

**THE ROLE AND IMPACT OF A STRESS INTERVENTION PROGRAMME
FOR PRIMARY SCHOOL PRINCIPALS**

by

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**Submitted in part fulfillment of the requirements
for the degree of**

MASTER OF EDUCATION

in the subject

EDUCATION MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

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FEBRUARY 2009

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I declare that **THE ROLE AND IMPACT OF A STRESS INTERVENTION PROGRAMME FOR PRIMARY SCHOOL PRINCIPALS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Mrs A M Parsotam

(MRS A M PARSOTAM)

08 October 2009

DATE

DEDICATION

Dedicated to my spiritual master and guide for His divine inspiration.

“It is the birth right of every human being to have
a stress - free mind and a disease - free body.”

Sri Sri Ravishanker.

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to the following people for their contribution to this dissertation:

- My promoter, Dr H M Van der Merwe, for her expert guidance and infinite patience.
- Mrs. Carol Jansen for her valued comments and continued support.
- Mrs. I Naidoo and Mr. Anil Sangham for the statistical analysis.
- Mrs. P Appalsamy for assisting with the initial editing.
- Dr/ Mrs. Carina Barnard for the final editing of this dissertation.
- The principals who sacrificed their valuable time and participated in the research.
- My friends and colleagues for their motivation and encouragement.
- The elders in my family for their inspiration, love and prayer.
- My two sons Bhaven and Bhavish, my daughter-in-law Drashna, my nephew Nikhil and my niece Dipika for moral and technical support.
- My late husband, Shantilal for always believing in me.

ABSTRACT

Change in any form can become painful if individuals are not equipped with the necessary coping mechanisms. The transformation in the educational arena over the last few years has resulted in increased stress levels for school principals.

This study investigates the role and impact of a stress intervention programme, the Art of Living workshop, using controlled breathing techniques, on the functioning of primary school principals in the Phoenix Circuit, Durban.

A combined quantitative and qualitative research approach employing structured questionnaires and semi-structured individual interviews was used to compare the principals' stress levels before and after the stress intervention programme.

The findings revealed that the intervention programme was successful in reducing principals' stress levels. A lack of resources, increased workloads, learner discipline, educator attitudes, indifferent parents and resolving conflicts created stress for principals.

Benefits of the Art of Living workshop included the ability to remain calm and relaxed; and improved sleep patterns, increased energy levels and improved human relation skills.

Key terms:

Stress; burnout; breathing techniques; relaxation techniques; stress intervention; stress management; work stress.

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THE ROLE AND IMPACT OF A STRESS INTERVENTION PROGRAMME FOR PRIMARY SCHOOL PRINCIPALS

CHAPTER ONE ORIENTATION OF THE STUDY

1.1 INTRODUCTION

We often breathe a sigh of relief at the successful conclusion of an important event, at the end of a meeting that involved heated debates and tight negotiations or when an interview with a 'difficult' parent has been concluded satisfactorily. We may not be aware, but such a sigh of relief relieves us of the stress that we experience in the various encounters in our daily lives.

Stress in the school environment seems to have multiplied worldwide in recent years because of increasing student numbers and excessive paperwork (Torelli & Gmelch, 1993:376). In South Africa principals are faced with additional challenges due to major politically and socially motivated transformations in education. Some of these changes include the Revised National Curriculum, staffing norms, school finances and school governance. Learners' attitudes and behavioural problems add to principals' stress, as do social problems such as drug and alcohol abuse, violence and crime and the demands they make on safety and security on school premises (Olivier & Venter, 2003:186). Resolving conflict amongst learners, educators and parents also causes stress for principals especially if there are many conflicts, some of which may escalate and become difficult to resolve (Gmelch & Chan, 1994:7).

All these kinds of stress have a negative effect on principals, it is therefore important that they perceive their different stressors to be able to deal with them. This could assist them to become better equipped to execute their management

responsibilities. Against this background, the purpose of this study is to investigate the effect of an intervention programme that is based on breathing techniques on the stress levels of a group of primary school principals in the Phoenix Circuit of Durban, KwaZulu Natal.

1.2 BACKGROUND TO THE STUDY

1.2.1 Breathing and stress relief

The use of the breath in relieving stress is a simple yet profound mechanism that the mind and the body automatically resort to in stressful situations. The stress response of the body during psychological stress can result in hyperventilating panic (Sapolsky, 1994:42). According to Benson (in Nagel & Brown, 2003:256) our breathing patterns change when we are faced with different situations and when we experience different emotions. For example, when we are angry, the breath tends to become shorter and faster, in contrast, when we are sad or depressed, the breath becomes slow and long. Breathing is thus closely related to our state of mind and mood changes and seems to work, as if controlled by a sensor, to help us through our experiences and emotions.

Although a prerequisite for life, breathing is one of the most easily disturbed functions because even minor mood changes or stress levels can affect one's breathing, causing it to become shallow or strained or resulting in hyperventilation leading to light-headedness or even fainting. Correct breathing is therefore very important and something that we should exercise regularly to promote relaxation, to regulate blood circulation and digestion and to assist in controlling tension and stress (Schlebusch, 1998:70). Correct breathing does indeed help with self-healing, because we can use the breath to influence our other bodily functions.

Although we all breathe, most of us do it wrongly. Correct breathing should ideally be through the nose, predominantly abdominal and should involve equal inspiration and expiration cycles, i.e. it should have the correct rhythm (Schlebusch, 1998:70). In this regard, Papworth (2003:24) recommends belly breathing that is deep, relaxing and effective. A few rounds of deep belly breathing calm the mind and cools the temper and puts a whole new complexion on the day (Papworth, 2003:25). Benson (in Nagel & Brown, 2003:256) confirms that diaphragmatic breathing helps create emotional balance.

The importance of the breath for stress relief purposes has been recognised scientifically to such an extent that workshops are commonly conducted to train participants in the effective utilisation of breathing techniques to alleviate stressful situations.

The Art of Living Foundation is an example of an organisation that conducts workshops to relieve stress by engaging participants in breathing exercises. This study focuses on the effects of the Art of Living workshop on alleviating stress levels amongst primary school principals.

1.2.2 Stress at the workplace

Stress is prevalent in our modern society and is seen as one of the main health and safety problems in the workplace that has been associated with job dissatisfaction, absenteeism, higher turnover of staff, and lower productivity (Kinman & Jones, 2003:21). One reason for the prevalence of stress in the workplace is linked to the demand for continuous change. As work becomes more dynamic and decentralised, organisations frequently change their structures, causing varied levels of stress to develop in the employees, with the result that they become more and more physically, emotionally and spiritually exhausted. Consequences of this wearing - out of employees include high staff

turnover, absenteeism and poor performance, both in terms of productivity and quality of work (Dierendonck, Garssen & Visser, 2005:623).

