future studies.

1.5 Summary

Stress experienced in the work environment in this day and age is taking its toll on people's physical, emotional and mental health. It is imperative that stress management programmes be implemented to assist staff in utilizing their resources better and, ultimately, adapting to the demands made on them in productive and effective ways. In order for these programmes and interventions to be successful, it is important to ensure that there is a variety of ways in which people can find stress relief. This entails research being conducted in order to explore novel methods of stress intervention. Animal therapy may be a possible option in this movement. The potential behind this approach, however, needs to be explored fully in the South African context due to the complexity of our culture-rich heritage.

Chapter 2

Stress - the silent killer

Dogs need to sniff the ground; it's how they keep abreast of current events. The ground is a giant dog newspaper, containing all kinds of late-breaking dog news items, which, if they are especially urgent, are often continued in the next yard.

- Dave Barry

2.1 Introduction

The experience of stress is a fundamental part of human lives. People need stress to spur them on to meet challenges and overcome obstacles. People need stress to add richness and flavour to their lives by encouraging them to push a little harder in order to achieve their goals and fulfil their potential. There is, however, a fine line between healthy amounts of this eustress and the debilitating, illness-inducing effects of distress. When a person experiences too much stress, their normal day-to-day functioning (for example, sleeping and healthy eating patterns) becomes impaired and their quality of life is diminished as a result.

Lazarus (cited in Shigemi et al., 1997) confirms that the daily hassles of living can be a cause of chronic stress. The profound impact of this is made even clearer by Beatty's (cited in Fries, 2009) report that it is the long-term response to stress, as opposed to acute experiences, that is dangerous to people's health. This is emphasised by Matteson and Ivancevich's (1987) findings that the more a person is in a stress-response mode, the more susceptible he/she is to the severe consequences of stress, including fatigue, disease, disability and even death.

2.2 Definitions of stress

Literature is inundated with a multitude of definitions of stress as well as numerous depictions of various kinds of stress. Although the scientific community might differ in

their conceptualisation of stress, there is an underlying thread of similarity that is shared, as determined by the researcher: when an individual finds him/herself in a situation where he/she cannot successfully meet the demands made on him/her, then stress is experienced and this state is often characterized by a sense of discomfort and is accompanied by physical and psychological reactions which have profound effects on the individual's health and well-being.

Lazarus and Folkman (cited in Cohen et al., 1993) have defined psychological stress as the negative effects experienced, both cognitively and emotionally, when a person realises that their ability to cope is not sufficient in light of the demands being placed upon them. Lazarus (1993) goes a step further and differentiates between three kinds of psychological stress: harm, threat and challenge. Harm refers to a state of loss in the sense that psychological damage has already been done and cannot be reversed. Threat comes into play when no harm has yet occurred but is on the horizon; whereas challenge stems from demands that people feel capable of meeting once they have utilized the resources made available to them.

Gerdes et al. (1998), however, remind the scientific community that stress might also be experienced as a result of under-demand: a person's abilities might not be adequately utilized and this will elicit feelings of frustration, boredom and lack of stimulation. The importance of healthy amounts of stress cannot be disputed. However, the focus of this study will be on distress and, especially, on occupational stress.

Occupational stress results when the equilibrium between the individual's emotional and cognitive resources and his/her environment is affected by extenuating circumstances (Rothmann, 2008). This stress consists of three components (Spielberger, Vagg & Wasala cited in Rothmann, 2008):

- sources of stress that are encountered in the work environment,
- the perception and appraisal of this particular stressor by the employee, with **stressor** defined by Le Fevre, Mathey and Kolt (2003) as the external force acting on the individual ; and
- the emotional reactions evoked when the stressor is appraised as threatening.

When the reports cited above are considered, it becomes apparent that the interaction between the individual and the environment creates the foundation for the experience of stress (Francis & Barling, 2005; Lazarus & Launier, 1978). Stress entails an individual perception that the demands of the environment exceed available psychosocial resources. Westin (1999) elaborates by reporting that the extent to which an event is experienced as stressful depends on the individual's appraisal of both the situation and his/her ability to cope. Stress is, therefore, a perception. Neddermeyer (2000) states that what one person perceives as a threat might not be experienced by another person in the same manner. If we are to proceed from this standpoint, then a person's appraisal of their situation, and the importance they assign to the event in question, is tantamount to the way they approach the stress experience.

2.3 Approaches to the definition and study of stress

There are three different but overlapping approaches to stress, especially within an occupational setting, that have defined the nature of research in this field. These will now be briefly discussed.

2.3.1 The engineering approach

Within this approach, occupational stress is conceptualised as a deleterious characteristic of the work environment (Cox et al., 2000). Stress is usually conceived in terms of the high level of demand that the individual is expected to meet and is treated as an independent variable (that is, the environmental cause of ill-health). Spielberg (cited in Cox et al., 2000), however, felt that stress within this setting should refer to the characteristics of the environment as they are objectively seen by all those concerned. Stress is, therefore, an objectively measureable aspect of that environment.

From within this approach, the concept of a stress threshold was developed. Stress was thought to “produce a strain reaction” (Jovanovic, Lazaridis & Stefanovic, 2006, p.164) which could result in permanent damage. The stress threshold concept was used to account for individual differences in terms of stress resistance and vulnerability to this strain reaction (Cox et al., 2000; Jovanovic et al., 2006).

2.3.2 The physiological approach

This approach, which was motivated by Seyle's work, treats stress as a generalised and non-specific physiological response (Cox et al., 2000; Jovanovic et al., 2006). This response was attributed mainly to the activation of two neuroendocrine systems: the anterior pituitary-adrenal cortical system and the sympathetic-adrenal medullary system. According to Seyle's theory, this physiological response is triphasic in nature (Cox et al., 2000; Jovanovic et al., 2006):

- the initial alarm stage which involves the activation of the sympathetic-adrenal medullary system, is followed by
- the resistance stage, which revolves around adrenal-cortical activation, which gives way to the
- final stages of exhaustion, associated with the terminal reactivation of the sympathetic-adrenal medullary system.

If a person is exposed to repeated, intense or prolonged stimulation of this physiological response, then this person would be susceptible to what Seyle has termed “diseases of adaptation” (Cox et al., 2000, p. 33.; Jovanovic et al., 2006, p.165), which arises from the contrast between the short-term advantages associated with this physiological response (for example, mobilisation of energy) and the long-term disadvantages (for example, the increased risk of certain stress-related disorders).

2.3.3 Criticisms of the engineering and physiological approaches

The engineering and physiological approaches, however, do not adequately account for the existing data regarding the experience, and manifestation, of occupational stress. In terms of the engineering approach, researchers (Cox, 1978; Flanagan cited in Cox et al., 2000) have put forth the example of noise on performance and comfort to illustrate their concerns. Both the nature of the noise as well as individual differences and the contextual implications play a role in the effect noise has on task performance (Cox et al., 2000; Jovanovic et al., 2006) In other words, it seems that there is more to the

effects of noise than its loudness or frequency. For example, noise levels that are normally perceived as disruptive may actually enhance task performance when the individuals are tired (Broadbent cited in Cox et al., 2000).

Scott and Howard (cited in Jovanovic et al., 2006) clarify this further by stating that the unique meaning certain individuals assign to particular stimuli defines the situation as problematic but only to those individuals, whereas other stimuli, with a commonly shared meaning, may be perceived as challenging by a larger number of people. This is in agreement with Westen's (1999) and Neddermeyer's (2000) belief that stress is a perception: both cognitive as well as situational factors play a role in the stress process.

The belief that stressful events might be perceived differently by various individuals has, however, been manipulated in some instances. Poor management practices have been justified using the assumption that a certain level of stress is needed for maximal performance and this enables supervisors to continue implementing procedures that are problematic to certain employees (Jovanovic et al., 2006). By applying the assumption that various individuals will perceive situations and/or events differently, supervisors can dismiss employees' individual concerns by proposing that any issues raised are purely an indication of that specific individual's inability to cope and not a reflection of poor management practices. The perceptions of risk/threats are, therefore, determined by group and cultural biases with little regard given to individual perceptions.

The physiological approach is also open to criticism. Both non-specificity and the time course of the physiological response to noxious stimuli have been shown to be different from that described by Selye. According to Jovanovic et al. (2006) some aversive stimuli do not elicit the stress response at all. Fisher (cited in Cox et al., 2000) notes that difficulty has also been encountered in distinguishing those physiological changes which represent stress and those which do not. For example, some physiological responses to stress may occur well after the exposure to the stressor and this makes it difficult to establish the association clearly.

The criticisms raised above supports the belief that, if the stress response syndrome does indeed exist, it is not as non-specific as initially proposed. There are subtle but crucial differences in the overall stress response (Cox et al., 2000; Jovanovic et al.,

2006). In this regard, Cox and Cox (cited in Cox et al., 2000) report that evidence of differentiation in the response of the catecholamines, which reflect activation of the sympathetic-adrenal medullary system, to stressful situations has been found.

For the above reasons, both these approaches to stress are believed to be conceptually dated. Researchers (Sutherland & Cox cited in Cox et al., 2000; Jovanovic et al., 2006) believe that the engineering and physiological approaches to stress are set within a simple stimulus-response paradigm and, therefore, ignore the interaction between the person and their various environments (Cox et al., 2000; Jovanovic et al., 2006). The interactions between an individual and the environment are an indispensable part of the systems-based occupational stress approaches which incorporate biology, behaviour and psychology.

2.3.4 The psychological approach

The psychological approach to stress was developed in an attempt to overcome the criticisms raised against the earlier approaches. Contemporary stress theory is dominated by variants within this approach with emphasis placed on the two distinct categories which have been identified, namely interactional and transactional theories.

2.3.4.1 Interactional theories of occupational stress

The focus within this theory is “on the structural characteristics of the person's interaction with their work environment” (Jovanovic et al., 2006, p.166). Two particular theories have been offered to better explain this approach.

- French's Person-Environment Fit Theory

The extent with which a person and his/her environment complement each other offers a better understanding of behaviour than individual or situational differences (Cox et al., 2000; Jovanovic et al., 2006). This relationship is often referred to as the **goodness of fit**. French's (cited in Cox et al., 2000) theory of work stress is based on this relationship with two aspects of fit being identified as central to this

theory: the degree to which an employee's attitudes and abilities meet the demands of the job and the extent to which the job environment meets the worker's needs (for example, the extent to which the worker is encouraged to use his/her knowledge and skills within the job setting). When there is a lack of fit in either or both aspects, the individual might experience stress as well as a diminished sense of well-being.

French (Cox et al., 2000; Jovanovic et al., 2006) makes two clear distinctions in this theory. A distinction is made between objective reality and subject perceptions as well as between environmental variables (E) and person variables (P). Lack of fit can, therefore, occur in four different ways but researchers (Cox et al., 2000; Jovanovic et al., 2006) express a particular interest in the lack of subjective fit which refers to how the employee sees his/her work situation.

- Demand-control model

Karasek (cited in Jovanovic et al., 2006) proposed that there is an interaction between work characteristics and employee health. He found that employees in jobs perceived as having both low decision latitude (the working individual's potential control over his/her tasks and general working day) and high job demands were more likely to report poor health and low satisfaction.

Karasek's model was, however, criticized for being too simple as well as for ignoring the moderating effect of social support on the main variables. Johnson (cited in Cox et al., 2000) addressed this concern by expanding Karasek's model into the Demand-Control-Support model. In this instance, social support refers to overall levels of helpful, supportive social interaction available on the job from colleagues and supervisors (Baron & Byrne, 2003). It was found that work environments characterised as highly demanding with low decision latitude and low social support increased workers' susceptibility to certain health problems, especially musculoskeletal and psychosomatic complaints (Cox et al., 2000). The Demand-Control-Support model did, however, fail to consider individual differences in susceptibility and coping.

One of the individual characteristics that was raised as criticism of the Demand-Control-Support model was “disturbed relaxation ability” (Cox et al., 2000, p. 39; Jovanovic et al., 2006, p. 167). This term refers to excessive work involvement, including the tendency to remove the boundaries between work and domestic life (Richter cited in Cox et al., 2000). This could be a form of work obsession which could result in the inability to relax during leisure time.

2.3.4.2 Transactional theories of occupational stress

The cognitive processes and emotional reactions that are the key elements in a person’s interaction with his/her environment are the focal points of transactional theories of stress (Cox et al., 2000; Jovanovic et al., 2006).

Siegrist’s transactional model of effort-reward imbalance is a good example of such a theory (Cox et al., 2000). According to this model, the experience of stress can be defined as the discrepancy between the high costs spent and the low gains received (that is, stress results when an individual puts in a great amount of effort into a task but only receives a small reward). Two sources of effort have been identified, namely an extrinsic source, which entails the demands of the job, and an intrinsic source, which refers to the motivation of the individual worker in a taxing situation (Cox et al., 2000; Jovanovic et al., 2006). In terms of reward, three dimensions to this aspect have been proposed: financial gratifications, socio-emotional reward and status control (for example, promotion prospects). Negative effects on health, especially in terms of cardiovascular risk, are more common in occupations where this high-cost but low-gain element exists (Jovanovic et al., 2006).

Transactional theories focus on the possible imbalance between demands and ability. Within this approach, the stress state is viewed as an “internal representation of particular and problematic transactions between the person and their environment” (Jovanovic et al., 2006, p. 167). This is consistent with Lazarus and Launier’s (1978) conclusion that stress does not originate solely within a person or his/her environment but is the result of the interaction between them. These person-environment transactions need to have meaning for the individual before he/she can even become aware of any

difficulties that might exist. An appraisal of these transactions, therefore, has to be done. Lazarus (1966) proposed that the evaluative appraisal process consists of both primary and secondary components.

Primary appraisal involves incessant monitoring of a person's transactions with his/her environment (Cox et al., 2000; Jovanovic et al., 2006; Lazarus, 1966). This requires constant censoring of certain aspects of these transactions including demands, abilities, competence, constraints and support. Once a problem is recognized, it is usually accompanied by a feeling of general uneasiness (Cox et al., 2000). The evaluation of an event will, however, determine whether its implications are positive, negative or neutral. If the implications are negative, a further assessment is carried out in order to determine how detrimental such implications have been in the past, how threatening it appears to the future and how likely it is that the problem can be successfully resolved (Cox et al., 2000; Jovanovic, et al., 2006).

The more detailed analysis of the problem can be termed secondary appraisal (Cox et al., 2000; Jovanovic et al., 2006). Secondary appraisal involves the assessment of a person's resources, abilities and coping strategies in order to determine whether or not they are sufficient to overcome the threat posed by the potential stressor. Stress will be experienced when the person perceives that he/she is not able to successfully cope with the demands made on them and this failure to neutralise the threat is a cause of concern for him/her. Feldman (2001) points out that stress is the by-product of both primary and secondary appraisal and that there are different levels of awareness at play during the appraisal process: growing awareness of problem markers (for example, feeling uncomfortable or making mistakes), recognising the existence of problems in a general way, identifying the general problem area and assessing its importance and analysing the nature of the problem and its effects in more detail.

Stress, therefore, is a continuous process that involves interaction between a person and his/her environment where this interaction is constantly appraised and coping strategies are implemented in order to deal with problems that arise (Cox et al., 2000). Cox (1978) has described this process in terms of a five-stage model. The first stage epitomises the sources of demands that a person is confronted with and these demands are part of his/her environment. This individual's perceptions of these demands in terms of his/her

abilities falls under stage two. If this person believes that his/her ability to cope is inadequate in relation to what is needed in order to meet these demands, then stress might be experienced (Cohen et al., 1993). The psychological and physiological changes which are associated with stress represent the third stage. These include, but are not limited to, depression, anxiety, irritability, headaches, nausea, high blood pressure and ulcers. The fourth stage is dedicated to the consequences of coping whereas stage five concerns general feedback on all aspects covered by the other stages of this model.

Hence, stress is often accompanied by attempts to cope with the perceived threat and the effects of both stress and the coping strategies might result in changes in cognition, emotion, behaviour and physiological function. These changes might have adverse effects on physical and psychological health if the individual experiences long-lasting stress.

2.4 Sources of occupational stress

According to Farrell and Geist-Martin (2005), employees spend almost 50% of their lives at work and 78% report that work is their biggest source of stress. Rees (1995) reports that it is commonly accepted that approximately 40% of workers in any group will be affected by stress, although the assessment of stress is dependent on the definition of stress as well as the measuring tool used, which might result in conflicting reports. The severity of these findings is highlighted by Bradley and Sutherland's (1994) report that occupational ill-health statistics have found that 55% of all reported cases of stress and depression and half of reported cases of exhaustion are attributed to stress caused by work. In the Netherlands, researchers found an increase from 21 % to 30% in the percentage of workers who received a disability pension because of stress-related disorders between 1981 and 1994 (Van der Hek & Plomp cited in Cox et al., 2000).

Occupational stressors have been defined by Larson (2004) as any feature of the work environment that is perceived as threatening by the individual, including high expectations that cannot be met or the lack of sufficient resources to meet these

demands. Fishkin (1991) stated that every organisation has certain elements which contribute to stress. The effects of occupational stress on our health are to be taken seriously and every effort should be taken to help workers cope more effectively. This requires an understanding of the sources of occupational stress (Beehr & Newman, 1978; Briner, 2000; Cartwright & Cooper, 2002; Cherniss, 1980; Cordes & Dougherty, 1993; Cox et al., 2000; De Bruyn & Taylor, 2006; De Croon, Sluiter, Kuijer & Frings-Dresen, 2005; Pejtersen, Allermann, Kristensen & Paulsen, 2006; Perlman & Hartman, 1982; Rojas & Klein, 2000):

2.4.1 Job and role ambiguity

Role ambiguity occurs when an individual has inadequate information about his/her work role and, therefore, might find him/herself in situations which are difficult to interpret. This may result in employees jumping to conclusions or developing a distorted perspective of a given event.

Role ambiguity often manifests in general confusion about appropriate objectives, a lack of clarity regarding expectations and a general uncertainty about the scope and responsibilities of the job (Cox et al., 2000). Workers affected by such ambiguity were more likely to experience lower levels of job satisfaction, a greater incidence of job-related tension, greater feelings of futility and lower levels of self-confidence. French and Caplan (1970) found that role ambiguity is also related to increased blood pressure and higher pulse rates.

This is intensified in cases where an individual is responsible for others. He/she often experiences greater job stress. This association has been attributed to the fact that this individual will spend a significant amount of his/her time interacting with others, attending meetings and trying to motivate subordinates to meet deadlines and schedules while having to carry out his/her own job tasks (Larson, 2004). If these responsibilities are not clearly prioritized, this individual might perceive the expectations placed upon him/her as conflicting and role ambiguity might occur.

2.4.2 Relationships

Social relationships, both at work and outside the workplace, are commonly viewed as playing a moderating role in the experience of stress (Theorell, 1997). This will be discussed in more detail later in this chapter. The effects of poor relationships as a source of occupational stress will be (briefly) examined.

Poor or unsupportive relationships with colleagues and supervisors may lead to psychological strain and emotional distress, especially if coupled with isolation and unfair treatment. High levels of anxiety, emotional exhaustion, job tension and low job satisfaction have all been associated with low interpersonal support at work (Beehr & Newman, 1978; Warr, 1992). The importance of good relationships at work is essential when you consider the amount of time spent in the company of co-workers.

The significance of interpersonal relationships as a source of occupational stress in today's society cannot be denied. Most offices implement an open-plan office layout where individuals are forced to interact with their colleagues and are afforded little, if any, privacy. If these relationships are strained, this enforced environment can lead to heightened stress levels. This is particularly relevant in a South African context where the various cultural and language barriers might lead to misunderstandings and interpersonal conflicts (for example, certain language might be offensive to some cultures but not to others).

2.4.3 Job equipment and working conditions

The fundamental nature of the job, which includes physical working conditions, type of tasks and the amount of satisfaction derived from the job itself, is a major cause of emotional distress. For example, prolonged exposure to noise may result in the experience of stress, anxiety, irritability, tension, fatigue and impaired performance (Cox et al., 2000; Warr, 1992). This is supported by Smith's (1991) findings that prolonged exposure to acute noise produces physiological responses which could have detrimental effects on health. It was found that even the perceived threat of its presence has been associated with the experience of stress (Cox et al., 2000).

Exposure to poor equipment and work station design, in conjunction with poor task objectives and work organisation, gives rise to increased stress levels. Fairbrother and Warn (2003) report that physical conditions, including high noise levels, overcrowding and lack of privacy, are associated with stress. Poor mental health has, therefore, been linked to unpleasant working conditions including incorrect air quality, inappropriate indoor climate control and incorrect and insufficient lighting (Pike, 2003). Most of these conditions are common in open-plan offices.

2.4.4 Career advancement prospects

People's perceptions of a lack of opportunity for further advancement within the company are a major source of concern, particularly in today's uncertain and unstable workplace. Factors contributing to poor career advancement prospects include inadequate staff training in order to maintain skills and personal development as well as poor miscommunication between management and employees which might lead to an inability to reach career goals (Cox et al., 2000). Marshall (cited in Cox et al., 2000) identified two major categories of potential stressors in this area: lack of job security and status incongruity (the frustration felt when a person is unable to break through the glass ceiling in terms of advancement).

2.4.5 Job security

Job insecurity and uncertainty are extremely detrimental to people's attitudes and emotional well-being. Warr (1992) found that lack of feedback on performance is also a source of stress which can contribute to feelings of uncertainty at work. This lack of feedback may fortify the effects of other precarious job characteristics (for example, uncertainty about the future in terms of job security and redundancy).

According to Cooper, Dewe and O'Driscoll (2001), concerns surrounding job security and career development have increasingly become a source of stress over the past two decades. This can be credited to the higher incidence of mergers, acquisitions and downsizing prevalent in today's economy. The threat of job loss has been associated

with a number of health problems including ulcers, colitis, alopecia and increased muscular complaints in addition to the negative effects on socio-emotional well-being.

2.4.6 Lack of job autonomy

Environments where individuals experience a lack of job control can lead to anxiety because these individuals' participation in decision-making has been limited which results in them being subjected to situations that conflict with their values. Decision latitude and job control are key issues in terms of occupational stress. Low latitude has been correlated with anxiety, depression, apathy, exhaustion, low self-esteem and the increased incidence of cardiovascular symptoms (Cox et al., 2000).

2.4.7 Work/home conflict

Dual career couples often experience inter-role conflict where the role pressures from the work and family domains are mutually incompatible in some respect, leading to conflict. Role conflict occurs when an individual is required to play a role which conflicts with their values or when the various roles that they play are incompatible with one another. Kahn (cited in Cox et al., 2000) has found that the greater the role conflict experienced, the lower the job satisfaction and the greater the job-related tension.

Hingley and Cooper (1986) claimed that the problems relating to the work-home dynamic either involve conflicts on time and commitment or revolve around issues of support. The difficulties created by these feelings of discord are magnified if the family has young children. The value of successful conflict resolution is highlighted when we consider that the support offered by spouses and family can be compromised if the opposing demands between work and family are not adequately settled.

2.4.8 Workload

Working long hours, meeting deadlines, responding to time pressures and role overload are often causes of strain: employees experience more burnout when they work more

hours per week (Cox et al., 2000). This is especially true in cases where disproportionate workloads among employees with similar job descriptions exist.

French and Caplan (1970) distinguish between quantitative and qualitative workload. Quantitative workload refers to the amount of work to be done while qualitative workload refers to the difficulty of that work. These dimensions are independent: it is possible to have work which involves quantitative overload and qualitative under-load and vice versa. Irrespective of its classification, work overload threatens both physical and psychological health.

2.4.9 Compensation and benefits

The financial rewards that work brings determine people's type of lifestyle, feelings of self-worth and perception of their value to their organisation. When rewards fall short of what an individual feels he/she deserves in relation to his/her inputs, burnout may develop. According to Warr (1992), poor pay undoubtedly has an effect on an individual's well-being.

2.4.10 Lack of leadership and management support/ guidance

Employees need managers to provide them with adequate career-management support practices, for example performance appraisals, career counselling, mentoring and career planning. Landy (cited in Cox et al., 2000) states that managerial styles have a considerable influence on the emotional well-being of employees. Taking into consideration that the approach taken by managers and supervisors when addressing staff will impact on the quality of relationships within the workplace, it becomes clear this executive attitude has far reaching effects.

2.4.11 Wasted Leisure Time Syndrome

Spill-over effects from work might account for the possible wasting of constructive leisure time among some groups of employees (Gardell cited in Cox et al., 2000). Gardell has described this **wasted leisure time** syndrome as workers not doing more

than eating, sleeping and watching television during their free time. This wasted leisure time has been linked to employees' psychological and behavioural adaptation to the demands of repetitive work (Cox, 1980). Essentially, wasted leisure time might result in employees' lives revolving around work and not fully cultivating friendships and hobbies, which are needed in order to reach a state of self-actualisation and psychological health. Wasted leisure time syndrome is, therefore, similar to the disturbed relaxation ability discussed in the Demand-Control-Support model.

2.5 Burnout

This constant focus on work to the exclusion of other vital aspects of life can contribute to the experience of burnout. The negative effects associated with burnout are numerous and, if unalleviated, can trigger the onset of depression and the breakdown of social functioning.

2.5.1 Definitions of burnout

Veninga and Spradley (1981) defined burnout as a devastating psychological reaction brought about by constant exposure to unalleviated work stress. Schaufeli and Buunk (1996) have likened this state of mental exhaustion to the smothering of a fire or the extinguishing of a candle. This metaphor implies a sudden decline in the ability to function normally even though the process of burnout is usually gradual.

This is best explained by Etzion (1984) who states that burnout is a slowly developing process that is set off without warning and evolves almost unrecognised until an individual suddenly and unexpectedly feels exhausted and is unable to relate this devastating experience to any particular stressful event. Herein lies the danger of burnout: by the time a person realizes what is happening, it is too late. The minor stressors that contribute to chronic stress do not cause alarm and, therefore, are rarely subjected to any coping effect. With time, the cumulated effects of these stressors contribute to the process of psychological erosion and the affected individual is set on the slippery downward slope that leads to burnout. Burnout is, therefore, considered as a particular kind of prolonged job stress (Brill, 1984).

Freudenberger and Richelson (1980), however, define burnout as the experience of an individual who is devoted to a cause that has not managed to deliver the expected rewards. An individual who finds him/ herself in such circumstances might experience intensified feelings of fatigue and frustration. Freudenberger (cited in Jennings, 2008) states that this stress reaction is common in occupations involving numerous direct interactions with people. Considering that people in such occupations are usually dedicated to serving their clients/patients, and might overburden themselves in their endeavours to carry out their duties accordingly, it is understandable that they might find themselves feeling disillusioned and frustrated with reality. The chronic stress experienced, as a result of the difference between the 'real' situation and the 'ideal' scenario which was envisioned, can contribute to burnout.

The following is a more precise definition of burnout as proposed by Brill (1984, p.15):

Burnout is an exceptionally mediated, job-related, dysphoric and dysfunctional state in an individual without major psychopathology, who has:

- a. functioned for a time at adequate performance and effective levels in the same job situation and who,
- b. will not recover to previous levels without outside help or environmental rearrangement

This is better understood once the three components of burnout (Maslach, Jackson & Leiter, 1996) are considered, namely:

- emotional exhaustion (reduction in the emotional resources of an individual);
- reduced professional efficacy (feeling of being unable to meet clients' needs and to satisfy essential elements of job performance); and
- cynicism and depersonalisation (a cynical and insensitive attitude towards work, colleagues, clients and/or patients).

Once a person experiences burnout, he/she is emotionally depleted and cannot be motivated to return to his/her previous level of functioning without assistance and

support from trained professionals. An individual caught in this process will endure degeneration in their job function as well as in their mental and physical health.

Although researchers might not agree on the conceptualisation of burnout, it is important to note that, at least, agreement has been reached in terms of three features of burnout that underlie most of the proposed definitions. According to Maslach (1982) there is a general agreement that burnout:

- occurs at an individual level;
- entails an internal psychological experience involving feelings, motivations and expectations; and
- is a negative experience for the individual.

Irrespective of whether researchers view burnout as an experience, reaction or as a type of stress, it has been shown that the consequences of burnout have a profound negative impact on the individual concerned.

2.5.2 Phases of burnout

Burnout can be considered as the final stage in the dissolution of adaptation which stems from the long-term imbalance of demands and resources, often accompanied by chronic malfunctioning at work. Burnout is the end result of this constant exposure to long-lasting stress but the deterioration of our psychological resources is a gradual progression. Freudemberger and North (cited in Kraft, 2006) theorized that there are twelve steps in the burnout process:

- A compulsion to prove oneself
People with excessive ambition who need to prove they are capable of doing a job perfectly are more susceptible to experiencing burnout. These individuals view each task as a challenge to better their performance and, therefore, place exceedingly high expectations on themselves.

- **Working harder**

As a result of their excessive ambition and high expectations, these people often tend to push themselves harder and take on even more work above that which has already been assigned to them. Instead of delegating tasks to subordinates or politely declining additional assignments that could be entrusted to someone else, these individuals continue to undertake additional work.
- **Neglecting one's own needs**

This high workload and hectic schedule does not leave much room for other aspects of their lives. This results in these people sacrificing their own needs in order to prove themselves.
- **Displacement of conflicts**

These employees are aware that something is wrong but are unable to realize that the root cause of their distress is their own unreasonable expectations.
- **Revision of values**

The world consists of only work for these individuals at this stage: friends and hobbies are completely dismissed. They often find themselves isolated and denying their needs. The only standard of evaluation of their self-worth is their job and their excellent performance.
- **Denial of emerging problems**

At this point, cynicism and aggression become apparent. These people often perceive their colleagues as lazy and stupid. This deep-seated intolerance of others leads to the impression that only they are disciplined. Furthermore, they view their increasing problems as a result of time pressure and high volumes of work.
- **Withdrawal**

Their state of isolation is intensified, perhaps as a result of their intolerant attitudes, and social contact is reduced to a minimal, even in the work environment. These people may start turning to alcohol or other substances to help them cope.

- Behavioural changes become obvious to others
Due to neglect of other essential aspects of their lives, these people often start to undergo shifts in their personalities. They become shy, fearful, apathetic and start feeling worthless.
- Depersonalization
This feeling of worthlessness intensifies over the course of time and these individuals lose contact with themselves: they do not see themselves as valuable and they can only focus on the present. This could result in them feeling trapped in this one negative state with no hope of improvement.
- Inner emptiness
This narrow perception of time and place means they desperately seek activities to overcome their emptiness. For example, overeating, substance abuse and promiscuity are all distractions in their unfulfilled existence.
- Depression
All of this contributes to feelings of indifference, hopelessness, exhaustion and a belief that the future holds nothing worthwhile for them.
- Burnout syndrome
Almost all people who experience burnout have suicidal thoughts as a means of escape. At this point in time they suffer total mental and physical collapse.

Brill's (1984) definition of burnout makes more sense once the emotional ramifications of burnout are taken into account. These individuals are drained of energy and motivation and, therefore, cannot revert back to their previous levels of functioning without seeking help. The effects of burnout on the individual are, therefore, both substantial and harmful.

2.5.3 Symptoms of burnout

According to Schaufeli and Enzmann (1998), psychological symptoms of burnout can be classified into five categories. These symptoms are interrelated and may also maintain the burnout state. For example, pessimism and depression are not only the results of burnout but contribute to the perpetuation of this emotional condition by limiting the individual's coping mechanisms. Someone who is feeling isolated will not be able to harness the social support needed to help cope better with their escalating stress levels.

2.5.3.1 Affective symptoms

Burnt-out individuals tend to be melancholy, tearful and depressed. They experience severe mood swings but spirits are usually low with minimal emotional control. For this reason, affected workers are plagued by undefined fears, anxiety and nervous tension (Schaufeli & Enzmann, 1998). Their family and colleagues tend to describe their new dispositions as irritable, unemotional and oversensitive with a sense of diminished emotional empathy and coolness towards others.

2.5.3.2 Cognitive symptoms

As a result of this state of exhaustion, cognitive abilities are affected by burnout. These individuals find that their thinking becomes more rigid, schematic and detached which makes decision-making more difficult. The ability to concentrate for longer periods of time is reduced leading to a susceptibility to making mistakes and becoming more forgetful.

Schaufeli and Enzmann (1998) reported that burnt-out workers show a tendency to daydream. This could be an attempt to escape from reality but only contributes to isolating them further and lessening their frustration tolerance. As a result, there is a decreased involvement with others which is cognitively reflected by negativism, pessimism, reduced empathy and stereotyping (Schaufeli & Enzmann, 1998) with the result that a psychological distance is created with the aim of protecting the self.

These individuals have been known to foster an air of grandiosity and often demonstrate resentfulness, hostility, suspicion and paranoia. They feel helpless, hopeless and powerless. This intensifies their feelings of losing control and feeling trapped. A sense of failure and feelings of insufficiency may lead to poor job-related self-esteem (Schaufeli & Enzmann, 1998). Considering that these employees build their sense of worth on grounds of their performance at work, this feeling of impotence could have devastating consequences. This is usually when suicidal thoughts start to materialize.

2.5.3.3 Physical symptoms

The physical symptoms of burnout can be grouped into three categories according to Schaufeli and Enzmann (1998):

- **Physical distress**
These include headaches, nausea, dizziness, restlessness, nervous tics and muscle pains. Hyperventilation might occur which can cause peculiar sensations including prickling limbs, dry throat, heart palpitations and heavy perspiration. Affected individuals also report sexual problems, sleep disturbances, sudden loss or gain in weight, shortness of breath, chronic fatigue, drowsiness and bodily weaknesses.
- **Psychosomatic disorders**
These include, but are not limited to, ulcers, gastric-intestinal disorders, coronary heart disease, prolonged colds and flu as well as deterioration in pre-existing conditions such as asthma or diabetes.
- **Physiological reactions**
These include increased heart rate and respiration rate, hypertension, high levels of serum cholesterol and decrease of the electrical resistance of the skin due to increased perspiration.

Maslach and Leiter (1997) found that burnout contributes to the aggravation of existing physical problems (for example, hypertension, stroke, coronary heart disease, ulcers,

migraines, tension headaches, gastro-intestinal illnesses, cancer, allergies, high blood pressure, asthma, rheumatoid arthritis, backaches, muscle tension and temporal mandibular joint syndrome). These researchers have proposed that burnout also plays a causal role in some of the above-mentioned conditions.

2.5.3.4 Behavioural symptoms

The behaviour of individuals suffering from burnout is characterized by hyperactivity, impulsiveness and an inability to concentrate. Procrastination, doubt and indecision are also observed in some cases (Schaufeli & Enzmann, 1998). These burnout individuals exhibit a propensity towards aggression and violent behaviour with frequent outbursts of rage and interpersonal conflicts occurring. Naturally, this impacts on their social interaction patterns which could result in increased isolation and feelings of detachment. With hopelessness, helplessness and meaninglessness being communicated both verbally and non-verbally, affected individuals can only respond to others in a mechanical manner.

In a misdirected attempt to cope with their situation better, these employees often increase their consumption of stimulants including coffee, tobacco, alcohol and barbiturates. This only serves to further impair both their judgement and their ability to function normally and, as a result, they engage in other high-risk behaviour (for example, over- and under-eating, promiscuity and consumption of illicit drugs).

2.5.3.5 Motivational symptoms

Individuals experiencing burnout find that their inherent motivation has deteriorated. Naturally-occurring feelings of zeal, enthusiasm and idealism are disregarded and replaced with disillusionment, disappointment and resignation. There is a decline in interest in the people around them (for example, they no longer express an interest in engaging with family, friends and colleagues). This new found inappropriate motivation is in sharp contrast with their initial idealistic drives (Schaufeli & Enzmann, 1998).

2.5.4 Discussion of burnout

The incapacitating effect of burnout on the individual is clear. Irrespective of whether burnout plays a causal or an exacerbating role, the physical and psychological effects associated with burnout are debilitating and leave the affected person with few available resources (and even less motivation) to cope with the exceedingly high demands that he/she is expected to meet.

Although burnout is considered an individual experience, its impact on the wider community cannot be ignored. Family, friends and colleagues of burnt-out individuals are placed under additional stress themselves as a direct consequence of the burnout experienced by their loved one. The people in the burnt-out individual's social circle (whether family or co-workers) are plagued by concern for him/her and, simultaneously, may be subjected to increased demands on their own resources because they might be expected to undertake tasks and duties previously carried out by the affected individual. This could, as a result, leave the people in this community more susceptible to burnout themselves. Etzion (1984), however, points out that social support from colleagues, supervisors and family has been associated with a lower incidence of burnout. Although social support can act as a buffer in the experience of stress (Theorell, 1997), it is important to remember that individuals in a burnout state are often isolated. As previously mentioned, one of the effects of burnout is the deterioration of interpersonal relationships (Schaufeli & Enzmann, 1998) which affects the available social support network. This could result in a vicious circle: social support will help ameliorate the effects of burnout but the deterioration of interpersonal relationships is one of the symptoms of burnout. Hence, burnout could result in weakened social support networks which only contributes to the negative impact stress has on the affected individual.

The consequences of burnout are, therefore, far-reaching. Yet society continues to contribute to the incidence of burnout by encouraging individuals to strive to meet unrealistic expectations (Lyall, 1989). This 'must-have-it-all-and-do-it-all-perfectly' attitude, common in people who are highly motivated and idealistic, tends to leave these individuals vulnerable to the experience of burnout but, yet, is perpetuated by the social world. People with Type-A personalities (which will be discussed later in this chapter)

are especially influenced by this attitude since these individuals strive for perfection in everything they do.

Individual characteristics may, therefore, predispose certain individuals to burnout. In fact, Ormel and Wohlfarth (1991) state that temperamental attributes of individuals are better predictors of emotional burnout than environmental factors. However, even though an individual might not be susceptible to burnout in terms of reaching its final step, burnout syndrome, as proposed by Freudenberger and North (cited in Kraft, 2006), this individual might still experience some of the symptoms of burnout. Stress, therefore, can still wreak havoc on physical and psychological health even if the individual in question does not show a propensity for burnout.

2.6 Physiological and psychological responses to stress

Stress has been linked with numerous physical and psychological conditions that impair a person's ability to function and impacts on his/her quality of life. DeLongis, Folkman and Lazarus (1988) found that deterioration in health and mood is associated with an increase in daily hassles which can be considered a source of chronic stress (Lazarus cited in Shigemi et al., 1997). It is the response to chronic stress, as opposed to acute experiences of stress, which is harmful to a person's physical and psychological health (Fries, 2009).

2.6.1 Physiological and physical effects of stress

The human body automatically reacts to stress. When a person perceives a stressor, this response is activated and the adrenocorticotropic hormone (ACTH) is released into the bloodstream by the anterior pituitary gland in the brain (Fries, 2009). Once ACTH reaches the kidneys, where the adrenal cortex is situated, it stimulates the endocrine cells to secrete the hormone cortisol. Prolonged exposure to cortisol has been correlated with cardiovascular diseases including both high blood pressure and increase in heart rate (Fries, 2009). Beatty (2001) emphasises that the increases in cortisol levels can result in the suppression of the immune system which will exacerbate chronic illnesses.

Adrenaline and cortisol have become known as the stress hormones because the levels of these hormones in the body consistently rise in response to stress. Polland (cited in Cox et al., 2000) reports that repeated elevation of these hormones can have long-term consequences on a person's health (for example, these hormones tend to raise blood pressure and serum cholesterol levels). Exposure to stressors which are severe, frequent or prolonged might, therefore, cause permanent damage. Stress can cause endocrine hypoactivity and hyperactivity, thereby altering the balance of the autonomic control which will result in changes in the functioning of the cardiovascular, respiratory, secretory and visceral systems (Zegans, 1982).

Diseases usually cited as being stress-related include asthma, bronchitis, cancer, coronary heart disease, diabetes, thyroid diseases, skin diseases, certain types of rheumatoid arthritis, obesity, tuberculosis, headaches and migraines, peptic ulcers, ulcerative colitis and mental illness (Cox et al., 2000; Zegans, 1982).

2.6.2 Psychological, behavioural and social effects of stress

The effects of stress are expressed in various ways and involve changes in emotion, behaviour and cognitive-perceptual functioning. Each individual will react in his/her own unique way although certain patterns have been noted in the literature. For example, common psychological responses to stress include fear, anxiety, depression, hostility, low self-confidence, dissatisfaction with quality of his/her life and social withdrawal (Abbey & Andrews, 1985; Gerdes et al., 1998).

Cox et al. (2000) report that some health-promoting behaviours might be compromised by the experience of stress (for example, individuals might develop problems sleeping or abstain from exercise). In some cases, stressed individuals might resort to eating junk food instead of cooking a healthy, balanced meal in a misguided attempt to remove one task that is expected from them. Unfortunately, junk food cannot provide the necessary nutrition in terms of vitamins and minerals needed by the body to function effectively. By abandoning good dietary habits in this way, people only aggravate the physical effects of stress on their bodies.

Stress can also lead to activities that place the individual at risk for developing additional problems such as overeating, excessive alcohol consumption, substance abuse, gambling and promiscuity (Cox et al., 2000; Sapolsky, 2004).

These behaviours might primarily affect an individual's physical health but are accompanied by emotional and social implications. A highly-stressed individual, who is not sleeping well and is malnourished, is often irritable and experiences memory and attention-span difficulties. He/she may feel frustrated and impatient. As a result, social relations are often impaired and this may create secondary problems by reducing the availability of social support (Cox et al., 2000).

Gambling, for example, could create financial difficulties for the already stressed individual. The tendency to gamble excessively, coupled with any financial setbacks, may place additional strain on relationships. The constant fighting that might occur over this unhealthy behaviour will, in turn, contribute to intensified stress levels. The individual is, therefore, caught in a negative circle where one action might lead to secondary stressors which, in turn, serve to maintain the initial unhealthy behaviour.

2.7 Stress and moderating factors

Individual and interpersonal differences may influence a person's vulnerability to the experience of stress. These differences or traits have been labelled modifiers. Modifiers are pre-existing characteristics that might have a bearing on how an individual responds to stress (Dua, 1994). Dua has proposed that modifiers can be categorized into two groups, namely internal conditioning (for example, family history, behaviour patterns, past experiences, cognitive functioning, age, sex, and personality traits such as locus of control and emotional stability) and external conditioning (for example, diet, climate, drugs, interpersonal relationships and social support).

Schuler (1980) states that these modifiers can affect how an individual responds to stress in three ways:

- A person's desires are sculpted by his/her needs and values. These qualities determine the relative importance of events in that person's life which has a direct bearing on how stress is perceived (that is, the more important the event is to that person, the more stressful he/she might find the circumstances surrounding this event);
- An individual's abilities and past experiences influence the choice of strategies harnessed to cope with stressful events; and
- The arsenal of coping strategies at an individual's disposal is influenced by his/her personality characteristics.

Some of the modifiers that can help people resist the deleterious effects of stress will be briefly discussed.

According to Pearlin and Schooler (cited in DeLongis et al., 1988), self-esteem can be a powerful psychological tool which influences how an individual responds to stress. An individual who views him/herself positively will be less likely to feel overwhelmed when challenged by stressful circumstances. The implication behind these findings is that a stress management programme which can help improve employees' self-esteem can also assist them in coping with their stress more efficiently.

Kobasa's hardiness (Lazarus, 1993; Sue, Sue & Sue, 2003), which is defined as the ability to deal well with stress, is another personality characteristic that is beneficial to individuals. According to Sue et al. (2003), there are three kinds of hardiness, namely a sense of control over life, feeling of involvement or commitment and an openness to change. Individuals who are open to change tend to interpret events more positively, thereby reducing their stress levels (for example, they tend to view demands as challenges rather than threats).

Locus of control (Rotter, 1990; Raubenheimer, Louw, Van Ede & Louw, 1998) is yet another characteristic which can alleviate the effects of stress on an individual. Locus of control refers to the degree to which people feel that they are in control of their lives and behaviour. If an individual believes that he/she can control what happens to him/her, then this individual is said to have an internal locus of control. External locus of control, on the other hand, refers to the belief that factors outside their control (for

example, the environment) are regarded as responsible for what happens to an individual. It is, therefore, clear that control, as well as the perception of control, over the environment and its stressors appears to mitigate the effects of stress. Seligman (cited in Abbey & Andrews, 1985) reports that prolonged experience of external locus of control has been correlated with impaired cognitive, affective and behavioural functioning.

As a result of this impaired cognitive performance, individuals may harbour misconceptions regarding their own abilities and, therefore, may experience feelings associated with learned helplessness. Thus, individuals that are at the mercy of their circumstances and who believe that they are unable to control events may develop a sense of hopelessness (Jordaan & Jordaan, 1998; Lazarus, 1993). These individuals tend to appraise challenging events as stressful and believe that nothing can be done to change the situation. This is in direct contrast to learned resourcefulness where the individual has a repertoire of coping strategies and skills which are utilized when he/she is faced with a stressful situation (Jordaan & Jordaan, 1998). These individuals believe that they have control over the way in which they cope with situations.

Another factor that has an effect on how an individual responds to stress is Type A behaviour. Type A behaviour was proposed by Friedman and Rosenman (cited in Baron & Byrne, 2003) and is identified by certain characteristics, namely a strong commitment to their work coupled with a tendency to become obsessive about their responsibilities, a well-developed sense of urgency and a strong sense of competition with a tendency to be aggressive. These traits are valued by society and certain cultures (for example, Westernised countries which place a strong emphasis on individuation and status) encourage the development of these characteristics. Individuals with Type A personality are constantly striving for achievement and pushing themselves to meet unrealistic expectations. They are more likely to engage in hostile aggression (the prime objective of which is to inflict harm on others). Sue et al. (2003) state that these individuals show a penchant for attempting several tasks simultaneously, tend to anger quickly when others do not perform to the same standard as themselves and exhibit rapid speech and body movements. Type A behaviour has been associated with increased risk of heart attack when it was found that some of the risk factors for cardiovascular problems include irritability and hostility (Sue et al., 2003). For this

reason, individuals with Type B personality (who are not highly competitive and do not feel a need to succumb to time pressure) are less susceptible to the negative effects of stress (Baron & Byrne, 2003).

Even if individuals have a predisposition to qualities that are not beneficial in the mitigation of the effects of stress, they can still experience the buffering effects of social support. Baron and Byrne (2003) emphasise the fact that contact with others is a source of comfort during challenging times. Interacting with other people may reduce anxiety as well as offer an outlet to purge frustrations by discussing problems. Other people may also be in a position to offer help or possible solutions. Clark (cited in Baron & Byrne, 2003) supports the idea that the simple act of talking to someone can reduce negative feelings and, perhaps, even the experience of stress.

Baron and Byrne (2003), however, point out that unhelpful support efforts (for example, trying to minimize problems thereby invalidating a person's feelings) can actually aggravate the situation. Relationships that have been found to be beneficial in this regard are characterized by feelings of positive regard, affection and encouragement (Abbey & Andrews, 1985). This kind of support has a positive effect on the cardiovascular, endocrine and immune systems (Baron & Byrne, 2003).

DeLongis et al. (1988) report that perceived availability of social support can diminish the effects of stress on physical and psychological distress. They state that one of the ways social support acts as a psychological buffer is that it effects appraisal of the situation as well as the coping processes applied. By discussing a stressful situation with loved ones, an individual's perception of the circumstances may be altered.

Social support has received a great deal of attention by researchers (Abbey & Andrews, 1985; Baron & Byrne, 1998; Cohen & McKay, 1984; DeLongis et al., 1988; Jordaan & Jordaan, 1998; Schwarzer & Knoll, 2007; Theorell, 1997). Social support theory will be discussed more comprehensively in the next chapter.

2.8 Coping

Coping has been defined by Carver, Scheier and Pozo (1992) as the attempt made by an individual to neutralise a threat and find a way to meet the expectations demanded from them. Lazarus (1993) has suggested that there are two approaches to coping, namely problem-focused coping and emotion-focused coping.

Problem-focused coping occurs when a person's relationship with his/her environment changes as a direct consequence of coping actions. If this person-environment transaction changes, then there might also be positive changes in the appraisal of the situation. For example, by confronting a colleague over a hurtful remark and resolving any misunderstandings that might have occurred, an individual can eliminate feelings of resentment and bitterness that could create a stressful atmosphere. Emotion-focused coping, on the other hand, involves changes in the way an individual interprets the situation. For example, if an individual views the time-consuming, complicated task which was delegated to them by a supervisor as a token of confidence in their abilities instead of a personal attack, they will remove the cognitive basis of the stress reaction. People usually apply both problem-focused and emotion-focused coping strategies when faced with a threatening situation (Lazarus, 1993). The efficiency of the coping strategy utilized is feedback into the appraisal process to alter the person's perception of the situation.

Important to bear in mind is that not one type of coping strategy is necessarily better than any other when confronted with a threatening situation. Most people tend to employ various strategies depending on the context of the situation. Hence, it is important to explore alternative stress management programs, coping resources and support networks to ensure that each individual has as many options available to them as possible in order for them to successfully nullify the effects of stress.

2.9 Conclusion

Stress is not a simple concept to define. It is an interdependent process which includes appraisal and coping, which influences the frequency, intensity, duration and type of

psychological and physiological responses to the experience of stress (DeLongis et al., 1998).

Researchers have proposed various approaches to understanding stress, especially occupational stress, and these approaches have helped clarify how stress can occur. For example, French's goodness of fit concept (Cox et al., 2000; Jovanovic et al., 2006) emphasises just how individual values and needs can taint how a situation is perceived (that is, if a situation conflicts with a person's value system, he/she will find that situation particularly stressful). This is supported by Schuler's (1980) findings that a person's desires determine the relative importance of certain events in his/her life. If an event is not really important to an individual, he/she will not feel threatened by an inability to cope successfully with the demands central to that event and, therefore, will not be vulnerable to the experience of stress.

On the other hand, if a certain situation is ranked highly in terms of importance, then an individual will be stressed if he/she cannot acclimate successfully to the situation. This individual will then be susceptible to a multitude of physical and psychological symptoms that have been associated with stress. The profound effects on a person's physical and psychological health cannot be negated. This is especially true if the individual in question has a disposition (for example, Type A personality) that enhances his/her vulnerability to the experience of burnout.

Burnout is a debilitating condition with far-reaching effects. Burnt-out individuals are emotionally and physically battered as a result of exposure to chronic stress. These individuals can also be a burden to their family, friends and colleagues by intensifying their own stressed emotional states.

Once the gradual process of burnout, as well as the life-threatening effects of stress, is considered, it is clear that stress is dangerous to people's physical and psychological health. Stress management programmes should be introduced to assist employees in working through their stress and utilizing the resources available to them in more efficient ways. It has been suggested that Benson's relaxation theory could be valuable in the development of stress management programmes (DeSchrive & Riddick, 1990; Wells, 2009). According to this theory, there are four basic elements to the relaxation

response: presence of an object on which to focus, a quiet environment, a passive attitude and a comfortable position. Furthermore, such programmes should provide alternative ways to cope with the situations these individuals find themselves in because each individual has his/her own unique needs, values and personalities (that is, what may work for one individual might not work for another one), although any programme that can instil a level of mindfulness should be beneficial. By focusing fully on the present moment, self-defeating and irrational thoughts may be interrupted and people should then be better able to process and respond to the situation at hand.

Chapter 3

The human-animal bond

We give dogs time we can spare, space we can spare and love we can spare.

And in return, dogs give us their all. It's the best deal man has ever made.

- M. Acklam

3.1 Introduction

In the book of Genesis (chapter 1 verses 26-28), the Bible tells how God created animals and charged humankind with the care of these creatures. Throughout the years, some of these animals (for example, dogs and cats) have become domesticated and, in turn, have impacted on their owners' emotional well-being: what started out as a relationship where humans were the sole caretakers evolved into a mutually beneficial human-animal bond.

Sable (2000) supports the proposition that the human-animal bond is revered by some people by reviewing evidence which indicates that a significant proportion of pet owners see their pets as family members. Noonan (1998) argues that animals and humans can be attachment figures for each other, thereby offer a support and comfort to each other.

The human-animal bond has become a research phenomenon in the last few decades and animals have been included in a number of settings to assist humans to reach desired goals (for example, improve fine motor skills).

3.2. Animal-Assisted Therapy (AAT) and Animal-Assisted Activities (AAA)

According to Friesen (2010), the last three decades of research indicates that therapy animals offer physiological, emotional, social and physical support simply due to the fact that these animals are perceived as being non-judgemental. The involvement of

animals, therefore, can form part of a multidisciplinary treatment plan with the distinct goal of decreasing stress and improving physical and mental health (Le Roux & Kemp, 2009).

3.2.1 Definition of AAT/AAA

Nimer and Lundahl (2007, p. 225) define animal-assisted therapy "as the deliberate inclusion of an animal in a treatment plan where the introduction of the animal is designed to accomplish predefined outcomes believed to be difficult to achieve otherwise or outcomes best addressed through exposure to an animal".

The most commonly accepted definition of AAT/AAA, however, is the one proposed by the Delta Society (www.deltasociety.org). The Delta Society is a non-profit organisation founded in 1977 which aims to assist people to live healthier lives by integrating therapy, service and companion animals into their lives. The Delta Society differentiates between animal-assisted therapy (AAT), which revolves around specific, individualised goals, and animal-assisted activities (AAA), which have no specific treatment goals and can be used identically with many people. An example of AAT would be when a woman recovering from a stroke experiences difficulties standing or walking. A physical therapist might incorporate a dog into his/her sessions with this woman. By placing the dog on a raised surface, like a table, and encouraging the woman to stand while brushing the dog's back, he/she will help increase the client's strength and abilities. An example of AAA, on the other hand, would be when a group of volunteers take their pets to an orphanage for a visit. These visits would be influenced by the orphanage staff's instructions but no treatment goals would be set. The positive effects animals have on human's physical and psychological well-being (as discussed in this chapter) would serve as the motivation behind these visits.

LaJoie (cited in Kruger & Serpell, 2000) reports that various terms in the literature share similar definitions as those proposed above for AAT/AAA (for example pet therapy, pet psychotherapy, pet-facilitated therapy, companion-animal therapy and four-footed therapy) and these interchangeable terms might cause confusion when reviewing studies conducted in this field. For this reason, Kruger and Serpell (2000) prefer the term Animal-Assisted Interventions (AAI) which refers to any intervention that entails

the inclusion of animals with the intention of either reaching certain therapeutic goals or improving certain conditions (for example, reducing blood pressure and anxiety levels).

For purposes of this study, research on AAT/AAA and the general positive effects of the human-animal bond will be discussed in order to highlight the wide-spread benefits of human-animal interaction. The researcher, however, proposes to explore the individual beliefs and opinions of employees pertaining to the inclusion of animals (AAA/AAI) in a work environment as a possible means of stress management. This will be more fully discussed in subsequent chapters.

3.2.2 History of AAT

Historical accounts of animals contributing to the well-being of people date back to the 1600s. According to Fine (2000), this is evident in John Locke's discussion pertaining to the utilization of small animals in nurturing empathy and responsibility in children. Urichuk and Anderson (2003), however, point out that hippotherapy (that is, physical therapy on horseback) was used¹ by the Ancient Greeks to rehabilitate injured soldiers and, therefore, the benefits of AAT were recognized years before the first accounts were recorded.

In 1792, the York Retreat in England enhanced their treatment of mental health patients by introducing farm animals as an adjunct to medical therapy (Altschuler, 1999; Baun & McCabe, 2000; Macauley, 2006; Urichuk & Anderson, 2003). These animals were a form of positive reinforcement and support for the patients resulting in improved patient attitudes. Florence Nightingale further documented the benefits of therapy animals in 1860 when she emphasised the importance of small pets in providing companionship to people who were sick (Altschuler, 1999; Macauley, 2006). According to Baun and McCabe (2000), the next century saw mental health institutions including animals in their treatment plans.

¹ Throughout this chapter, the words 'used' or 'utilized' will be applied in context for purposes of illustrating how animals have contributed to human well-being throughout history. This does not mean that the author endorses any form of animal abuse, misuse or exploitation.

In 1919, St. Elizabeth's Hospital, in Washington, D.C., introduced dogs as companion animals for patients in psychiatric care (Altschuler, 1999; Macauley, 2006; Urichuk & Anderson, 2003). However, with the advent of psychotropic drugs in the medical and psychological fields, the involvement of animals disappeared in the documented literature until the 1940s (Urichuk & Anderson, 2003). In 1940, James Bossard (cited in Fine, 2000) noted the positive physical and emotional effects of being a pet-owner and this report coincided with the U.S. military introducing animals in their treatment of veterans in convalescent hospitals in 1942.

The State Mental Hospital in Lima, Ohio, realized the positive effects animals have on human beings in the early 1960s when one of their patients discovered an injured sparrow (Urichuk & Anderson, 2003). This patient began to look after the injured bird and was assisted by other patients who were normally detached and withdrawn. When the hospital staff recognized the positive changes initiated by the introduction of the bird to the ward, they began incorporating animals into their treatment plans. The importance of this finding is highlighted by Lee's (1984) report stating that patients on wards where animals are present used only half the amount of medication than patients on wards without animals. Lee noted a reduction in violence and significantly fewer suicides in these animal-friendly wards in comparison with wards where animals were not allowed.

It was only in the 1960s, however, that the term 'pet therapy' was first coined by Boris Levinson. Levinson, believed to be the father of pet therapy, had his dog participate in his therapeutic work after he noted that the dog served as a focal point in one of his sessions with a non-verbal child. The boy, who was usually unresponsive, interacted with the dog and even tried to speak to it (Urichuk & Anderson, 2003). This marked the emergence of increased interest in the psychological effects of human and animal interactions (Zamir, 2006).

In the 1970s, the Corsons established a dog ward in their psychiatric hospital at Ohio State University in order to research animal behaviour in various settings (Corson, Corson & Gwynne, 1974). The intention behind this study was to provide these researchers with insight into the behaviour of children and adolescents who found

themselves in similar circumstances. The ward where these dogs were kept was not soundproof and, consequently, the patients in the adolescent ward could hear them barking. Many of these patients broke their self-imposed silence to express an interest in taking care of the dogs. This finding inspired these researchers to determine the effects of dogs on psychiatric patients who had not responded to other treatment methods. They found a dramatic improvement in 28 out of 30 patients (Corson et al., 1974).

The above research findings led Beck and Katcher (1983) to suggest that animals could promote physical and mental health as well as offer companionship and even assist in therapy.

3.2.3 AAT and research

AAT has come under the scientific microscope over the last few decades. Researchers (Chandler, 2005; Katcher & Wilkins, 2000; Martin & Farnum, 2002; Reichert, 1994) have conducted studies using AAT across a multitude of scenarios and the results have been encouraging. A few of these studies will be discussed in order to illustrate the profound effects animals may have on humans.

- AAT and sexual abuse

The effects of animals, as a complimentary component to individual and group therapy for sexually abused girls, was examined by Reichert (1994; 1998). The findings of these studies provided evidence that animals can be helpful in enabling these girls to work through their trauma. Peacock (cited in Reichert, 1998) confirms that animals may help abuse victims relax and feel more comfortable with expressing their feelings.

- AAT and anger management

An exploratory study was carried out by Lange, Cox, Bernet and Jenkins (2007) with the aim of investigating the value of including dogs in anger management therapy. This study consisted of a sample of five adolescents between the ages of 13 and 16 years. Although the small sample size could draw criticism, these researchers found that the dogs appeared to have a calming effect on the participants during difficult and

challenging moments and provided humour in the serious therapeutic setting. Lange et al. (2007) noted that the dogs aided the building of rapport between the therapist and the clients as well as motivated the participants to engage with the therapist throughout the session.

- AAT and Attention Deficit/Hyperactivity Disorder (AD/HD)

Katcher and Wilkins (2000) utilized a crossover experimental design in order to determine the effects of including animals in educational settings catered for children diagnosed with AD/HD. They found that the inclusion of animals was beneficial (for example, these children displayed less symptoms when participating in the care of animals) but that the positive effects these animals had on the children was context specific. The children carried over the positive behaviour only to other structured settings (for example, the classroom), but no changes in behaviour were noted in less-structured environments.

- AAT and diagnosis

An interesting study was carried out by Prothmann, Albrecht, Dietrich, Ulrike, Stiever and Ettirch (2005) regarding whether animal-play could assist with the diagnosis of a variety of disorders (for example, eating disorders, anxiety and autism). Participants' interactions with dogs were digitally recorded and analysed using software specially designed to statistically interpret these interactions. The mere presence of a dog promoted spontaneous non-verbal communication which was clear and easy to code. Prothmann et al. (2005) found that almost three quarters of all patients could be correctly diagnosed in this manner.

- AAT and communication

Martin and Farnum (2002) conducted a quantitative crossover study of children with pervasive development disorders. They compared children who were exposed to a ball, a stuffed dog and a real dog. The results indicated that children who were in the presence of the live dog were more focused and more aware of their social environment

than children in the other groups. This would suggest that animals can help people to centre themselves in the present moment and, in this way, embrace a life of mindfulness. Martin and Farnum (2002) found that children's response to the real dog (when compared to the behaviour of children in the other conditions) was characterized by more laughter, increased eye contact, communication with the dog and a desire to connect with the dog by feeding him. Animals can, therefore, "act as a bridge by which therapists can reach patients who are withdrawn, uncooperative and uncommunicative" (Beck & Katcher, 1996, p. 129).

- AAT and counselling

Chandler's (2005) study involved inmates working with dogs as part of their mandated therapy sessions. It was found that interacting with the dogs allowed these inmates to relax more fully and be more open to the counselling session.

Further research on the effects of animals on clients in therapy was conducted by Prothmann, Bienert and Ettirch (2006). These researchers conducted a pretest-posttest research design with the aim of determining children's state of mind while interacting with animals during counselling. They used the Basler Befindlichkeits Skala (BBS) which provides a measure of a person's state of mind in terms of vitality, intra-emotional balance, social extroversion and alertness. The findings of this study indicated that children who interacted with the dog during therapy demonstrated increases in all areas identified by the measure. Prothmann et al. (2006) proposed that the dogs infused the atmosphere with warmth and acceptance.

- AAT and social development

Marr, French, Thompson, Drum, Greening, Mormon, Henderson and Hughes (2000) conducted a study in which 69 participants met for one hour each day of the week for four weeks. This sample comprised of both men and women with a mean age of 41.5 years. Each participant had been diagnosed with a mental illness with some showing signs of alcohol or drug abuse. Half the participants interacted with a variety of small animals (for example dogs, rabbits and guinea pigs) during their social sessions while

the other half comprised the control group. These researchers found that the participants interacting with the animals were more sociable and relaxed than the participants in the control group. This finding supports Collis and McNicholas's (1998) suggestion that stress, depression and anxiety experienced as a result of social disconnection may be reduced by the inclusion of animals.

The research mentioned above, although only a small sample of the studies that have been carried out, has been briefly discussed in order to emphasize the beneficial effects animals can have on humans across a broad spectrum of situations. Irrespective of age, health status and socio-economic situation, animals can still impact on people positively. If animals can help people who have been abused cope better with their trauma, then the possibility of animals having the same positive effect on people who are experiencing stress due to less traumatic reasons (for example, conflict at work) should be more fully explored.

3.3 The human-animal bond: Physical and psychological effects

A national survey conducted in Australia in 1994-95 reported that the health benefits provided by pets contributed to an estimated saving of \$988 million (Headey, 1999). The results of this survey highlight the profound effects that animals can have on human health.

3.3.1 Physical effects of the human-animal bond

Most of the research conducted in order to explore the physical effects animals have on people has been carried out within the medical community. As denoted by the Gestalt concept (Jordaan & Jordaan, 1998), we are more than the sum of our parts. Mind and body are intricately connected. Thus, any physical effect that animals have on an individual will, in some way, impact on his/her psychological well-being and, for this reason, cannot be ignored. Beck and Katcher (2003) add weight to the importance of this mind-body connection by reporting that there is a link between physiological responses and mental wellness. These researchers emphasise the interrelationship between positive physiological changes and improved psychological health.

Researchers have found that pet owners have significantly lower systolic blood pressure than non-owners (Allen et al., 2001; Dimitrijevic, 2009; Edney & Robinson, 1998; Headey, 1999; Jennings, 1995; Pompeo, 2005; Sable, 1995; Serpell, 1990; Sobo et al., 2006). In Vormbroch and Grossberg's study (cited in Somervill, Swanson, Robertson, Arnett & MacLin, 2009), college students had their systolic blood pressure (SBP), diastolic blood pressure (DBP) and mean arterial pressure (MAP) tested while they carried out experimental tasks. These students were divided into three groups: one group played with a dog, one group only talked to the dog and one group talked to the experimenter. The results of this study provided evidence that the college students petting a dog produced the lowest SBP, DBP and MAP whereas college students who talked to a dog produced slightly higher levels of SBP, DBP and MAP. The college students who talked to the experimenter produced the highest levels of SBP, DBP and MAP. These findings suggest that interacting with the dog had a calming effect on the college students.

The findings cited above are consistent with Allen, Blascovich, Tomaka and Kelsey's (1991) study. These researchers tested the blood pressure and heart rate reactivity of adult female dog-owners while they performed challenging tasks. The participants either had to carry out the task in the presence of their dog, their spouse or their best friend. Allen et al. (1991) found that the participants who performed the tasks in the presence of their dogs showed significant reductions in SBP and pulse rate (PR) compared to participants in the other conditions. This finding could be attributed to the perception that dogs/animals are non-judgemental and, therefore, participants can perform the tasks without having to worry about what other people think of them (Allen et al., 1991; Friesen, 2010; O'Haire, 2009; Pompeo, 2005). Another possible explanation for these findings could be that paying attention to animals, especially by petting them, may reduce sympathetic arousal and, therefore, result in decreases in blood pressure (Headey, 1999; Pompeo, 2005; Wells, 2009; Wolff & Frishman, 2005). In 1929, research found that a dog's blood pressure dropped when he/she was being petted (Wolff & Frishman, 2005). These researchers report that half a century later it was found that the blood pressure of the person petting the dog also dropped.

Interestingly, Baun, Bergstrom, Langston and Thomas (cited in Somervill et al., 2008) reported that there was an initial excitatory effect demonstrated by significant increases

in both SBP and DBP when participants' own pets entered the room. Wolff and Frishman (2005), however, point out that a significant decrease in blood pressure was found in humans after 5 to 24 minutes of positive interaction with a dog. This finding could account for any discrepancies that might be found in the research: a participant might initially be excited in the presence of an animal, with the concomitant increase in blood pressure, but will relax after a few minutes of interacting with the animal resulting in significant decreases in blood pressure.

Wolff and Frishman (2005) report that specific neurochemical plasma levels were examined before and after a human interacted positively with a dog. Participants' blood was analysed after a decrease in the mean arterial blood pressure was noted and significant increases in the human's beta-endorphin, oxytocin, prolactin, phenylacetic acid and dopamine levels was found. This analysis also showed a decrease in cortisol (Wolff & Frishman, 2005) which has been described as one of the stress hormones (Cox et al., 2000). These researchers declare that these changes in neurochemical plasma levels offer additional support to the belief that interaction with animals can reduce blood pressure in humans.

Jennings (1995) reports that male pet owners have significantly lower cholesterol levels than female pet owners although pet owners in general have lower cholesterol levels than people who do not have a pet (Wells, 2009). High cholesterol, cortisol and blood pressure levels are risk factors for stress-related coronary heart disease. The research discussed thus far would suggest that pet-owners have a lower risk of developing coronary heart disease than non-owners. This has been confirmed by Wells (2009) who reports that the risk factor for coronary heart disease was significantly lower for pet owners than for non-owners.

The reduced risk for coronary heart disease could also be attributed to the positive effects of exercise. Pompeo (2005) states that pets can encourage an increase in exercise because most pet owners will engage physically with their pet (s) for health purposes (for example, dog owners will take their dog for a walk in order to promote the dog's good health).

The propensity for increased exercise, together with the research findings on decreased blood pressure and cholesterol levels as a result of interaction with an animal, might explain Friedman's findings (cited in Headey, 1999) that pet owners who suffered a heart attack were much less likely to die in the following year than heart-attack sufferers who do not own pets. Dog-owners were roughly 8.6 times more likely to be alive one year after their heart attack than patients who did not own a dog (Dimitrijevic, 2009; Halm, 2008; Somervill et al., 2008; Wells, 2009). The positive physical effects that animals have on humans could protect pet owners who suffered a heart attack from further deterioration in health and could act as a psychological buffer to the negative effects of stress.

Wells (2009) supports this hypothesis by reporting that animals may improve people's short-term physical health irrespective of whether people physically interact with the animals or are just in the presence of animals. According to Wells (2009) the mere presence of an animal can help lower automatic responses to moderate stressors. DeSchraver and Riddick's (1990) study adds weight to this statement. These researchers divided their elderly participants into three groups: one group was exposed to a live aquarium, one group viewed a recording of a variety of tropical fish and one group viewed placebo recordings. The hypothesis was that participants in the two fish-gazing groups would experience a reduction in pulse rate, an increase in skin temperature and a reduction in muscle tension after experiencing a stressor. The results of this study confirmed the hypothesis. DeSchraver and Riddick (1990) report that participants were overheard talking to other people about their favourite fish. This would suggest that animals may act as a catalyst for social interaction.

3.3.2 Psychological effects of the human-animal bond

Dimitrijevic (2009) stated that the presence of animals has been associated with positive psychological and psychosocial benefits. Le Roux and Kemp (2009) expand on this by reporting that animals contribute to a person's psychological health by reducing stress, anxiety, depression and loneliness.

Calvert (cited in Dimitrijevic, 2009) defined loneliness as the emotional state experienced by an individual who finds him/herself unable to acclimatise to his/her

environment and is unable and/or unwilling to take responsibility for this environment. Researchers (Dimitrijevic, 2009; Headey, 1999; Pompeo, 2005; Sobo et al., 2006; Wells, 2009) have found that people who keep pets report less feelings of loneliness than people who do not have any pets. According to Levinson (cited in Urichuk & Anderson, 2003), this diminished experience of loneliness may be attributed to pet owners feeling more fulfilled than non-owners since animals may satisfy the human need for loyalty, trust, respectful obedience and submission. Animals have also been noted to encourage social interaction (Le Roux & Kemp, 2009; Pompeo, 2005; Sable, 1995; Serpell, 1990; Sobo et al., 2006; Urichuk & Anderson, 2003; Wells, 2009) which may contribute to the dispelling of feelings of loneliness.

Allen et al. (2001) confirm that animals have a positive influence on human physical and psychological health. For example, these researchers found that service dogs have a positive effect on the emotional well-being and self-esteem of disabled people. Service dogs even played a role in assisting these individuals to integrate successfully into their community. Dimitrijevic (2009) accentuates that animals may assist with the improvement of attention, concentration, self-esteem and verbal interaction as well as with the reduction of anxiety and loneliness.

Halm (2008) stated that an interesting emotional benefit of human-animal interaction was reported by pediatric and adult patients in hospitals. These patients reported a sense of relief or distraction from their pain and/or situation as a result of their interaction with animals. This finding could provide further evidence in support of animals promoting a sense of mindfulness by encouraging people to focus more fully on the present moment instead of being pulled into the recesses of their pain or depression. The proposition that animals may encourage people to engage more in the present moment was also suggested by Martin and Farnum's (2002) study discussed earlier.

Of further interest, the nurses in Halm's (2008) study believed that the mere presence of the animals transformed their work environment into a happier and more interesting one. This confirms Corson, O'Leary Corson, Gwynne and Arnold's (1977) claim that animals promote a more relaxed, friendly atmosphere. The nurses also believed that the animals did not impact negatively on the work flow which would imply that the inclusion of animals in work environments will not necessarily affect productivity.

The presence of animals encourages people to interact with each other (Le Roux & Kemp, 2009). By helping to improve social interactions and relationships, animals may affect people's psycho-immune status (that is, improved social support may result in more successful coping strategies, as was discussed in the previous chapter, and, therefore, acts as a buffer to the experience of acute stress). Wells (2009) acknowledges the important role positive social relations play in protecting people from the potentially illness-inducing effects of stress.

Researchers (Serpell, 1990; Wells, 2009) have found that dog owners encounter more positive social interactions when walking their dogs than solitary walkers. Wells (2009) points out that this increased social interaction is especially true for young dogs, perhaps because their enthusiasm, clumsy movements and engaging charm tend to incite more social responses than older animals. Collis and McNicholas (1998) have speculated that this ability to evoke social interaction may be attributed to the fact that the animal acts as a focus for conversation. Pomeo (2005) and Sobo et al. (2006) have proposed that the mere presence of a dog may lead other people to perceive the dog-owner more positively (for example, as more friendly or approachable). This is consistent with Lockwood's study (cited in O'Haire, 2009) which will be discussed shortly.

In a study carried out by Hunt, Hart and Gomulkiewicz (cited in Wells, 2009), it was found that a woman sitting in a park was approached by strangers more often when she was accompanied by a rabbit or a turtle than when she sat alone blowing bubbles. Further evidence in support of animals acting as facilitators for social interaction has been submitted by Halcomb and Meacham (1990). These researchers conducted a study in an in-patient psychiatric unit. They found that attendance was improved in the therapeutic groups where animals were present suggesting that animals motivated patients to engage with both the therapist and with one another. Animals, therefore, may be conduits that encourage shy, withdrawn or isolated individuals to express themselves and interact more successfully with other people.

It would appear as if the research supports Sable's (1995) declaration that animals have the potential to foster emotional attachments by providing opportunities to expand social networks and by encouraging the nurturing of other living beings.

There is substantial evidence that animals help ameliorate stress and anxiety. Allen et al. (2002) conducted a study to determine the physiological response to stress of both pet owners and non-owners. These researchers found that both groups had the same physiological response (measured in terms of heart rate and blood pressure) to stress when they were alone but, whereas this was the lowest physiological response exhibited by non-owners, pet owners experienced an even lower response when their pets were present. This would suggest that pet owners had significantly lower heart rates and blood pressure levels at baseline and significantly smaller reactivity from baseline during exposure to stress than non-owners. Wolff and Frishman (2005) report that pet owners return quicker to baseline when in the presence of their pets.

Arambasic and Kerestes (1998) conducted a study in Slavonia, a region heavily affected by war. These researchers found that students who had a dog or a cat were more expressive of their emotions, sought out social support more often and demonstrated more evolved coping strategies than students without a pet. All of these enhanced attributes can help reduce stress.