Research indicates that educators commonly report higher levels of stress and lower levels of job satisfaction and psychological health than workers in other occupations (Borg & Riding, 1991:263; Chaplain, 1995:473; Tatar & Horenczyk, 2003:404). This could be because staff members in human services and educational institutions are often required to spend considerable time in activities that entail intense involvement with other people. This may result in them experiencing anger, fear or despair. For the person who works continuously with people under such circumstances, the chronic stress can be emotionally draining and may lead to burnout (Maslach, Jackson & Leiter, 1997:1). This is especially true in the school situation where principals are dealing with various people, solving all kinds of problems, resolving conflict, disciplining learners, motivating staff and striving to improve the levels of performance in the school. This results in differing levels of emotional involvement at the individual level, which may lead to burnout; and which needs to be curbed. At the same time however, it is also important to curb stress at the organisational levels. The goal is to create harmony between people and their jobs, by finding ways to change the environment, as well as the people (Henry, 2005:383; Leiter & Maslach, 2000:545).

1.2.3 South African school principals and stress

The political and social changes in the South African education system are placing new and higher demands on principals. These demands relate to the implementation of educational policies that are initiated at National and Provincial levels (Schulze & Steyn, 2003:139). Principals are tasked with monitoring the implementation of these policies; and that causes tremendous stress.

The revised educational policies imply changes in staffing norms, a new curriculum, new governance structures and changes with regard to school funding norms. The responsibility for increased control of school finances, increased fund - raising demands and the demand of working harmoniously with the School Governing Body are causing varied levels of stress to principals (Hayward, 1994:86; Niehaus, Myburgh & Kok, 1996:104; Olivier & Venter, 2003:186). Their roles have become more demanding with increased financial responsibilities, school governance demands, increasing numbers of learners (Ostell & Oakland, 1995:174), while simultaneously serving as educators, supervisors, mediators, counsellors and comforters (Williams, 1997:12).

The stress caused by the changing nature of educational leadership in a changed South African school environment results in a constantly decreasing pool of individuals who are willing to go into, or remain in school principal and superintendent positions (Metzger, 2003:656).

Additional challenges to those already discussed that South African principals face because of educational changes, relate to findings of a Californian study by Metzger (2003:656). These challenges are:

- Sharing power with the parents and community.
- Attacks by media on public school performance.
- Being unconditionally accountable for all on-site events and situations.

Managers who do not cope effectively with stress become a liability to themselves and everyone around them (Mills, 1994:3). The stress principals experience may hamper the progress of the school as an organisation which will, in turn, impact negatively on educators and learners because when leaders are under stress, interpersonal relations suffer and the organisations generally do not perform well. It is therefore important that principals be proactive in detecting and coping with stress.

What is important to consider, however, is that although stress at work is unavoidable, the intensity of the stress experienced by an individual depends on how he/she perceives, appraises, reacts to and interacts with the environment (Beard, 1990:109). This implies that peoples' reactions to stressors differ. Their reaction can be either positive or negative depending on their appraisal of the events or situations (Hayward, 1992:5). The stress levels of a person depend on factors such as the personality traits of the person. Friedman and Ulmer (1985:6) pointed out that Type A personalities differ from that of Type B people. The personality traits exhibited by Type A include excessive competitive drive, impatience, a sense of urgency and a display of hostility. The emotional stress that Type A people experience often leads to heart disease. Type B, on the other hand, feel no sense of urgency, exhibit no excessive competitive drive or hostility (Friedman & Ulmer, 1985:6). The personality type will thus mediate or aggravate the stress levels experienced by the individual.

It appears that there are contradictory reports on whether all principals do actually experience their jobs as extremely stressful. Whereas Allison (1997(a):1103) contends that school principals all experience stress at some time or other in their jobs, Torelli and Gmelch (1993:363) found that overall, school principals reported low levels of stress and varying levels of burnout. In a more recent study of Chaplain (2001:200) on primary school principals he found that 55% of the principals reported experiencing *very high* levels of stress. A further 40% considered the job moderately *stressful*. What Chaplain (2001:200) also found was that the frequency and intensity of stress levels vary in different countries and at different times depending on the state of national and regional education systems.

In order to deal with stressful work situations, principals should develop coping skills; and stress-training programmes can be employed as an effective way of improving the individual's coping behaviours. Cartwright and Whatmore

(2005:169) recommended the following activities that may be included in stress management training programmes:

- stress awareness
- relaxation techniques
- cognitive coping strategies, for example rational emotive behavioural therapy (REBT)
- biofeedback
- meditation
- exercise
- lifestyle advice and health promotion activities
- interpersonal skills training such as time management and assertiveness training.

Niehaus and Myburgh (1999:20) highlight the importance of a training programme in coping with stress. They recommend that principals be empowered to cope effectively with stress by means of in-service training programmes, workshops and stress management interventions. Thus the focus of this study was on the effect of a stress intervention programme based on breathing techniques on the functioning of primary school principals.

1.3 MOTIVATION FOR THE RESEARCH.

School principals in general, face very busy and highly unpredictable workdays with many individuals and groups competing for their time (Allison, 1997(b):39). The issue of too little time for too many tasks appears to be universal among school principals (Gmelch & Chan, 1995:283). This is intensified by the many interruptions they experience daily; and this increases their stress levels as they do not have enough time to implement the plans they draw up for the day.

Due to the political and social changes in South Africa and the effect of those factors on education, the managerial role of principals has increased dramatically

(Niehaus & Myburgh, 1999:9). With regard to the increased demands pertaining to school finances for example, the principal's responsibilities now takes on the basic requirements of a small commercial business as the financial role now includes that of managing school budgets (Ostell & Oakland, 1995:68).

From personal encounters and interactions with some of the principals in the Phoenix area, it seems that their stress levels are significantly high. It was the intention of the researcher to ascertain what exactly the levels of stress are of these principals and to investigate to what extent a stress intervention programme that is based on breathing techniques did, in fact, result in these principals acquiring better coping mechanisms to cope with stress.

1.4 PROBLEM STATEMENT

The researcher is greatly concerned about the topic of stress in general and the possible effects of stress on the principals of primary schools in particular. What compounds this problem is the fact that the principals' ability or failure to cope with stressful conditions may affect the entire school system; furthermore, it also affects educators and learners (Allison, 1997(a):1103).