It has been suggested that pets not only buffer reactivity to stress but have the potential to diminish the perception of stress (Allen et al., 2002). This hypothesis has been supported by Lockwood's study (cited in O'Haire, 2009). Lockwood set out to determine whether the presence of an animal can alter a person's perception of a scene by incorporating the Animal Thematic Apperception Test (TAT) into his study. TAT comprises of pictures of people in provocative, yet ambiguous, situations. Participants were shown two sets of pictures which were identical except for the presence or absence of an animal. Participants consistently described those images with animals as friendlier, happier and less threatening than the pictures without animals. When an animal is present, people may experience the situation as less foreboding and a person's perception of their circumstances influences his/her stress response. By influencing how a situation may be perceived, animals can reduce anxiety, loneliness and depression as well as boosting feelings of competence, autonomy and self-esteem (Wells, 2009).

Elderly individuals with pets, when compared to their peers without pets, appear to be cushioned from the impact of stressful life events and make fewer appointments with physicians (Allen et al., 2001; Allen et al., 2002; Dimitrijevic, 2009; Headey, 1999; Wells, 2009). Perhaps this can be explained by considering Lynch's finding (cited in Allen et al., 2002) that talking to pets has been associated with lower cardiovascular responses than talking to other people (that is, an indication of reduced anxiety after talking to an animal). Researchers (Allen et al., 1991; Allen et al., 2002; Pompeo, 2005) have proposed that the presence of a beloved pet can offer non-judgemental social support which is crucial to buffering an individual from the pathogenic effects of stress. Social support theorists have argued that the positive-feeling states associated with social support (for example, feeling validated and cared for) may augment a person's ability to handle stress (Allen et al., 1991; Allen et al., 2001; Allen et al., 2002; Dimitrijevic, 2009; Pompeo, 2005; Sobo et al., 2006; Wells, 2009).

Fine (2000) reports that animals often stumble into comical and/or playful situations evoking laughter and amusement from the people present. This was confirmed by Lange et al. (2007) in their study on AAT and anger management which was briefly discussed earlier. These expressions of joy are thought to be therapeutic because they reduce stress and improve a person's quality of life (Cousins, 1989). By regulating a person's emotional state in this way, animals can positively alter the atmosphere in a room.

Barker and Dawson (1998) found that animals have a calming effect on anxious individuals. They have speculated that simply touching an animal may have a soothing effect and this hypothesis has been supported by a number of other researchers (Halm, 2008; Headey, 1999; Parshall, 2003; Pompeo, 2005; Smith, 1983; Wells, 2009; Wolff & Frishman, 2005). It has, however, been proposed that merely looking at animals may have the same effect (DeSchrive & Riddick, 1990; Headey, 1999; O'Haire, 2009; Pompeo, 2005). In this regard DeSchrive and Riddick (1990) reported that watching fish in an aquarium had a hypnotic effect on anxious patients awaiting dental surgery.

The calming effect animals have on humans is consistent with Benson's relaxation theory (DeSchrive & Riddick, 1990; Wells, 2009). According to Benson, there are four basic elements to the relaxation response: presence of an object on which to focus (for

example, a dog), a quiet environment, a passive attitude and a comfortable position. By encouraging a sense of mindfulness (as suggested by Halm's (2008) and Martin and Farnum's (2002) studies discussed earlier), animals promote the passive, reflective attitude conducive to relaxation as proposed by this theory.

Animals, therefore, clearly contribute to a general sense of well-being throughout life (Headey, 1998; Sable, 1995; Sobo et al., 2006). The studies cited in this chapter span numerous situations, conditions, demographics and age groups. These studies were included in the discussion on the effects animals have on humans in order to illustrate how influential the human-animal bond can be in the quest for physical and psychological health.

3.4 Possible explanations for the positive physical and psychological effects associated with the human-animal bond

The health benefits associated with animals may be credited to the mutual giving and receiving of affection which is a fundamental component of the human-animal bond. Urichuk and Anderson (2003) remind the scientific community that the powerful act of giving can improve an individual's sense of worth which may lead to him/her automatically experiencing an improvement in how he/she feels. A mentally healthy person is someone who is able to show love, affection, care, understanding and tolerance. Nebbe (1994) believes that an individual fulfils his/her own nurturing needs when he/she nurtures another creature.

3.4.1 Biophilia hypothesis

Biophilia theory, first conceptualised by Erich Fromm in the early 1940s, suggests that there is an innate bond between human beings and other living systems (Beck & Katcher, 2003; Fawcett & Gullone, 2001; Gullone, 2000; Kahn, 1997; O'Haire, 2009). Fromm used this term to describe the psychological attraction humans have to the living, pulsating natural world. Wilson (cited in O'Haire, 2009) used the term in the same sense when he proposed that human beings subconsciously seek connections with animals and other living things. Wilson proposed that this tendency to bond with the living world is rooted in biology.

Wilson's (cited in O'Haire, 2009) proposition means that, although a person's affinity towards things in nature can be developed through experience, the innate need for affiliation is a product of evolution. For example, adult mammals are generally attracted to the features of baby mammals and this attraction helps increase the survival rate of the species by ensuring that the young mammal is nurtured and protected. O'Haire (2009) endorses the proposition of an evolution-based reason for this affiliation by emphasizing that paying attention to animals would enhance a person's chances of survival in prehistoric times. Animals' behaviour acts as an early warning detection system indicating the presence of danger. An animal at rest or playing will evoke feelings of calm and relaxation whereas an animal that senses danger will be nervous or restless, which will trigger the human instinct to be on guard. This suggestion serves as a possible explanation as to why animals have such a positive effect on people's physical and psychological health, specifically the effect animals have on human's stress and anxiety levels.

The propensity to connect with living systems can be seen throughout history. Ulrich (cited in Fawcett & Gullone, 2001) states that this can be demonstrated by the fact that the homes of the ancient Egyptian nobility, Persian settlements and medieval Chinese villages were all said to have extensive, sophisticated gardens suggesting that people found this contact with nature necessary for their well-being. Further historical evidence of the inherent tendency to interact with living systems has been put forth by Archer (cited in Fawcett & Gullone, 2001). Archer stated that fossil evidence, dating back 500 000 years, indicates that our ancestors associated with canids resembling wolves, suggesting that humans feel a deep-seated need to interact with other living beings. This is supported by Davis and Valla's report (cited in O'Haire, 2009) of a 12,000 year-old tomb discovered in modern Israel. When this tomb was opened, it was found that its occupant had an arm wrapped around a puppy indicating that an affectionate relationship between humans and animals has existed for millennia.

Gullone (2002) and Fawcett and Gullone (2001) mentioned that this intrinsic attraction to nature can also be seen in more recent times. They point out that this attraction is reflected in people's expressions of pleasure when they interact with or view other living species. They cite Wilson's findings, that more people visit zoos than attend

major professional sporting events in the United States and Canada, to support this claim. Furthermore, it has also been reported that the provision of parks and the preservation of nature reserves has been endorsed by the belief that nature promotes psychological well-being by reducing the stress experienced as a result of modern living (Fawcett & Gullone, 2001; Gullone, 2000).

Studies have shown that even negligible exposure to nature (for example, looking at a park out of a window) increases productivity and improves health in the workplace, promotes the healing process in hospitals and reduces the incidence of illness in prisons (Kahn, 1997). Ulrich, Simons, Losito, Fiorito, Miles and Zelson (cited in Kahn, 1997) conducted a study to assess the effects of natural and urban settings on stress reduction. In this experiment, 120 participants viewed a stressful movie followed by videotapes of either natural or urban settings. Self-reports, as well as the results of a battery of physiological measures (including heart rate, muscle tension, skin conductance and pulse transit time), indicated that there was a greater stress recovery in response to the natural than to the urban settings.

Ulrich and Lunden's study (cited in Kahn, 1997) entailed the random allocation of 166 patients, scheduled to undergo open-heart surgery with visual stimulation, to different types of visual scenarios. Patients were either exposed to one of two types of nature pictures (open view with water or a moderately enclosed forest scene), an abstract picture or a control condition (a white panel or no picture at all). Ulrich and Lunden found that the patients exposed to the picture of an open view with water experienced less post-operative anxiety than patients exposed to the other pictures. These findings support the belief that exposure to nature, however minimal, promotes health and recovery.

Research, therefore, substantiates the hypothesis that contact with nature, including other living creatures, leads to feelings of enjoyment, relaxation and lowered stress levels (Kahn, 1997).

Kellert (cited in Fawcett & Gullone, 2001, p.125) adds that "as a social species whose extensive co-operation and affiliational ties undoubtedly had a central value for survival, humans' affiliation with other species may have served the adaptive value of

enhancing our capacity for bonding, altruism and sharing". These traits are fundamental to the development and maintenance of good, healthy social relationships and, in this way, animals not only promote social interaction but help cultivate characteristics conducive to establishing a sound social support network.

3.4.2 Social support theory

Baron and Byrne (2003) point out that the need to connect with, and be accepted by, other people is a fundamental aspect of the human psychological constitution comparative to physical needs like hunger and thirst. Social support refers to the physical and psychological comfort provided by other living beings in fulfilment of this need for acceptance and kinship. Schwarzer and Knoll (2007) differentiate between social integration and social support. According to these researchers, social integration refers to the structure and quantity of social relationships (which includes the extent of networks as well as the frequency of interaction) whereas social support refers to the function and quality of these social relationships in terms of the perceived availability of help and the support actually received. For purposes of this study, the researcher will not apply this differentiation and will refer to social support as a combination of Schwarzer and Knoll's terms.

Animals not only provide social support but also facilitate social interaction between people. Beck and Katcher (2003) confirm that the companionship of animals forms part of a person's social support network while, simultaneously, encouraging the expansion of an individual's social circle. Researchers (Allen et al., 2002; Fawcett & Gullone, 2001; O'Haire, 2009; Pompeo, 2005; Sobo et al., 2006; Wells, 2009) have attributed this positive effect of animals on social interaction to the belief that animals may increase the attractiveness of people.

Muscel (cited in O'Haire, 2009) reports that the benefits associated with animals as a form of social support was emphasized in a study on cancer patients. In this study, statements were obtained from these patients who claimed that the presence of animals reduced their fears as well as feelings of despair, loneliness and isolation. These patients also professed that animals assisted them to adapt to their difficult situations. It stands to reason that if animals can have such a positive effect on cancer patients just by being

present, thereby offering unconditional love and support, then perhaps animals might have similar positive effects on people in less difficult and emotionally charged situations.

Social support has positive effects on health and well-being (Gurung, Taylor & Seeman, 2003; O'Haire, 2009; Sandler & Lakey, 1982). The presence of social support has been found to reduce loneliness (O'Haire, 2009), protect against illness (Baron & Byrne, 2003) and act as a buffer against the negative effects of stress (Bellman, Forster, Still & Cooper, 2003; Cohen & McKay, 1984; DeLongis et al., 1988; Sandler & Lakey, 1982; Schwarzer & Knoll, 2007; Theorell, 1997). For this reason, social support will be more fully explored in this chapter.

According to Caplan (cited in Sandler & Lakey, 1982), social support provides emotional encouragement and guidance and, in this way, buffers the negative impact of stress. The regulating influence social support has on the impact of stress is known as the stress-buffering effect (Schwarzer & Knoll, 2007). Bellman et al. (2003) provide evidence in support of the stress-buffering effect by reporting that strong social support from co-workers has a moderating influence on the stress levels of employees who find themselves in a conflict with their supervisors. Furthermore these researchers found evidence that receiving social support, especially from women, can reduce the cardiovascular effects of stress.

Social support may expose individuals to various experiences which might come in helpful when coping with a stressor (for example, experience might result in the refinement of existing coping skills or might make the individual aware of alternative coping strategies). Social support may influence the cognitive appraisal of stressful events (DeLongis et al., 1988). For instance, according to the social comparison theory, if an individual finds him/herself in a threatening situation, and the cause of this threat is slightly ambiguous, this individual will consult with other people in order to determine the appropriate emotional reaction (Cohen & McKay, 1984). This implies that a person's circle of support may impact on the extent to which a situation is viewed as a stressor. Social support's effect on the appraisal of a situation as a stressor is, therefore, consistent with the transactional theories of stress discussed in the previous chapter.

Cohen and McKay (1984) point out that a person's social support group may succeed in getting the individual to focus on the positive aspects of the situation or, alternatively, on the positive things in his/her life. The change of focus will not only shift the individual's attention to more positive elements but might also alter his/her perception of the event. The change in perception of a stressor will promote emotion-focused coping as explained in chapter two which was dedicated to the discussion of stress.

A person's social support network can further contribute to his/her ability to endure the effects of stress by encouraging certain kinds of behaviour (Cohen & McKay, 1984). For example friends and family might play a role in promoting a lifestyle which includes exercise, nutritious dietary habits and relaxation. These behaviours will contribute to better stress management by ensuring that the individual is in a sound physical and mental state and, thus, able to cope more effectively with daily hassles.

Cobb (cited in Fine, 2000) reports that social relationships have a profound effect on an individual's emotions. When an individual interacts with other people, he/she may feel valued, loved and esteemed. The increased feeling of belonging associated with social relationships has an uplifting effect on a person's mood and will lead to the individual in question feeling validated. Serpell (2000) emphasises the important role social support plays in facilitating psychological well-being by pointing out that humankind has used isolation and loneliness as a form of punishment throughout history. For example prisons make use of solitary confinement to punish convicts. Social ostracism and exile are further examples of the use of social isolation as punishment. Serpell (2000) highlighted the effects of social connection by reporting that the psychological effects of social separation are similar to the experiences described by individuals who were subjected to physical torture (for example, pain, loneliness, discomfort and feelings of worthlessness).

Social support, therefore, is a resourceful factor in the pursuit of good physical health and sound mind. Animals provide unconditional love and support and also facilitate social interactions between people, thereby promoting the expansion of an individual's social support system. Serpell (2000) states that the positive effects associated with social support can result from any positive social relationship (that is, any relationship

in which a person feels loved and respected). In this sense, the human-animal bond can elicit the same positive effects on a person as a human-human bond.

Both biophilia hypothesis and social support theory are consistent with Nebbe's (1994) suggestion that an individual fulfils his/her own nurturing needs when he/she nurtures another creature. By taking care of animals and/or relating to other people, an individual is in a position to nurture and be nurtured in return.

3.5 Ethical issues and potential obstacles associated with AAT/AAA

Although the potential health benefits to humans associated with the human-animal bond are profound, it is important to consider the rights of animals when including them in AAT/AAA. Together with these ethical concerns, it is imperative to explore possible obstacles that might hamper the success of AAT/AAA.

3.5.1 Ethical considerations

Iannuzzi and Rowan (1991) point out that some animal protection groups perceive AAT/AAA as one more way of exploiting animals. These researchers raise a number of concerns which, if not properly addressed, could be detrimental to the health of these animals. For example, they mention that there is a strong possibility that animals in such situations might experience fatigue and/or burnout as a result of overstimulation, too many people interacting with them and too little time to rest.

Another cause of concern raised by Iannuzzi and Rowan (1991) is the possibility of overfeeding and under-exercising these therapy animals which may lead to congestive heart failure. The potential for animal abuse is, therefore, unfortunately quite high if proper care is not taken when introducing animals to such settings.

The potential for animal abuse in therapeutic settings is highlighted by Haubenhofner and Kirchengast's (2007) study. These researchers used hormonal indicators to assess the possible stress experienced by dogs. Haubenhofner and Kirchengast approached their study under the assumption that a living being can be considered to be stressed if it reacts to an event in a distinctive physiological manner (for example, increased

secretion of cortisol into the bloodstream). According to these researchers, saliva cortisol is a useful method of determining a dog's reaction to both acute and chronic stress. Haubenhofer and Kirchengast found that dogs have higher levels of salivary cortisol on days when they were incorporated into the therapeutic environment. The higher levels of salivary cortisol have been attributed to corporal and/or mental exhaustion, too much attention, too little sleep and chaotic, busy surroundings.

Chandler (2005) emphasizes that environmental considerations must be taken into account when introducing animals to therapeutic settings. These considerations include noise levels, possible excessive feeding of animals and the potential risk for injury as well as the unique characteristics of that specific animal which allows it to adapt to the situation.

Aanderson (2008) suggests that these detrimental effects on the animals might be reduced by implementing certain policies. The more important elements in this regard will be choosing the size of the animal to fit the space available, providing a suitably sized exercise area as well as creating a haven for the animal to go to when feeling stressed or uncomfortable. This suggestion would imply that smaller animals might be better suited to institutions and/or establishments where space may be restricted (for example hospitals, classrooms and office buildings). Flom (2005) refers to these small animals, which include gerbils, guinea pigs or even fish, as 'pocket pets'.

Iannuzzi and Rowan (1991) have suggested that care needs to be taken to ensure that adequate shelter is provided and that animals undergo routine medical examinations as both a means to promote health as well as monitor the animals' stress levels. It is, therefore, imperative to develop an understanding of a particular animal's stress symptoms bearing in mind that, like people, every animal will respond differently. This is in accordance with Hatch's (2007, p. 39) statement that "recent sociological work affirms that animals are minded actors with distinct selves and the ability to feel and display a range of emotions".

3.5.2 Potential obstacles and risks hindering the effectiveness of AAT/AAT

There are a number of issues that might impact on the effectiveness of AAT/AAA and, if not acknowledged, might produce results contradictory to the intended goals. These issues will now be discussed.

3.5.2.1 Health and sanitation

Sanitation and the potential for disease must be addressed. Researchers (Dimitrijevic, 2009; Gorczyca, Fine & Spain, 2000; Wells, 2009) stipulate that special attention needs to be given to the prevention of the transmission of infectious diseases (for example, ringworm or salmonella) associated with animals. These zoonotic diseases (passed between humans and animals) might compromise an individual's immune system placing him/her at higher risk for the contraction of other illnesses. This is especially relevant once consideration is given to the fact that an individual who is already stressed often has a weakened immune system as a direct result of stress hormones (Fries, 2009). These individuals are, therefore, even more susceptible to the contraction of diseases.

Urichuk and Anderson (2003) raise concerns regarding animal-related skin problems which might occur. These include canine scabies caused by mites, tick-borne diseases (for example Lyme disease and tick paralysis) and dermatophytosis caused by ringworm.

Thus, animal inoculations and parasite control are fundamental elements in any AAT/AAA endeavour. These practices, coupled with the routine medical examinations mentioned above and proper hygienic care, should be sufficient in addressing these concerns.

3.5.2.2 Physical risk and emotional vulnerability

It is important to bear in mind that animals are not completely predictable irrespective of how well-trained they might be. This may raise a number of liability issues since the risk for injury (for example, breaking an ankle tripping over an animal in the office) cannot be completely eliminated (Wells, 2009). The risk for injury might be reduced,

however, by implementing certain practices including housing animals in an adequate designated area and not allowing them to roam free. Protection against legal action could be addressed by requesting that people who wish to interact with the animals must sign an indemnity form.

By introducing pocket pets, instead of larger animals, into restrictive environments some of these concerns might be addressed. For example, fish may still have a positive effect on human physical and psychological health without placing humans at risk for injury.

Fine (2000) pointed out that people might experience intensified levels of concern if anything happens to the animals. The attachment bond which develops between humans and animals may contribute to feelings of emotional vulnerability. If something should befall the animal, feelings of loss and grief could be experienced. Similarly, if something should happen to a beloved human, the animal might be affected by the loss. Unfortunately, no precautions can be taken against such an event although it is crucial to bear in mind that both humans and animals will gain from this emotional attachment during the course of the relationship and, therefore, should not avoid forming an attachment for fear of experiencing feelings of loss at a later stage.

3.5.2.3 Cultural diversity

Arthur and Collins (2005) stated that a person's worldview has a profound effect on how he/she regards an animal. Furthermore, an individual's ethos has a direct bearing on how he/she interacts with animals. Friedmann (2000) affirms that different worldviews might mean that an animal's presence could be more of an encumbrance than a catalyst for rapport building, not to mention that the safety and/or well-being of the animal may be compromised if the individual holds a system of beliefs that might not be respectful to animal rights. Hatch (2007) adds that human esteem for animals varies substantially and it is this canon of beliefs which influences the manner in which an animal is treated.

From this standpoint, Beck and Katcher's (2003) suggestion that human-animal interaction might be healthy for some individuals, while having a negative effect on

others, makes sense. For this reason, it is important to explore any cultural aversions to the introduction of animals into a setting before implementing such actions. The importance of such a consideration is even more critical in a country like South Africa, where cultural diversity is at the heart of its heritage and forms the backbone of interrelations between its citizens.

3.6 Conclusion

The research discussed in this chapter supports the belief that there are numerous physical and psychological benefits associated with the human-animal bond. These benefits can be enjoyed after a few minutes of interaction with an animal or just being in the mere presence of an animal.

In order to fully illustrate the immense and wide-spread positive effects animals have on humans, research spanning various populations, conditions, situations and demographics was discussed. The purpose behind such a broad dissection of the available research was to reiterate that animals can impact positively on human physical and psychological health irrespective of an individual's age, health or socioeconomic status. An individual's cultural upbringing may, however, play a role in the influence of animal interaction on his/her physical and psychological well-being. The research cited in this chapter provides evidence in support of the physical and psychological health benefits associated with the human-animal bond. It must be noted, however, that certain characteristics of the participants (for example, ethnicity) were not mentioned in the research. There could, therefore, be a possibility that people from various cultures will benefit from the human-animal bond in different ways with even a possibility that people from certain cultures might even be negatively affected by animal interaction.

Nevertheless, the inclusion of animals into stress management programmes in the work environment, whether structured or informal, remains an interesting avenue that needs to be more fully investigated. The positive physical and psychological effects of animals on people are impressive enough to warrant an exploration into the prospect of implementing an animal-based stress management programme. It is imperative, however, that staff from different cultural backgrounds are consulted prior to the

implementation of such programmes in order to ensure that no harm and/or discomfort is caused to either individuals or animals as a result of cultural beliefs.

According to the biophilia hypothesis, the human need to connect with living things (including animals) stems from the evolutionary need to survive and, therefore, has a biological root. From this perspective, the calming effects animals have on humans should be experienced by most people irrespective of cultural diversities. The implication of such a standpoint is that animals may soothe human anxiety on a subconscious level simply by triggering some deep-seated instinct to respond emotionally in accordance with the life forms around a person. If an animal is resting or playful, this would suggest that no danger is present and an individual can, therefore, also be at peace.

There could, however, be other objections to the inclusion of animals in the work environment and these objections would have to be explored in order to ensure that future research along this vein will be based on a feasible premise.

Chapter 4

Research Methodology

In order to keep a true perspective of one's importance, everyone should have a dog that will worship him and a cat that will ignore him.

- Dereke Bruce

4.1 Introduction

The purpose of research is to add to the existing body of knowledge, to ask questions to which the answers are not yet known and, through the interpretation of the data, provide those answers and explore phenomena more fully. In order for this objective to be realised, it is imperative that a researcher pays sufficient attention to his/her research design before implementing his/her study.

The aim of a research design is to plan and structure a research project in order to ensure that the eventual research findings are valid and can add to the understanding of a certain phenomenon (Durrheim, 1999; Leedy & Ormrod, 2005). A research design is a stepping stone between a research question and the execution of a research project and, as such, entails the making of a number of decisions pertaining to the research process (for example sampling strategy, data collection and data analysis methods). A research design, therefore, provides the framework and/or blueprint from which a researcher must work to ensure that his/her research is plausible, coherent and valuable.

This chapter will expound on the purpose and aim of the research as set out in this dissertation. This will be followed by a discussion of the various elements of a research design and the decisions made by the researcher in this regard.

4.2 Research rationale

The profound and severe effect of chronic stress on physical and psychological health was discussed comprehensively in chapter two. Once these effects are taken into

consideration, it is obvious that stress management tools are paramount to psychological well-being. People need to effectively cope with their stress levels if they are to live full, rich lives. Research in this field should be devoted to exploring alternate ways in which to aide stressed individuals to manage their stress more efficiently.

The effects of stress on people's physical and psychological well-being drive home the fact that effective stress management interventions are crucial. It is imperative that researchers explore alternative methods of stress management in order to ensure that every individual, with all their unique characteristics, has a plethora of viable options at hand. This will result in matching individuals' personalities with a stress intervention that caters for their particular needs.

4.2.1 The research problem

Research has shown that companion animals can act as a buffer in stressful situations (Allen et al., 2001; Allen et al., 2002; Dimitrijevic, 2009; Headey, 1999; Pompeo, 2005; Wells, 2009). But can non-companion animals in a work place ameliorate the effects of stress? Will different individuals, from different cultures and different backgrounds, experience the same effects with regards to stress management? How will having an animal in the workplace affect individual staff members? Will this be a viable approach in combating the effects of stress at work? Are employees open to the possibility of exploring different avenues for stress management?

The answers to some of these questions could assist companies in reviewing their stress management programmes in the future. An understanding of employees' feelings, opinions and beliefs is a fundamental aspect of a successful campaign aimed at corporate wellbeing. With this in mind, the researcher conducted an exploratory study within her own department² in order to obtain information to answer the research

² Due to an agreement between the researcher and her deputy directors, the researcher is not at liberty to identify the organisation in question. For purposes of this research, mention will only be made to certain characteristics of this institution and department. The researcher works for an institution that has various offices throughout South Africa as well as international affiliations. She works for a department within this institution that carries out predominately administrative duties but that requires staff to have specialised, expert knowledge regarding the institution's product.

question: ‘Can animals in the workplace assist staff in reducing their stress levels and how would employees experience such a situation?’

4.2.2 The purpose of this study

The aim of this study was to determine how staff, working within the same department, perceive their own stress levels and whether or not they believe that being in the presence of an animal can reduce these stress levels. It is imperative that in-depth information is obtained in order to establish attitudes towards having animals in the work environment and these results will function as building blocks for future studies.

4.2.3 The motivation behind this study

In the 21st century, it is customary for people to spend the majority of their time at work and, as such, are exposed to the often negative effects of high job demands, office politics, work pressure and high work load. The work environment, therefore, plays a pivotal role in psychological well-being since the stress experienced at work affects people both physically and psychologically (Abbey & Andrews, 1985; Beatty, 2001; Cox et al., 2000; DeLongis et al., 1988; Fries, 2009; Jennings, 2008; Rothmann, 2008; Sapolsky, 2004; Shigemi et al., 1997; Zegans, 1982). If inadequately dealt with, stress can even result in burnout.

Once the severe consequences of excessive and chronic stress on well-being are taken into consideration, there is no doubt that it is crucial to explore every possible avenue that can reduce stress levels or, at the very least, help people cope better with the effects of stress on both their physical and psychological health.

The research findings discussed in the previous chapter suggests that animals have a positive physical and psychological effect on humans. Researchers have found that animals appear to have a calming effect on people and, thus, help them reduce their stress levels (Allen et al., 2001; Allen et al., 2002; Barker & Dawson, 1998; Dimitrijevic, 2009; Headey, 1999; O’Haire, 2009; Pompeo, 2005; Wells, 2009; Wolff & Frishman, 2005). This lead the researcher to speculate as to whether or not it would

be possible to introduce animals into the workplace in order to assist employees to manage their stress levels more efficiently. It was felt, however, that it is important to first explore employees' opinions regarding this issue before any such intervention is implemented. For this reason, the researcher proposed to conduct an exploratory study using open-ended questions in order to provide participants with the opportunity to express themselves as they see best, resulting in culturally salient information that is rich in nature. People's feelings and apprehensions regarding the inclusion of animals in the work place should be explored fully in order to establish a good foundation for future research.

4.3 Qualitative research

According to Leedy (1993, p. 139), the “nature of the data and the problem for research dictate the research methodology”. Leedy goes on to distinguish between quantitative research methodologies, where data is predominately numerical, and qualitative research methodologies, where data is predominately verbal.

The difference between qualitative and quantitative research is one of degree. These approaches differ in terms of the degree to which the researcher immerses him/herself in experiential arrangements, the extent of direct contact with the participants as well as the degree of physical involvement in the research setting(s). Shank (2002, p.11) makes use of two metaphors to illustrate the difference between qualitative and quantitative research. He likens quantitative research to the experience of looking through a window in order to get an accurate view of the research subject. According to this metaphor, all variables that impact on the research project are seen as “smudges” that need to be dealt with in order to be able to view the subject as it really exists. Qualitative research, on the other hand, is compared to a lantern which helps “shed light in dark corners” and, in this way, explores the hidden, personal elements underlying the research phenomena.

For the purpose of this study, a qualitative research design seemed appropriate.

Qualitative research is especially effective in obtaining specific information about the values, opinions, behaviours and social contexts of particular populations. According to

Banister, Burman, Parker, Taylor and Tindall (1994, p.142), qualitative research "is theory generating, inductive, aiming to gain valid knowledge and understanding by representing and illuminating the nature and quality of people's experiences. Participants are encouraged to speak for themselves".

Denzin and Lincoln (2000) reiterate the above definition by pointing out that qualitative research is dedicated to the naturalistic perspective and seeks to gain an understanding of human experience. In this way, qualitative research is useful in providing empirical support for hypotheses by ensuring that theories are grounded in the world of experience. Qualitative research acknowledges the uniqueness of each situation and empowers participants by promoting a view that they are the experts in their lives. Berg (cited in Mudaly & Goddard, 2006) highlights the importance of qualitative research in allowing participants to tell their own stories in their own voice, thereby promoting the discovery of new realities brought forth by the interactive dialogue between researcher and participants.

Qualitative research, therefore, prevents the need for complex issues to be oversimplified for the sake of establishing cause-and-effect relationships more typical of quantitative research. Researchers operating from within a qualitative paradigm will endeavour to study phenomena in their natural settings with the aim of attempting to understand and/or interpret the phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2003). This would support the proposition that there is no one truth waiting to be discovered but that truth lies within the understanding of actions, beliefs and values as seen from the participants' frame of reference and, as such, there are multiple realities that are socially and historically constructed (Mudaly & Goddard, 2006; Terre Blanche & Durrheim, 1999b). Qualitative research, therefore, does function as a lantern (Shank, 2002) illuminating the various understandings central to the exploration of phenomena.

Leedy and Ormrod (2005) have suggested that qualitative research is characterized by a number of attributes, namely it is concerned with interpretation and meaning, it involves verification by testing relevant literature in a real-world context, it is descriptive and it involves evaluation of the phenomena as understood empirically.

According to Conger (1998), qualitative research has numerous advantages:

- its flexibility allows the researcher to follow unexpected ideas while conducting the research and, therefore, enables the exploration of various processes;
- it encourages a sensitivity for contextual factors;
- it promotes a study of symbolic dimensions and social meanings; and
- it provides increased opportunities
 - to develop empirically supported new ideas and theories;
 - for in-depth and longitudinal exploration of phenomena; and
 - to cultivate a deeper interest in the subject being researched.

Taking the above-mentioned advantages into consideration, as well as the fact that qualitative research aims to explore phenomena from within the participants' frame of reference, the researcher felt that this approach would be best suited for her research objectives. It would allow the researcher the opportunity to engage with participants in order to develop an understanding of their opinions, beliefs and feelings pertaining to occupational stress, the effects of animals on their stress levels and how the inclusion of animals in the work environment would be received.

Furthermore, qualitative research is consistent with the researcher's personal epistemological stance. Epistemology specifies "the nature of the relationship between the researcher (knower) and what can be known" (Terre Blanche & Durrheim, 1999a, p. 6). Qualitative research adopts an epistemological viewpoint that describes this relationship as empathetic and open to observer intersubjectivity. The researcher personally accepts these principles and believes that individuals are the true experts in terms of their feelings, beliefs, values and experiences. It is further believed that some experiences are created and/or enhanced by the interaction between people and, therefore, the mere relationship between the researcher and participants has a bearing on the information collected. For this reason, the researcher chose to make her personal epistemological stance known in order to establish credibility (which will be discussed later in the chapter).

4.4 Sampling

According to Durrheim (1999), sampling entails making a number of decisions in terms of which people, settings, events, behaviours and/or social processes to observe.

Neuman (1997, p. 201) defines sampling as the “process of systematically selecting cases for inclusion in a research paper”.

There are various types of sample selection techniques but, for purposes of this study, it was decided to employ purposive sampling. Purposive sampling entails the selection of participants from a population on grounds of certain predetermined criteria relevant to the research question (McBurney, 2001; Neuman, 1997). Purposive sampling provides the researcher with the means to obtain specialised insight into the phenomenon being studied and is most successful when data collection and analysis are done in conjunction with each other (Tuckett, 2004). Research strategies that will be utilized by the researcher to promote this constant comparison of data include keeping a thematic log book, writing marginal remarks during transcript reading as well as on-going reading of the literature.

Patton (2002) believes that the advantages of purposive sampling, which include the selection of information-rich cases for in-depth study, are powerful components in the endorsement of this sampling technique. Strydom and Delport (2005) emphasise the applicability of purposive sampling in studies where researchers require both conventional as well as divergent information.

For purposes of this study, participants were selected from within the researcher’s own department in accordance with the following predetermined criteria:

- participants had to have worked in the department for a minimum period of five years in order to have sufficient experience to address questions relating to occupational stress; and
- had to have the ability to express him/herself clearly.

In order to add credibility to the study these participants were chosen randomly. By selecting respondents from within the same department it was ensured that all individuals share the same work environment, have the same job description and, essentially, should experience the same job demands. It should be noted, however, that employees who excel at their jobs may have additional tasks delegated to them which might affect them both physically and psychologically.

Before the researcher commenced with the study, all the deputy directors and directors of the involved department were approached in order to obtain the necessary permission to conduct the study. Certain members of this managerial team requested that the researcher refrain from naming the institution they work for as well as the specific department for confidential reasons.

The researcher agreed to these terms and, therefore, the exact institution in which the research was carried out cannot be mentioned. The following characteristics of the staff members involved in this research will, however, be mentioned in order to allow the reader to evaluate the possible transferability (to be discussed later in this chapter) of this study: employees work in an open-plan office and are divided among different sections within the department; each section requires specialised, expert knowledge to carry out duties in a professional manner; each employee is expected to carry out specialised administrative duties and meet tight deadlines and/or accomplish a certain quota of tasks within specified periods of time; employees are sometimes requested to help colleagues in other sections and, therefore, are expected to have a working knowledge of other sections' portfolios and concomitant responsibilities. It should also be mentioned that employees are sometimes moved from one section to another depending on operational needs and, therefore, participants in this study might have started off in one section only to be transferred to another during the course of this research.

Once the managerial team granted permission, participants were randomly chosen from an internal staff directory. Each participant was then approached by the researcher who explained the purpose of the study as well as what would be expected from him/her if he/she agreed to participate. An e-mail was sent to each participant confirming what was discussed together with assurances of confidentiality and anonymity. Furthermore,

each participant was asked to sign an informed consent form (see Annexure A). It should be mentioned that two of the employees who were approached indicated that they do not wish to participate listing time constraints as one of the reasons.

Qualitative research usually focuses on relatively small sample sizes because the aim of the study is to develop an in-depth understanding of the phenomena in question (Patton, 2002; Tuckett, 2004). Patton points out that determining the sample size depends on the information you wish to obtain, the purpose of the study, what is at stake, what is deemed useful, what will be accepted as credible and what can be done with the available resources. For this reason sample sizes are typically determined on the basis of theoretical saturation which is achieved when data collection no longer provides new information or insights to the research question (Glaser & Strauss, 1976; Greeff, 2005; Lincoln & Guba, 1985; Patton, 2002; Tuckett, 2004).

Therefore, the sample size for this study could not be determined prior to the completion of the study but was limited by time restrictions. The final sample consisted of eleven participants, five men and six women. Five participants are African and six are white.

4.5 Data collection

Data collection in qualitative research may be carried out using different methods including direct observation, in-depth interviewing, document reviews and active participation in the research setting (Mudaly & Goddard, 2006). In this study data was collected through semi-structured interviews.

4.5.1 Interviews

Babbie (1992) has defined interviews as the interpersonal interaction between a researcher and a respondent where the interviewer attempts to obtain information orally from the respondent, relevant to the research problem, by posing a number of questions. Patton (2002, p. 340) clarifies this definition further by stating that “we interview people to find out from them those things that we cannot directly observe”.

According to McMillan and Schumacher (2001), interviews in qualitative research serve several purposes including obtaining information on present perceptions as well as future expectations pertaining to activities, roles, feelings, motivations, concerns and thoughts, verifying information extracted from other sources and clarifying ideas developed by the researcher.

O’Leary (2004) states that there are three types of interviews:

- Structured interviews – these interviews entail the asking of predetermined questions which are put forth in a certain order and make use of a standardised response method.
- Unstructured interviews – these interviews are carried out with the specific aim of obtaining particular information without having any predetermined questions to act as a framework during the course of the interview.
- Semi-structured interviews – these interviews are on a continuum between structured and unstructured interviews. Researchers utilizing semi-structured interviews have a defined plan of questioning in order to elicit specific information, opinions, beliefs and attitudes pertinent to certain issues but can capitalize on the benefits of the more flexible unstructured interview format.

For the purposes of this study semi-structured interviews were utilized.

- Semi-structured interviews

Semi-structured interviews entail the utilization of predetermined questions, referred to as an interview schedule, which serves as a framework to guide the interview process (Greeff, 2005). In this type of interview, the participants’ responses affect which questions the researcher will ask and the manner in which these questions are posed. For this reason, these in-depth interviews are considered to be more flexible and conversational than formal, structured interviews.

Semi-structured interviews are characterised by open-ended questions catered to capturing the individual participants' experiences. By allowing the participants to enter into a narrative which focuses on their personal beliefs, opinions and attitudes, the message is conveyed that each participant is the expert on his/her own experiences. This empowering message is consistent with the principles of qualitative research as discussed above.

Kellehear (cited in Mudaly & Goddard, 2006) claims that semi-structured interviews promote the thorough exploration of the participant's meanings and experiences. This claim is supported by Denzin and Lincoln (2003) and Greeff (2005) who state that this type of interview generates in-depth information allowing the issues surrounding the research question to be fully explored.

Sewell (2006) proposes the following advantages of qualitative interviewing: enables the respondent to articulate what is important and meaningful to him/her, it is a rich source of data, is flexible and prevents the curbing of information-sharing by offering the opportunity to fully explore issues. Sewell, however, points out that there are also distinct disadvantages to this type of interviewing. For example, in-depth interviews could be experienced as more intrusive than quantitative approaches (such as questionnaires), interviews may also be more reactive to interpersonal dynamics and are often perceived as more subjective than quantitative, structured interviews.

Despite these disadvantages, it was decided to utilize semi-structured interviews for the purposes of this study because it was felt that the breadth of data that these interviews provide will enable the researcher to explore employees' experiences in a more comprehensive manner and, thus, allow her to delve into the intricate personal and cultural differences arising from the possibility of introducing animal-assisted stress management programmes into the work environment.

Furthermore, the quality of information collected by means of semi-structured interviews can be improved by adhering to the interview criteria proposed by Kvale (1996):

- the interviewer must follow up and clarify the respondent's meanings/answers;

- the interviewer should attempt to verify his/her interpretations of the participants' answers during the course of the interview;
- interviews should be characterized by spontaneous, rich, specific and relevant answers; and
- the interviewer should keep the questions short while encouraging long, comprehensive answers from the participants.

Kruger (1979) stated that interviewing participants in locations, and under conditions, that are comfortable and familiar to them is important in ensuring that quality information is obtained. This will be elaborated on in a later section.

Due to the fact that semi-structured interviews allow the researcher to ask questions in response to the answers received, these types of interviews are better suited to meeting the criteria suggested by Kvale (1996).

- Interview schedule

An interview schedule is a simple outline of questions and/or topics to be covered during an interview and, in this way, acts as a guide for the interviewer. Weiss (1994) points out that an interview schedule will help put both the interviewer and the respondent at ease which might encourage the divulging of personal information.

According to Patton (2002), using an interview schedule has numerous advantages. It can function as a checklist during the interview to ensure that all relevant issues are covered; it can help the researcher make the most of the limited time available; encourages more comprehensive discussions and makes data collection systematic to some extent.

The interview schedule for this research study is included as Annexure B but a few examples of typical questions asked appear hereunder:

- How would you describe your stress levels today?

- Is there a difference between today's stress levels and your stress levels five years ago? Please elaborate.
- When do you experience the most stress?
- What contributes to your stress levels at work? What are the causes of stress in your office environment?
- How does occupational stress impact on other aspects of your life?
- Do you notice any change in how you feel when you are around animals? Please elaborate.
- How do you suppose you would react in the presence of different kinds of animals, like fish, birds, hamsters?

Questions were asked in such a way as to encourage open-ended answers with the sole purpose of capturing the individual's experiences, opinions, beliefs, attitudes and concerns.

▪ Pilot Study

Researchers (Greeff, 2005; Knight, 2002; Leedy & Ormrod, 2005) stress the importance of conducting a pilot study with a small number of participants before commencing with the research study. Pilot studies may assist with the identification of possible shortcomings of the research design prior to the initiation of the actual study and, therefore, enables the researcher to make any necessary changes while there is still time.

Strydom and Delport (2005) note that pilot studies allow a researcher to hone his/her communication and interview skills, estimate the time needed to conduct the interview, identify poorly phrased and/or ambiguous questions and identify potential weaknesses which could compromise the quality of the study.

A pilot study was, therefore, conducted with three participants prior to the official interviews. The participants in the pilot study were chosen from within the researcher's circle of friends and, therefore, were not included in the final sample. These pilot interviews lead to a number of questions being rephrased.

- Interview techniques

Pilot studies can help a researcher hone his/her interview skills. There are a number of interview techniques which can improve the quality of an interview. Seidman (2005) points out that one of the most important skills which a researcher can possess is the ability to actively listen, which can be facilitated by note-taking. The act of making notes during an interview helps a researcher to concentrate on what the respondent is actually saying.

Seidman (2005) states that an interviewer should learn to listen on three levels:

- listen to what the participant is saying which entails concentrating on the core of the matter being discussed;
- listen while remaining aware of the interview process including any time constraints and topics still to be covered; and
- listen to Steiner's (cited in Seidman, 2005, p. 63) "inner voice" which refers to the participant's true opinions and is contrasted with his/her public voice. A respondent's public voice reflects an awareness of the audience and what is being said could stem from a desire to be socially accepted.

Active listening, moreover, requires sensitivity to the participant's non-verbal cues as well as energy levels. A participant who is tired and/or uncomfortable might not be in a position to provide sufficient and relevant information.

Seidman (2005) encourages interviewers to ask for clarification when he/she does not understand what the respondent is trying to verbalise. An interviewer who follows up on what is being said shows the participant that he/she is being listened to and his/her opinions are validated.

Interviewers should listen more and talk less. By asking the right questions the researcher will be in a position to sit back and listen while the participants expound on the core issues relevant to the research problem. Spradley (cited in Seidman, 2005, p. 69) suggests that interviewers begin interviews with "grand tour" questions. These are

questions which encourage respondents to elaborate on significant experiences, for example researchers could ask participants to describe a typical working day. This will help provide the interviewer with information on subjective experiences.

- Recording and managing of data

Each participant was asked, prior to the commencement of the interview, whether he/she had any objections to the interview being recorded. Participants were informed that they could switch off the recorder at any time. Furthermore, participants were reassured that the recordings of their interview would be safely stored by the researcher and would not be circulated to any third party without their written consent. The taped interviews were saved on the researcher's password-protected laptop under participants' pseudonyms. A back-up recording was saved on to a flash-drive which was kept on the researcher's person for the duration of her study. These recordings could only be accessed by the loading of specific computer software catered for the researcher's particular recorder.

In addition, participants were notified that any information provided by them immediately after the interview might be used for purposes of this study. It was found that most participants were reserved while the recorder was on but were more forthcoming once the recorder had been switched off. All information obtained after the recorder was turned off was captured by copious note-taking.

The recorded interviews were transcribed and each participant received a copy of his/her own transcribed interview in order to ensure that what was said was accurately captured. Any information that could identify the participant was either removed or slightly altered with the participant confirming that the essence of what he/she said remained intact. Each participant received a pseudonym for purposes of this study as suggested by Knight (2002).

Patton (2002) states that having access to recorded interviews allows the researcher to make use of direct quotations. These quotations reveal a participant's emotional viewpoints and hint at the manner in which he/she has organised thoughts, experiences

and perceptions. This information allows for a deeper understanding of the core issues central to the research questions.

Furthermore, the interviewee's body language was observed to highlight the congruency between what was said and what is actually felt. Notes were taken on the content of the interview as a supplement to the transcription and these could function as a back-up in the event that the recorder malfunctioned. Additional notes were made immediately after the interview to capture the researcher's impressions as well as record events that occurred directly after the termination of the interview. These three sources of information (transcribed interviews, body-language observations and summarised interview notes) allowed the researcher to fully contrast and compare all information portrayed across both verbal and non-verbal levels.

- Particulars of the interviews

Interviews were held after working hours in one of the office lounges. This location was familiar to all participants and the layout of the room was made as comfortable as possible by introducing sofas, coffee and snacks. Due to the fact that interviews were held outside normal working hours, there were no other people in the offices while the interviews took place, thus, ensuring privacy and confidentiality. Two of the interviews, however, were held in the participants' homes at their request.

Each interview was between twenty-five minutes to an hour long in order to ensure that participants were not overwhelmed or exhausted after a long day in the office. Follow-up interviews were conducted telephonically in cases where further clarity on certain statements was sought.

4.6 Data analysis and interpretation

Qualitative analysis is a “relatively systematic process of selecting, categorising, comparing, synthesising and interpreting to provide explanations of a single phenomenon” (McMillan & Schumacher, 2001, p. 462). Thematic analysis is an approach used to identify, analyse and report patterns that capture something important about the data in

relation to the research question (Aronson, 1994; Braun & Clarke, 2006). These semantic patterns (themes) are identified within the meanings of the data and researcher judgement is necessary to determine what will be considered as a theme (Braun & Clarke, 2006).

The flexibility of thematic analysis allows for the development of rich, detailed accounts which are especially useful when the topic under investigation is under-researched (Braun & Clarke, 2006). This is an inductive approach where identified themes are strongly linked to the data. Furthermore, analysis involves moving back and forth between the data and its collection, which is consistent with the iterative nature of this qualitative study. Tesch (1990) advises that researchers maintain a relentlessly curious attitude which enables them to move back and forth between certain elements of the data and the text as a whole. Addison (1992, p. 113) agrees that analysis is a “circular progression between parts and whole, foreground and background, understanding and interpretation, and researcher and narrative account”.

Braun and Clarke (2006) highlight some of the advantages of thematic analysis. Thematic analysis:

- provides a flexible and useful research tool which can provide richly detailed accounts of the data. This flexibility has been attributed to the fact that thematic analysis is independent of theory and epistemology and, therefore, can be applied across a range of theoretical approaches.
- is a relatively easy and quick method to learn.
- is accessible to researchers with little or no experience of qualitative research.
- highlights both similarities as well as differences across the data.
- can generate unexpected insights.
- encourages social as well as psychological interpretations.

Due to its flexible nature, there are no solid rules for carrying out thematic analysis. A number of steps, however, have been proposed by researchers (Braun & Clarke, 2006; McMillan & Schumacher, 2001; Terre Blanche & Kelly, 1999) to guide this process.

The researcher must immerse herself in the data. This engagement with the data enhances analysis by allowing the researcher to thoroughly familiarise herself with the phenomenon. She must engage in 'repeated reading' of the transcribed interviews and write down her impressions while actively engrossing herself with the data (Braun & Clarke, 2006). Furthermore, the researcher must listen to the audio-tapes of the interviews over and over again in order to sensitize herself to nuances that can impact on the study in profound ways. It needs to be noted that, according to Riessman (cited in Braun & Clarke, 2006), the very act of transcribing the interviews can also facilitate the immersion process because the close attention needed to transcribe interviews may promote close reading and interpretive skills.

Thereafter, a few key questions, based on the existing literature and information obtained in interviews, must be identified. The questions will help guide the identification of themes and, thus, provide a framework for the analysis of the data. Examples of key questions would be:

- Are there distinct differences in employees' stress levels across a five-year time period?
- Which factors impact the greatest on perceived occupational stress?
- Are employees open to the suggestion of alternate stress management programmes?
- Will connecting with animals help employees develop a sense of mindfulness and could this focus assist employees to reduce their stress levels?

Once familiarisation with the data has taken place, the process of generating codes can begin. McMillan and Schumacher (2001) define coding as the process of demarcating data into categories. These codes identify initial ideas which highlight information within the data that is of interest (Braun & Clarke, 2006). These researchers have suggested that it might be beneficial to code for as many potential themes as possible in the early stages of the analysis process since it will not be possible to identify which themes will be the most relevant until the study has been concluded.

The coded information must be sorted into potential themes which entails the organization of information into coherent categories. The searching for potential themes requires that the researcher consider the relationships between various codes across numerous levels. Patterns and connections between these categories will have to be explored to ensure that the data is compared and contrasted across various themes and sub-themes (Braun & Clarke, 2006; Patton, 2002). Coded data is, in this way, merged to fully expand on potential themes.

Patton (2002) suggests reviewing these themes in terms of two principles: internal homogeneity and external heterogeneity. This means that data **within** themes should correspond in a meaningful manner while the distinction **between** themes should be clear.

The analysis of data continues until no new themes are identified. Themes, and sub-themes, must be explored further until the essence of each theme is fully understood and this understanding must be collated into a comprehensive account. The findings and conclusions of this study will be discussed in chapter five.

It is worth mentioning that deducing themes from the raw data is subject to the researcher's judgement. This means that the researcher's beliefs, opinions, attitudes, experiences, expectations and upbringing will be brought into this study and will allow her to view the data from her own particular 'lens' (Becvar & Becvar, 2006). Although qualitative research is more subjective in nature than quantitative, it remains important to deliver sound and credible research findings that can be used to build the foundation on which future research can be based. For this reason, the researcher discussed her personal epistemological stance in an earlier section, thus making this information available to the reader in order to better ensure that all information pertaining to this study is accessible. In this way, each reader can judge for him/herself whether the study's findings hold true. The researcher's personal assumptions will be included in the discussion of her findings in the next chapter.

4.7 Trustworthiness, credibility, dependability and transferability

The value of research is closely linked to certain criteria, such as reliability and validity, which impacts on the acceptance and merit awarded to the research by the scientific community. These concepts, however, are more applicable to the statistical nature of the quantitative research approaches than to the qualitative approach which aims to understand and illuminate the phenomena rather than to predict results or determine causal relationships. For this reason, qualitative researchers prefer to determine the scientific value of research in terms of concepts such as trustworthiness, credibility, dependability and transferability.

Mudaly and Goddard (2006) define reliability as the degree to which the research measures, observations and/or conclusions consistently produce the same results. Within a qualitative study, however, Stiles (1993) stated that reliability may be referred to as the trustworthiness of the data. Trustworthiness refers to the degree to which research provides an accurate description of the participants' experiences, beliefs, opinions and perceptions.

Trustworthiness can be enhanced by utilizing a number of strategies (Stiles, 1993). For example, prolonged engagement with the material can add a level of accuracy to research findings. This could also entail establishing a relationship or rapport with the participants. The participants in this study were selected from within the researcher's own department and, therefore, the researcher shared a sense of camaraderie with her respondents which helped both parties to feel more comfortable with each other in the research setting.

Another strategy proposed by Stiles (1993) relates to the constant back and forth movement between interpretation and observation which allows the researcher to fully engage with the data enabling him/her to develop a deeper understanding of the meanings pertinent to the phenomena being studied. This iterative cycle is one of the characteristics of thematic analysis and, therefore, the researcher's familiarisation with the raw data is paramount to her analysis. Furthermore, by grounding the results of a study in existing literature, as well as the inclusion of direct quotations from the participants, the researcher can enhance the trustworthiness of her study.

Tobin and Begley (2004) have linked reliability within a qualitative approach to the concept of dependability. Dependability has been defined as the degree to which the reader can be convinced that the reported findings did indeed occur (Bowen, 2005; Tobin & Begley, 2004). These researchers state that dependability can be achieved by ensuring that the research process is reported in a logical, clear and traceable manner by providing the readers with rich, thick descriptions which reflect how the research was conducted and how the analysis is rooted in the data. For purposes of this study the raw data, in the form of the transcribed interviews, are included in the final report (see Annexure C). This dissertation, and this chapter in particular, provide the reader with sufficient descriptive information relating to the research process followed. The inclusion of this information allows the reader to judge the dependability of this study for him/herself.

There is no one definition of validity but it is generally accepted that validity refers to the degree to which research accurately assesses the explicit concepts central to the research question and the extent to which the research conclusions can be generalised across situations and/or contexts (Durrheim & Wassenaar, 1999). Validity within a qualitative study, however, must be conceptualised along different lines. According to Osborne (1994, p. 180), results of a qualitative study “are valid to the extent that they resonate with the experiences of others who have experienced the phenomenon in question”. The implication of this statement is that validity in qualitative research pertains to the extent to which the amalgamated account is sound and grounded in the information collected. This aim can be accomplished by providing rich, thick descriptions littered with appropriate quotes grounding the discussion of results in the participants’ experiences.

Credibility refers to the extent that the research produces results that are convincing and believable (Durrheim & Wassenaar, 1999; Tobin & Begley, 2004). The researcher employed various methods in establishing credibility. Participants were asked to check the accuracy of their transcribed interviews in order to confirm that what was said was accurately captured. Furthermore, the thematic interpretation was disseminated to the participants with the purpose of gauging whether or not the researcher's analysis is meaningful to them and, thereby, reducing the risk that the identification of themes was based solely on the researcher’s judgement. This form of member checking helps

confirm the trustworthiness of this study by ensuring that the research results are accepted by the participants as an accurate representation of their experiences.

In a previous section the researcher made her epistemological stance known with the intention of enhancing the credibility of this study. An additional tactic used by the researcher in this endeavour was the random selection of the participants as discussed in the section dedicated to sampling procedures.

In addition to the above, the researcher read through the transcribed interviews while listening to the audio-tapes in order to identify any discrepancies. Furthermore, by means of triangulation, defined as the collecting of information from a number of sources (Terre Blanche & Kelly, 1999), the researcher was able to develop a fuller, deeper understanding of the research topic. Information was derived from the transcribed interviews, the notes made during the duration of the interview, the researcher's observations of the participants' body language and the existing literature.

These rich, thick descriptions of the context and results will, moreover, provide the necessary information to confirm transferability which refers to the extent to which other researchers can apply this study's results to other contexts (Durrheim & Wassenaar, 1999). Greeff (2005) points out that data saturation can enhance the transferability of a qualitative study enabling the application of the findings to other settings. The researcher determined her sample size on grounds of data saturation as discussed earlier.

4.8 Ethical considerations

Ethics can be defined as a “set of moral principles which is suggested by an individual or group, is subsequently widely accepted, and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents” (Strydom, 2005, p. 560). Knight (2002) highlights the importance of adhering to an ethical code of behaviour while conducting research in order to ensure that no participants are hurt in any way, whether physical and/or emotional.

For purposes of this study a number of ethical aspects, which will now be briefly discussed, received attention.

4.8.1 Informed consent

Information pertaining to the purpose and nature of the research should be conveyed to all possible participants prior to the commencement of the study (Leedy & Ormrod, 2005). The choice of whether or not to partake in the study lies solely with the participants. It is imperative that all participation is truly voluntary in order to ensure that each individual's right to autonomy is respected.

Prior to the implementation of the research, the researcher obtained the express permission of the deputy directors and director to conduct the study within the department in which she was employed. Each member of the managerial team was sent an e-mail which clearly stated the purposes of the research, what was expected from the participants and how this could possibly affect the department.

Once permission was granted to carry out the research, the researcher personally approached each participant before the implementation of the study and conveyed the following information:

- The purpose of the research including the fact that the researcher is operating in a personal capacity and that the research is in no way affiliated with the department's own research endeavours.
- The participants would be expected to take part in one-on-one interviews, to be held after working hours, where issues pertaining to occupational stress, stress management programmes and the possible introduction of animal-based intervention programmes would be discussed.
- The interviews would be audio-taped with the participants' express permission but they could switch off the recorder at any time.
- Any information conveyed to the researcher during, as well as immediately after, the interview will be used for purposes of this study.

- Participants were assured of confidentiality and anonymity and were notified that pseudonyms will be used throughout the dissertation to protect their identity.
- Participants were informed that the taped interviews, as well as the transcriptions thereof, would be safely stored on the researcher's password-protected laptop.
- Participants would receive a copy of their own transcribed interview in order to ensure that the information divulged to the researcher was correctly captured and that no information which could be used to identify them was included in the transcribed material.
- Participants were informed that the transcribed interview would be included in the final dissertation (see Annexure C) but that no information would be included which would identify them.
- All participants would receive a copy of the researcher's interpretations in order to verify whether her analysis holds true to their experiences.
- Participants were assured that they would not be exposed to any environment and/or situation during the interview which they could perceive as harmful or uncomfortable.
- Participants were informed that they could withdraw from the study at any time without any repercussions and/or prejudice.
- Participants were provided with contact details for both the researcher and her supervisor with instructions to contact either party with any questions or concerns.

The above course of action was followed-up by distributing written confirmation of the afore-mentioned principles to each participant via e-mail. The e-mail included an informed consent form (see Annexure A) which each participant had to sign indicating that they agree to participate under the conditions listed above. Participants were notified that the signed forms remain the property of the researcher and only a template would be included in this dissertation.

4.8.2 Privacy, anonymity and confidentiality

According to Neuman (1997), there are three underlying principles at the core of ethical research: privacy, anonymity and confidentiality. Strydom (2005) proposed that privacy and confidentiality can be treated as synonymous since both principles relate to the right of each participant to have their identity and personal information honoured. Any information conveyed to the researcher by participants must be handled responsibly with the ultimate aim of protecting the participant from any harm.

The researcher strived to adhere to these principles by: scheduling the interviews at a time and place both comfortable and convenient for the participants but guaranteeing total privacy as discussed in the section pertaining to the particulars of the interviews; allocating pseudonyms to each participant with the aim of protecting his/her identity; excluding any information from the transcribed interviews which might be used to identify the participants; storing the audio-recordings and transcribed interviews in a password-protected laptop; ensuring that specific computer software is needed in order to access the recorded interviews, thereby reducing the risk of a third-party acquiring this information; decimating the transcribed interviews to each participant in order for them to confirm that all information is correct and that no information is included which might identify them.

4.8.3 The right to protection against possible harm: Nonmaleficence

Nonmaleficence derives from the Latin term *primum non nocere* which, when translated, means that, above all, no harm must be done (Smith, 2005). Leedy and Ormrod (2005) suggest that researchers ensure that the physical and emotional risks associated with research should not exceed those to be expected in daily life.

Furthermore, all participants need to be fully informed, prior to the commencement of the research, about the possible dangers that they may be exposed to by agreeing to participate in the research. Strydom (2005) stresses the fact that participants can be harmed both physically and/or emotionally and the researcher must, therefore, take precautionary measures to ensure that no participant is harmed in any way.

In this study care was taken to conduct the interviews in a setting both familiar and comfortable to the participants in accordance with Kruger's (1979) suggestion. Participants were reassured that the researcher was genuinely interested in their

opinions, beliefs and experiences and that participants should feel free to express themselves in any way they deem appropriate.

It was mentioned to all participants prior to the interviews that their opinions and/or feelings about and towards animals will be discussed but that no animals will actually be present during the course of the interview. The researcher was aware that participants who do not like, or possibly even fear, animals might be uncomfortable discussing the possible presence of animals in the work environment. In these instances reassurance was provided to the participants reinforcing the belief that their opinions were respected. The respondents' feelings were constantly validated by using non-verbal techniques such as nodding and smiling.

Participants were informed that the research study is only exploring employees' attitudes, opinions and feelings regarding the possible introduction of animals in stress management programmes and that there is in no intention on bringing animals into the work environment for purposes of the study.

Furthermore, care was taken to ensure that all participants were as comfortable as possible throughout the duration of the interview. It was attempted to keep the interviews as short as possible due to the fact that participants had already put in a full day at work and still had to go home and attend to their domestic roles and responsibilities. In this way it was ensured that participants were not feeling overwhelmed and/or exhausted throughout the interview.

4.8.4 Beneficence

Beneficence refers to any action which holds advantages and/or benefits for others (Durrheim & Wassenaar, 1999). This can be in the form of either contributing to the improvement of certain situations or the prevention of harm to other people.

The purpose of this research is to explore employees' opinions, beliefs and feelings with regard to both occupational stress and the possible introduction of animal-based stress management programmes. The findings of this research can function as building blocks for future research in this field with the ultimate aim of making a variety of

stress management tools available to individuals in the working environment. In this way this research aims to contribute towards benefiting employees in the future.

In terms of benefits for the participants in this study, the researcher believes that the mere act of being presented with an opportunity to voice their opinions, feelings and frustrations in an open, warm and non-judgemental environment could be beneficial to the participants. Participants could verbalise their concerns relating to their work environment without fear of repercussions and, perhaps, this could have assisted in the amelioration of their stress levels.

4.8.5 The role and competence of the researcher

Strydom (2005) highlights the fact that researchers have a responsibility towards their participants, and the scientific community at large, to ensure that they are adequately skilled to conduct the research. Furthermore, researchers must take care when engaging with participants from different cultures since the possibility of affronting an individual can be increased as a result of misunderstandings. Researchers should refrain from passing judgement and should understand that the participant's experiences are true and real for him/her.

The researcher constantly provided assurances to the participants by nodding and voicing encouraging sounds, for example "uh-huh". She tried to place herself in their shoes and, by empathising, bracketed her own beliefs and viewpoints. Kelly (1999) defines bracketing as the suspension of a researcher's own viewpoint enabling the participants to speak for themselves. This allowed the researcher to engage with the research participants without passing judgement.

In addition, the research was carried out under the guidance of a supervisor who provided advice, suggestions and encouragement throughout the duration of the research and the compilation of the dissertation. Furthermore, the researcher embarked on an in-depth study of the concepts central to the research problem in order to ensure that she had a comprehensive understanding of the literature. In this way it was ensured that she is in the best position possible to conduct the research as skilfully as possible.

4.9 Conclusion

The various components central to a successful research project were discussed in this chapter. Different elements pertinent to this research design were elaborated on and reasons and/or motivations as to why certain decisions were taken in terms of methods to be followed were provided.

Chapter 5

Analysis of results

There is no psychiatrist in the world like a puppy licking your face - Ben Williams

5.1 Introduction

Individuals have different needs, perceptions, circumstances, strengths and weaknesses which need to be taken into account by employers when designing and introducing stress management programmes in the work environment. Ideally, employers should offer their workers a number of different stress intervention options so that an employee can choose the technique best suited to his/ her needs and circumstances. Due to possible financial implications involved in implementing such interventions, it is imperative that sufficient research be done to determine the feasibility of introducing a specific type of stress management programme.

The research presented in this dissertation serves two purposes. Firstly, it was sought to explore the factors contributing to employees' occupational stress. This was deemed important for two reasons, namely to verify that occupational stress is a reality with far-reaching consequences that needs to be addressed, thereby emphasizing the need for appropriate stress management tools and to determine whether or not employees' perceptions of occupational stress are consistent with the research already done in this field. Secondly, the researcher set out to explore employees' attitudes towards animals and the possibility of utilizing animals to ameliorate the negative effects of stress. An understanding of the various perceptions and feelings pertaining to animals is crucial in order to determine whether or not it will be feasible to introduce an animal-assisted stress intervention programme in a working environment.

This chapter will discuss the various themes that emerged throughout the interviews with the research participants of this study.

5.2 Good fences make for happier employees

In Robert Frost's poem, "Mending Wall", it is stated that 'Good fences make good neighbours' (www.wikipedia.org) and this sentiment seems to be shared by the participants of this study who have all been assigned pseudonyms in order to protect their privacy.

Tyler, for instance, described a situation that occurred in his office on the day he was interviewed which caused him unnecessary stress: '...there was something that irritated me earlier this morning. What was that? Oh yeah, that was something my manager said, to someone else, that actually irritated me and caused some stress'.

One of the disadvantages of open-plan offices appears to be the lack of privacy (De Croon et al., 2005; Hedge, 1982; Pejtersen et al., 2006). The incident referred to above would probably not have affected Tyler negatively if he wasn't exposed to the interactions of colleagues. Instead, he was subjected to the negative experience of having, what should have been a private conversation, taking place within his immediate environment and, unfortunately, the nature of the conversation was such that it caused him to feel unnecessary tension and frustration. Working in an open-plan office, however, means that employees constantly have to deal with intra-office politics, personality clashes, cultural differences and inconsiderate behaviour. A number of participants in this study expressed their agreement with this perceived reality:

'...they could have been brought up like that. You, for instance, are a soft speaker again whereas I have quite a loud voice. But not as loud as some others... So I know one has to adapt to that as well. Everything is fine. I don't mind. But if they get so loud that I can't concentrate anymore, then it's really affecting me'. – Cassandra

'Open-plan office...lots of noise, no privacy, office gossip...what do you call it?...escalates because of the open-office plan'. – Amber

'...cultural differences, gender differences, religious differences, health differences and, you know, I find that I operate better in a closed office in that you are able to operate or

be better productively with a person you are in that moment. At work, you are a different person in that you are expected to get along with colleagues, render a service to clients whether in a good mood or not. So I think that it does get to me a bit'. –

Parker

'And you are also forced to actually work with synergy irrespective of how you feel, what your beliefs or principles is. I find that the open-floor plan doesn't quite do it for me'. –Parker

'...the whole corporate environment and open-floor office...that's a big one in that I think I would be more functional and would operate better in an individualised, closed office type of environment. So I think the whole open-floor plan, office team work, get-to-know-each-other-better when you work visibly, it doesn't work for me'. - Parker

'...sometimes you find that your neighbour is talking on the speaker phone or the phone is ringing and not answered...I'm sitting between....a colleague who happens to be talking too much! So you sometimes feel that...it contributes to your stress. That colleague sometimes talks, talks, talks... and sometimes just the lack of approach on certain issues'. – Reggie

'...sometimes you will find colleagues that, even if they are not talking to you, when they talk, sometimes they raise their voices and obviously you are listening to what they are saying.' – Reggie

'I work with staff from all cultures. In some of my colleagues' cultures, it's okay to talk loudly and this breaks my concentration'. – Sean

'Well...I work in an open-plan office with no privacy in the office. My colleague next to me talks on the phone the whole day about personal things'. – Kevin

'Irritating personalities... We don't see things in the same way. What I see as stressful and irritating, other might not'. – Samantha

‘And people speaking to each other and cell phones going off...If people could just put the sound a bit lower then I am sure it won’t be such a big problem. But, I mean, it’s in another department and you hear it’. – Gail

Aside from the lack of privacy, some research participants also expressed dissatisfaction regarding their perceptions of diminished autonomy as a result of the open-office plan:

‘...psychologically it’s just your environment...just creates the placid environment that everyone wants. I would love to have my pink pictures on the wall which relaxes me and...so with an open-floor office, one is unable to actually have that individuality come out because it might affect your neighbour or whoever else is watching’. – Parker

‘I feel very strongly about the office set-up. Once that could change, where one has a bit more privacy where you are able to do your own thing in your own way and your own time’. -Parker

‘Some days I just don’t want to talk to anybody. I just want to sit there and do my work. Nobody should talk to me’. - Tyler

‘Except you don’t get chance to laugh as much anymore because it’s open-plan, you might offend somebody’. - Tyler

‘You get more...upset easily, more easily...uh...you get grumpy. It’s all kinds of...more negative stuff than anything else’. – Amber

Open-plan offices do not allow employees the luxury of being their own person as they are at that particular moment in time. In Tyler’s case, he cannot close himself off in his office when he feels a need to be alone. Instead, he is forced to interact with colleagues despite his needs because people might be offended or misconstrue his desire for solitude. This seems to cause him undue stress and frustration. Amber seems to agree. She feels that her emotions are more unstable as a result of the open-office structure and the forced interaction with colleagues that tend to be more preoccupied with gossiping and other petty, trivial issues instead of their work. As a result of the open environment,

she cannot escape from these unpleasant and uncomfortable situations and, instead, finds herself stuck in a demoralising environment.

Parker, on the other hand, feels that open-plan offices restrict her sense of individuality. She expressed a desire to decorate her office space in a manner that is pleasing to her but she could not follow through due to colleagues' sensibilities. By sharing an open space with other people, it is difficult to personify your environment because what is relaxing and inspiring to one person, might be offensive or stressful to another. When consideration is given to the fact that research has proven that personalization of your environment has positive psychological effects on a person's well-being (Altman, 1975; Scheiberg, 1990; Wells, 2000), this aspect of the open-office plan may become problematic.

Wells (2000) defines personalization as the purposeful action taken by an individual to adorn his/her environment in such a way that his/her identity is reflected. Altman (1975) states that personalization serves two purposes: it demarcates a specific area as belonging to an individual and it helps regulate social interactions between that individual and others. By carrying out these two goals, personalization may act as a buffer against the negative consequences, whether physical or psychological, associated with lack of privacy (Altman, 1975; Wells, 2000). In open-plan offices, however, employees may find themselves in a no-win situation: they are affected by the lack of privacy and, while personalization of their environment might combat the negative effects thereof, they may be deprived of the opportunity to decorate their surroundings so as not to cause offense.

Scheiberg (1990) emphasizes the importance of personalization by reporting that this form of expression enables individuals to communicate their feelings and personality to others. This, in turn, has been found to be important factors contributing to psychological health and may even lead to improved job satisfaction and performance. In fact, Scheiberg (1990) states that personalization may help an individual cope better with his/her stress by promoting relaxation. By decorating his/her immediate work environment to his/her own unique specifications, the individual may create a soothing space to express his/her emotions and bring about a sense of fun, thereby promoting a general feeling of well-being.

Edney and Buda (cited in Wells, 2000) found an association between personalization and feelings of personal control. This sense of control, which has been linked to stress reduction, improved work performance, a boost in well-being as well as increased satisfaction (Averill cited in Wells, 2000), could explain Scheiberg's (1990) belief that personalization can enhance feelings of relaxation. Conversely, the perceived lack of control coupled with learned helplessness has been found to increase employees' propensity to stress which could result in the prolonged secretion of stress hormones (King cited in Danna & Griffin, 1999).

Lack of control and low decision latitude has also been associated with occupational stress as well as with increased feelings of anxiety, depression, apathy, exhaustion, low self-esteem and a higher incidence of cardiovascular symptoms (Cox et al., 2000). This is consistent with Karasek's (cited in Jovanovic et al., 2006) demand-control model which was discussed in chapter two and which will be touched upon in a later section.

Parker's opinion is, therefore, supported by the literature on personalization. The opportunity to modify your working environment to suite your needs and portray your identity may help you cope better with stress as well as promote a sense of individuality and control that contributes to better mental health.

In light of the information depicted above, open-plan offices appear to create challenges when it comes to employees' psychological well-being. According to Oldham and Brass (cited in Pejtersen et al., 2006), there are two approaches in place to illustrate the prevailing attitudes expressed in relation to open-plan offices: social relation approach and the sociotechnical approach.

The social relation approach views the open-plan office set-up as a means to foster social relationships among employees (Oldham & Brass cited in Pejtersen et al., 2006). This office set-up is meant to improve supervision and promote intra- and interdepartmental interaction. This approach proposes that such working environments can enhance employees' motivation, job satisfaction and performance.

The sociotechnical approach, on the other hand, is of the opinion that open-plan offices result in lack of privacy which, in turn, may diminish individuals' sense of autonomy. Co-workers tend to interrupt each other and hamper performance by being sources of distraction. Oldham and Brass (cited in Pejtersen et al., 2006) go on to state that this lack of privacy may moderate the communication between workers and their supervisors because confidential conversations will not be held in such an open environment. All of these factors (lack of privacy, decreased sense of autonomy, decreased feedback from supervisors and the increased interruptions from colleagues) impacts negatively on workers' motivation, job satisfaction and performance.

The participants in this study appear to view the open-office structure from the sociotechnical approach as is evident by the statements quoted above. Research done in this field lends further support to this approach. De Croon et al. (2005) found that there is compelling evidence associating open-plan offices with employees' sense of diminished job satisfaction as well as inadequate levels of privacy. These researchers also report that the cognitive demands placed on an employee are intensified by the open-plan structure and, furthermore, relationships between employees can be negatively affected.

Hedge's (1982) study on people's perceptions of their physical environment yielded interesting results in that it seems that more than half of the participants in an open-plan office set-up complained about their physical environment. Pejtersen et al. (2006) state that workers in open-plan offices are more likely to report dissatisfaction in terms of office temperatures, poor air quality and noise levels. The implication is that open-plan offices not only affect employees in terms of privacy, restrictions on the possible personalization of their environment and reductions in their job satisfaction but may also have a bearing on how the physical environment is perceived. The participants of this study offer support substantiating this claim:

'Stressing about the noise in the office. The noise downstairs that's coming up. People who are talking non-stop, laughing non-stop. Those are things that stress me'. –

Cassandra

‘And I think we were also in closed offices [five years ago], the noise levels...there was no noise. It was very quiet and more relaxing than what it is now’. – Cassandra

‘You are sitting in this open-plan office, which most of the people hate, under circumstances that’s awful...and actually causes more or less the same amount of frustration as other stuff’. – Tyler

‘And the building where we are currently housed in! The hot-and-cold is not conducive to normal health conditions and the people’s immune systems have been, basically, put at a disadvantage and they get sick easier’. – Brooke

‘...the temperature...or the ambience...in the building is awful. That causes a lot of stress because, here from 10:00, you feel like you are glowing and that is everybody’s story’.-
Tyler

‘It’s the noise...and then we also have the problem with our aircon. The general office, you know, environment is not user-friendly’. – Amber

‘Also the building where I work in has a problem with the aircon system and definitely a lack of fresh air’. – Sean

‘There is also no fresh air in the office. If my colleague is sick, I get the germs as well’.-
Kevin

‘This place is very cold’. – Samantha

‘The open plan is a problem, there’s a lot of noise. I feel I cannot concentrate with such a lot of movement going on and noises around me’. – Gail

‘It’s very hot. Some people sit, still, in September with heaters! I saw somebody yesterday, although we’ve got a problem with the aircon’. –Gail

It stands to reason that the open-plan office set-up makes it more difficult to regulate temperatures in such a manner that everyone sharing that space is comfortable. It is

perhaps more common to have some people complaining that they are too hot while others want to switch on their heaters because they feel cold. Due to the nature of open-plan offices, the various individual needs and perceptions cannot be accommodated. Instead, the needs of the majority take precedence and, in some cases, even those might not receive the credence it deserves as described by Tyler and Sean:

‘...how they [management] deal with problems, with simple things, it’s like the aircon or the temperature in the building...it’s been going on so long. And it’s like nobody really cares. Nobody really does something about it... It usually ends up high up at top management and then it usually dies away. I don’t think they really care about stuff like that. It’s the idea I get’. – Tyler

‘And nobody seems to do anything or care about that [temperature in the building] because it has been reported so many times’. – Tyler

‘Yes, it feels to me and, I know other staff as well, that our suggestions to make the offices more worker friendly, falls on deaf ears’. – Sean

Unfortunately, the physical office environment has a direct bearing on employees’ physical and psychological health and, if the open-plan office set-up affects workers’ perception of this environment, then further attention needs to be given to this issue.