The primary problem this study investigated can be formulated as follows:

- What impact does a stress intervention programme have on the functioning of primary school principals?

In order to solve the main research question, three sub-questions are formulated so that the solutions to the sub-questions can contribute to the solving of the main problem. The sub-questions are:

- What are the main stressors experienced by primary school principals?
- What do stress intervention strategies imply?

- What is the impact of the stress intervention programme on principals' stress relief?

1.5 AIMS OF THE RESEARCH

In order to find answers to the postulated research questions, the study ascertained the extent to which primary school principals experience stress, the implications of the stress coping strategy, and the potential role and impact of a stress relief programme which includes breathing techniques. Against this background the main aim of this study was:

To determine the impact of a stress intervention programme on the functioning of primary school principals.

In order to find answers to this main aim the following sub-aims are:

- To identify the main stressors as perceived by primary school principals.
- To determine what is implied by stress intervention strategies.
- To evaluate the impact of the stress intervention programme on principals' stress relief.

1.6 RESEARCH METHODOLOGY

To find answers to the research problem, a literature study was supplemented by an empirical investigation.

1.6.1 Literature Study

A literature study was conducted on the phenomenon of stress as experienced by primary school principals. Literature on stress intervention and the implications of stress coping strategies were also reviewed.

1.6.2 Empirical investigation

Apart from a literature study, an empirical investigation was undertaken. In this regard, both qualitative and quantitative research methods, which have strengths and weaknesses, were considered in the choice of the research design.

The major advantages of qualitative data are that depth and detail are provided through direct quotations about events, situations, and interactions. The data are not restricted to responses to predetermined categories as in a quantitatively oriented questionnaire. Qualitative responses however, although pursuing a deeper understanding of phenomena, are usually much longer and varied in content and can be difficult to analyse into themes (Ostell & Oakland, 1995:70). When working from a qualitative perspective, the researcher attempts to gain a first hand, holistic understanding of the phenomena (De Vos, Strydom, Fouche & Delport, 2002:364). Interviewing is mainly used to gather data allowing the participants to describe their experiences. With regard to this study on breathing techniques as a stress alleviation method for principals, the researcher attempted to understand the world from the participant's point of view. The emphasis was on collecting detailed and in depth information (De Vos et al, 2002:292); and for that reason and in accordance with a qualitative approach, a few participants were selected based on clear criteria (De Vos et al, 2002:334). In this study gender, age, years of experience and marital status were considered as selection criteria to select the participants purposefully. The researcher departed from the point of view that gender, age, years of experience and marital status may impact differently on stress levels.

Quantitative data on the other hand, assigns diverse opinions and experiences to predetermined response categories. The advantage is that it facilitates comparison and statistical analysis and a broad generalisation of findings is obtainable. The disadvantage of this standardised approach is that respondents must fit their experiences into predetermined categories, which can distort what

they really mean or have experienced (Ostell & Oakland, 1995:70). However, the two methods can be used in a complementary way and both methods can be incorporated into a research design (Ostell & Oakland, 1995:70).

In the case of this study on breathing techniques as an effective stress alleviation strategy for primary school principals, a combined approach was employed, but the main focus was on the qualitative part of the study. The quantitative approach was used in data collection and analysis, however, the research sample of six 'respondents' does not represent a proper sample for a quantitative approach. The findings of the quantitative data, albeit not a viable sample, could however be considered, to confirm the stress levels of 'respondents'. For this purpose, a structured questionnaire was used and collected data was interpreted in terms of the frequencies of the stressful encounters and how these stress levels changed on account of the stress intervention – thus the collection, analysis and interpretation of data from a quantitatively oriented perspective.

However, the focus was mainly on a qualitative research approach because the intention was to gain a greater depth of understanding on the phenomenon being studied (De Vos et al, 2002:31), which, in this study relates to understanding the meaning people attach to the term stress in everyday life and determining what the impact of a stress intervention programme with breathing techniques is on principals' stress relief. In this regard, the research elicited participant accounts of meanings and experiences of stress and produced descriptive data in the participants' own spoken or written words (De Vos et al, 2002:79). Semi-structured individual interviews were conducted and open-ended questions were used to obtain qualitative data which are rich in content and which gave first hand accounts of the participants' perceptions of how they experienced and dealt with stressful situations before and after the stress intervention programme.

1.6.2.1 Research methods

Research data was collected by means of a questionnaire, followed by the interviews and the application of a breathing technique intervention programme. The systematic programme according to which the empirical investigation was executed was as follows:

A quantitatively constructed questionnaire, the Maslach Burnout Inventory, was given to 'respondents' to complete. The aim was to determine the stress levels of 'respondents' and whether there was a need to alleviate stress. This was followed by conducting semi - structured individual interviews with participants to find out what their main stressors were. The next step entailed a stress relief intervention workshop with participants. The workshop is known as The Art of Living Programme that is based on breathing techniques to alleviate stress. This was followed by a second application of the Maslach Burnout Inventory questionnaire to determine whether stress levels had indeed decreased. A second session of interviews was conducted to evaluate the effects of the stress relief programme. The second session of interviews assisted in gaining a better understanding of the need for, and the impact of, the stress intervention programme based on breathing techniques.

(a) Quantitatively oriented questionnaire- the Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) questionnaire was used to assess the stress levels of the 'respondents.' It is a questionnaire that measures three dimensions of professional burnout - emotional exhaustion, depersonalisation and personal accomplishment (Maslach, Jackson & Leiter, 1997:1).

The MBI questionnaire consists of 22 items representing three subscales for the three dimensions relevant to determining of the degree of burnout:

- **Emotional exhaustion** measures feelings of being emotionally over extended and exhausted by one's work.

- **Personal accomplishment** measures feelings of being competent and achieving success in one's work.
- **Depersonalisation** measures an unfeeling and impersonal response towards recipients of one's service, care, treatment and instruction.

'Respondents' indicated the frequency of their feelings about each item on a 7-point Likert type scale (i.e. Never = 0; Everyday = 6). Higher scores on emotional exhaustion and depersonalisation and lower scores on the personal accomplishment subscale reflects a higher degree of burnout (Maslach, Jackson & Leiter, 1997:1).

It was meaningful to interpret the scores of 'respondents' before and after the stress intervention programme to determine the extent to which the intervention programme assisted in relieving stress via specific breathing techniques. What the researcher had to bear in mind however, was that 'respondents' could be individuals who have a higher than normal threshold for stress. The possibility could exist that they thrive on stressful situations and approach their jobs positively, with enthusiasm, energy and motivation despite all the challenges they face (type B personalities). On the other hand they could be type A personalities suffering from severe distress and hyperstress (par 1.2.3).

(b) The Stress Intervention Programme: The Art of Living workshop

The Art of Living workshop is an interactive workshop of fifteen to eighteen hours spread over five to six days. Extremely effective and revolutionary breathing techniques are taught which help an individual deal with the day-to-day stresses of life, thereby promoting a better quality of life and increased peace and happiness. The highlight of the programme is the re-vitalising breathing process known as "Sudarshan Kriya," which relieves stress and counteracts/neutralises toxins at the physical, mental and emotional levels, promoting better health on all these levels. The Sudarshan Kriya Yoga has three sequential breathing

components interspersed with normal breathing while sitting with eyes closed (Janakiramaiah, Gangadhar, Naga Venkatesha Murthy, Harish, Subbakrishna & Vedamurthachar 2000:256). It is preceded by Ujjayi Pranayam (long and deep breaths with constriction at the base of the throat), and Bhastrika (fast and forceful breaths through the nose along with arm movements) (Sharma, Sen, Singh, Bhardwaj, Kochupillai, & Singh, 2003:262). Sudarshan Kriya (Su = Right, Darshan = Vision, Kriya = Procedure) was devised by a spiritual guru, Pandit Sri Sri Ravi Shankar, founder of the Art of Living Foundation, Bangalore, India. It has been practiced as a brief and practical self - help stress management strategy (Janakiramaiah et al, 2000:255). The intervention programme aims to help sufferers from stress to recognise the symptoms and causes of the stress they experience and to assist them in coping with their stress by means of the consciously applied breathing techniques.

(c) Semi-structured individual interviews

For the purpose of this study, semi-structured individual interviews were conducted to gather information on what causes stress to develop in participants and to evaluate the success of the stress intervention programme. The interviews were guided by open ended questions set out in the interview schedules (Annexure D & Annexure E). The advantage of such an arrangement is that the researcher and the participants are given more flexibility, albeit in a checks-and-balances situation, guided by an interview schedule to ensure that all crucial aspects are attended to (De Vos et al, 2002:302).

1.6.2.2 Research population and sampling

The research sample for the quantitative and qualitative investigation was the same and consisted of six primary school principals with differing years of experience. Experience was measured in terms of the total years of experience as educators. One female principal and five male principals were chosen.

The geographical demarcation for the research was that of the Phoenix Circuit from which the six primary school principals were selected. Phoenix is a densely populated area with urban conditions. The schools in this area service the populations of Phoenix in Durban and the neighbouring areas. Meyer (2007:18) describes the conditions at Phoenix as having the dubious distinction of the highest crime rates in Durban associated with high levels of drug abuse and car hijackings. Phoenix also has the highest number of common assaults reported in Durban. The possibility naturally existed that principals of schools in such areas may experience higher than normal stress levels on account of grim socio-economic factors and the accompanying negative media reports. Limited resources at these schools would inevitably also contribute to increased stress levels amongst school principals.

1.6.2.3 Data analysis and interpretation

The data was analysed using the Maslach Burnout Inventory (MBI) Scoring Keys that relate to techniques typical of quantitative analysis as set out in the inventory manual (Maslach & Jackson, 1981:2). These scoring keys are explained in more detail in chapter three. A comparison of the results of the MBI questionnaire before and after attending the Art of Living workshop was done. In addition, the findings of the interviews were considered to reveal the main stressors that the participant principals experienced; and to determine the degree of success of the Art of Living workshop on employing breathing techniques to alleviate stress.

1.6.2.4 Trustworthiness and transferability

The Maslach Burnout Inventory (MBI) questionnaire is one of the very first scientifically validated instruments to determine burnout and it has been the most widely used in scholarly research (Enzmann, 2005:495). The reliability coefficients of the MBI-Internal consistency were estimated by Cronbach's

coefficient alpha ($n=1,316$). The reliability coefficients for the subscales were the following: .90 for Emotional Exhaustion, .79 for Depersonalisation, and .71 for Personal Accomplishment. The standard error of measurement for each subscale is as follows: 3.80 for Emotional Exhaustion, 3.16 for Depersonalisation and 3.73 for Personal Accomplishment (Maslach, Jackson & Leiter, 1997:7).

Apart from the reliability and validity of the MBI questionnaire as a quantitative research instrument, the researcher was also sensitised to the trustworthiness and transferability of the data collected via the interviewing process. Schulze (2002:79) states that the qualitative researcher is concerned with trustworthiness and transferability to prevent bias in the research. Transferability demonstrates the applicability of one set of findings to another context (Schulze, 1999:63). The important question to ask is how transferable and applicable are these findings to another setting or group of people (De Vos et al, 2002:351). In this regard, the qualitative researcher does not aim to generalise the results but rather intends them to be used for the extension of understanding (Schulze, 2002:78). In subsequent research, researchers can use the findings of the research to extend their understanding of the topic further (Schulze, 2002:79).

In order to ensure validity and trustworthiness, triangulation was employed by conducting a literature review and using both quantitative and qualitative data collecting instruments, namely, the Maslach Burnout Inventory questionnaire and the semi-structured individual interviews.

1.6.2.5 Ethical Considerations

The study took into consideration the need for anonymity and confidentiality of participant responses (Leiter & Maslach, 2000:157).

The participants were thus informed that:

- Participation is voluntary.

- The responses are anonymous in that no individual names will be used in the reporting process.
- The responses will be confidential. The report will only discuss the pattern of answers as an aggregated whole. It will not present the answers of one individual. The participants will have access to the reports and copies will be available to all the participants.

1.7 CLARIFICATION OF CONCEPTS

1.7.1 Stress and burnout

Hayward (1993:5) defines stress as the individual's negative or positive response to a situation, whether the situation belongs to the past, the present or is anticipated in the future. Responses may take various forms, namely distress (i.e. bad stress), eustress (i.e. good stress), hyperstress (i.e. overstress) or hypostress (i.e. understress) (Hayward, 1992:15). It is the individual's unique perception of the situation, which determines the degree of experienced negative or positive stress.

The term 'burnout' is a metaphor that refers to the draining of energy, that is, more energy is lost than replenished (Dierendonck et al, 2005:623).