Cox, Griffiths and Rial-Gonzales (2000) emphasized that prolonged exposure to noise may contribute to heightened stress levels as well as feelings of anxiety, irritability, tension, fatigue and decreased job performance. This is supported by Smith's (1991) findings that prolonged exposure to acute noise produces physiological responses which could have detrimental effects on health. It was found that even the perceived threat of its presence has been associated with the experience of stress (Cox et al., 2000).

Fairbrother and Warn (2003) report that physical conditions, including high noise levels, overcrowding and lack of privacy, are associated with stress. Poor mental health has, therefore, been linked to unpleasant working conditions such as poor air quality, inappropriate indoor temperatures and incorrect and insufficient lighting (Pike, 2003). Most of these conditions are common in open-plan offices.

Spurgeon, Gompertz and Harrington (cited in Danna & Griffin, 1999) have attributed the reported increase in the frequency and severity of a number of symptoms which are not exclusive to any one condition, for example headaches, backaches, tiredness, memory problems, nasal congestion, eye irritation and poor concentration to the effects of Sick Building Syndrome (SBS). The World Health Organization (WHO) has recognized the phenomenon of SBS which is “characterized as the excessive prevalence of irritative symptoms of the skin and mucous membranes and a host of other symptoms including fatigue, headache and difficulty concentrating among the people occupying a building” (Danna & Griffin, 1999, p. 361). The physical environment, therefore, has a profound impact on employees’ physical and psychological health, with some of the more non-specific symptoms making it potentially difficult for employees to prove that the source of their health problems could possibly be their working environment.

The research findings discussed above, together with the quotes extracted from the research participants’ interviews, highlights some of the problems raised by open-plan offices. It would seem as if the poet Robert Frost’s character showed wisdom by stating that ‘good fences make good neighbours’ - perhaps if the open-plan office structure had to be revised, employees might experience less occupational stress or, at the very least, experience less interpersonal, interdepartmental problems.

5.3 The rise of the machines: People as just another resource

With the constant advancements in the technological characteristic of today’s ever-changing world it is only reasonable for businesses to revolutionise the manner in which they operate. This could possibly result in some companies embracing the concept of employees being just another cog in the machine (Baker & Green cited in Danna & Griffin, 1999). Some of the participants in this study expressed their concern that, by treating employees as just another component of a well-oiled machine, the perception that staff can be bombarded with more work and still be able to perform as they previously did is enforced. Most of the participants in this study reported that the increased work load, coupled with the constant changes in policies and products, which is a wide-spread phenomenon these days, contributes to their stress levels:

‘...my work load has increased. Our client number has increased...So we work with all the clients from the various specialised sections, international and local’. – Brooke

‘...that I can’t take in all that work. Too many changes. So many different...departments / components. And all the requirements for all the different departments are different and there are different rules and regulations and so on’. - Cassandra

‘And...everything changes every year. And for me, it’s very difficult to adapt every year with all the new stuff’. – Cassandra

‘Well, just when you know about the changes, then they change it again! Just when you think you know what’s going on, everything is changed again’. – Cassandra

‘...too many tasks coming down on you too quickly, like this one phones you and that one phones you. You have...all of them are urgent. So...you get, like, um...it feels like friction. You can’t get away. So a lot of stress’. – Amber

‘...our client numbers that have more than tripled, our number of products that we offer that have more than tripled, other institutions that we have merged with...’ – Parker

‘...work that does not fall part of my job description. This puts a lot of stress on me, because I still have my normal tasks to perform and...now I have to do other people’s...or...supervisor’s job as well’. – Sean

‘...a new management structure and, in turn, a lot of policy and procedural changes...’ – Sean

‘...most of the work comes down to me and a few people in the office and we have to work extra hard, because of the other staff that chooses not to work’. – Sean

‘...there is more work to do and we have new management that just wants more stats’. – Kevin

‘I am more stressed when our management changes rules and quotas to be maintained during the busy time at work’. – Kevin

‘Nowadays the work is never up to date. There is just no...it’s very emotionally draining. You work and work and work and...there’s no...the work does not get finished. There is always a backlog’ – Tyler

‘Yeah, as long as the machine is running and top management thinks that things are going well, then they are happy. I don’t think they actually care about the person’. – Tyler

By viewing businesses and/ or corporations as machines that need to meet certain targets and produce certain results, there is a danger that this analogy might be taken too far and human beings might cease to be viewed as such. Instead, employees might be seen as part of the machine and might be expected to operate in the same capacity as one. The danger here lies in the attribution of android-type characteristics to human counterparts who are just not physically capable of producing the same results. For example, a machine could be reprogrammed to adjust for any changes and can maintain a certain level of output delivered with accuracy without wearing down or getting sick, whereas a human being needs time to assimilate new information, figure out how these changes impact on him/her and adjust their performance accordingly. People can only deliver so much before they start feeling run down or overwhelmed:

‘I don’t always know what to do...irrespective of the document’. – Cassandra

‘Too many things...demanding my attention. And your brain keeps going back to work, what’s going to happen there, how are you going to do this, how are you going to do that...’ – Cassandra

‘At work I get stressed more when people demand things immediately. My supervisor or manager e-mails me something that they want done immediately. Sometimes it takes a long time to attend to the e-mail and then they get upset, because they say I took my time and that my stats are low’. –Paul

‘It has definitely become more intense for sure. A lot has changed in the last few years’.

– Paul

Some of the participants also voiced their frustration at the manner in which they are sometimes treated by their supervisors and managers. This could, potentially, be another pitfall of applying the ‘well-oiled machine’ analogy: by viewing employees as components in this machine, their humanity might be overlooked. It is possible that some supervisors and/or managers might be so focused on performance and output delivery that they tend to forget that the people that report to them are individuals who have their own strengths, weaknesses and problems. This opens up the possibility of expecting too much from employees and increases the risk of belittling subordinates.

‘It’s just...and the way people talk to you even if you were there for many years’.- Tyler

‘There’s people there that have been there for shorter periods that I think... they look after them more’. - Tyler

‘Yes, it feels like no matter what I do, or how much, it is never enough for our top management’. – Kevin

‘And it looks as he is not listening to what you ask him. That’s very bad! If staff asks you something or talks to you about something that is making them unhappy and then you get this...the guy takes his cell phone and, while you’re talking, he is busy with his phone’. – Gail

Sean, Amber, Cassandra and Samantha also mentioned that they feel that they are sometimes treated as children and that they find that their managers tend to talk down to them. These research participants felt more comfortable discussing this issue with the researcher after the official interview though.

Perhaps a further consequence of the ‘cog in the machine’ analogy is that management might disregard any input or feedback employees put forth. If an employee is only a minor component in the inner workings of a complex machine, management might question the quality and relevance of any suggestions conveyed to them by such ‘cogs’,

especially since this mentality might be reinforced by the belief that these ‘cogs’ main function is to carry out the tasks given to them and they lack the understanding to positively contribute to policies and procedures. This could be construed by employees as yet another form of belittlement. Further research will need to be done along these lines to determine whether or not this mentality holds true for most organisations or if this sense of belittlement is unique to the experiences of the research participants of this study.

‘...I sometimes think that the managers are not so clued up with the work as some of their subordinates but they want to call the shots...That is heavy frustrations. If you know you are doing the right thing but, you know, they don’t seem to understand that’.

– Tyler

‘I think the people at grassroots must have more say in the managing of the work because they are the people who do the work. I think 90% of the time they know more than the people that are at management level’. – Tyler

‘If they would listen, if their consultation was not just information sessions but real consultations, real problem-solving sessions...then it would be better. But the consultation here is when you are called up and told. And you have no say’. – Samantha

‘Even though I might not be able to voice my opinion or my plans or have my initiatives be taken seriously...but if one day somebody could say, what you said makes sense. You know, that assurance, that validation...somebody is listening. In our case, though, nobody is listening’. – Samantha

According to Sparks, Cooper, Fried and Shirom (1997), the following factors contribute to increased levels of occupational stress and, subsequently, impact on the psychological well-being of employees: increased work demand (including long hours and high workloads), lack of control, poor support from superiors, lack of opportunity to contribute to decision-making, ambiguous management and expectations. Halbesleben and Buckley (cited in Bakker & Demerouti, 2006) report a causal relationship between high job demands and sleeping problems, exhaustion and impaired health. Glowinkowski and Cooper (cited in Danna & Griffin, 1999) emphasize the

health implications of an inappropriate work load by reporting that it has been found that both work overload and under-load can decrease self-esteem and may increase the incidence of smoking which, in turn, has physical and psychological implications (for example, it may contribute to the onset of lung cancer).

Skav, Borg and Orhede's (cited in Danna & Griffin, 1999) research found that people working in an environment characterized by high job demands, lack of control and inadequate social support were more susceptible to the development of musculoskeletal symptoms. As mentioned in an earlier section, lack of control and low decision latitude has been linked with a number of conditions including anxiety, depression, apathy and exhaustion (Cox et al., 2000). Briner (2000) confirms the perception of control has been found to be important for well-being.

This lends support to Karasek's demand-control model (Danna & Griffin, 1999; Jovanovic et al., 2006) which encompasses two concerns: decision latitude (including control) and job demands. Decision latitude refers to an employee's freedom to control his/her environment and to contribute to the decisions that have a direct bearing on him/her.

Karasek and Theorell (cited in Lindström, 2005) identified four categories within the demand-control model:

- Relaxed – this is the state experienced when control / decision latitude is high and job demands are low.
- Active – this state is characterized by high levels of both control and demands.
- Passive –this state is distinguished by low levels of control and demands.
- Job strain – this state is exemplified by low levels of control and high demands.

Job strain has been associated with a number of physical and psychological conditions: cardiovascular disease (Siegrist, Junge, Cremer & Seidel cited in Lindström, 2005), back pain (Kilbom, Armstrong & Buckle cited in Lindström, 2005), depression and exhaustion (Kawakami, Haratoni & Araki cited in Lindström, 2005) amongst others.

It needs to be mentioned, however, that Karasek's (Cox et al., 2000) demand-control model has been criticized for being too simplistic and for disregarding the possible buffering effect of social support but, even then, the implications that decision latitude / control and job demands have on an employee's well-being must be acknowledged.

The attempt to streamline office functioning in order to bring it more in line with the workings of a machine can, therefore, have some serious effects on employees. Not only can this orientation reduce workers to mere 'cogs' instead of human beings, thus demoralising staff and enhancing their feelings of frustration, but it can also impact on the job characteristics of the position in question. For example, the expectation that employees should meet an unreasonable quota within a given time frame might not be questioned by managers because they harbour the perception that greater output is the goal, with little (if any) regard given to the people who actually have to do the work. In this way, the demands of the job might be intensified. This is made even worse when the resources available to meet these demands are limited or reduced:

'There is a lot of things that we were able to do years ago that is now being taken away from us for some reason. I don't have a problem if it is taken away as such, but I do have a problem if it affects the work that I do. Years ago, if I had a problem I could deal with it but now I can't anymore because I have to ask a supervisor who has been there for only a year or two to deal with that'. –Tyler

'The computers are also very slow'. – Kevin

'The work gets more but the support gets lesser and computer systems get slower and more complicated'. –Kevin

'The slow computers and networks makes me frustrated because I cannot do my work as I am supposed to. The cherry on the cake is that management is aware of the slow computers but it doesn't seem to get fixed'. – Kevin

'Like, um, the systems that are so slow now again. It's very stressful to have to sit and wait after you have clicked for the next item'. – Gail

It would appear that the participants of this study are unhappy with the manner in which they are sometimes perceived. By approaching employees as just another cog in the machine there is a risk that workers' legitimate concerns might be disregarded. Perhaps it would be best for both employers and employees to bear in mind the principles of Warr's vitamin model (Briner, 2000) when discussing organizational issues and policies.

Warr "based [this model] on an analogy of the relationship between vitamins and physical health" (Briner, 2000, p. 301). According to this model, there are nine environmental 'vitamins' (as explained in the table below) which affect employees' health in a similar manner as nutritional vitamins. In the same way certain vitamins, for example vitamins A and D, can have harmful effects on the human body when taken in large quantities, some environmental 'vitamins' might be hazardous to an employee's health when he/she is exposed to high levels of it. For example, high levels of environmental clarity and externally generated goals could be dangerous to workers' well-being. Other environmental 'vitamins', such as valued social position and availability of money, are likened to vitamins C and E: no harmful effects have been noted when these 'vitamins' are consumed in larger quantities.

1. **Opportunity for control.** Discretion, decision latitude, independence, autonomy, job control, self-determination, personal control, absence of close supervision, participation in decision-making, absence of utilization.
2. **Opportunity for skill use.** Skill utilization, utilization of valued abilities, application of skills and abilities, required skills.
3. **Externally generated goals.** Job demands, quantitative or qualitative workload, time demands, role responsibility, time pressure at work, required concentration, conflicting demands.
4. **Variety.** Variation in job content and location, non-repetitive work, varied roles and responsibilities, skill variety, number of different job operations.
5. **Environmental clarity.** Information about the consequences of behaviour (e.g. availability of feedback), information about the future (e.g. absence of job future ambiguity), information about required behaviour (e.g. low role ambiguity).
6. **Availability of money.** Income level, amount of pay, moderate/high standard of living, absence of poverty, material resources.

7. **Physical security.** Absence of danger, good working conditions, ergonomically adequate equipment, safe levels of temperature and noise, absence of continuous heavy lifting.
8. **Opportunity for interpersonal contact.** Quantity of interaction (e.g. contact with others, adequate privacy), quality of interaction (e.g. good relationship with others, social support).
9. **Valued social position.** Cultural evaluations of status (e.g. social rank, occupational prestige), more localized social evaluations of in-company status or job importance, personal evaluations of task significance (e.g. meaningfulness of job or self-respect from the job).

Box 1. The nine environmental features in Warr's vitamin model identified as significant for psychological well-being (Briner, 2000, p. 302).

Warr's model (Briner, 2000) encourages moderation. None of the environmental 'vitamins' are bad for an employee but, in some cases, they can have dangerous implications if the levels are not properly monitored and adjusted as needed. Perhaps by applying this principle, both employers and employees can help foster a healthier working environment while still maintaining the required levels of production.

5.4 Fight for survival: Animals in the grand scheme of things

A number of factors can play a part in determining people's attitudes towards animals, for example social, cultural and environmental conditions can influence a person's feelings towards other living things (Lawrence cited in Brown, 2002). Although Kevin, Paul, Reggie and Samantha expressed a dislike or fear of animals, this distinction was not necessarily down to cultural differences. This is consistent with Gibbs's (cited in Brown, 2002) statement that ethnic or racial groups consist of individuals and these individuals are unique in their own right. Ethnic or racial groups, therefore, are characterized by diverse opinions, attitudes and beliefs and are not to be treated as one big homogenous group. In some cases, though, the historical background of certain cultural groups can affect an individual's attitudes.

For instance, Taylor (cited in Brown, 2002) conducted a review of the literature pertaining to why most African Americans do not participate in environmental issues. She proposed possible explanations for this (perceived) apathetic attitude:

- African Americans may have different priorities than their White counterparts, for instance, they might be more concerned with issues of personal survival as well as racial discrimination.
- Meeting basic social needs takes precedence in most African American homes due to the fact that they still find themselves in the lower socio-economic ranks and, therefore, may be financially disadvantaged.
- Due to the political climate of the past, African Americans have dedicated their time and energy towards advocating for their basic civil rights while the more affluent Whites could pursue less pressing needs such as enjoying companion animals.
- The African American human-animal interaction could have been coloured by folktales filtered down through generations regarding fierce, dangerous animals. Some of these stories could have originated in Africa.

Although Taylor's research (cited in Brown, 2002) was focused on African Americans, it is possible that the above explanations can be just as applicable to the South African context, perhaps even more so considering the political history of our country. Further research will need to be done on this though but it stands to reason that an individual who is struggling to put food on the table, get better housing and education, will be more focused on meeting his/her own immediate needs and will not have the luxury of developing an affectionate attachment to an animal. Samantha agreed by stating that she does not like to feel responsible for animals:

‘...so something that needs me to take care of it for every little thing and cannot talk, it cannot...Any animal, I'm not responsible for it so if I could...have it somewhere would I say go get your own food, go hunt yourself’.

Kellert (1996) has proposed that African Americans may harbour more utilitarian attitudes towards animals than Whites who tend to see animals in a more humanistic way. Kellert conducted interviews with almost four thousand Americans in order to explore their attitudes and opinions about animals. He found that African Americans expressed more utilitarian and dominionistic beliefs towards animals than European Americans. The utilitarian attitude attributes value to an animal on grounds of what purpose it can serve, for example an animal that can make life easier, such as a horse, or

that can contribute to the financial standing of an individual, such as a cow, is accepted more readily than a companion animal. This finding is supported by Kevin:

‘The only animal our family had when I was small was donkey that carried us from our home to the shop in the next village as well as a few chickens’.

‘My dad farms with chickens and he has got cows now as well. They sell eggs and milk to a local shop to make money’.

Kevin was not raised with companion animals. Instead, the animals he was exposed to as a young child all served a purpose and, perhaps, this helped form his attitudes towards animals. Raupp (cited in Vollum, Buffington-Vollum & Langmire, 2004) suggests that childhood socialization concerning the human-animal bond can affect an individual’s future attitudes, beliefs and behaviour. For families with limited economic means, the focus would be on survival. It would not be conducive to anyone’s well-being to take on a companion animal in such a case because this would be just another mouth to feed. Children growing up in such homes would not have the opportunity to bond with animals like their more affluent peers. These children could then grow up viewing animals in a purely instrumental way and, through socialization, pass on the same beliefs to their children, thereby perpetuating the cycle. It must be mentioned that there is nothing wrong with this utilitarian viewpoint. In fact, Jasper and Nelkin (cited in Brown, 2006) highlight the fact that both the humanitarian and instrumental attitudes towards animals have co-existed without incident throughout history.

Socialization might, however, also play a role in the perpetuation of feelings such as fear or disgust when it comes to animals. For instance, Rozin and Fallon (cited in Davey, 1994) have implied that disgust sensitivity can be transmitted culturally as well as socially, for example by imitating facial expressions, although they mention that a genetic predisposition has not been ruled out. Disgust or contamination sensitivity is a factor associated with fear of animals that is “characterized as a food-rejection response consisting of a distinctive physiological manifestation (nausea), a distancing of the self from the offensive objects (avoidance), and a sensitivity to contamination from, or oral incorporation of, the offensive object” (Matchett & Davey, 1991, p. 91).

There appears to be an association between disgust sensitivity and the fear experienced around certain animals (Webb & Davey, 1992). For example, animals that are categorized as fear-evoking, but are considered relatively harmless in a physical sense, elicit the food-rejection response typical to disgust sensitivity. Rats and spiders are examples of such animals. Certain animals (for example spiders, bats, lizards, slugs, cockroaches and snakes) are regarded as ‘fear-relevant’ (Davey, 1994, p. 19) due to the fact that they stimulate feelings of fear even though the animals are not regarded as predatory. Davey (cited in Webb & Davey, 1992, p. 392) has “shown that normal subjects tend to rate animals considered fear-relevant but generally physically harmless as equally disgust-evoking as animals which naturally elicit disgust (e.g. caterpillar, worm, snail, maggot, frog, slug), and more disgust evoking than predatory animals, fear-irrelevant animals, and farm animals”.

This lead him to propose that fear of animals might be better understood in terms of disease-avoidance rather than a fear of predatory actions. He believes that there are a number of ways for fear-relevant animals to have obtained that label including contributing to the transmission of diseases (for example, the rat); by being associated with decay or filth (for example, maggots); and by resembling objects that are commonly viewed as disgusting (for example, slugs which not only are slimy but resemble mucus).

Some of the participants in this study agree with the research cited above:

‘I don’t like birds or hamsters because they are dirty and can bite’. – Kevin

‘I associate certain animals with being dirty and they might carry sicknesses, for example rats and pigeons’. – Kevin

‘I am cautious around other animals because, in my culture, I was raised as boy to believe that big dogs and cats are carrying diseases and I am scared that one bites me and I get an infection’.- Paul

‘You see, when you have a dog in your house or...you know...I feel like it’s...they contribute to untidiness...you know’. –Reggie

Aside from the disgust-evoking response and the labelling of animals as fear-relevant, fear of animals might be rooted in experience. If a person was hurt by an animal, this incident will taint their perception of animals in general:

‘I was even afraid of rats and mice when I was a boy. I accidentally got bitten by a rat and was very scared from that day’. – Paul

‘I don’t very much like animals such as dogs because I was attacked by a dog once when I was a boy and they don’t like me’. – Kevin

‘My parents will not get a dog because they saw what happened to me’. –Kevin

‘When I walk in the street and I see a dog barking and jumping on one of the house gates, I get scared...because I got hurt by an animal when I was small, I automatically avoid them’. – Kevin

‘I think its more fear because I was bitten by a dog when I was young. I don’t think I ever overcame that’. – Samantha

There are various reasons for people not liking animals including how they have been socialized, the type of exposure they had to animals, how they view animals (utilitarian or humanistic), the associations they might have between animals and illness or just a general dislike and / or discomfort around animals. Each person is unique and needs to be respected for his /her beliefs and feelings. If an individual feels uncomfortable or afraid around animals, then it will be detrimental to their well-being to be forced to interact with animals. It was for this reason that the researcher felt it was important to more fully explore employees’ feelings and attitudes about animals in order to determine the feasibility of introducing an animal-assisted stress intervention programme.

It was felt that it is important to provide employees with a plethora of viable stress management tools in order for each individual to choose the technique and/or programme best suited to his/her own needs but, at the same time, it would be

counterproductive to introduce any programme that could affect an individual negatively.

Of the participants in the study who expressed dislike or fear of animals, three felt that the mere presence of animals in the vicinity would bring about feelings of fear but one of them went on to state that ‘as long as they are locked up [he] will feel less anxious’. The other participants stated that it is only the physical presence of animals that makes them feel uncomfortable but at least one of them enjoys watching programmes on animals. As with any other stress intervention technique, animal-assisted stress management programmes might not work for everyone but, if implemented correctly, might not cause any undue stress for the individuals who do not like animals. This will be elaborated on in the next chapter.

5.5 My furry friend: An anthropocentric approach

Most of the participants who expressed a love of animals demonstrated a tendency to anthropomorphise them. Anthropomorphism refers to the attribution of human qualities to non-human entities (Duvall Antonacopoulous & Pychyl, 2010; Epley, Waytz, Akalis & Cacioppo, 2008; Waytz, Cacioppo & Epley, 2010) and can satisfy two basic needs according to Baumeister and Leary (cited in Epley et al., 2008) namely the need for social connection and the need to feel competent.

Lagani, Butler and Hetts (cited in Toray, 2004) have suggested that anthropomorphism is one of three possible reasons why people tend to develop attachments to animals, with the other two being neoteny (which refers to the presence of infantile features on animals) and alleomemetic behaviour (which refers to human behaviour that is often imitated by animals).

The participants of this study displayed anthropomorphic tendencies whilst talking about animals:

‘I have to say that my doggie...she’s a character of her own...she just does silly things that make me laugh’. – Sean

‘They [animals] don’t complain about their personal problems...They sense if something is bothering you. My dog can sense if I am sad or happy and, uh, if I am sad, she comes and sits next to me or on my lap and I get a lot of licks’. – Sean

‘All animals have a unique thing that they do. A character of their own’. – Sean

‘...fish are very therapeutic...Sometimes even a bit funny to watch!’ – Sean

‘I think more dogs...animals with more emotion. That playfulness...Animals that use their brains and interact with you’. – Tyler

‘They [animals] are not backstabbers!’ – Amber

‘Innocent! Yeah, the innocence and you can see their feelings in the eyes’. – Amber

‘Their eyes show everything. Yeah. And if they lose trust in you, it takes quite a while to get it back again. That’s just like humans as well’. – Amber

‘I think, even though you cannot speak verbally, you do get a sense of loyalty’. – Parker

‘I mothered her [a stray], she was like a little baby in the house...This dog almost speaks to me and everybody keeps saying to me that we’re joined at the hip. But she communicates with me, she actually talks to everybody in the house. If you talk to her, she talks back and I find that, if I am upset, she will come and sit on my lap or she’ll sit next to me, and she...her love is unconditional’. – Brooke

‘...she has got this communicative way of speaking, I mean...she talks in this high-pitch little doggie yelp...My husband, he tends to talk loud. She will climb on his lap and she will put her mouth by his mouth to show him that he must keep it down. She keeps everybody quiet’. – Brooke

‘I am very comfortable with animals and I have this tendency to talk to them like babies’. – Brooke

‘A dog can almost read your mind. I know they’re very manipulative! They say dogs are even better manipulators than human beings are’. – Brooke

It would appear that there is a tendency to anthropomorphise animals. The participants’ companion animals are seen as part of the family and are perceived as displaying attributes that the participants find desirable in human companionship: loyal, funny, open, communicative, affectionate, sensitive, innocence and a source of comfort. These participants confirmed that they view their own pets in this light but that other animals are seen in a similar vein. In other words, it is not just companion animals that are anthropomorphised but animals in general.

By anthropomorphising animals, Cassandra fills a need for family:

‘I can only tell you because I’m single and family is far away...these cats of mine, they are my...companions’.

‘They’re my family...maybe even more so than my actual family because they don’t moan, they don’t...all they need is a bit of attention, feeding them and the fact that they are there for me’.

Baumeister and Leary (cited in Epley et al., 2008) state that anthropomorphism satisfies the need for social contact and some of the participants seem to agree. The relationship between humans and animals is becoming more and more similar to human-human relationships (Duvall Antonacopoulous & Pychyl, 2010). There is, however, conflicting research on whether or not this tendency to anthropomorphise non-human agents can be regarded as a healthy practice.

Veevers (cited in Duvall Antonacopoulous & Pychyl, 2010) claims that human-animal interactions may be a proxy for human-human relationships. Waytz, Cacioppo and Epley (2010) expressed a concern that lonely individuals demonstrated a higher tendency to humanize animals than non-lonely people. They speculated that this may be due to the fact that these lonely individuals are seeking to have their need for social connection meet. Duvall Antonacopoulous and Pychyl (2010) reported that

anthropomorphism may intensify feelings of loneliness. They carried out research on dog guardians to determine if there is a relationship between anthropomorphism, loneliness, physical health and social support. These researchers classified their participants according to the level of anthropomorphism demonstrated as well as to level of human social support experienced. They found that dog guardians who demonstrated both high levels of anthropomorphism and low levels of human support experienced more health problems than any other group. Archer (1997), however, suggests that anthropomorphising animals may signal some sort of inadequacy on a person's part to develop satisfying relationships with other people which could account for the low levels of human social support found in the above-mentioned study.

The participants of this study who expressed a tendency to anthropomorphise animals all confirmed that animals do provide a sense of connection but all of these individuals have loving, supportive social networks. This confirmation was supplied via personal communication with the researcher. Even Cassandra, who mentioned that her family does not live near her, confirmed that her friends offer her the support she needs.

It should be mentioned here that animals have also been noted to encourage social interaction (Le Roux & Kemp, 2009; Pompeo, 2005; Sable, 1995; Serpell, 1990; Sobol et al., 2006; Urichuck & Anderson, 2003; Wells, 2009). In this way, animals might help broaden an individual's social support network and this could help counter the effects of the research cited above regarding the association between loneliness, anthropomorphism and poor health. Gail adds support to this statement by describing some of her experiences at her previous employer where they used to have cats. She described what it was like to be able to go out and interact with the animals: 'It was so nice to look forward to. Sometimes someone would come out to take a smoke and then they would stay chatting to me'.

Serpell (cited in Archer, 1997) states that the attachment humans develop towards their companion animals is too prevalent throughout history to be perceived as an anomaly characteristic of individuals who seem to lack the skills to cultivate meaningful human relationships. In this light, developing an attachment to animals, and even humanizing them, is not seen as abnormal or detrimental to an individual's health. Joubert and Paden-Levy (cited in Archer, 1997) add weight to this viewpoint. These researchers

found that pet owners exhibited more positive personality characteristics than non-owners. Archer (1997) also mentions that there is preliminary evidence indicating that individuals who display strong relationships to those close to them are also the most likely to develop strong attachments to their dogs. Anthropomorphising animals, therefore, is not necessarily an indication of poor personal skills or an inadequate social support system.

Most of the participants in this study seem to derive feelings of comfort and love from animals. By attributing certain human characteristics to animals, they may also alleviate feelings of stress. For example, it has been discussed in chapter three just how animals may reduce stress levels but, by assigning animals an attribute such as a sense of humour, a person might introduce a humorous element to his/her interaction with an animal and, in this way, harness another stress management tool. The standard response to humour is laughter which can release tension and, therefore, may help reduce stress (McGhee, 1979), thus, by perceiving animals as funny, people can ameliorate stress.

Humanizing animals may, therefore, help meet a number of an individual's needs including social connection, companionship and comfort.

5.6 Caught in a moment: The gift of the present

When talking about animals a number of the participants in this study alluded to the concept of mindfulness. Mindfulness is “characterized by dispassionate, non-evaluative and sustained moment-to-moment awareness of perceptible mental states and processes” (Grossman, Niemann, Schmidt & Walach, 2004, p. 36). Being mindful, therefore, requires that an individual be fully in the moment and not allow either the past or the future to consume his/her thoughts.

‘I’m more relaxed. Definitely. Forget about your troubles’. – Gail

‘I totally lose myself with them’. – Brooke

‘The stress levels...you forget about everything that is worrying you’. – Brooke

‘Calm, relaxed. Nothing really matter because you don’t really think about the problems or situations when you are around your animals, or any other animals, because you concentrate on how nice they are or what they do for you. It just calms me down’. – Tyler

‘Yes, concentrating on them but they somehow do something to me...They just...concentrating on them and you forget about everything else’. – Tyler

‘And the moment I’m busy with them everything goes out of my head and I’m just thinking of them’. – Cassandra

‘When I am around animals, especially puppies, I forget about everything else’. – Sean

‘...playing with her and completely focus on something fun’. – Sean

‘...because of the time playing with the puppy, I forget about the nonsense that happened at work’. – Sean

‘I would immediately just want to play with him or her and I can guarantee that thinking about work will be the last thing on my mind’. – Sean

‘...it will focus your attention on something cute and furry and make you forget about office drama and you might even laugh a bit’. – Sean

‘Well, I enjoy being around horses. Combing them or feeding them or riding on them makes me focus on that moment’. – Paul

According to Amawattana, Mande and Ekstrand (cited in Grossman et al., 2004), people tend to function on autopilot which means that they are usually not fully conscious of the moment, often to their detriment. By fully engaging in the moment, an individual’s perceptions may change as a result of the deeper, richer sense of the present

experienced through actively participating in whatever situation is unfolding at that point in time.

If a person can change his/her perception of an event or situation, he/she could potentially reduce their stress levels. Lazarus (1993) has labelled this action emotion-focused coping. For example, if an individual views the time-consuming, complicated task which was delegated to them by a supervisor as a token of confidence in their abilities instead of a personal attack, they will remove the cognitive basis of the stress reaction. This would imply that animals, by indirectly bringing about a state of mindfulness, may contribute to an individual altering his/her perception of a situation which could, in turn, reduce his/her stress.

Brown and Ryan (2003) offer further support in favour of the positive effects of mindfulness by stating that the sense of vividness that an individual experiences when being mindful may have a direct bearing on a person's happiness as well as general well-being.

Hayes and Feldman (cited in Keng, Smoski & Robins, 2011) state that mindfulness may act as a buffer against certain actions which contribute to psychological distress, for example, anxiety, worry, fear and anger. These researchers go on to cite studies which have linked mindfulness to improved levels of life satisfaction, agreeableness, conscientiousness, vitality, self-esteem, empathy, sense of autonomy, optimism and competence.

The participants in this study confirm that animals help them to focus on the present moment and, in this way, promote a state of mindfulness. These participants report that animals have a calming effect on them which is consistent with Benson's relaxation theory (DeSchraver & Riddick, 1990; Wells, 2009). According to Benson, there are four basic elements to the relaxation response: presence of an object on which to focus (for example, fish), a quiet environment, a passive attitude and a comfortable position. By encouraging a sense of mindfulness, animals promote the passive, reflective attitude conducive to relaxation as proposed by this theory.

Animals, therefore, not only have a direct effect on stress reduction as discussed in chapter three but can also affect stress indirectly by helping to focus a person's attention, potentially altering perceptions, promoting mindfulness and offering support (as discussed in an earlier section).

5.7 A personal note

The researcher would just like to take a moment to convey her own personal assumptions and feelings on both occupational stress and animals as a means of stress relief. It is important that this information be put forth since it has a direct bearing on how she approached the information communicated to her by the participants and how she categorized the various themes.

The researcher initially got the idea to explore possible animal-assisted stress management programmes when she observed an interesting event in her work environment. One of her colleagues had brought a puppy to work and the researcher noticed that there was a change in the general vibe around the office. People were interacting more and they were laughing and joking with their co-workers instead of trying to ignore each other. There was a more pleasant feel in the atmosphere where even people who were usually sullen and standoffish were seen to be laughing and engaging with their colleagues. What really struck the researcher as interesting is that she observed this response in a wide range of people; that is age, race and gender did not appear to be influencing this reaction. There were people who avoided the puppy and seemed to be ill at ease but this response was not as common as what the researcher assumed it would be considering the number of people in the office. A few months later, the same colleague brought a different puppy to work and the same response was observed. These observations, coupled with the researcher's own love of animals, triggered the idea that it might be worth exploring the possibility of introducing an animal-assisted stress intervention programme.

The researcher loves animals and experiences great joy when interacting with them but, at the same time, is aware that not everyone feels the same way. She accepts this because she firmly believes that everyone is entitled to their own opinions, feelings and

beliefs and that these should be respected. She felt, however, that given the observations made, as discussed above, that this avenue should be further explored. Could animals help employees ameliorate stress? Although the researcher loves animals, her own form of stress relief is a combination of exercise and reading for recreational purposes but she started thinking about how she felt when interacting with her dogs. She concluded that she did feel less stressed after a few minutes of playing with them and she found that they injected some humour into stressful days.

In terms of the factors that contribute to the researcher's occupational stress, she finds that the general disrespect shown to people by their colleagues affects her the most. In an open-plan office there should be certain principles that must be applied and respect should be one of them. This could be as simple as turning down the volume of your cell phone or not screaming at someone across the hall.

The above mentioned feelings and opinions could taint the manner in which the researcher understood the participants' responses and opinions. It is for this reason that each participant was given a copy of this analysis to test whether or not it read true for them.

5.8 Conclusion

This chapter was dedicated to discussing the main underlying themes relevant to the participants' perceptions of occupational stress and animals, with a focus on possible animal-assisted stress management programmes. In the next chapter, the researcher will elaborate on her recommendations and conclusions.

Chapter 6

Recommendations and conclusions

The great pleasure of a dog is that you may make a fool of yourself with him and not only will he not scold you, but he will make a fool of himself too – Samuel Butler

6.1 Introduction

The importance of effective stress management programmes in the work place has been repeatedly emphasized throughout this dissertation. Every individual is unique and has different needs, strengths, weaknesses and physiological responses to stress. For this reason, it is safe to state that not everyone will respond in the same way to run of the mill stress management interventions. It is, therefore, crucial to offer employees a method of reducing their stress levels that is consistent with their beliefs, compatible with their characteristics and meets their unique needs.

It was proposed that one such stress management method might be the introduction of an animal-assisted programme. The positive effects animals have on people was discussed in detail in chapter three and it was proposed that those same positive effects might help employees in the work environment ameliorate stress. Due to the uniqueness of individuals, however, as well as the importance of not causing any undue distress to anyone, a qualitative study was conducted in order to explore employees' perceptions and opinions regarding the possibility of introducing such a programme into the office environment.

The results of this exploration were discussed in the previous chapter under applicable themes.

6.2 Recommendations

With reference to occupational stress, the main contributing factor to the experience of such stress as identified by all the research participants in this current study is the open-plan office set-up. All of the research participants expressed an intense discomfort and dislike of the open-office set-up and suggested that their stress levels would be dramatically reduced by the elimination of this practice. Although completely private offices might have other implications (for example, a sense of isolation and loneliness), it is worth researching the possibility and subsequent effects of introducing semi-private offices, for example having fewer employees in a clearly demarcated office space with more effective partitions between the employees.

Amber, Brooke, Cassandra, Gail, Parker, Sean and Tyler expressed a love for animals and were open to the idea of having animals on site, in some capacity or another, as a means to help reduce their stress levels. These participants confirmed that they do, in fact, find that their companion animals help them to alleviate their stress and they expect that the same response would be experienced if an animal-assisted stress management programme had to be introduced in their work environment.

Kevin, Paul, Reggie and Samantha, however, expressed a fear of animals and, in these cases, having animals in the vicinity could possibly lead them to experience an elevation in their stress levels. One of the ethical practices that should be adhered to by people, irrespective of their field or position, is the principle of nonmaleficence which means that, above all, no harm must be done (Durrheim & Wassenaar, 1999). In this regard, perhaps implementing an animal-assisted stress management programme which requires that animals are physically present on the premises might not be beneficial to employees who share these participants' sentiments. Further factors that might have a bearing on such an animal-assisted stress management programme would be the concerns raised with regards to the financial implications and logistical challenges that such an intervention would entail as well as possible hygiene issues. All of these factors were discussed in depth in chapter three.