For people who work under stressful conditions, the chronic stress experienced by them can lead to 'burnout'. Principals that have to manage their schools under challenging circumstances are prone to develop chronic stress that could lead to burnout, but this depends largely on how they view their work experiences on account of personality types A or B (Friedman & Ulmer, 1985:6). Burnout is generally viewed as a long-term stress reaction specific to those individuals who have been working under unrelieved stressful conditions for too long. A person is not classified as "burned out" or "not burned out" but instead is placed on a continuum from "more" to "less" burned out. We would thus view an individual as having high, moderate or low levels of burnout. The Maslach Burnout Inventory

questionnaire is used to measure the frequency of feelings of emotional exhaustion, depersonalisation or personal accomplishment as described in par 1.6.2.1(a).

1.7.2 Stress intervention programme

Intervention research is an example of applied research with a specific intervention mission. The intervention programme is directed towards shedding light on or providing possible solutions to practical problems (De Vos et al, 2002:112). In this case, it relates to the alleviation of stress. The stress intervention programme in this study is the Art of Living workshop described in paragraph 1.6.2.1(b).

1.7.3 Primary School Principal

The principal is the head of a public or private school. 'Primary' in this context refers to elementary or the first or initial form of schooling that a learner undergoes (Marckwardt, Cassidy & McMillan, 1997:1003). The task of a primary school principal is similar to that of a secondary school principal and relates to being leader (Ripley, 1997:58), manager (Chaplain, 2001:202) and administrator (Sarros, 1998:184).

1.8 CHAPTER DIVISION

Chapter One: Chapter one represents an orientation of the study. Apart from motivating the study and providing a background to the study, the problem statement with research questions and research aims are discussed, followed by an explanation of the research methodology employed in order to find answers to the research questions.

Chapter Two: Chapter two consists of a literature review of and theoretical background to the phenomenon of stress as experienced by primary school principals.

Chapter Three: In chapter three, the research design is discussed. This relates to an explanation of the choice of research paradigm and related research methods and the techniques employed to analyse and interpret the research data. Validity and reliability measures and ethical considerations are also explained in chapter three.

Chapter Four: Chapter four comprises the research findings based on a detailed analysis and interpretation of the data from the empirical investigation.

Chapter Five: Chapter five comprises a summary of the findings, the drawing of conclusions and recommendations for further study.

1.9 SUMMARY

The aim of this study was to determine the role and impact of a stress intervention programme that is based on breathing techniques, on the functioning of primary school principals. It is assumed that school principals are increasingly prone to experiencing high levels of stress. When schools are served by such leaders, the entire school is affected and the mission of maximising teaching and learning is hampered (Metzger, 2003:657). Stress among principals thus has an effect on their management responsibilities, which in turn impacts negatively on the teaching and learning experiences in the school. It is therefore imperative that stress is not allowed to spiral out of control. On account of the inevitability of stress occurrences, there is a need for stress relief by the application of coping strategies. The workshop on breathing techniques is one such strategy, which is investigated in this study to alleviate stress amongst primary school principals.

CHAPTER TWO

A LITERATURE STUDY ON PRINCIPALS' STRESS, EFFECTS AND COPING STRATEGIES

2.1 INTRODUCTION

The term stress was first used by Dr. Hans Selye, an endocrinologist, who found that there was a similarity in the rats that he studied and the patients in his rooms - that they were 'just feeling sick,' not in a specific way, but it seemed, in direct response to a series of external pressures or stimuli. He called this the General Adaptation Syndrome, and later called it **stress** (Petit, 2005:34). In fact Selye (1974:85) believes that stress is the spice of life. Everybody experiences stress. What differs is how people view the situations and events and react to them.

The experience of stress at work occurs when workers have difficulty in coping with the demands of the job. Walsh (1998:15), Nhundu (1999:257) and Usher (1998:208) agree that the experience of workplace stress is a result of the interaction between the workers and the environment. There is an excess of demands beyond an individual's ability to cope.

The school principal's job often comprises of role conflict, role ambiguity and role overload and this has been the cause of principals' stress and burnout. The complex nature of principals' jobs causes occupational stress (Whitaker, 1996:61; Torelli & Gmelch, 1993:375) which is compounded by the fact that principals are very often drawn from the ranks of teachers without any managerial training. The lack of adequate training for the job may result in a misfit between the individual and the job environment and may cause occupational stress (Motholo, 1995:7).

In order to evaluate the impact of the stress intervention programme, the literature review focuses on stress and its effects and on previous studies on the

main stressors as experienced by principals. The chapter concludes with coping strategies that helps one cope with stress, thereby addressing the sub-question 'What do stress intervention strategies imply.'

2. 2 DEFINING STRESS AND STRESSORS

The term 'stress' is used to mean different things in different disciplines, for example, in medicine, for physiological studies as well as in psychological research (Chaplain, 2001:198). It is therefore important to firstly reach common ground on the meaning of stress. There are many definitions of stress, which have been changed and adapted over time by medical practitioners, different authors and researchers across the broad spectrum of human inquiry. These definitions range from Selye's response-based interpretation of stress to definitions that are interactional in nature (Brown & Ralph, 1998:40); but stress is generally seen as a consequence of a dynamic relationship between a person and the environment (Schlebusch, 2000:4).

Ostell (1998:77), Lazarus and Folkman (1984:18) and Schafer (1996:3) agree that stress is a particular relationship between people and their environments that are appraised by them as exceeding their resources and endangering their well-being. It is a reaction to circumstances and events, whether real or imagined, internal or external, which exceeds a person's resources for coping. Events in our lives place demands on our internal and external coping resources. If the demands exceed our coping resources, we experience negative stress. If we are able to manage and utilise our resources to handle the situation we will experience positive stress. Lazarus and Folkman (1984:18) emphasise that the stress is neither in the environment nor in the person but in the complex relationship between the two. Many factors in the environment and in the person combine to generate stress and its outcomes.

In work situations stress is caused when peoples' resources are not well matched to the level of the job demands placed on them. In other words there is an imbalance between the demands of the job and the capacity of the individual to cope effectively (Cox, Kuk & Leiter, 1993:186).

2.2.1 Stimulus definitions

Stimulus definitions focus on events in the environment such as natural disasters, illness or unemployment. This approach views stress as a demand made upon the adaptive capacities of the mind and body. It is assumed that certain situations in life are normatively stressful; the weakness in this approach is that it does not allow for individual differences in the evaluation of events (Lazarus & Folkman, 1984:21). The important role played by personality and one's perception of stress is ignored (Motholo, 1995:10). With this approach, the emphasis falls on the *causes* rather than the *reaction*.

2.2.2 Response definitions

The response approach focuses on the response of the individual to the pressure exerted on him/her. The focus here is on the consequences, rather than the cause of stress (Motholo, 1995:10). In this approach, we have no systematic way of identifying prospectively what will be a stressor and what will not. We must await the reaction (Lazarus & Folkman, 1984:14). The criticism leveled against this approach is that it focuses too much attention on physiological reactions to the detriment of psychological, social and other factors that play a role in the process of stress (Motholo, 1995:10).

2.2.3 The interactional approach

According to the interactionist view of stress, the *relationship* between the *person* and the *environment* is important in defining stress (Lazarus & Folkman,

1984:18). Every individual is unique and therefore responds differently to similar situations (Motholo, 1995:10). What may be stressful to one person will not necessarily be stressful to another.

Considering the three approaches to explain stress, it is evident that both stimulus and response definitions have limited use because a stimulus gets defined as stressful only in terms of a response (Lazarus & Folkman, 1984:21). The stimulus definition, which focuses on the environmental stressors only, fails to consider the individual differences. The response definition emphasises the response of a person. The interactional approach, however, considers both the individual and the environment in the stress equation.

For the purposes of this study, stress and burnout will refer to the response of the worker to mismatches between the individual and the workplace and the resultant stress experienced due to the stressors.

2.2.4 Stressors

According to Selye (1974:141), a stressor is that which produces stress. A stressor can be any event, situation, person or object that you perceive as stressful and with which you have difficulty in coping. Although stressors are part of everyone's existence, some people experience them more severely than others (Schlebusch, 1998:16).

2.3 THE BODY'S BIOCHEMICAL WORKINGS AND STRESS

2.3.1 The biological nature of stress

Black (2003:36) explains the biological reactions of stress as follows:

When the brain senses stress, the hypothalamus alerts the pituitary, which, in turn signals the adrenal glands to secrete the hormone cortisol and other substances. In the right amount, cortisol helps regulate the blood pressure, insulin, metabolism and cardiovascular functions. However, chronic stress or extreme stress can trigger the release of too much cortisol and that can spell trouble. Excessive cortisol destroys brain cells in the hippocampus, resulting in short-term memory impairment, rapid weight gain, irritability, mood swings, high blood pressure and fatigue (Black, 2003:36).

Cannon (1929:225) explains that people have displayed very unusual abilities, both physical and mental, in times of stress. The reflex response which prepares organisms to 'fight' or 'escape', involves bodily changes, which assist in making them more energetic and effective in times of fear, pain or rage. The bodily responses described by Cannon (1929:225) are:

- Cessation of processes in the alimentary canal (thus freeing the energy supply for other parts).
- The shifting of blood from the abdominal organs to the organs immediately essential to muscular exertion.
- The increased vigour of contraction of the heart.
- The discharge of extra blood corpuscles from the spleen.
- The deeper respiration.
- The dilation of the bronchioles.
- The quick abolition of the effects of muscular fatigue.
- The mobilising of sugar in the circulation.

A certain amount of stress and the accompanying responses of the body are acceptable. However, when there is prolonged stress, the body becomes exhausted and this may result in illnesses (Vayej, 2002:9).

Selye (1974:27) describes stress as "the non-specific response of the body to any demand made upon it. In this regard the body responds in a stereotyped

manner to stress, regardless of the type of stressor, whether pleasant or unpleasant. This is known as the General Adaptation Syndrome (Selye, 1974:27).

Selye (1974:36) divides the General Adaptation Syndrome into three stages: the alarm reaction, the stage of resistance and the stage of exhaustion. He describes the reaction of the body in the three stages as follows:

- First, in the alarm stage, a person recognizes the stressor and sends signals either fight or flight reactions. Stress hormones such as cortisol are released (Selye, 1974:36).
- In the second stage of resistance or adaptation, the bodily signs of the alarm reaction stage have virtually disappeared (Selye, 1974:36), and the person's resistance rises above normal. A favourite mode of response is initiated. If the problem is solved the stress disappears. If not, this is the stage when physical and/or psychological malfunctioning can appear (Conaway & Coleman, 1984:1).
- This may be followed by the third and final stage of exhaustion, wherein the ability of the individual to cope breaks down due to long and continued exposure to the same stressor. The signs of the alarm reaction stage reappear, but now they are irreversible (Selye, 1974:36).

The general adaptation syndrome described by Selye emphasises the *physiological responses* to environmental stimuli and fails to consider the personality of the person and the subjective assessments of the stressor by the individual (Beard, 1990:110).

2.3.2 Stress, health and disease

The question that comes to mind is, does stress cause disease? According to Lazarus and Folkman (1984:18), stress alone is not a sufficient cause of disease.

To produce stress-linked disease other conditions must also be present such as vulnerable tissues or coping processes that inadequately manage the stress.

Greenglass (2005:504) and Thomas (1999:393) believe that good health and well-being could be considered as combatants of stress. However, one cannot make an automatic assumption that a person who is in good health will not be affected by stress. Health is a complex phenomenon mediated, *inter alia*, by personality, family history and heredity. Some diseases in which stress plays a particularly important role however are high blood pressure, heart diseases and gastric or duodenal ulcers (Selye, 1974:47). Whether the heart, kidney, gastrointestinal tract or brain will suffer most depends on which is the weakest link in the individual (Selye, 1974:46).

2.3.3 Homeostasis

In order to counteract the disruptive effects of the stressors, the biological processes are activated in order to restore homeostatic balance in the organism (Schlebusch, 1998:38). Homeostasis is the ability of an organism to maintain a relatively constant internal environment. It does this by regulating vital bodily functions like breathing, circulation of the blood and body temperature (Schlebusch, 1998:38).

2.3.4 Stress and the mind - body connection

Schlebusch (2000:35) advises that we take a holistic approach to health and wellness, wherein the mind and body are regarded as a unit. Health could take a turn for the worse when one is exposed to high levels of stress because there is a close connection between stress and physical illness. He speaks of the bio-psychological approach, which is based on the principle that biological, psychological and social forces closely interact and affect one's health. People in general function best when they optimize all three. Failure to cope at any of

these levels may seriously increase one's vulnerability to stress (Schlebusch, 2000:35).

2.4 CONDITIONS OF STRESS

A person's reaction to the stressful encounter will determine whether the event is seen as positive or negative. The stress itself is neutral. A negative reaction results in distress. A positive reaction results in eustress (Selye, 1974:27).

2.4.1 Eustress

Eustress is a positive psychological response to a stressor, as indicated by the presence of positive psychological states and refers to the pleasant stress experienced by a person. Eustress results in positive consequences such as enhanced performance and personal growth (Selye, 1974:138; Greenberg, 2004:65; Nelson & Simmons, 2005:106).