This does not mean, however, that the feasibility of animal-assisted stress interventions should be dismissed. As mentioned earlier, Amber, Brooke, Cassandra, Gail, Parker,

Sean and Tyler were very supportive of the idea and felt strongly that this type of programme could help them improve their psychological well-being. It will, therefore, be best to find a way to introduce this kind of stress management method while being respectful of both orientations expressed above, namely the love of animals and the fear of them.

Considering some of the research already done in the animal-assisted therapy field, it is recommended that consideration be given to the introduction of video clips of animals into the work environment.

Ulrich, Simons, Losito, Fiorito, Miles and Zelson (cited in Kahn, 1997) conducted a study to assess the effects of natural and urban settings on stress reduction. In this experiment, 120 participants viewed a stressful movie followed by videotapes of either natural or urban settings. Self-reports, as well as the results of a battery of physiological measures (including heart rate, muscle tension, skin conductance and pulse transit time), indicated that there was a greater stress recovery in response to the natural than to the urban settings. This would suggest that watching videotapes of animals in their natural environment could also contribute to reduced stress levels.

Wells (2009) reported that animals may improve people's short-term physical health. This is true irrespective of whether an individual physically interacts with the animals or is just in the presence of animals in some way or another. According to Wells (2009), the mere presence of an animal can help lower automatic responses to moderate stressors. DeSchraver and Riddick's (1990) study adds weight to this statement. These researchers divided their elderly participants into three groups: one group was exposed to a live aquarium, one group viewed a recording of a variety of tropical fish and one group viewed placebo recordings. The hypothesis was that participants in the two fish-gazing groups would experience a reduction in pulse rate, an increase in skin temperature and a reduction in muscle tension after experiencing a stressor. The results of this study confirmed the hypothesis. This research lends credence to the suggestion that both interacting with real animals and simply watching them on tape can lead to a decrease in stress levels.

DeSchraver and Riddick (1990) also report that participants were overheard talking to people about their favourite fish. This would suggest that animals may act as a catalyst for social interaction which, in turn, has been found to lower stress levels (Allen et al., 1991; Allen et al., 2001; Allen et al., 2002; Dimitrijevic, 2009; Pompeo, 2005; Sobo et al., 2006; Wells, 2009).

The research cited above suggests that merely watching a videotape of animals can have more or less the same positive effects on a person as physically interacting with them. Although further research would need to be done in order to determine the exact physiological and psychological differences between the two situations, it is sufficient for the purposes of this study to state that watching videotapes of animals can contribute to stress reduction for certain individuals in the work environment. The research participants in this study who expressed a dislike or fear of animals indicated that they have no objection to pictures or videos of them; it is only the physical presence of an animal that elicits a fear response. In fact, one of these participants even stated that he enjoys watching television programmes of animals.

For these reasons, it is believed that playing videotapes of animals on big television screens, or even on computer monitors, in the work environment might help some employees focus on something else when they need it, thereby reducing their feelings of stress without negatively affecting employees who do not like animals. The principle applied here would be that this is an option available to those who are interested and it is not mandatory. In other words, if employees find that this is a stress management technique that works for them then they have the option of getting away for a few minutes to go watch a videotape of animals; if animals cause them undue distress, then they can avoid watching. There are, however, other considerations that need to be taken into account, for example, due to the open-plan office set-up, it might be best to switch off the sound on such displays so as not to contribute to the noise levels.

Some of the participants did mention that they would prefer to interact with animals as opposed to watching videotapes of them but this option was not dismissed by them. At least one of these participants stated that watching video clips or photos of animals had a calming effect on her. This would suggest that introducing animal-assisted stress

management programmes in the work environment in the form of videotapes is an option worth pursuing.

6.3 Limitations of the study

It is imperative to mention that this study was carried out with the employees of one specific department within one institution and, therefore, these findings might not be transferable to other companies. This is especially relevant to the discussion of occupational stress and the perception of these participants on the main contributing factors. It must be pointed out, however, that the opinions and concerns expressed by the research participants concurred with research done within this field as discussed in previous chapters.

Furthermore, the research participants of this study were randomly selected from a list of staff within the identified department. Due to the fact that they were chosen randomly, a possibility exists that other employees (not chosen for this study) might express different opinions. This is especially true with reference to cultural factors. For example, none of the participants come from Indian, coloured or oriental backgrounds. Although the researcher found that feelings towards and about animals was not clearly distinguished along cultural lines, this observation might not hold if individuals from the above-mentioned ethnic groups were interviewed. Unfortunately, the department chosen within which this study was conducted does not have many employees from these groups, thereby reducing the possibility that such an employee would be randomly selected to participate in this study.

6.4 Suggestions for future research

As mentioned in an earlier section, further research would need to be done in order to determine the exact physiological and psychological differences between physically interacting with an animal and merely watching an animal on screen or in pictures. Although research, as cited above, suggests that people can still benefit physically from merely watching animals, it would help to understand the phenomenon better if the exact differences between the two approaches could be explored.

Further research will also need to be conducted to determine how effective videotapes of animals can be in reducing employees' stress levels and what are the implications of such a stress management technique, for example does it affect productivity which, in turn, could lead to the experience of stress? Would the nature of the videotape have a bearing on how it would affect an individual (for example, would the kind of animal, and the activity the animal is engaging in, be a factor in how the individual is affected?). Would this promote social interaction within the working environment and, thereby, offer a means of social support for employees? Would this create any negative interactions between those employees who like animals and those who feel otherwise? Consideration would also have to be given to any financial and logistical implications involved in the introduction and maintenance of such an intervention programme.

6.5 Conclusions

Today's world is characterized by a culture of constant change. It is a world where technological advancements, economic recessions and political unrest are the order of the day. All of these factors may cause stress in and of themselves but they definitely compound the effects of occupational stress by eliciting changes in office policies, procedures and work load (Johnson et al., 2005). The factors that have been found to contribute the most to the experience of occupational stress as well as the severe consequences of chronic stress were discussed in depth in chapter two. In light of the negative physical and psychological effects of stress on employees it is imperative that action be taken to help individuals alleviate their stress levels or, at the very least, reduce the intensity of their stress experience.

Stress management programmes, therefore, are very important in the promotion of physical and psychological well-being but, in order to be truly effective, they need to cater to the individual's unique characteristics, strengths, weaknesses and needs. The purpose of this study was to explore the possibility of introducing an animal-assisted stress management programme into working environments with the aim of helping employees reduce their stress levels. In order to ensure that this would be a feasible enterprise it was crucial to fully explore employees' perceptions, opinions and beliefs

on the matter. In the same way that different stress management programmes are needed because of individual differences, these same differences between people means that an animal-assisted stress management programme is not suitable for everyone.

The outcome of this study confirmed that the physical presence of animals do, in fact, help reduce stress levels for those individuals who like animals but, at the same time, might be a cause of distress for those individuals on the opposite end of the spectrum. This is a logical outcome when consideration is given to the fact that people are different and it is this very premise that demands that different stress management programmes are offered in order to fully meet the needs of individuals.

This does not mean, however, that the concept of an animal-assisted stress management programme should be completely dismissed. Irrespective of the fact that some research participants were opposed to the idea, the positive physical and psychological effects animals have on humans, as discussed in chapter three, cannot be negated. An optimal solution will be one that allows employees who can benefit from an animal-assisted stress management programme to reap the maximum benefits but, simultaneously, protects those employees who feel emotional and physical distress around the physical presence of animals from undue discomfort. It is, therefore, recommended that further research be done on the positive and negative effects of introducing an electronic version of an animal-assisted stress management programme, such as videotapes. Although the employees who choose to embrace such a programme might not reap the same type of rewards as they would if they were allowed to physically interact with the animal, research (as discussed above) lends weight to the idea that watching animals on screen still contributes to the reduction of stress without adding to the distress experienced by those who are not fond of animals.

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Annexure A – Informed consent

To the participants of this study.

I am a Masters student at the University of South Africa (UNISA). My research subject involves the possible relationship between animals and staff's stress levels. I am interviewing a number of staff within our Directorate in order to obtain sufficient information to fully explore this potential relationship.

As part of this study, you are being asked to participate in an in-depth interview. During this interview, we cover issues relevant to the subject at hand. You will be asked to discuss your work environment, stress levels, feelings towards animals and other similar questions.

Each interview will be audio-taped and later transcribed. You will receive a copy of your transcribed interview for your own purposes as well as to ensure that I have correctly captured what was said. At no time will your name, or any other information that can identify you, be made known. In my report, I might quote you but will always use a pseudonym and will ensure that no information in the quotes can be used to identify you.

This signed consent form remains for my own records and only a template will feature in my dissertation.

You may withdraw from this study at any stage and will not have to provide reasons as to why you wish to do so. Any feedback from you will be welcome, however, and will be taken in the spirit it is intended.

I, _____ (NAME IN BLOCK LETTERS) have read the above statement and have agreed to participate as an interviewee under the above-mentioned conditions.

Signature of participant

Date

Annexure B – Interview schedule

I am researching the possible relationship between animals and staff's stress levels. Throughout the interview I would like you to remember that I am genuinely interested in your opinions, experiences and feelings.

I wish to take this opportunity to thank you for agreeing to take part. If you feel uncomfortable, or if you wish to stop with the interview at any time, please don't hesitate to tell me. If you have any questions or would like me to clarify something, please feel free to ask.

Before we begin, will you have any objections to my taping this interview? You are reminded that you may stop this recording at any time you feel like it.

1. How do you experience your typical working day? Did anything happen today you of the ordinary? (*Helps determine if anything happened that might taint answers*).
2. How would you describe your stress levels today?
3. Is there a difference between today's stress levels and your stress levels five years ago? Please elaborate.
4. How does stress affect you? (Physically? Emotionally? Mentally? In what way?)
5. When do you experience the most stress?
6. What contributes to your stress levels at work? What are the causes of stress in your office environment?
7. How does occupational stress impact on other aspects of your life?
8. What coping methods do you currently use?
9. How effective are these methods?
10. Do you think your employer could provide stress management programmes to enable staff to cope more efficiently with stress? In what sense...
11. How do you feel about animals?
12. Do you have any pets?

13. If so, how many and what kind? If not, may I ask why? (Would you perhaps like pets but can't have any due to your specific circumstances? Or are you perhaps uncomfortable around animals?)
14. Do you notice any change in how you feel when you are around animals (*irrespective of whether participant likes animals or not, he/she should experience some reaction to the presence of animals*)? Please elaborate.
15. What do you suppose is it about animals that affects you in this way (*whether positive or negative*)?
16. Do you notice any differences between how you feel around your own pets and how you feel around other animals? (*only applicable to participants who express liking for animals*) Please elaborate.
17. How do you suppose you would react in the presence of different kinds of animals, like fish, birds, hamsters? (*irrespective of whether participant likes animals or not, he/she should experience some reaction to the presence of animals and this reaction might differ depending on the animals*)
18. If animals were present in your office setting (for instance, a petting zoo), how would that affect you? Please elaborate.
19. Would you have any concerns about having the animals present (even if you did not have to interact with them)?
20. What problems can you foresee if such a scenario had to materialise?
21. How do you think this would affect the animals?

Annexure C – Transcribed interviews

Amber

M: I was wondering if you could take me through a typical working day for you. What is that like for you?

A: A typical working day? At the moment it's stressful. Starting at 7:45, sometimes not even seeing it's tea time, taking a tea break of ten minutes, working 'til, sometimes you don't see it again, 12:15, come back at 13:00 and then work until 16:00 again. This is with a lot of interruptions, computer down time...it's quite tough.

M: A lot of demands?

A: A lot of demands, a lot of stress. Yes.

M: How would you describe your stress levels today if you had to put it into words?

A: Today...quite high. It causes a feeling of friction.

M: In what way?

A: Uh....too many tasks coming down on you too quickly, like this one phones you and that one phones you. You have ...all of them are urgent. So...you get, like, um...it feels like friction. You can't get away. So a lot of stress.

M: So a lot of high priorities in a short time?

A: That's it.

M: Would you say there is a difference between your stress levels today as opposed to, let's say, five years ago?

A: Yes.

M: In what way?

A: Umm...work got more. More work. Um...hectic, hectic situations we have to cope with, office change, interaction with other colleagues. It's quite a lot of things that works in. But, work load. Mainly work load.

M: So high volumes of work, short deadlines, a lot of overtime?

A: A lot of overtime, computer problems, yeah.

M: You mentioned changes in the offices?

A: Open-plan office...lots of noise, no privacy, office gossip...what do you call it?
...escalates because of the open-office plan. I think that's the main thing.

M: And the office gossip would be demoralising?

A: Hell, yes. And it's not true. You know mors how it starts with one person and ends up with a totally different person.

M: How would you say stress affects you? Physically, emotionally, mentally?

A: Physically? Body is tired. Um...emotionally, eat too much. Comfort zone. Um, makes you depressed. Um, influences the productivity level. What else? You get more...upset easily, more easily...uh...you get grumpy. It's all kinds of...more negative stuff than anything else.

M: It would escalate...so you're tired, you can't keep up with the demands...

A: Yeah...and because of that you don't sleep so well so it's less sleep, more work. Vicious circle. Yeah.

M: From what you said I gather that you are affected mainly emotionally...

A: Yeah.

M: Stressed, frustrated, depressed?

A: Yes! Yes! Yeah.

M: When do you experience the most stress? At work, at home?

A: I would say during peak periods at work but I've also got a mom at home who is unwell. So there isn't really a time you can say...what do you call it?...that you have a break. So...

M: So the one impacts on the other?

A: Yeah. So you try to do something nice over the weekends but that's the period that you try to catch up on sleep. So for a few months it's actually very hectic. There's no balance.

M: So would you say that the work-home role is a source of stress for you?

A: Oh yes, definitely.

M: So you can't just shut down when you get home and switch over...?

A: No. it's just a different kind of stress then. Yeah.

M: From what you said I gather that the work load, open-office plan, the dual demands made on you as both a worker and a caretaker...those are your main causes of stress?

A: Yes.

M: Is there anything else in the office environment that you think contributes to your stress levels that you haven't mentioned yet?

A: It's the noise...and then we also have the problem with our aircon. The general office, you know, environment is not user-friendly. Ja.

M: What coping methods are you currently using to deal with your stress levels?

A: Uh...I got to gym. I try to watch some nice DVDs, listen to relaxing music and try to catch up a little bit on sleep.

M: So, basically, escapism. Anything to distract you from what's happening...

A: Yes! Something totally different. And I find that the exercise, even if you are tired when you go there, after you have done that you feel much better. And you sleep a bit better as well.

M: Overall they're effective methods? It works for you?

A: Yeah.

M: Do you think your employer could provide better stress management programmes that could help staff cope better?

A: Oh yes. Definitely.

M: In that sense...how do you feel about animals?

A: Whoa...what a question! (laughs). I love them! I think, sometimes, more than humans. Yeah...they're not so complicated in any case. They are not back-stabbers!

M: None of that office gossip?

A: Yeah! They don't like you then they give you a little nibble (laughs) so then you know where you stand with them. Yeah.

M: Do you have any pets?

A: Yes.

M: How many?

A: Only one, unfortunately, at the moment. But he is a handful so I think one is enough.

M: Do you notice any changes in how you feel when you are around animals?

A: Animals? Oh yes. It's like I am in a totally different world.

M: How so?

A: I feel relaxed, by rubbing him and hugging him, you know, you feel...I think you feel more wanted because you don't know...like, with humans, you always wonder can I really trust that person? But with a dog and his reactions you know. You can see in the eyes, you can feel in the body. So I think that's a really good stress mechanism as well.

M: So you feel comforted and secure?

A: Yes. Loved. Respected. Yes.

M: Would you say that you feel like this around any animal or just specifically yours?

A: I think my own has got a bigger soft spot but I love all kinds of animals.

M: So, irrespective of which animal, you feel comfortable?

A: Yeah.

M: If you had to speculate what it is about animals that gives you that sense of comfort and love, why do you think they make you feel that way?

A: Umm...what is the word? It's like a small child...onskuldig. What's the English word?

M: Innocent.

A: Innocent! Yeah, the innocence and you can see their feelings in the eyes. You can always go according to the body language, you can see when they are aggressive or not. The feedback, the interaction...I don't know. They're just wonderful creatures, they're different.

M: So there are no emotional games with them?

A: What you see is what you get. Yes.

M: No second guessing.

A: No.

M: Do you suppose you would react in the same way to different kinds of animals? Let's say, fish, birds, hamsters?

A: Yeah...fish and (shudders) snakes and spiders...I don't think I'd look. I won't touch or cuddle or whatever. But animals that I love are like dolphins and dogs and cats and parrots. Mostly all the other kinds of animals. Crocodiles are also out!! I don't know if it's because they are cold blooded or what but I don't get the same vibe.

M: So you want some tactile comfort? Cuddly, furry?

A: Yes, mammal kind of animal.

M: So an animal you can interact with?

A: Yes. Relate to. Yes.

M: If we had to introduce animals into the office environment, how would you feel about that?

A: Ooh...I would feel very happy. If someone gives me problems I send the big...what do you call it?...the big dog and when someone else gives me problems I send the small one (laughs). No, it would be very nice. It would be like the old age homes where they sometimes brings the dogs in to get them stroked or whatever. I think that will always also have an influence. But, from what I've seen, what can be a problem, is the culture aspect.

M: Not everyone likes animals.

A: Yeah. Some of them are scared of black dogs or black cats. But, generally speaking, I think it's a good thing.

M: So if we had to set up, let's say, a petting zoo. It's something away from the office environment where you could go to whenever you are feeling a need for that comfort...would that be something you would be open to?

A: Yeah, for sure. I would even help to feed them or look after them or something. I think that would be a wonderful idea.

M: So it would help with your stress levels just to be able to interact and connect with animals?

A: Yes. Yeah.

M: Would you have any concerns aside from the cultural diversity issues that you raised earlier?

A: Umm...what can happen is that the animals can feel who is afraid of them. They can do something that the animal can bite them or something, and then the whole structure will go. Ok...so that can also cause friction in the interaction.

M: So the whole comfort of the animal is the sense of what you need and that's what they give you?

A: Yeah!

M: So that might actually be a negative effect for the animals as such...

A: Yeah.

M: How else would you think the animals might be affected in such a scenario?

A: You mean if we had to place them in our environment? Uh...the noise, some animals don't like too much movement. Uh...too many different people, they can't associate with a specific one. And, like I said, they can also feel that some people are not positive towards them.

M: So basically overstimulation....

A: That's it. Yeah.

M: Um...okay that's about all my questions covered. With reference to stress and to animals as a stress management tool, is there anything you can think of that you would like to add? Anything you would like to elaborate on?

A: Umm...yeah, like I said, if you go home, especially in the winter time and you work overtime and it's dark and you wonder what is going to happen at home and you got all this baggage from the day and, when you drive in and you see this little thing...the whole body shaking and talking to you in dog language...It's like everything just, you know, washes off. And what's also interesting is that lots of people think animals are stupid. But they're not. Look at the parrot. They know what to say at what time. The dogs...look at what they do with them now with the cancer, that they train them to smell the cancer. Um...and what people do with dogs, and I've seen the programme, especially in the work place but this was now in just the jails, how they give a dog to an inmate. He had to train that dog. And a lot of them are murderers and stuff...and how they changed them over as well. It brings out their humanity. I don't know what the effect is when they take that dog, after he has been trained, out of that prison again, but I think they replace him as soon as possible with another dog.

M: To carry on with their rehabilitation?

A: Yes, it's excellent what they can do.

M: A dog gives you something else to focus on?

A: Yes, and they can see that there is something better than crime and stuff. I think it changes them a lot.

M: It brings out the positive?

A: Yes, that's it. And also the other programme...I think I am guilty here!...you must actually show the animal who is boss. But I think mine has turned the roles around! For those few hours you see him...its fine. Why not? And it hurts me when I see how people hurt animals and stuff. Their eyes show everything. Yeah. And if they lose trust in you, it takes quite a while to get it back again. That's just like humans as well. But I think it happens more often at work that you lose trust in people but, in an animal, you don't really lose trust that easily.

M: So an animal doesn't really let you down?

A: That's it. Yeah. If he bites you by accident or something, maybe it's because you came up to fast or something. Like mine bit me this morning because he was fast asleep and I turned around and...it's my fault. Not on purpose.

M: So it's not malicious. There's no second guessing his intentions...

A: No. And I'm so glad that the TV coverage is showing us so much because we wouldn't have known about animals which are in the Amazon or whatever if it wasn't for TV. And the more you see the more you understand the creation and stuff and why there has to be animals...

M: So we are all interlinked, we are connected...

A: Yeah. We're all part of nature. And it's interesting. All those creatures you would never have seen them! And then they let people go in and destroy the Amazon...So it's a vicious circle. We're dependent on nature but we destroy. What are our kids going to have?

M: Thank you. You have given me a lot of think about and I appreciate you taking the time to talk to me and share your views.

Personal communication

Amber expressed some more concerns and opinions once the recorder was switched off. She said she did not feel comfortable mentioning that she sometimes felt undermined by her manager. She was sometimes made to feel like a child by the manner in which her superiors talked to her and they tend to treat her like she is an idiot.

She also mentioned that she feels is it unfair how some people may get away with anything whereas she cannot even put in a few days leave without being asked to explain why she needs the time off.

Brooke

M: I was wondering if you can take me through a typical working day. What is that like?

B: A typical working day...do you mean from the house or when I get to the office?

M: From the office.

B: From the office... drive to work in the traffic, get to work between 7: 30 and 7: 45. Some mornings I am a bit earlier. I'm actually not a person who suffers from depression; I usually look at the bright side. I enjoy seeing friendly faces when I walk in. Usually when you go up the aisle and see everyone you know so it's 'Hello, hello, hello'. And you know that everyone else is going to grind at the stone just as much as you are going to do that day. I usually hope and pray that the day is going to deliver...how can I say?...it's going to be a better day than the day before and whatever problems that there are will be sorted out. I try to see a brighter outcome. When I get to my desk, I switch on my computer and put on my telephone, put my bags away, go and get water, maybe a cup of coffee so I can start my day. I cannot start my day without coffee! Even if I had one at home, I have to have one at work. It's almost like this crutch...psychological block (laughs). Then I start doing my work, stuff that I left from the previous day. I usually go through it again to see if I can help the client, especially if it's an emergency. The ones that I have left until last...that I couldn't help the day before and I have had a mental block about them, I usually leave them for the next day and try and work through them as well. That I usually do until about tea time. I don't really take tea in the sense that I leave my table and go away. I usually get my stuff, go back and carry on working or whatever the case is. I might take a five minute break which is my norm. It's very rare that I take fifteen minutes. If the cafeteria takes long... Then I will work through the work flow or telephone calls that I get, other work that has been placed with me, help my colleagues until about lunch time. My lunch time is from 13:00 to 13: 45. That I definitely have to take. Either I leave the building and go for a drive or I go sit with my friends and have a chat about daily issues, irritations pertaining to family, maybe a bit of work, complications and irritations regarding rules we don't understand and stuff like that. In the afternoon, the pace starts to slow down a little bit. Things that I haven't had to sort out, maybe that's been reconciled. Then it's 16:00 and leave for home. At last.

M: Judging from what you said, it sounds like you have a lot of demands being placed upon you at all times. Would you say that's true?

B: It is very true. Um, I have 24 years of service this year. In 1988 I started and I hit the 24 year thing. My supervisors rely on me a lot when they are not here, my colleagues rely on me a lot because of my work experience. Life experiences, if I can put it that way. The clients...when I moved off from my previous section, I have been in various departments, my experience there gained. They usually just look for me because once they have latched on to your name, they don't forget it. Then you have to help out with all aspects, not just pertaining to the work. It places a lot of stress and a lot of demands on you through the day.

M: Seeing as you have been working here for such a long time, how would you compare your stress levels today to that of five years ago?

B: I would say that it is a lot more in the sense that my work load has increased. Our client number has increased and I think with more the demands of my fellow colleagues...Five years ago I was in a specialised section, basically one portfolio and my close-knit colleagues ...there was about seven of us. But now where I am, present day, we work with everything. So we work with all the clients from the various specialised sections, international and local. We are also short-staffed in this section and, because we work with all the various portfolios, the demands placed on me if my section head and my supervisor aren't there...I am put in charge of the office because of my years' experience and everybody looks to me. I wouldn't say it's automatic, it's sort of a mentoring thing. They think that because I have more experience that they can...I will look after them. That kind of thing. And that places a demand on you.

M: So you they assign you second in-charge even though it's not actually your job?

B: Ja.

M: Would you say expectations like that are common?

B: Um...I think it's common in the sense that, they may not expect it from me but they know that I will be more than willing and able. The fact of the matter is that if there is a crisis I will be able to handle it. And it's more familiarity knowing that they feel comfortable with ...I wouldn't ...abusing or misusing my capacity.

M: Would you say that it is when you experience the most stress? When your supervisor or manager is not there and you are put on the spot?

B: Yes, in a sense. I get work that is not usually delegated to me like the contract workers, people reporting sick, people wanting to go home, people having appointments. Out of the norm. That isn't my usual daily routine, so where I don't have to worry about delegating. I get jobs delegated to me where I get given instructions to pass on the work to my fellow colleagues and then they question me: why? Then I have to stand fast and explain to them that is just the way it is. The work has to get done. So ja...the stress levels does go up a little bit sometimes. But, as I said earlier one, I am a positive person so I try and work through. You can't run around screaming in the building (laughs).

M: It sounds like your co-workers have got double standards for you. They expect you to help them and act as a supervisor but they don't want to take instructions from you.

B: Yes, in a sense. I wouldn't say it's a total negativity. They do give me...they do talk to me as if I am the second in-charge, they even talk to me... 'acting'...that is the title that I get. I think they probably think the 'acting' helps them to maybe take the afternoon off, going to the doctor, whatever...everything else that is good in a day's work. But the bad part like the delegation of the work...I think they think my delegation ends where they can take time off and that kind of thing.

M: So where it benefits them.

B: Where it benefits them, ja.

M: Aside from the work load and the office politics (by the sound of it), what other causes of stress can you see in your office environment?

B: Monetary. That is an issue. Um...the other attitude is...what I found out...is that there is an antagonism where staff members that have been here a long time are earning the same as staff members that have just basically walked through the door. That causes antagonism because for them it is a monetary issue...even though they might have five years' experience on the other staff member, for them the crux of the matter is they feel they are not being paid of their experience. Further than that, I can't...the monetary side. Personal issues...maybe deaths in families which puts some stress on. There have been quite a few. One of my colleagues has had a number of deaths in the family this year and that has put a strain on his

health. Ja. When we're short-staffed as well...if you're sick it puts pressure on the other staff members. And the building where we are currently housed in! The hot-and-cold is not conducive to normal health conditions and the people's immune systems have been, basically, put at a disadvantage and they get sick easier. Everybody is walking around with running noses and coughs. Constantly.

M: Obviously having people being sick just puts extra pressure on you because now your work load has increased...

B: That's true.

M: How would you say your stress, your occupational stress, affects other aspects of your life?

B: I think...the upsetting part for me might be...clients that have applied for certain services and you have done your utmost for them. You have bent over backwards and sent through about eleven applications for them. And they cannot understand why they can't get any more. And when you phone them back, they turn around and say to you, "I'm just wondering about this other application? How many truckloads of documents can I send you to change the final decision?" Then when I get home, I think I tried my best. I try and not take it home with me but I keep thinking...Some people just don't know how to take no for an answer.

M: Does that in a way make you feel invalidated? Like everything you've done for them is just not good enough?

B: Um...I wouldn't say that. I..for myself, I feel in myself...I've got inner peace about it. I just want to say to them to get a life. If the answer is no, then it is no. You cannot push against the wall.

M: How would you say stress affects you? Physically, mentally, emotionally?

B: Stress...in the sense, emotionally it affects me. Sometimes I do go to bed late and wake up early..I dream a lot about the office. Especially during the peak seasons. Then I end up dreaming of clients, dream of things I did at work. I find that the office becomes an intergral part of my home life in my dreams. Like there's no separate line. People that have a dictatorial attitude at the office...I usually find that they peek out in my dreams. They are even more dictatorial! I would say that would be the most...sometimes I do...When I get home, because I haven't got house help, my husband helps me a lot and the children do their

best, but there are times where the house does look like a disaster and you've worked overtime, then you get home and you still have to cope with that! I tend to lose it a little bit at home then. My patience is short. I try and have a creative outlet at home. If I feel like I am getting really frustrated then I start painting walls or do something creative just to do something...like go outside and hang up the washing and then I'll walk in calmer. Then I'll say, "You do this, you do that, sorry if I shouted at you but..."

M: So it sounds like the work-home dynamic conflicts a little in terms of the roles you have to carry out. Is this a big issue for you?

B: Definitely a big issue.

M: But you have a creative outlet with the painting, for instance. What other methods do you use to deal with your stress levels?

B: Well, we have a lot of animals at home. My favourite...my husband picks up these strays and, about seven years ago, he brought Mindy home. She was a stray left in Danville for dead and he brought her home. I mothered her; she was like a little baby in the house because my sons were already big. And I used to really nurture her and everything and she became the total love of everybody's life. And then when my son started working, he brought home Kiki. Now Mindy was already going into the ageing scene when Kiki came along and she is...she is a terrier-cross Jack Russell but she is highly intelligent. This dog almost speaks to me and everybody keeps saying to me that we're joined at the hip. But she communicates with me, she actually talks to everybody in the house. If you talk to her, she talks back and I find that, if I'm upset, she will come and sit on my lap, or she'll sit next to me, and she...her love is unconditional. The children sometimes say to me that I love the dog more than I do them. I say, she doesn't talk back! Unconditional love. She makes me feel special. Because mom is nobody, hey? That kind of thing. She helps relief my stress levels extremely where somebody else won't be able to do that. Just because she's cuddly and she's just sitting with me with those little brown eyes... You know that kind of thing? And because she has got this communicative way of speaking, I mean...she talks in this high-pitch little doggie yelp. You know, she's so sweet. And that's also how she relieves my stress levels. My husband, he tends to talk loud. She will climb on his lap and she will put her mouth by his mouth (gestures) to show him that he must keep it down. She keeps everybody quiet.

M: She understands everybody's emotional needs...

B: Ja. Definitely. She is like a calm-ed for me.

M: That brings me to my next question...do you know any changes in how you feel when you are around other animals?

B: I love them! I am very comfortable with animals and I have this tendency to talk to them like babies. Everybody says chase the dog away and I'll tell them to leave the dog. Animals relax me. I'm not really a cat person because I do suffer from allergies but dogs of all shapes and sizes ... I totally lose myself with them. They always seem to be in a relatively good humour when I talk to them. Dogs love me and come sit by me. I must say my children have that tendency and my husband as well. It's a family thing. That's why my house has got cement floors that are painted and our furniture is sturdy, the doors are wide-open, the dogs run through the house. We've got chickens and everything, a menagerie with all the birds... At one stage, we had rabbits and tortoises and that. But our main favourite animal that we always come back to, and always kept, is dogs. Man's best friend.

M: How do you suppose you would react in the presence of other kinds of animals? Do you feel you would respond in the same way to birds or fish or hamsters the way you respond around dogs?

B: Fish are nice to look at but I won't say I am totally fond of them. We did have hamsters as well. They bit me too much so I didn't develop a connection with them. Birds...yes, I'm very fond of my husband's birds. He has finches and sort of little grey doves...I can't remember all the names. He's got ringnecks. We had budgies at one stage. I am very fond of budgies because you can teach them to talk and they interact a lot more. The finches are very sensitive but you start to get used to them in the way they look and their babies. You also develop a connection with them but I wouldn't say it's the same as with a dog. A dog can almost read your mind. I know they're very manipulative! They say dogs are even better manipulators than human beings are (laughs).

M: You spoke about connections. Would you say that plays a role in helping you feel relaxed around dogs?

B: The connection with them, yes. It's on a relatively simple level because you don't have to speak when you are with them. You know, even if the whole family is lying around on a Sunday and the dogs are also lying there. I feel safe with the dogs there. They also feel this

connection. They have to part of the family. When I am cooking in the kitchen, they all stand in a row and watch me. Hoping for something to fall (laughs)!

M: If animals were present in your office environment...

B: I would love it!

M: So like a petting zoo?

B: Ja.

M: How do you think it would benefit you while at work?

B: I would love to go and interact with the animals. Cuddle with some rabbit or scratch the ear of a little buck, you know. I love baby animals! I think it would be able to help with stress relief. You can just sneak away and go sit there, check them out. You don't have to think or anything. Animals are restful, they are not aggressive. I wouldn't say put an African Grey in the office because they do tend to have loud voices. When they pick up words they chat the whole day long! I mean, everybody to their own. If they were in a menagerie and if there was a place to go and interact with them, I would definitely go.

M: Would you have any concerns about having animals being present?

B: I would say...I would be concerned about them at night when it's cold. And the winter. I would hope that the person who is in charge of the animals would make sure that the animals are housed correctly, they have food and water, enough space to move around in. I think in the sense of a petting zoo, I would rather they look at animals that are usually present in a petting zoo, say rabbits, little buck, mountain goats. Maybe a few tortoises and stuff like that. Birds in a menagerie. But I wouldn't suggest they put dogs...I think dogs are a more home-relative than actually being in the work environment. I wouldn't mind if there were guide dogs in the office (for the visually impaired staff members) but I think the dogs would get so fat because everybody would give them treats the whole day. I think it's very conducive to have animals around but for the petting zoo bit, I think they would have to be a little more exotic but...you know, also cuddly in a sense.

M: So you can still have that tactile comfort?

B: Tactile comfort, ja.

M: What if we had to introduce video clips or video tapes of animals?

B: I'd watch all day! That would also have the same affect. I love these e-mails that get send around with pictures of little animals, how they are lying in different poses. I absolutely adore it! Because you can see the characters of each and every single one of them... I could look at that all day long!

M: How would you think it would affect the animal itself?

B: I think it would be stressful for the animals. The office has a lot of movement. During peak seasons, we have all the clients. I think it there had to be a petting zoo, the electronic or technical one would be a lot more conducive but I think a petting zoo a little bit further away from the buildings, in the sense, that a garden environment rather this built-up environment. You could then walk over to the petting zoo and have a sit down in the grass and that. It would be nice to walk over there and get to interact with the animals. You get some exercise, nature, fresh air, the calming effect of the animals. Strangely enough, with our birds at the menagerie at home, Sunday afternoons if we sit outside, that little chirp-chirp of them? It's relaxing. It feels like you're there...you're part of nature. Ok, they are caged up but it's fascinating to watch them build nests and you totally lose yourself for a while. The stress levels...you forget about everything else that is worrying you. You look at the babies and they are so cuddly, so cute. And you just want to save all of them!

M: So you have an external focus...concentrating on something else.

B: Ja. That's right.

M: I think that's about it. Is there anything you would like to add or emphasise?

B: I would love to say...we do have people that are disabled and they have animals that they have to interact with...I wouldn't mind if they brought animals...dogs...into the office. I'd actually love it! That would be a nice option. If they could think about introducing a recreational area with well-housed animals... Animals aren't everyone's cup of tea. My supervisor hates dogs but he has got a dog at home now. I see a fondness creeping in there but...But some people just don't like it.

M: Thank you.

Cassandra

M: Can you describe a typical working day? What is that like for you?

C: A typical working day for me is stress.

M: The whole day?

C: About the whole day because I am a stressful person. I stress about everything. Stressing when I open a document and I don't know what to do. (Laughs). Stressing about the noise in the office. The noise downstairs that's coming up. People who are talking non-stop, laughing non-stop. Those are the things that stress me. Terribly.

M: So the constant noise, constant stimulation, constant ...?

C: Everything! Yes. And especially what I stress about is the work.

M: What is it about the work that stresses you?

C: It's...I don't always know what to do...irrespective of the document. South African documents are alright but as soon as it's a foreign document...I stress about that. I stress about writing the letter, scared that I write the wrong thing. That's what I stress about as well.

M: So, basically, a lack of training or lack of support from supervisors?

C: I can't really say that it's really a lack because we do get training. It's just that...maybe it's the age...I don't know...that I can't take in all that work. Too many changes. So many different...departments/ components. And all the requirements for all the different departments are different and there are different rules and regulations and so on.

M: So it's a lot of specialised, expert knowledge...

C: Ja.

M: Seeing as your typical day is usually stressful for you, would you say that there is a difference in your stress levels today when you compare it to five years ago?

C: Yes.

M: How has it changed?

C: Five years ago....I was still just dealing, mostly, with only one department's specialisations. So I could specialise. And then...we did foreign enquiries but, between me and my colleague, he did one department and I did another. And then we merged with this new department and that was a very big change...with all the different departments, accounts, branches. Yes. And I think we were also in closed offices, the noise levels...there was no noise. It was very quiet and more relaxing than what it is now.

M: Two big changes. One, you had to adapt to a lot of changes and specialised knowledge and a wide variety of information. Two, you have been dumped in an open-plan office.

C: And then an open-plan offices with all these terrible big changes. And....everything changes every year. And for me, it's very difficult to adapt every year with all the new stuff.

M: So you just adapt to the last changes and they introduce more?

C: Well, just when you know about the changes, then they change it again! Just when you think you know what's going on, everything is changed again.

M: That is stressful. You are never on top of your work?

C: (Laughs). No.

M: All this stress, how does it affect you? Physically?Emotionally?Mentally?

C: It makes me tired. It makes me feel...how can I say?...I'm not feeling myself. I'm not feeling healthy.

M: So...you're feeling very out of it....overwhelmed?