2.4.2 Distress

Distress, on the other hand, is a negative psychological response to a stressor, as indicated by the presence of negative psychological states. Distress thus refers to the harmful, unpleasant stress experienced by a person and results in negative consequences such as decreased performance (Selye, 1974:138; Greenberg, 2004:65; Nelson & Simmons, 2005:106).

2.4.3 Burnout

The term 'burnout' is a metaphor that refers to the draining of energy; that is, more energy is lost than replenished (Dierendonck, Garrsen & Visser, 2005:623). Maslach and Schaufeli (1993:9) identify the concept of "burnout" as being the result of prolonged job stress. They maintain stress and burnout are difficult to

separate; the only distinction being with respect to time. Stress and burnout cannot be distinguished based on their symptoms, but rather on the basis of the process, that is, burnout is a long-term process (Maslach & Schaufeli, 1993:10; Hobfall & Freedy, 1993:116; Sarros, 1988:185).

Cherniss (1983:17) also sees burnout as a *process* and describes burnout as a transactional process consisting of three stages. From figure 2.1 it is clear that these three stages relate to job stress, strain and defensive coping:

- Job stress as the first stage involves an imbalance between the resources and demand (*Stress*).
- Strain as the second stage is the immediate short-term emotional response to this imbalance characterised by feelings of anxiety, tension, fatigue and exhaustion (*Strain*).
- Defensive coping as the third stage consists of a number of changes in attitude and behaviour, such as a tendency to treat clients in a detached and mechanical fashion or a cynical preoccupation of one's needs (*Defensive Coping*).

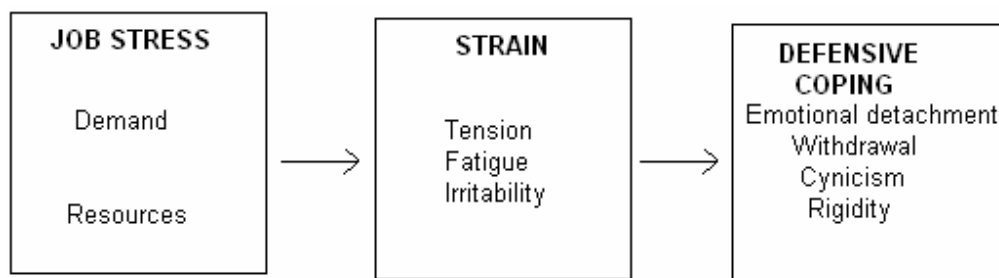


Figure 2.1: Transactional Definition of Burnout (Cherniss, 1983:13).

From figure 2.1 it is clear that burnout is a process that begins with excessive and prolonged job *stress*. This stress produces *strain* in the worker (feelings of tension, irritability and fatigue). The process is completed when the workers *cope defensively* by detaching themselves psychologically from the job and becoming apathetic, cynical or rigid (Cherniss, 1983:21).

Previously committed professionals like teachers, nurses, doctors, social workers and police, disengage from their work in response to stress experienced in the workplace (Shirom & Melamad, 2005:600). Maintaining a detached relationship with clients serves as a defense mechanism, limiting the stress that might occur. This psychological detachment helps one conserve one's energy for the coping process (Cherniss, 1983:19).

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) is an instrument that measures three dimensions of the burnout syndrome: emotional exhaustion, depersonalisation and personal accomplishment (Maslach, Jackson & Leiter, 1997:96). This multidimensional model of burnout proposed by Maslach (1993:27) is not at odds with the simpler approaches; rather, it incorporates both the single dimension (exhaustion) and extends it by adding two other dimensions, which are, response to others (depersonalisation) and response to self (personal accomplishment), that is, self-evaluation.

The three dimensions of burnout described by Maslach (1982:3-5) are:

- *Emotional Exhaustion*, which includes feelings of fatigue and of being drained by one's work. The workers become emotionally involved in their work and feel overwhelmed by the emotional demands imposed by other people. The emotional resources are depleted and there is no source of replenishment. The workers feel they can no longer give of themselves to others (Maslach, 1982:3).
- *Depersonalisation* refers to a dimension of interpersonal relationships. The workers deal with the emotional burden by detaching themselves emotionally from the client and may display negative, cynical attitudes towards, and a dehumanising treatment of clients (Maslach, 1982:4).
- *Personal Accomplishment* reflects a dimension of self-evaluation. The workers evaluate themselves negatively, particularly with regard to work

with clients. This is accompanied by feelings of a lack of competence in their work with people (Maslach, 1982:3-5; Maslach, 1993:28; Schaufeli, Enzmann & Girault, 1993:200).

Depersonalisation burnout and personal accomplishment burnout are caused by failure to satisfy the motivational needs of recognition, feedback and satisfactory interpersonal relationships, whereas emotional exhaustion burnout is more a consequence of work-stress (Sarros,1988:193). In the empirical investigation the researcher relies extensively on the research of Maslach (1982) to determine the stress levels of participants (chapters 3 & 4).

2.4.4 Engagement

In contrast to burnout, engagement is an energetic state in which one is dedicated to excellent performance at work and confident of one's effectiveness (Maslach, Jackson & Leiter, 1997:209). Engagement and burnout are on the opposite ends of a continuum - when one is high, the other is low (Leiter & Maslach, 2003:3).

People who are burned out from their work become cynical and ineffective; and will do the bare minimum. The quality of their work and their relationship with people will decline. In contrast, for people who are engaged with their work - who are energetic, involved and effective - the quality of their work will improve (Leiter & Maslach, 2003:4).

It appears that burnout is more likely to occur when there is a major mismatch between the *nature of the job* and the *nature of the people* who do the job (Maslach & Leiter, 1997:9). The following six areas of work life either cause problems of burnout or lead to engagement (Leiter & Maslach, 2003:5):

- The first area is 'Workload', which is defined as the extent to which people can handle responsibilities.

- The second area is 'Control' people feel in their job.
- The third area is 'Reward,' which concerns the extent of recognition given to people within the organization.
- The fourth area is 'Community,' which deals with how responsive the organisation is to the staff's needs.
- The fifth area is 'Fairness,' which concerns the respect people receive within the organisation.
- The sixth and final area is 'Values,' referring to the individual's values and whether or not these values match those of the organisation in which the individual works.