C: Completely. Completely. I'm not myself anymore. It's my head....sometimes I can't even think anymore!

M: Too many thoughts....

C: Too many things...demanding my attention. And your brain keeps going back to work, what's going to happen there, how are you going to do this, how are you going to do that....

M: So even when you go home, you don't shut down? You take it with you?

C: Nooo...sometimes yes....but, as soon as I come home and I see my animals....most of the time, everything flows out and my stress goes down. That's most probably why I feel much

better...healthier...when I am at home because if there is something that bothers me, I just go to the cats, pat the cats and speak to the cats. And that's so relaxing for me!

M: I will get back to that now now if you don't mind. So...work is obviously your biggest stressor?

C: My biggest stressor is work. Yes. Although...I stress about everything. Even at home....if a tap is dripping a little bit I stress about that.

M: So you are naturally an anxious person?

C: Very. Very.Very.

M: So stress management is definitely very important for you?

C: For sure. For sure.

M: Aside from the things you've mentioned already (the open-plan offices, the vast knowledge of expertise that you need to do your job) what else about the working environment stresses you out?

C: I've got nothing against...what can I say?...some of my colleagues...but, as I mentioned before, people that are talking non-stop or sitting together laughing... I don't mind that. But the noise they make!

M: The constant noise environment...

C: As I said before, the noise! So...I would prefer, of course, ...I wouldn't say completely closed offices...

M: But more privacy?

C: More privacy. And...um...the noise levels to go down.

M: So that would also be a personality thing...cultural thing...the different ways of having people reacting to something?

C: You see, on the other hand, you can't blame them...they could have been brought up like that. You, for instance, are a soft speaker again whereas I have quite a loud voice. But not as loud as some others....So I know one has to adapt to that as well. Everything is fine. I don't mind. But if they get so loud that I can't concentrate anymore, then it's really affecting me.

M: So it's a vicious circle. They're loud so you can't concentrate, you can't do your work so you stress about that...

C: (Nods). It is.

M: Ok, you mentioned that occupational stress does not really impact on your home life because you manage to shut down...

C: I've quite shut down when I come home because there are things to do there as well. There are little things that I stress about at home but those are things that can be fixed. And once they are fixed, everything is fine.

M: So it's not something that you carry on taking with you. You deal with it and it's gone.

C: No. it's gone. Yeah.

M: You mentioned your cats. They are your current coping method in terms of your stress management...

C: They are my absolute...I wouldn't know what I would do without them because they are my stress relief. Totally.

M: So it definitely works for you?

C: Oh it works for me because the moment...I don't laugh a lot...but the moment I get home and I see the cats, or actually any animal, I get a smile on my face.

M: Because they are happy to see you?

C: They are happy to see me, I'm happy to see them. If I pat them or they come meowing to me... I feel I'm needed. I can give them attention. And the moment I'm busy with them everything goes out of my head and I'm just thinking of them.

M: So they help you to focus on only one thing and that would be them...

C: Oh yes. And just pat them...and them purring and so on...it makes me...It takes all the stress out of me. And that's why I give them a lot of attention and they know I love them. And they come to me as well if they need attention.

M: They give you love back?

C: Very much. Oh very much. I couldn't do without them really.

M: They make you feel worthwhile, loved, needed...

C: Yes! I've got...it's something to do that keeps me going. I've got a responsibility.

M: Is that responsibility a form of stress for you or is it...

C: No, not at all. That's totally different. Totally different.

M: This change that you feel when you are around your animals, would you say that you feel that around other people's animals as well or just yours?

C: All animals. Just sitting on the veranda watching a bird or so...makes me relaxed. Any animal, it doesn't matter what it is.

M: Hamsters, fish, rabbits?

C: Any. I had hamsters as well. Even a pig...it doesn't matter what animal. The moment I see an animal I get a smile on my face. And I think it's not just me, its most children. You can see...Watch a child seeing an animal, immediately the eyes go like that (widens eyes) and...you can see the child forgets he was crying or whatever.

M: You mentioned that your animals make you smile. Is it just out of happiness or do they make you laugh?

C: They make me laugh. I smile because I'm glad I can see them, I can feel them. It's just because I'm an animal lover.

M: Would you say that you would actually need to interact with the animals to feel like that? In other words, you would need to pet and play with them or would you have the same reaction if you saw a video clip for instance?

C: Well, if I see a video clip as well, it's about animals it always makes me smile. It's just totally different from...people.

M: If we had to introduce animals into the work environment, let's say like a petting zoo outside, how would you feel about that?

C: I would love that! I would absolutely love that because the moment that you feel you are really stressed out and you just go pat the animal or watch them, I'm sure you'll feel much better. I will feel much better.

M: So you think it's something that could benefit you in the long run?

C: Oh yes. Oh yes. (Laughs). You can give me any animal...but yes. It doesn't matter what animal it is.

M: As long as it's one of God's creatures?

C: Ja.

M: Would you have any concerns about having any animals present?

C: No. Not at all.

M: Do you think it would affect the animals in any way on a negative level?

C: I...it might be, because if everybody is going to touch the animal...Although, on the other hand, animals need love as well and like to be patted. It depends on what type of animal it is.

M: So if there are control measures in place?

C: Yes.

M: I think you've given me quite a bit to think about. Is there anything you would like to mention either on stress or animals we haven't touched on? Anything you would like to emphasise or highlight?

C: No. If I think of something that's really special, I will let you know and maybe you can add it. I can only tell you because I'm single and family is far away...these two cats of mine, they are my...companions. I couldn't do without them.

M: They're your family?

C: They're my family....maybe even more so than my actual family (laughs) because they don't moan, they don't...all they need is a bit of attention, feeding them and the fact that they are there for me.

M: It's unconditional?

C: It's unconditional.

M: Thank you for taking the time to talk to me. I really value your inputs and appreciate your willingness to participate.

Personal communication:

After the recorder was switched off, Cassandra asked if she could mention one more thing. She said she sometimes felt that she was talked to as if she is an idiot. She attributed this to people getting impatient with her because she takes longer to adapt to changes and learn new things than her co-workers. Irrespective of the reason for it, she expressed her anger and frustration at being belittled and disrespected by her supervisors.

Gail

M: I was wondering if you could describe a typical working day. What is that like for you?

G: It's very stressful. It's very hot. Some people sit, still, in September with heaters! I saw somebody yesterday, although we've got a problem with the aircon. It's just not a very healthy place to work at. The open plan is a problem, there's a lot of noise. I feel I cannot concentrate with such a lot of movement going on and noises around me, so it's not a very health place to work.

M: So it all contributes to your stress?

G: Yes.

M: How would you describe your stress levels? Let's say today, what is it like today?

G: It's very high today because of the recent closing date. There are so many clients coming in, bringing their children with who are crying and screaming. It sounds like a crèche! And it's very difficult for me to concentrate with noise around me. I don't know if it's only me or if I feel it more than other people but...It's constant noise. And now with the aircon (which is broken)...that makes extra noise as well while they are looking to see if they can get it to work better. It sounds like a drumming 'mmmmmm' all the time and, because of that noise, everybody else speaks louder. So it's actually a vicious circle.

M: And then you have the phones and the printers...

G: And people speaking to each other and cell phones going off... If people could just put the sound a bit lower then I am sure it won't be such a big problem. But I mean, it's in another department and you hear it. You already know everyone's ring tones, you know (laughs). The sms tones...Oh, that's so-and-so's.

M: Then they don't answer it?

G: Ja, then they're most probably out for just that little bit.

M: So, in general, it's stressful for you?

G: Very stressful.

M: If you had to compare your recent stress levels to that experienced five years ago, is there a difference?

G: Yes, there's a big difference. Back then I worked in my own office. Although, then I had other stress as well. I had traffic stress because I travelled further. But, five years ago, I would say it was much less than now. Definitely.

M: So as time goes by it is becoming more and more of an issue for you?

G: (Nods). Yes.

M: How would you say stress affects you? Physically, emotionally..?

G: I... (sighs deeply)...I feel as if I can just...sometimes I feel as if I am going to burst a vein in my head or something... because of the traffic in the morning. The way people drive, I can understand why people can get...what do you call it?...road rage. Yes. I also actually get road rage. I blow my hooter and I throw signs (laughs). Not that it helps but it just gets worse and worse and worse. So by the time you get to work, you've already gone through this whole stressful patch. And then you walk in here and then... Like, um, the systems that are so slow now again. It's very stressful to have to sit and wait after you have clicked for the next item. So you get up and go to have some tea. That's also not very good for the work flow (laughs).

M: So you would say you have a more physical reaction to stress?

G: Yes. Some people cope quite but I really...I also go quite but when I...after that...I just burst out. Unfortunately, you take it out on...You go home and you take it home with you and you take it out on your children or anybody that is near to you.

M: So all the frustration results in an emotional outburst?

G: Ja. Ja. I really do....I get sort of worried. I have already ridden behind people until they stop and then gotten out and told them...If you dare blow your hooter, they throw you a sign or something. And you know, there are departments here that do not seem to have a lot of work. Whenever I go there, they just sit there. *Het julleniewerknie? (Don't you have work?). No, not really. There is some stuff waiting in the inboxes but no-one else is doing it so why must we?* And, there by us, there is always work. That's also stressful. If things would just be fair! Because some people....I was late the other morning. I had to go for blood tests. But I was here around 8:50 and then someone else came in just before 10:00...just strolling in, not

a care in the world. It seems to always come down to a few people who have to pick up the work load. I don't know what the problem is. I haven't been in this section long enough so maybe I just don't know the managers that well but, it seems, that certain people can get away with murder. Other people, though, sort of, their stats gets looked at (to see what they've done during the day).

M: So it's double standards?

G: Ja. Double standards. Definitely. I'm not very at ease there as it is (laughs). I think it's because of this stressful situation that I feel as if I cannot remember stuff. I'm so worried I'm going to do it wrong. It also makes my stress worse!

M: So you have that constant worrying, constant monitoring...

G: Ja, I don't know...I'm worried. I am just a person like that. I feel like I must do something right. And it's stressful for me when I'm not sure. You see? In a way, it's my own fault that I cannot just think, It's not that bad. Just let it go. It's my own...

M: Your own work ethic that is getting to you?

G: Yes. It's not good in a situation like this. It's not easy for you if you're a perfectionist in your own eyes...to work in such...in a place like this...because you put yourself under too much pressure. If you're like that, it's not easy just to say...ag, I'm not going to bother anymore. You say that and you think you will but you don't.

M: Would that be different if you got support from everyone that you work with? If everyone had the same mentality: we're here to work?

G: Ja, ja...you know, I don't know if it's because other people have pressure. Like my supervisor. I just, sometimes, feel...because I don't really have a problem with him, not socially or personally...he is not rude. It's just that I feel bad...like I should have known something by now. But...sometimes...you know, he won't turn towards you when you ask him something. He will look over his shoulder, you know. Sometimes I don't think he understands what I ask. Instead of saying, is this what you are asking? He will just give me an answer and I feel too bad to say that's not really what I want to know. I just don't have the confidence to tell him that. Because he is sitting there like this (throws an impatient look)...sort of hurry up... And, lots of times, he is on his Facebook page. So that irritates me a bit. If he was busy with work and I could see...that's fine. But when it's personal things and

I ask him something and he can't even turn towards to me! I don't think he is a bad guy but can't he just...be a supervisor. I don't know. Sometimes people say they don't like him but I can't say that because he hasn't been nasty towards me. I would appreciate a bit more...and, I have seen, not with me but in meetings....Like G (co-worker) asked him something one day and it wasn't something he was happy to answer so...(sighs)...He always takes his cell phone and starts reading....I don't know what he does. I can't see but he starts fiddling with his cell phone. And it looks as if he is not listening to what you ask him. That's very bad! If staff asks you something or talks to you about something that is making them unhappy and then you get this....the guy takes his cell phone and, while you're talking, he is busy with his phone!

M: So you feel like your opinions and problems don't matter...

G: Definitely not. I know...it's not a nice thing but he gets paid to deal with that, to listen. I wasn't very happy in my previous section either – also didn't have a manager that listens. So...I suppose there are more departments like that around.

M: Basically, it's a problem. You don't feel like you have that support to do your work. A person you can go to when you need help or advice.

G: Ja. You don't feel....you feel like you are on your own. There's things that are fine and there's things that...you know, J (another supervisor) gave us a lot of training. Thank goodness for that! But now...I can't believe it could be so difficult but there are other things where the training wasn't so good. Obviously. People differ with different things...this is easier for one than for someone else. There are a lot of things that still...It's just not nice to get up in the mornings to come to this place, like this.

M: A lot of stress and a lot of negativity...

G: Ja. People, you know, talking to each other. Like...screaming at each other. (sighs). Now I have got somebody sitting next to me and she and another supervisor keeps talking to each other. It's so unprofessional. Just get up and go stand next to the other person. I don't have a problem if she does that but just....don't scream over me. They cannot expect you to deliver quality work if you have to work with people screaming... I don't mind if it's work or if it's not work, it's just not professional. You get up and you walk to the other person. It's respectful towards the other people. I don't know if this is maybe a cultural thing... One day there was a lot of children making a lot of noise downstairs and I went to look over the balcony. And someone screamed that they must keep quite. I tried to show the mother that the

noise is filtering into the offices overhead...and they just look at you. When I got back to my seat, I was asked why I don't like children. I mean, this is a work place, not a crèche!

M: So it was completely taken out of context...

G: I've already wondered...can't somebody put up a little...I don't know if it will work but maybe it will work for one out of ten...Please be quite. This is a work environment. There are people working upstairs. Maybe somebody will see it. Or speak to the student workers and ask them to help. If they see someone is making a noise, offer to take the child outside. I don't know. There must be a way...

M: Like introducing a play area for children?

G: I also thought...This morning, I was thinking about that when that child...But just now someone runs away with someone else's child or something. But even if they only put up notices... Please keep your children quite.

M: So the noise is definitely a big issue for you...

G: Oh yes! I don't want to....I just feel like if everybody just did whatever it is that they are here for, do their best, then everything will work better.

M: So if everybody pulls their own weight, it will take some pressure off you.

G: Ja. But I don't know. I don't know. There is a cultural thing. There must be things like that. And some things you can accommodate and some things you just cannot. It's like good manners as well. It's not just cultural. It's decency.

M: Aside from the noise levels and the feeling of not receiving support from your managers, is there anything else about your work situation that really gets to you?

G: Well, as I said, the systems that are slow, computers...my mouse at this stage that is not working. The other day...I think it was maybe the mouse just starting...I don't know what it was but I couldn't do something... I thought I would quickly phone downstairs to ICT. I will log a call but, in the meantime...I actually thought it was something with the connections...It was my mouse. Yes. It was Monday (remembering). And then I phoned the guy downstairs but they didn't answer at first. After a while, they did answer and before I could even say I will log a call but...No. I must log a call. When I told him I can't because my mouse is not working, they just said someone must do it for me. I mean, isn't there an easier....it's such a

schlepp to get something done. It takes so long just to get something done. I mean, we are forever looking for envelopes. You have to give an empty pen back if you want a new pen. I mean, it's like a crèche. Just buy your own pens. It's such a mission to get stationery. And yet if you go for ink, then you get given the key and get told to go and fetch it! I always think about how things were and how they're now...And that is really not good.

M: Deterioration? Things going downhill?

G: Definitely. If I look at the e-mails....I feel, sometimes, so sorry for the clients. There's e-mails...you get cross...yesterday there was one. I think she must have sent about twenty e-mails. She must have thought *now I will show you* because they were lying all beneath each other. But you must still open them all to get rid of them. AndI mean...I know people don't answer their phones. I don't also....because if your phone is on, you get all the calls. And then you can't get to your work. And it's always difficult things and then you have to tell the person you must first go find out. I tell them to e-mail me. Then I have time to look at it and e-mail her back.

M: Give her the right information.

G: Ja, I don't like to...I feel sorry for our clients. Now we sit with old e-mails from a few months back...you cannot help people. It's too late. There must be a better system... I don't know if it's a staff thing. Under-staffed. Or people don't work. I mean, I know for a fact that people working overtime are sitting and doing address changes when there are more important things. I mean, I could have also done it. During peak periods, around 15:30 you see everyone taking a break and chatting before they start working overtime at 16:00 (laughs). I don't know. It all becomes a bit...there's a lot of discipline problems because people just don't...They're afraid to take on people, it seems to me.

M: You're now talking from managerial down?

G: Ja. I really feel that...because...in other instances as well, because...even with this heater thing, this guy from the building maintenance told B (co-worker) that she's not allowed to use it because it messes with the air con. And she told him that she's not talking to him about this! Very cheeky. I mean, you don't talk to someone like that...even your friend. I couldn't think that this guy didn't report it the way she spoke to him. And you're wrong! You're wrong and then you still have an attitude like that?! I think that's work related as well.

Because she seems to have...why does she get away with things? Why does she not get in trouble? I mean, she's nice enough to talk to but ...what's fair is fair.

M: If she doesn't pull her weight, it's more work on you.

G: Ja. And not actually that that worries me but...just...I just feel we all work for the same institution. We all have working hours. We all take off now and then. Come late now and then. And everybody sees it. Where do some people get all their leave from? You only get a certain amount of days. I'm sure that some people's leave does not get put through. And that is very unfair!

M: So a big sense of injustice...

G: Yes. Things like that...Maybe you say nothing but it crops up. I feel bad when I'm not really, really sick and I stay at home but...My leave gets...I put it in every time I was sick but other people get away with not just a day or two. It's really...I thought maybe I must make little notes...but then I thought rather not. It's just going to upset me more.

M: It festers...

G: That's the thing. Long ago, at my previous post, I read something about people getting upset with work, working environment and things like that. And they would start stealing stationery because they feel like they need to get back at somebody. But they can't really so they start stealing the stationery (Laughs)! It's so stupid but.... They just needed to do something!

(silence)

G: And still...the ones that never work, are never in trouble! You cannot believe it...

M: A lot of double standards?

G: Ja.

M: All of this stress, I am sure it impacts on other areas of your life...

G: Well, this year I was sick as well. I was booked off. I was off Thursday and Friday. Monday I was still not feeling well so I made an appointment for later that day and I was booked off until Thursday. And usually, when I'm sick, it's for two days and by then I'm better. I don't know if it was something to do with the building (broken aircon) or stress is

getting worse. I never feel well. I always have this...pain...in my tummy. I think it's stress. You feel as if you cannot breathe properly.

M: How are you currently dealing with your stress levels? What are your stress management techniques?

G: My stress management at home is my garden and my animals. Stuff like that. That's why I even started to feed the stray cat (seen around the office building) as well. Sometimes at 10:00 I think let me just go see the cat. Even if the cat is not there, let me just go put some fresh food and water in his bowl. You really have to get out of here (offices) sometimes. Lunch times also. A lot of people actually sit and read but I cannot switch off. I need to actually leave the building. This noise... this...everything. All the time. If you sit on your chair, it's the same as if you're working. I have to go out. It's not good because I go to the Spar and see some nice stuff (laughs)...I thought about it. In the summer, these trees behind the building are so nice. If they just put up some picnic tables or something. I don't know if I will sit there but it should be an option.

M: You mentioned your cats. I take it you like animals?

G: Yes, I love them!

M: Do you notice any change in the way you feel when you are around an animal?

G: Oh yes, for sure. I'm more relaxed. Definitely. Forget about your troubles...unless something happens and then you worry about them again...but, on the average, definitely.

M: They keep you calm? They help you focus on the now?

G: Yeah.

M: Would you say that you only feel that way around your animals or any animals?

G: More...about my own but I love animals. I love cats more than dogs. I don't mind...like yesterday, I went to my neighbour and they have a new, young dog that is jumping (laughs). People cannot understand that I don't mind, you know. I can see that he is just playing and he is not going to go...That's why I can't understand that people cannot love animals. They don't have to love them but why not...look after them? Why do they have to make problems? Have animals put out and things like that because of...like this guy now that said we must

stop feeding them (cats) because then they'll go away! I mean...how can you do that to an animal? What makes a person like animals or not? Is it because you grew up with animals?

M: So, in general, animals have a calming effect on you?

G: Definitely, yes.

M: Would you say that this is applicable to all kinds of animals? You mentioned that you prefer cats to dogs but what about birds, fish...?

G: Yes. My brother-in-law has got many birds. When I get there I talk to them all. I just love cats. I love any animal. It's just that connection.

M: How would you feel if we had to introduce animals into the office environment, like a petting zoo?

G: That is more or less what I had at my previous employer. At tea times I would go there, take them something to eat or just play with them. It was really very nice.

M: Did that help you in any way?

G: Definitely. It was so nice to look forward to. Sometimes someone would come out to take a smoke and then they would stay chatting to me...I could tell them...You do get people that ask you questions that you would think are so obvious! Everyone must know it, you know. Like...I can't really think of an example now...

M: So you would be for the idea of having an animal present?

G: Yeah.

M: Can you foresee any problems with that scenario?

G: I don't know. It's noisy here. I don't know where you could do it. There's always people...lots of stimulation.

M: Aside from the overstimulation, how do you think it would affect the animals?

G: If they get used to it, they feel the love, they get played with and get feed...they will be looked after and they will be in a safe place. It can't really be a problem. For people who don't like them, just don't go there.

M: Is there anything you would like to aid, either on stress or animals?

G: I'll think on it and I'll come to back to you if I think of anything else.

Kevin

M: Can you describe a typical working date? What is that like for you?

K: (Sighs). It was a busy day at work. We were told today to work harder and do more work for stats.

M: So you feel as if what you do is not enough?

K: Yes, it feels like no matter what I do, or how much, it is never enough for our top management.

M: Is this normal? Do you feel like this more often than not? Or was it just today?

K: It is getting more normal because just as you meet their quotas, they change it and expect you to do more and they include a time limit to it as well.

M: How would you describe your stress levels today?

K: My stress levels was okay this morning but, after lunch, we got new targets that we have to meet per day.

M: You are now expected to deliver more but with the same resources?

K: Exactly! The work gets more but the support gets lesser and computer systems gets slower and more complicated.

M: Do you feel that these quotas are reasonable?

K: No. These quotas are not reasonable and not fair. Management does not know what they are doing to us.

M: Is there a difference between today's stress levels and your stress levels five years ago?

K: The stress levels from five years ago was better than today because there is more work to do and we have new management that just wants more stats.

M: You feel that management is more concerned with quantity than anything else?

K: Yes, they are too concerned about quantity and stats than the quality of work being done.

M: How does that make you feel?

K: I feel that...why should I be bothered with doing my tasks correctly if what they are looking for is stats.

M: How does all this stress affect you?

K: When I am stressed my muscles are sore and I struggle to exercise. Sometimes I also struggle to focus on my work. I cannot think anymore!

M: It affects your concentration and this makes it more difficult for you to deliver the standard of work expected from you...

K: Yes.

M: When do you experience the most stress?

K: I am more stressed when our management changes rules and quotas to be maintained during the busy times at work. The computers are also very slow.

M: So there are constant changes in expectations and information that you have to know?

K: Yes! Management changes rules overnight and just expect us to follow them without questioning anything.

M: You mention slow computers. How does this affect your work and the quotas that need to be met daily?

K: The slow computers and networks makes me frustrated because I cannot do my work as I am supposed to. The cherry on the cake is that management is aware of the slow computers but it doesn't seem to get fixed.

M: What else contributes to your stress levels at work? What are the causes of stress in your office environment?

K: Well...I work in an open-plan office with no privacy in the office. My colleague next to me talks on the phone the whole day about personal things. There is also no fresh air in the office. If my colleague is sick, I get the germs as well.

M: You feel that privacy is a big issue?

K: Oh yes! To do my work properly I need to focus and not listen to my colleague arguing with someone over the phone.

M: Aside from the spreading of germs, how does the office environment affect you?

K: The office is sometimes too hot or too cold. In the winter it is cold and in the summer it is hot. If you complain that it is too hot then they adjust the aircon so that you freeze and vice versa. The one day the office temperature was 28°C and we were almost dying!

M: How does occupational stress impact on other aspects of your life?

K: I feel run down, especially in the evenings. When I watch the television I fall asleep!

M: You don't have energy for the things that are important to you as an individual, like watching your favourite television programmes?

K: Exactly! When I watch television I just want to fall asleep. And I can't concentrate on my breathing when I run at the club.

M: What coping methods do you currently use?

K: In order for me to relax, I go out with my buddies to a club. Uh ... I also practice twice a week with a running club where I run like five to seven kilometres.

M: You find that the social interaction with your buddies as well as exercise helps relieve your frustration?

K: Definitely the exercise helps with tension and just hanging out with my buddies helps me to change the subject of work.

M: How effective are these methods?

K: What I do seems to help take my mind off work and I do feel better.

M: You focus on the moment and forget about everything that was bothering you?

K: Yes, when I just focus there and then I forget about other things that trouble me.

M: Do you think your employer could provide stress management programmes to enable staff to cope more efficiently with stress?

K: I think that my employer could provide some kind of programme or initiative that would make staff stress less. My employer has a fun day once a year and you can participate in some activities like soccer or a fun run. This helps when you get out of the office a bit.

M: Do you feel that this is something that should be done more often or does it help to have this event to look forward to?

K: My employer should do this more often because you get to be out of the office and do something active. I think that some staff just gets motivated to be out of the office a bit.

M: I'm going to change the subject a little bit now. How do you feel about animals?

K: I don't like animals. Animals must stay in the Kruger Park and if you want to visit them then they are there! I don't very much like animals such as dogs because I was attacked by a dog once when I was a boy and they don't like me. The only animal our family had when I was small was a donkey that carried us from our home to the shop in the next village as well as a few chickens.

M: I'm sorry to hear that you were attacked. That must have been scary.

K: (Sighs). It was scary for me because I was a small boy and I was walking from a church gathering. I don't know whose dog it was but he was biting me on the leg. I cannot forget that day.

M: You mentioned that you did not grow up with animals except for a donkey and some chickens. Does this mean that your family feels the same way about animals as you do? They don't like them much or are scared of them?

K: My parents will not get a dog because they saw what happened to me. My dad farms with chickens and he got cows now as well. They sell eggs and milk to a local shop to make money.

M: Do you notice any change in how you feel when you are around animals?

K: When I walk in the street and I see a dog barking and jumping on one of the house gates, I get scared. I don't trust dogs that are walking by themselves in the street. Because I got hurt by an animal when I was small, I automatically avoid them.

M: So you feel anxious and apprehensive? You don't know what to expect from them?

K: I think that I will always be careful around animals.

M: How do you suppose you would react in the presence of different kinds of animals, like fish, birds, hamsters?

K: I don't like birds or hamsters because they are dirty and can bite. Fish...I don't have a problem because they stay in a water tank.

M: Animals being dirty is just as important to you as the fact that they can bite...

K: I associate certain animals with being dirty and they might carry sicknesses, for example rats and pigeons.

M: If animals were present in your office setting (for instance, a petting zoo), how would that affect you?

K: If it is only a fish petting zoo I would be okay but, otherwise, I would be scared and avoid the area.

M: Would knowing that they are nearby (although not in your way) cause you to feel afraid? Or would you only be scared or anxious if they were physically near you?

K: I think I would be scared knowing they are somewhere nearby and wondering if the cage is still closed.

M: What problems can you foresee if such a scenario (petting zoo) had to materialise?

K: Who would take care of the animal and make sure they don't escape from their cages?

M: So your concern would be that the animals are safely locked up?

K: Yes, as long as they are locked up I will feel less anxious.

M: How do you think this would affect the animals?

K: I think that the animals might dirty the office and then it might smell.

M: Thank you. With regards to our two topics, stress and animals, is there anything you would like to add or elaborate on?

K: For some people it might help to play with animals but I don't think that I will ever be one of those people.

Parker

M: Can I ask you to please take me through a typical working day? What is that like for you?

P: A typical working day is when I report to work at 7:45. I'm expected to start working...basically, deal with e-mails, enquiries...I take my tea break from 9: 30 to 9:45, my lunch time again at 13:00 and I knock off at 16:00.

M: Did anything happen today to really upset you? Anything out of the ordinary that really stood out?

P: Well, what I actually found to be very brave of one of my managers is, actually, he put his foot down on deadlines, which is something we don't usually stick to in terms of our policies, procedures and so on. That I found quiet...that was a highlight for me where I am able to say to a client that there was a closing date, goodbye.

M: No means no?

P: Yes.

M: I will get back to that. It's an interesting point. If you had to describe your stress levels as they are today, how would you describe them?

P: I think it is more fatigue than stress but, also, fatigue caused by stress.

M: So it's a vicious circle – one leads to the other?

P: Yes, one leads to the other. It's there when you start your morning on a very good vibe, well rested, good energy with enthusiasm and then you have that one client that takes up two hours of your time with something that should rightfully be resolved in ten minutes. So...

M: It wears you down.

P: Yes!

M: Is there a difference between your stress level today as opposed to, let's say, five years ago?

P: Definitely! We are speaking work-related, right?

M: Yes, work related stress.

P: Yes, definitely! In terms of our client numbers that have more than tripled, our number of products that we offer that have more than tripled, other institutions that we have merged with... Yes, definitely, our client numbers have grown, productivity levels are stressful, you are expected to service those clients and render a service and we are still growing... There is a very huge difference between a few years ago and now.

M: So basically your work load has intensified?

P: It has more than tripled by far. And also, you know, back in the day, one would have a certain job description that you would adhere to and now you would need to do a broader number of tasks across various spectrums. When you look at... what is it called... job portfolio, I like to call it that instead of a job description, it has also grown in terms of expectations.

M: So you have to be skilled across various levels just to perform a job...

P: Yes. It's what they call generic now days.

M: I'm assuming that this affects your stress levels as well: these high volumes of work with these various expectations where you have to swop and change between one task and another. Is that correct?

P: Yes, most definitely.

M: Is that when you experience the most stress at work? When you feel all these demands being placed upon you?

P: Yes, most definitely.

M: What else would you say would contribute to your occupational stress levels?

P: I think currently, I don't know if I'm old-fashioned, if I'm not moving with the times of the whole corporate environment and open-floor office, but for me, that's a big one in that I think I would be more functional and would operate better in an individualised, closed office type of environment so I think the whole open-floor plan, office team work, get-to-know-each-other-better when you work visibly, it doesn't work for me. That just adds to my stress.

M: If you had to speculate as to why this open-plan office impacts on you, is it just the constantly being exposed, lack of privacy, personality clashes...?

P: It's a combination of a whole lot of things put into one: cultural differences, gender differences, religious differences, health differences and, you know, I find that I operate better in a closed office in that you are able to operate or be better productively with a person you are in that moment. At work, you are different person in that you are expected to get along with colleagues, render a service to clients whether in a good mood or not. So I think that it does get to me a bit.

M: So you are forced to put on a smiling face even though you kind of just want to close yourself off and just do your work?

P: Yes! And you are also forced to actually work with synergy irrespective of how you feel, what your beliefs or principles is. I find that the open-floor plan doesn't quite do it for me.

M: Does this occupational stress, everything that happens at work, does it impact on other areas of your life?

P: Most definitely. I'd say being a working mom to a teenager and a little girl who is about to go to high school as well, and having to be a wife when I get home, it does... You spend eight hours of your day at work, so you find that by the time you leave work at 16:00 you still need to drive home through traffic, you get home at 17:00 and you are still loaded with your own emotional work stress, baggage, luggage...and it's just very difficult fitting that into your own home and private life.

M: So that role conflict between being an employee and being a mom and wife, is definitely a strain on you?

P: Yes, most definitely. And not only after hours. It affects you during working hours as well.

M: While you are here you worry about them and vice versa?

P: Yes. It is 12:00, is your daughter now leaving for her other sports? Has the eldest now, at 15:00, caught her bus? Did the husband remember he needs to pick you up after overtime? So it definitely does.

M: So one impacts on the other, they interlink.

P: Yes.

M: How are you affected by stress? Physically, emotionally, mentally?

P: Hmm...it's a combination of physically, more in terms of fatigue, and I find that I really overeat because of stress. For me, it's more on the physical side. Physically I really get very tired and I do end up overeating because of that.

M: So a vicious circle. Stress impacts on your health which impacts on you emotionally. So stress management is definitely something we all need. What are your coping methods at the moment in terms of dealing with your stress levels? How do you diminish the impact that stress has on you?

P: You know, I've...for many years I've been battling and I still am...I just shut out to what I am not doing at that moment. If I need to do something at a certain moment, that's what I do and I shut out to the rest and that's just how I cope. Otherwise I would never be able to juggle them all.

M: It works for you?

P: It...it's not really works well but it helps my situation.

M: So, for you, it's beneficial as opposed to be swamped by all these demands at the same time.

P: Yes.

M: Do you think that your employer could provide better stress management programmes for you?

P: Firstly, yes, I do in that...I feel very strongly about the office set-up. Once that could change, where one has a bit more privacy where you are able to do your own thing in your own way and your own time, yes. I also find that...you know... in the kind of work we do, I believe could be flexi-hours. Yes. Or the flexibility of saying that X, if you come in to work at 6:00, then after your eight hours you can leave at 14:00. That type of thing.

M: Basically, that would help you deal with the work-home conflict?

P: Yes.

M: So if you need to be home to pick up your daughter or take her somewhere, you can work around it?

P: Yes, most definitely. And coming back to the whole open-floor office, you know, I think psychologically it's just your environment...just creates the placid environment that everyone wants. I would love to have my pink pictures on the wall which relaxes me and...so with an open-floor office, one is unable to actually have that individuality come out because it might affect your neighbour or whoever else is watching.

M: So, basically, just by eliminating the causes of your stress, they would actually be assisting you with your stress management?

P: Yes. And, in the long run, it helps with productivity. I think one is just better at your work and you produce better when your stress levels are in place, better managed.

M: In terms of expectations on you, do you think there is anything management can do to help you? In other words any other way that they can support you? You mentioned deadlines earlier, for instance. It was a surprise for you that for once no is no and you know that is the expectation. If they had to offer you that kind of support/ clear guidelines, would it help you?

P: Oh yes by far. Because then you are consistent with what you do and when you're consistent, you are able to produce better results, work better, work smartly...

M: So no ambiguity?

P: No ambiguity, yes.

M: I would like to deviate slightly from the topic of stress now. How do you feel about animals?

P: I love animals. There are those that I am frightened of...I don't know if it's a psychological matter. I love them very much. I feel they form a greater part of nature. You know, someone actually said that you actually judge society by how they treat their animals. And that says a lot.

M: Okay, you mentioned that animals are a part of nature. Do you feel any different when you are in a natural environment as opposed to a structured, concrete urban environment?

P: Just for starters....I'll be breathing that natural fresh air already. Just that alone is a beginning to a much, much better feeling. Yes, and being able to be myself, to listen to the birds sing and relate to nature, actually inhale and exhale this air and you feel it. I feel connected.

M: You mentioned that you love animals... can I ask if you have any pets?

P: I'd love to but, unfortunately, logistics and my home set-up currently do not permit me to have any. I would also not want to take on a pet when I am unable to care for it well. But I'd love to...

M: So, in your case, having pets would be a cause of stress knowing that they don't have the room to play...?

P: Yes and there would be no care-taker while we are out at work and school.

M: When you are in the presence of an animal, do you notice any changes in how you feel, either positive or negative?

P: Quite strangely, I do in that... I have a friend who I visit regularly and she has a very big German Shepard. I'm a very fearful and nervous person by nature. And you know, this dog will just come lay next to me and I will just get a sense of security, for some strange reason. I don't know what connection takes place between that German Shepard and me, huge as it is, but I feel a great sense of serenity, peace and, more especially, security. I don't know why but I feel protected. I don't know why.

M: Do you suppose it's just with that German Shepard or do you experience similar feelings around other animals?

P: Look, in all honesty, there are those animals that I am frightened of because dogs are known to bite; cats are known to scratch type of thing. You know, how we think as society but generally I am very at peace with animals.

M: What about animals do you think makes you feel this way? You speculated earlier that you don't know what this connection is with the German Shepard...but if you had to wager a guess, is there anything about the dog's personality that offers you that comfort?

P: You know, I think the sense of care ...that this animal has for you. Most importantly, I think, even though you cannot speak verbally, you do get a sense of loyalty. I think that's what...yes.

M: So you feel validated?

P: Yes. To them, I am very important.

M: Do you think you would react in the same way around other kinds of animals? Like fish or birds for instance?

P: It would depend on which animal, obviously. The ones like snakes I would never even attempt! But the rest, yes, very calmly so. Fish in its tank swimming, it's very peaceful for me.

M: Would you actually have to be in the presence of an animal to feel that comfort or would just thinking about an animal bring about the same emotions?

P: You know, obviously when you think of the German Shephard or the animal that sense of peace does come to you but, obviously, the closeness brings about better connectivity so...I feel it more when I am actually in the presence of the animal, that tactile, tangible touch where you actually feeling it, playing with it.

M: If we had to introduce animals into your office setting, like a petting zoo outside, how would you feel about something like that?

P: That's wonderful! That's wonderful! I personally don't believe that nature should be separated in any way and where we can as human beings, plants, animals, the greater part of nature, be at the same place at the same time, obviously within measures where you won't bring your scorpion or snake all over here biting people, I think it's fantastic. That brings about a lot of peace where a person can, during lunch time, walk to the cage or wherever it's kept, and be with it. Oh yes, most definitely.

M: Do you think something like that will help you deal better with your stress levels while at work or would it contribute to it?

P: No...if the infrastructure is in place for that kind of arrangement and there is proper base case, it would by far eliminate my stress.

M: Would you have any concerns, like you mentioned the infrastructure that has to be controlled, about animals being present?

P: Not at all, not at all...along as the infrastructure and hygiene matters are in place. It can't be where I am assisting a client telephonically and I have this German Shephard barking right next to the door or window (laughs). No, not at all.

M: Can you foresee any problems in this scenario for the animal itself? In other words, if we had to introduce a petting zoo, what advantages and disadvantages for the animal can you foresee?

P: I don't think much besides confinement. And, obviously, that would depend on the kind of infrastructure that they would have for the various types of animals.

M: Thank you. I think we covered everything I wanted to in this session. Is there anything you would like to add or expand on with regards to either stress management or animals?

P: No. That's about all. Besides that nature can work together, in synergy, and we can all work together. It's how it all began.

M: Thank you.

Paul

M: Can you describe a typical working date? What is that like for you?

P: It was a hectic day. The supervisor gave me a lot of problem work today and the phones were ringing a lot. I enjoy my work, but people make it very hard for me to focus on my work when they keep on changing rules.

M: So you feel that you never quite know what is expected of you because of all the changes?

P: That is exactly how I feel and there are more and more changes....

M: How would you describe your stress levels today?

P: Ai, it was bad today. My supervisor insisted that I phone difficult clients today. These people are very unhappy with the service they received. You know, when I am stressed, I eat a lot and today I eat baie! This afternoon I was yawning a lot and I know that I must still phone another lady. It was bad today.

M: Is this normal for you? Are your stress levels these days more or less the same or was today just a particularly bad day?

P: This is not normal. I am not used to this. Normally the demands and stress is not as bad as today, but it feels like it is getting worse and worse.

M: Is there a difference between today's stress levels and your stress levels five years ago?

P: Normally, I am ok with stress if I do my work and don't deal with problems. Five years ago was better for me, because I was less experienced than I am now, so my supervisor didn't send me problems to do. The rules and policies were much simpler as well.

M: So the nature of your work has intensified and undergone a lot of changes in the last few years?

P: It has definitely become more intense for sure. A lot has changed in the last few years.

M: How does this stress affect you?

P: When I am stressed I get a funny feeling inside. The one time I went to the doctor and she told me that I am stressed. This happened during a busy time at work. I feel tired and just want to eat. Sometimes I cannot think straight anymore.

M: So you are run down. You can't concentrate and you find yourself turning to food for comfort?

P: Most definitely. I feel tired all the time now and I just want to eat more!

M: You mentioned earlier that you are now required to deal with problem cases and this is stressful for you. What else contributes to your stress levels at work?

P: At work I get stressed more when people demand things immediately. My supervisor or manager e-mails me something that they want done immediately. Sometimes it takes a long time to attend to the e-mail and then they get upset, because they say I took my time and that my stats are low today. What makes it more worse is that some of my colleagues don't work and then I have to work harder.

M: They give you problem cases to attend to, all of which are high priority, but get upset when you take the time to do it properly?

P: Exactly! They want stats and more stats instead of looking at the quality of work!

M: You mentioned that some of your colleagues don't work which places more strain on you. How does this situation make you feel?

P: (Sighs) This is very much unfair. It makes me feel that I also should not work, but that is wrong and I will get into trouble anyways.

M: How does all this impact on other aspects of your life?

P: It makes me frustrated and then I go home and my kids need help with homework and I cannot help them, because I cannot focus properly. I sometimes am tired and then my wife is upset, because she needs me to fix the tap or door and I am too tired to do it. I am not happy with being stressed.

M: So your personal life is negatively affected by your work situation?

P: Definitely negatively affected.

M: What coping methods do you currently use?

P: I eat when I am stressed. Wednesdays I play soccer with a football club.

M: So a combination of comfort eating and exercise?

P: I don't know why but I just want to eat. I enjoy soccer plenty much because the exercise makes me feel good and, otherwise, my wife says I get lazy because of the eating!

M: How effective are your coping methods?

P: I feel better after I play soccer. I am tired after soccer and then I go home and I have dinner.

M: Playing soccer is a physical release for you...you take out your frustration on the ball?

P: The aim is to kick hard and to focus on the goal. Some players are very competitive and it feels good to kick the ball harder.

M: Do you think your employer could provide stress management programmes to enable staff to cope more efficiently with stress?

P: I think my employer must have stress programmes that should help me with my stress. I know my employer has a stress management workshop, but you only sit in a classroom and listen to someone telling you how to manage stress, but it is not catered for my needs.

M: You feel that something should be introduced that is more applicable to your own personal circumstances....

P: Very much so! I get bored sitting in the classroom. It is frustrating for me!

M: Okay, I'm going to change the subject now ...how do you feel about animals?

P: I don't like some animals, but my other cousin works with horses and I enjoy being with horses. I was very afraid of horses in the beginning, but now I ride on them, I feed them

M: So you're not a fan of animals except horses?

P: No, I don't like other animals but the horses are different for me.

M: Do you notice a change in how you feel when you are around horses?

P: Well, I enjoy being around horses. Combing them or feeding them or riding on them makes me focus on that moment, but I am cautious around some animals.

M: Cautious in what sense? How would you describe your feelings when you are around other animals?

P: I am cautious around other animals because in my culture I was raised as a boy to believe that big dogs and cats are carrying diseases and I am scared that one bites me and I get an infection.

M: What about animals like fish, birds or hamsters?

P: I like fish and birds, but not hamsters or mice. I was even afraid of rats and mice when I was a boy. I accidentally got bitten by a rat and was very scared from that day.

M: So certain animals elicit fear and/or anxiety but you are ok around other animals?

P: Yes, some animals scare me and I rather prefer horses. I am not scared of horses anymore. My cousin showed me not to be scared of horses and how to comb them and it is fun to ride on them.

M: If animals were present in your office setting (for instance, a petting zoo), how would that affect you?

P: I would not mind if my employer had a petting zoo in the office, but no mice or rats or big dogs, only baby dogs and fish. It will be something different to have in the office.

M: Would you have any concerns about having the animals present?

P: The animals must not run loose in the office. They must be safe in a cage. They must not make a noise also, otherwise we will not be able to concentrate.

M: What problems can you foresee if such a scenario had to materialise?

P: Depending on the animals in the petting zoo, some people might be scared and other people might enjoy it.

M: How do you think this would affect the animals?

P: The animals might enjoy it. If people play with them then they would be happy I think.

M: Thank you. With regards to our two topics, stress and animals, is there anything you would like to add or elaborate on?

P: No, but I know this stress is not good for me. Something must change.

Reggie

M: I was wondering if you could describe a typical working day for you. What is that like for you?

R: Ok...my typical working day is, uh, I get into the office. First thing first, you know, I log on to my computer, log on to our system programmes, and, um, my phone as well. Then I start working, you know...replying to clients' queries, uh, you know the normal work that we do...printing records, updating records as well so that's what I basically spend my day doing here at work.

M: If you had to describe your stress levels today, how would you do that?

R: Umm...my stress levels today...well, all I can say is that the... kind of work that we do is demanding. And, of course, you get stressed by the kind of enquiries that we get. Sometimes we happen to be answering one client who sends ten enquires on the same...the same subject so you know I would say that, of course we cannot just spend a day without being stressed so you uh...I'm a little bit stressed ! (Laughs) It is all I can say.

M: Just a little bit?

R: (laughs) a little...

M: Would you say that there is a difference between your stress levels recently compared to, let's say, five years ago? Has it gotten worse, has it gotten better, is it the same?

R: I would say that it's the same.

M: So it's been constant for you?

R: Yeah it's been constant I think...nothing has changed for me.

M: But still stressful?

R: Still stressful (laughs).

M: How would you say that stress affects you? Does it affect you physically, mentally, emotionally?

R: Yeah, stress will actually affect me in a way that, um, you know um....let me um...can you please rephrase your question?

M: How does stress affect you?

R: Okay, it affects me in this way. Sometimes when I, or rather most of the time, when I'm stressed, you know, obviously I feel I'm down and... uh... it even affects as well my performance at work. You know, if you are stressed, you cannot perform according to certain expected standards of performance. So I must say that it does affect, you know, your concentration and even your body physically, you know, when you knock off you feel tired...

M: You are drained?

R: Yeah...so that's how I feel... I think... stress affects me.

M: That must be a vicious circle for you...You feel tired, drained, you can't concentrate so you can't keep up with your work which makes you more stress...

R: Absolutely, absolutely.

M: Would you say that you experience the most stress at work? Is work the biggest stressor in your life at the moment?

R: Yeah, I would say so, I would say so.

M: What do you think contributes to your stress levels at work?

R: Um... I think it's a number of factors. One, you know, like I indicated before, earlier on, that the kind of, you know, the kinds of enquiries we get from our clients. Two, you know, the colleagues that you work with... We work in an open plan office, sometimes you find that your neighbour is talking on the speaker phone or the phone is ringing and not answered. You know...those are kinds of things that stress me. And sometimes, like myself, where I am sitting... I'm sitting between... I'm not gonna mention names...but a colleague who happens to be talking too much! So you sometimes you feel that...it contributes to your stress. That colleague sometimes talks, talks, talks...and sometimes just the lack of approach on certain issues.

M: So you have a personality clash the whole time?

R: Yes, absolutely. But, otherwise, at the end of the day you have to concentrate on what you are here for and that is to work.

M: So the open-plan office is your biggest stressor at the moment?

R: Absolutely. It is.

M: You would function better in your own private office where you can go out and socialise or just...

R: ...sit and concentrate on my work. Yeah...sometimes you will find colleagues that, even if they are not talking to you, when they talk, sometimes they raise their voices and obviously you are listening to what they are saying. And that as well will contribute to your stress levels.

M: So you can't shut them out?

R: Yeah (laughs)... no matter how much you try!

M: How would you say this occupational stress impacts on other areas of your life?

R: Um....ok what I can say is that this stress at work, obviously...like I am saying now when you knock off and then ...when you knock off you go home to go and rest. But then that stress that you experience at work... obviously, um, when you go home, it does not necessarily mean that you will immediately forget about what happened during the day. You take it with you and, sometimes, when you get home you find that you are supposed to be... friendly to the children at home or to the wife and you find that sometimes you are not... that warmth that you are supposed to bring at home is not there because you had a bad day at work.

M: You just want to be left alone for a little while?

R: You know what I mean. Yeah.

M: So it's definitely a very important thing for you to deal with this stress?

R: Yeah it is. I agree.

M: Do you think your employer could provide better stress management programmes for you?

R: Yeah I think so. Um ... I remember last year we attended a course on stress management which I think was good and I feel that the employer could try and organise more of those...seminars where us, as employees, can go and sit and listen to experts. I remember that there was this lady, who happens to be a psychologist, who was actually giving us lessons on how to manage our stress...both at work and even at home. You know, so I think that the employer could do something more.

M: More often?

R: Once every now and then is not helpful... more often would help.

M: Aside from what you learned at that seminar, how are you coping with your stress at the moment? What methods are you using?

R: Um... I think I'm coping well because I don't actually, you know, necessarily focus on stress per se. They give you mechanisms to deal with stress like, you know, sometimes you know the workload can contribute to your stress as well. So they also teach you time management and you know...how to manage time... you know...in accordance with your work.

M: So a more hands-on approach?

R: Absolutely. They give you lessons like, you know, sometimes when, for example, this particular example I am giving you is not work related, but...when you are at home and you feel like you are stressed or you are angry, you know, you don't...you just need to take a walk to the nearest park and...have your own time there.

M: So just a little exercise...

R: ... eases the stress. When you go home and then you are...completely, you know, refreshed person.

M: That's a nice example there. I like that. Would you say that it's just the walk itself that is most beneficial to you?

R: I think the walk plus the environment, the natural environment ... contributes, you know, to easing out your stress.

M: So just getting away from your office environment or building...that urban setting?

R: Absolutely. That's what they actually taught us there at that seminar.

M: And that works for you?

R: I think it works...it works best.

M: Ok...sort of on the natural environment topic...how do you feel about animals?

R: Um...I...I must be honest with you... I'm not a good fan of animals. Uh...I remember when I went home, I found that there was a dog. And I was...like...you know...angry. Why this dog? Why a dog out of all these things? But not that I hate a dog per se... I'm just not a good fan of animals. Whether be it a cat or a dog...

M: So animals in general?

R: Animals in general...I'm not a good fan.

M: Is there any specific reason for that? Or...like did you have a bad incident in the past? Or is just a general discomfort that you feel around them?

R: I think it's a ...general discomfort. Yeah...it's a general discomfort.

M: So you just feel on edge?

R: Yeah, I feel on edge. You see when you have a dog in your house or...you know...I feel like it's...they contribute to untidiness...you know.

M: Unhygienic?

R: Absolutely. You have put it...that's the term I was looking for. Yeah...so I think that's how I feel. The attitude that I have towards animals.

M: Okay, you mentioned all animals. Would that apply to, let's say, just dogs and cats and rabbits or would that apply to things like fish or birds or....?

R: Yeah. That would apply to a bird as well. (Laughs). Fish...I'm not a 100% sure because I've never been in an environment where, you know, there were fish ...

M: So you don't know how you would respond to an aquarium for instance?

R: Absolutely. That one I am definitely sure I don't know how I would react. But birds definitely would fall into the same category as the other animals.

M: Do you think that this discomfort you feel around animals...is it just for the physical presence or do you feel the same if you see a photo or a video of an animal? In other words, if you are walking past a TV display and you see little kittens playing...do you feel that same discomfort? Or it only the actual physical creature?

R: I think it is only the physical presence. Because um...for example, I happen to like watching, you know, this programme on animals. It's called 50/50 on SABC and it's on wild animals. I enjoy watching it.

M: So it's just that contact that makes you feel uneasy?

R: That's correct.

M: So if we had to bring animals into an office setting...but, let's say, like a petting zoo. So it's not in your office environment but it's near your office environment. How would you react to that? Would it make you uncomfortable? Make you edgy?

R: Still...I'd feel uncomfortable.

M: So even though it's not next to you, just knowing that they are near?

R: Yeah, just knowing that they're near. Um...just for example, when I come to work, I use a bus. So I bought a bus to work and on my way, I only found that there was this lady with a dog and...oh well...even though she was sitting far away from me....But, um, I was, like, uncomfortable about having a dog inside the bus.

M: You didn't know what to expect?

R: Yeah. (Laughs).

M: It's stressful having that uncertainty around you the whole time?

R: It is. Although there were people sitting next to the dog...but for me...I like...a dog?
(Laughs).

M: You don't know how it's going to respond to you?

R: Absolutely.

M: In light of both our topics, occupational stress and animals, is there anything you would like to add? Anything you would like to elaborate on? Anything we happened touched upon?

R: Um...well I have nothing to add but I want to say that I find the topic very interesting especially on occupational health. It is a very important subject that I feel needs to be explored a bit further because as employees we spend most of our time here at work. And you need an environment which is stress free and where you are able to work...

M: So you feel that you need to be supported?

R: Absolutely.

M: And you are not getting that support at the moment?

R: It is there but I feel that it is not sufficient.

M: It's definitely a deficit? They have to do something to help you cope better?

R: Absolutely, absolutely.

M: Thank you. I really appreciate your time and your inputs. You have given me a lot to think about.

Samantha

S: I have to say something before we start.

M: Please go ahead.

S: I'm not a very patient person and ...uh...so something that needs me to take care of it for every little thing, and cannot talk, it cannot...I don't know. I cannot stand my children and tolerate them! They can talk and they talk back. But at least I know they are my children. Any animal...I'm not responsible for it so if I could...have it somewhere would I could say go get your own food, go hunt yourself...so just to be on the safe side, I don't want animals next to me.

M: Everyone is entitled to their own opinion. That's what I am here to talk about: your opinions.

S: Don't leave your pets with me (laughs).

M: I'm just going to start with the stress aspect of it first, if you don't mind. What's a typical working day for you like?

S: I don't have a normal working day (laughs)! Um...what stresses me is the lack of accountability in the department and the lack of responsibility. I believe that if everyone was committed enough, we wouldn't have the kinds of problems that we have. The systems and the other resources we have, that we cannot control. But, I would love if everyone could love their work, love their job. At the end of the day, this is our bread and butter. We are here for it. But the fact that some are here because they feel like they are doing someone a favour and... I cannot stand that.

M: So they feel like they are entitled...

S: They are entitled to a salary without working for it. Or they are entitled...actually, we owe the clients something because without them, we will not be where we are today. Basically it's that. And the lack of consistency with my managers. Conflicting information. Actually, I think sometimes, there's no separation of authority...I can supervise to a certain level but there are others that they can do...The deputy directors, they don't know...what it is they are supposed to be doing. They are not supposed to be policing the staff. They have supervisors to do that.

They are not supposed to be delegating work to certain staff. They have supervisors. The line of responsibility and the line of authority are very...ambiguous.

M: So you don't really know what is expected of you?

S: You are not empowered to become...um...how can I put it?...you are not empowered to be able to handle bigger things or bigger challenges.

M: Would you say that you feel belittled?

S: Most of the time.

M: You mentioned earlier that there are people who feel it's their right, not a privilege, to work here. How does that affect you and your workload?

S: In some instances, yeah...my workload is increased. But in most cases...I believe in fair talk. If I could have someone directly responsible to me who does that, I think I would take it up with them because I don't believe in keeping quiet. Even though...in some of the instances I do but if it would be something that would hinder my work...But it is stressful. It is heartening. Actually you lose morale. If people are not taking their work seriously, why should I take them seriously? I can shut down. I can...not see things that are happening because I just don't want to.

M: Aside from that, what else in the office environment is a cause of stress for you?

S: This place is very cold! I see lately they have adjusted the temperature and I can focus. If I could...the other thing that stresses me ...I get stuck so much in traffic and by the time I get to work, I'm edgy. I'm irritated. It takes me time to cool off and to focus on my work. If I could, possibly, get here at 9:00...flexi-hours. It will never happen but... What else? Irritating personalities. But sometimes I can pretend not to see. I can switch off and that helps me a lot. But not always! We don't see things in the same way. What I see as stressful and irritating, others might not...Nobody listens.

M: In your office or higher up?

S: Higher up. In my office, I don't have any problems. This is more the communication channels. The people above me. I think people...when I say managers I mean everyone above me...they believe in disaster management but they don't know how to manage the disaster. They cannot plan ahead. We have been doing this for how many years? We have the same

problems, year in, year out. What are they doing when they go to these workshops? It looks like it's just talk but the implementation is not there. More often than not, you are thrown in the deep end and told that there are sharks coming, so swim for your life! If you can't swim, they won't find you. You will be chomped by the sharks and they will just throw another person in!

M: Do you feel that they don't consult with the people at the grassroots?

S: Never! If they would listen, if their consultation was not just information sessions but real consultations, real problem-solving sessions ...then it would be better. But the consultation here is when you are called up and told. And you have no say. If that could happen...I hope I will still be here to see that happening!

M: It must be frustrating...

S: Agh! Very.

M: There is a definite difference in stress levels now as opposed to five years ago...

S: Yeah, because I think then...I wasn't sure or confident about what I was doing to ask...If I say something like this, do I really have the knowledge to backup my point? So I was just moving with the flow. But now, because I am expected to be doing this and I am supposed to be a source of knowledge to others...If I see something that I want to bring up and I cannot bring that up, what do I do? I just shrug my shoulders and hope that it will go away. My hands are tied. Very, very tied.

M: How does stress affect you?

S: Um...my way of dealing with my stress is that whatever I experience at work, I leave at work. When I get home, I don't talk about work. When I'm out there, I don't talk about work. When I walk in here then I remember...But try to be productive and as cheerful as I can.

M: So you compartmentalise?

S: Yes. I wouldn't have time to think about work at home anyway (laughs).

M: So that switching off works for you?

S: Yes.

M: Would you say that it is a form of escaping?

S: That's my....my...safe room.

M: What other coping methods do you use to deal with your stress?

S: I approach the source of whatever is stressing me up. I take it on even though I know it might not yield any solution, the fact that I take it out of my system and give it to somebody else...it's no longer my stress.

M: So just by verbalising it...

S: By verbalising it then I feel better. Yeah.

M: Do you think your employer could provide better stress management programmes?

S: If they did, we wouldn't be swimming with sharks. We wouldn't be so frustrated by the direction that we have to take...I think that, at some level, they should. Even though I might not be able to voice my opinion or my plans or have my initiatives be taken seriously...but if one day somebody could say, what you said makes sense. You know, that assurance, that validation...somebody is listening. In our case, though, nobody is listening.

M: So coming back to feeling belittled and disrespected.

S: Hmm (Nods).

M: You've already mentioned that you don't like animals and you've explained why. The next couple of questions might be a bit tricky for you but I want your honest opinion. Aside from the whole responsibility thing, how do you feel when you are around an animal?

S: I feel uncomfortable. If I had a choice I wouldn't enter the house or room.

M: Physically uncomfortable? Or is fear? Allergies?

S: I think it's more fear because I was bitten by a dog when I was young. I don't think I ever overcame that. So to me, a dog bites. I don't trust dogs.

M: Do you feel the same way about all animals?

S: You know what...I'm not sure if it is fear but I also don't like cats. It gives me the creeps! I am...not comfortable with animals.

M: So that would apply to everything then, fish, birds...?

S: I cannot stand a worm! It's all animals. Maybe...maybe...I don't know. My grandmother used to have cows and...you know in the rural areas...as you walk there are cows everywhere. I know they will charge on me without even provoking them! I don't make that mistake. If I hear dogs barking or see them walking down the street, I go back and take another street.

M: If we had to introduce a petting zoo or something similar away from the office, let's say near the bushes behind the building. How would that affect you?

S: I would rather kill a colleague (laughs)! I was once given this offer to go to Kruger. I have got this friend who likes the Kruger National Park. She said to me that she wants us to sit outside at night and listen to the howling of the hyenas and everything. I would rather stay at the Hotel Inn rather go to game lodges. The fact that they are somewhere there...at the back of my mind I would know that if they can find a way...a hole...it will come directly to me because it knows I don't feel comfortable!

M: Do you feel the same way when you see a picture or a video of an animal?

S: No. Pictures I am comfortable with, I know that it cannot be alive. As long as I have an option of looking aside...

M: Thank you. Is there anything else you would like to add?

S: No. I think that's everything.

Sean

M: Can you describe a typical working date? What is that like for you?

S: Hmm... a typical working date for me entails me doing a lot of ...umm... work that does not fall part of my job description. This puts a lot of stress on me, because I still have my normal tasks to perform and...now I have to do other people's...or...supervisors' job as well.

M: So, basically, there are demands being placed on you on a daily basis over and above your actual tasks?

S: Yes. I am expected to do other work that doesn't really fall under my job description.

M: How would you describe your stress levels today?

S: Sjoe! Today was a really bad day in the office because I had to solve a lot of complaints from clients and...these complaints were sent from our top management. So I think that today, especially, my stress levels were high.

M: Is this normal for you? Are your stress levels these days more or less the same or was today just a particularly bad day?

S: Uh ... This is getting to be normal for me. My days are becoming more and more stressful by the day.

M: Is there a difference between today's stress levels and your stress levels five years ago?

S: My...hmm...stress levels five years ago was much lower than today's. I ...uh...think that it is because of a new management structure and, in turn, a lot of policy and procedural changes and new staff that were appointed that...umm.. prefer to just get paid a salary instead of actually working.

M: You feel that you need to pick up the slack...

S: It feels to me that most of the work comes down to me and a few people in the office and we have to work extra hard, because of other staff that chooses not to work.

M: How does this stress affect you?

S: I think that stress affects me physically and emotionally. (Silence). Physically, it feels as if something is pressing on my chest and, emotionally, I am tired. But I can't sleep properly and...this makes me more tired. Hmm...Oh yes, and mentally I sometimes struggle to focus or just pay attention.

M: It's a vicious circle...You're tired but you can't sleep which makes you more tired affecting your concentration which stresses you out more?

S: That is exactly what is happening and the scary part is, I don't know how much longer I can keep this up.

M: You mentioned earlier that you are required to do other people's work as well as your own and this is stressful for you. What else contributes to your stress levels at work?

S: Let me think a bit...Hmm...I work in an open-plan office and...I work with staff from all cultures. In some of my colleagues' cultures, it's ok to talk loudly and this breaks my concentration. Also the building where I work in has a problem with the aircon system and definitely a lack of fresh air.

M: You feel as if you don't have any control over your environment?

S: Yes, it feels to me and, I know to other staff as well, that our suggestions to make the offices more worker friendly, falls on deaf ears.

M: So you're expected to meet these high demands whilst working in a space that is not conducive to promoting optimal performance?

S: That is correct.

M: How does all this impact on other aspects of your life?

S: Other aspects of my life...hmmm... definitely my relationship with my family, my wife. I...uh...snap at them sometimes or I am just unpleasant to be around.

M: So you tend to take a while before you can shake off the day's frustrations?

S: That is true. Only quite a while after I have arrived home, do I feel less frustrated and snappy.

M: What coping methods do you currently use?

S: To help with my...hmm...stress I use a punching bag to kick and punch, to see if I can relieve some tension. I have to say that my doggie...uh...she's a character of her own...she comes and lies on my lap or she just does silly things that make me laugh. I can easily spend...uh... half an hour playing with her and completely focus on something fun.

M: She distracts you from the burdens of the day?

S: Yes, you can say that, because for the time playing with the puppy, I forget about the nonsense that happened at work.

M: How effective are your coping methods?

S: I would personally say that it definitely helps break some of my tension.

M: Do you think your employer could provide stress management programmes to enable staff to cope more efficiently with stress?

S: Personally, I think that yes, uh, my employer could provide some form of a stress management programme. We used to have a 'fun day' at work where you could take part in soccer or a 5km race, but that was only once a year.

M: You feel that something should be done on a more regular basis.

S: Yes, definitely more on a regular basis.

M: You mentioned earlier that your dog helps distract you from the events of the day so I think I know the answer to the next question but still...how do you feel about animals?

S: I love animals in general. I sometimes think I prefer animals to humans! They don't complain about their personal problems. They just want attention and to be loved and...they...hmmm.. sense if something is bothering you. My dog can sense if I am sad or happy and, uh, if I am sad, she comes and sits next to me or on my lap and I get a lot of licks. (Pause). If I can mention something...with your previous question...I think it would be a great stress reliever to have more 'fun day's at the office but to include animals. Ummm...perhaps adopting animals from the SPCA for a day and do a 5km walk with them and spoil them. I...uh... think that will be very cool. So, ja. I think animals are a ...or should be...a core part of our lives.

M: So you notice a change in how you feel when you are around animals?

S: When I am around animals, especially puppies, I forget about everything else and...uh...just want to hold them.

M: They give you some positive to focus on?

S: O yes, most definitely. Sometimes I wish that I could be a puppy, because IUh... don't think that they have the type of problems that we have.

M: Do you notice any differences between how you feel around your own pets and how you feel around other animals?

S: I always look at other dogs and think...or know that...uh.... all animals have a unique thing that they do. A character of their own.

M: In terms of how other animals (not your own pet) make you feel though, how would describe their effect on you?

S: Uh... I think, depending on which animal. Let's say for instance another puppy. I would immediately just want to play with him or her and I can guarantee that thinking about work will be the last thing on my mind.

M: Do you think you would react in similar ways when in the presence of different kinds of animals, like fish, birds, hamsters?

S: I am not really fond of birds but I think that fish are very therapeutic and also...uh...fascinating to watch. Sometimes even a bit funny to watch!

M: If animals were present in your office setting (for instance, a petting zoo), how would that affect you?

S: Now...that is a wonderful suggestion! Every now and then you feel as if you could hit someone in the office and I think that, if you have a petting zoo, it will focus your attention on something cute and furry and make you forget about office drama and you might even laugh a bit.

M: Would you have any concerns about having the animals present?

S: None...except if it was a lion! (Laughs). Then I would keep a look out every second and hope that the colleague that irritates me would disappear (laughs).

M: What problems can you foresee if such a scenario had to materialise?

S: (Long pause...followed by laughter). Sorry, I'm still thinking about a lion...Hmm...I think that the first thing that would come to mind is that...would the animals be taken care of in the office setting and then I think that some people would be scared of the animals.

M: How do you think this would affect the animals?

S: Hmm...the animal might become tired after a lot of attention and playtime.

M: Thank you. With regards to our two topics, stress and animals, is there anything you would like to add or elaborate on?

S: I would like to say that your suggestion to incorporate some sort of animal presence in the working environment would definitely be welcome, and I hope that something like this can be implemented. Thank you for giving me the opportunity to be interviewed. I must say that I feel a bit better talking about my stress that I experience in the office.

Personal communication:

As the researcher was packing up, Sean hesitated at the door and asked if he could add one more thing. He went on to state that sometimes he feels as if managers do not care about their staff. He thinks that the focus is just on productions and not on the well-being of the people charged with delivering that service. This makes him feel unimportant and unvalued.

Tyler

M: Can you take me through a typical working day for you? What is that like?

T: A typical working day... (laughs)... I get to work at 7: 45 and I start as soon as I can, whatever my supervisor or manager thinks it priority for that day, we start on that. That's it until the end of the day. If there is nothing that is priority, you do what work there is.

M: Does that actually happen? Where you don't have something that is a priority?

T: No, there is always priorities but they don't always say that today this is priority. So if they don't say what we must focus on, we just do the work that is there.

M: If you had to describe your stress levels today, how would you that?

T: Today? Today wasn't that bad but...there was something that irritated me earlier this morning. What was that? Oh yeah, that was something my manager said, to someone else, that actually irritated me and caused some stress. But that cleared up quickly so today wasn't a bad day.

M: If you had to compare your stress levels lately to your stress levels five years ago, would there be a difference?

T: Oh huge difference!

M: How so?

T: I think the stress...stress is such a wide word. Stress that I have isn't stress like cut-off dates and targets. I don't stress about that. I think the stress that I have is frustration stress. Frustration that becomes stress, that causes stress.

M: What are you frustrated about?

T: (laughs) Well, I've been there for very long so the way things were done and the way things are now, I think... there is a lot of unfairness. There is a lot of things that we were able to do years ago that is now being taken away from us for some reason. I don't have a problem if it is taken away as such but I do have a problem if it affects the work that I do. Years ago, if I had a problem I could deal with it but now I can't anymore because I have to ask a supervisor who has been there only for a year or two to deal with that. That causes

frustration. Fairness... the consequences of what managers do. Umm...I sometimes think that there are no 'thank yous' anymore. It's just...and the way people talk to you even if you were there for many years. I don't say you should get preferential treatment, I just say that if you have done stuff for many years, take that into account because you actually know what you are doing there.

M: So, basically, you want acknowledgement for your expert knowledge. Recognition for it.

T: Recognition...ja, I think so. And I want them to sort of...not look at me like a child. There's people there that have been there for shorter periods that I think they look after them more. Stuff like functions (system related) that have been taken away, that you could usually do, that you have been doing for many, many years and now, suddenly, you can't do it anymore because someone screwed up and everyone's functions are now taken away. At some stages you could just sit and if you have a crisis you could sort it you, use your own judgement. Now it becomes explain this to a supervisor and maybe they are not confident to make a decision and they refer it to a section head...It's just very frustrating!

M: So you are still expected to do the same job on a greater scale but with less resources?

T: Yes. I would say that.

M: How would you say stress, in your case frustration, affects you: physically, emotionally, mentally?

T: Emotionally....and mentally...quite a lot. Physically I'm not sure. Maybe I'm just not aware of the fact but I think it does have an effect on your health. But...yeah...some days I just don't want to talk to anybody. I just want to sit there and do my work. Nobody should talk to me. That's not really who I am though. We used to be...five years ago...we always talk about how things were about ten years ago. I know that things must change but if they change for the worst, I'm not so sure it's a good thing. We always used to work hard and laugh hard. We had a lot of laughs but the work was always up to date. Nowadays the work is never up to date. There is just no...it's very emotionally draining. You work and work and work and...there's no ...the work does not get finished. There is always a backlog. Nobody is ever thankful. If you work overtime for fifty hours or if you don't do anything you are treated in the same manner. It's frustrating and it does affect you emotionally and, eventually physically. Health-wise.

M: So you feel undervalued?

T: Oh yes, that's a departmental thing. There is a big thank you maybe once or twice a year from the head of the department but that's basically that. Otherwise you just feel like you never do enough. You are not working hard enough, you are not working quick enough.

M: I take it that is when you experience the most stress? Having this constant unreasonable demand placed on you?

T: Yeah, I think so. The constant demand and the fact that I sometimes think that the managers are not so clued up with the work as some of their subordinates are but they want to call the shots...That is heavy frustrations. If you know you are doing the right thing but, you know, they don't seem to understand that.

M: So the people at grassroots are being undermined?

T: Yeah. I think so. No, I don't think so, I know so! (laughs) I think the people at grassroots must have more say in the managing of the work because they are the people who do the work. I think 90 % of the time they know more than the people that are at management level.

M: Aside from work overload, taking away certain responsibilities/functions...what else in the office environment contributes to your stress/frustration levels?

T: Open-plan offices. I hate it with a passion. I always have. We used to ...we were in offices. Sometimes there were three or four people in an office but there was still ...we were divided by stuff so we had privacy. I work much better when you leave me alone in an office or secluded area. But open space offices are very frustrating. I think most of the people know that the temperature...or the ambience... in the building is awful. That causes a lot of stress because here from 10:00 you feel like you are glowing and that is everyday's story. And nobody seems to do anything or care about that because it has been reported so many times. It's just a thing you have to deal with. I think that is actually causes... You are sitting in this open-plan office, which most of the people hate, under circumstances that's awful...and actually causes more or less the same amount of frustration as other stuff. The general office environment is definitely not pleasant at all.

M: In terms of coping methods, how are you currently dealing with your stress?

T: Making jokes (laughs) whenever you have an opportunity to make a joke or laugh. Laugh. Laugh. Laughing...Looking forward to 16:00. I think so. I keep in mind what I'm going to do this weekend and you tend to forget about... although to still do the work, it doesn't stress you out that much. Laughing. Making jokes. A form of escape. Escaping reality a bit. Except you don't get much chance to laugh as much anymore because it's open-plan, you might offend somebody.

M: Do you think that your employer could provide better stress management programmes?

T: Definitely think they can but I'm not so sure that they even think about stuff like that.

M: Why do you say that?

T: The idea I get...how they deal with problems, with simple things, it's like the aircon or the temperature in the building...it's been going on so long. And it's like nobody really cares. Nobody really does something about it. Especially in our department. It usually ends up high up at top management and then it usually dies away. I don't think they really care about stuff like that. It's the idea I get. It's all work, work, work and work has to get done.

M: So you feel more like a part of a machine than a human being?

T: Yeah, as long as the machine is running and top management thinks that things are going well, then they are happy. I don't think they actually care about the person.

M: Okay, I'm going to slightly deviate from that topic now. How do you feel about animals?

T: I just love them! I would much rather...I always tell two of the people I work with...and I've been saying this for many years, we always joke about it...I would rather work with animals than people! That, I think, says it all.

M: Is there a specific reason you would say that?

T: They just calm me down.

M: Do you have any pets? If so, how many and what kind?

T: Two dogs.

M: You mention that you feel calm around animals. Any other changes in your emotional or physical state that you experience when around animals?

T: Are we talking about any animals now?

M: Any animals.

T: Calm, relaxed. Nothing really matters because you don't really think about the problems or situations when you are around your animals, or any other animals, because you concentrate on how nice they are or what they do for you. It just calms me down.

M: So they provide an external focus for you, concentrating on them and not on what else is bothering you.

T: Yes, concentraing on them but they somehow do something to me...They just...concentrating on them and you forget about everything else.

M: Would you say that this would be true for animals in general or specifically yours?

T: No, animals in general.

M: Do you notice differences in how you feel around different kinds of animals?

T: I don't think fish. I think...it's difficult to say. Not fish and hamsters as such. I think more dogs...animals with more emotion. That playfulness. Animals like fish they tend to...they're just there. Animals that use their brain and interact with you...

M: So that distracts you. While playing with them...as opposed to staring at you.

T: Staring doesn't work. Although in the wild it works. But then in the wild they're not just walking around without a purpose. I'm thinking of wild animals, they do the same for me. So not really interacting physically with them but to see how they operate and stuff like that.

M: Basically, just that connection....

T; Yeah, it's a connection with an animal.

M: If animals had to be introduced into our office environment, like a petting zoo, how you would you feel about that?

T: Well, I would visit the petting zoo quite often (laughs). I won't have a problem with that. I think it would be a great thing.

M: Do you think it could be a stress outlet for you?

T: Oh yes. Most defiantly. Especially if it's cute puppies. Someone was there with a cute puppy a few weeks..months?...ago, and just to hold that little thing was so nice.

M: Would you have any concerns about having animals present?

T: None.

M: Any concerns for the animal itself?

T: It's difficult because I think the people who really care about animals will be the people who are handling them. They will look after them. It depends on how...if it's there, it's obviously just during working hours. I can't see them being there overnight so that would be a problem for me. If the animals are in a building the whole day and night...that could be a problem. But if they would be taken care of properly...

M: In terms of the two topics, stress and animals, is there anything you would like to add or elaborate one?

T: I think we basically covered it all. I just think that animals are a stress-reliever. For me and, I think, for a lot of other people. I don't know if it's for everybody but for me it is.

M: So it's an option for those people who want to seek animals...

T: Yeah.

M: So if there is a petting zoo, you can go out but if you don't want to, then you're not forced to?

T: Pretty much. If everybody is forced to... There are a lot of people who are very afraid of animals. Although for the wrong reasons for most of the time... so maybe this would be a good thing to help them get over their fear.

M: Thank you.