When the six areas of work life do not match the workers' expectations, the resultant experience of burnout may cause (Leiter & Maslach, 2003:5):

- An erosion of professional engagement:
What started out as important, meaningful, fascinating work becomes unpleasant, unfulfilling and meaningless.
- An erosion of emotions:
The positive feelings of enthusiasm, dedication, security and enjoyment fade away and are replaced by anger, anxiety and depression.
- A problem of fit between the person and the job:
Individuals see this imbalance as a personal crisis, but it is also the workplace that is affected (Maslach & Leiter, 1997:23).

2.4.5 Depression

Whereas burnout is context specific in that it refers to depletion of an individual's energetic resources at work (Shirom & Melamad, 2005:607), depression signifies a generalised distress encompassing all life domains. Depression is therefore 'context-free' i.e. generalisation of the person's symptoms across all situations, whereas burnout is situation-specific relating to the specific job (Maslach &

Schaufeli, 1993:9). Burnout may therefore lead to depression if a person feels overwhelmed by work stress and aggravating circumstances in the person's personal life. This implies that a condition of depression should not necessarily be attributed to extensive job stress only; but a relation could be drawn between work stress and depression.

2.4.6 Rustout

The total absence of stress, rustout, is just as disastrous as too much of it; thus too little work and too much monotony may bring forth the same physiological and psychological symptoms resulting in high levels of frustration with a hampering effect on productivity (Van Der Linde, 2000:376).

2.4.7 The optimal stress level

Selye (1974:72) describes the optimal stress level as the level of stress at which one feels most comfortable. An excess of continuous stress (burnout) is caused by compulsive pursuits of perfection, while a lack of stress (rustout) is caused by one's purposeless existence. Either extreme is undesirable. One must, therefore, analyse oneself and try to find one's optimal stress level at which optimum performance is achieved.

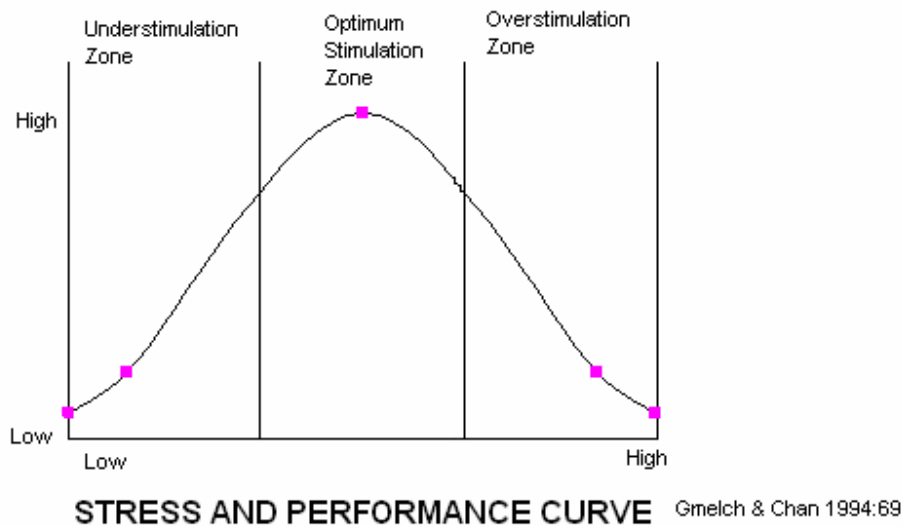
Figure 2.2

Fig 2.2 STRESS AND PERFORMANCE CURVE: adapted from Gmelch and Chan, (1994:69).

In this drawing stress ranges from low to high on the horizontal axis; performance ranges from low to high on the vertical axis; and the bell-shaped curve is divided into three zones of stimulation: understimulation, optimum stimulation, and overstimulation.

The first zone of *understimulation* is caused by routine and boredom. The principals here are underchallenged and suffer from fatigue, frustration and dissatisfaction. The job does not present the person with enough challenges, the tasks being relatively simple, routine and understimulating, and the person may suffer from rustout (Gmelch & Chan, 1994:69).

In the *overstimulation* zone, the principals will suffer from distress, which then leads to irrational problem solving, exhaustion, illness and low self-esteem. They

feel that the job is beyond their abilities, and this may result in burnout (Gmelch & Chan, 1994:69).

Optimal performance results from the complexity and challenges of the job equaling the capacity of the person. Under this condition, the person suffers neither rustout nor burnout but is optimally stimulated for peak performance. Principals in the optimum stimulation zone manifest creativity, rational problem solving, progress, change and satisfaction (Gmelch & Chan, 1994:69). Schlebusch (2000:27) explains that one's position on the stress curve is dynamic and varied and the shape of the curve differs from one person to the next. Although a person's level of performance increases as stress increases, this stress cannot continue indefinitely. When people pass the peak performance on the stress curve, their health and performance are negatively affected (Schlebusch, 2000:27).

2.5 RELATIVITY OF STRESS EFFECT

Behaviour pattern-Type A or Type B?

Friedman and Rosenman discovered a syndrome called Type A Behaviour Pattern (TABP), which is a complex combination of emotional reactions (Friedman & Ulmer, 1985: 6). The personality traits exhibited by people with this type of behaviour include excessive competitive drive, impatience, a sense of urgency and a display of hostility. The stress this personality type experiences at work is a contributory factor to heart attacks and their emotional stress is a potential cause of heart diseases (Friedman & Ulmer, 1985:7). Opposed to Type A personalities, Type B personalities feel no sense of urgency and they exhibit no excessive competitive drive or hostility. The incidence of coronary heart disease was found to be higher among Type A personalities than among Type B personalities yet their diets and exercise habits were almost identical (Friedman & Ulmer, 1985:12).

The school setting always seems to act as a trigger to bring out Type A behaviour. Gmelch and Chan (1994:6) found that principals with Type A behaviour work hard and fast to succeed, constantly setting and striving towards goals, and are highly achievement-oriented, pushing themselves to their limits. However, while they may receive their rewards, they live by dangerous unhealthy rules, and the odds are greater that they may suffer from coronary heart disease. Type Bs, on the other hand, are able to relax without feeling guilty, and work without agitation (Gmelch & Chan, 1994:6). Unlike Type As, Type Bs adopt a more realistic view of life and work and are not inclined to take on more than that with which they can cope. They do not always like to work to deadlines and are better at delegating. They are secure in themselves and in what they do, and always maintain a sense of balance in their lives (Brown & Ralph, 1998:43).

2.6 CAUSES OF STRESS

2.6.1 General stressors

General stressors include life events such as natural disasters or man-made catastrophes such as wars; or the death of a loved one, illness, unemployment or divorce (Lazarus and Folkman, 1984:311). General stressors also includes the little things that can irritate or distress people, for example, having an argument with a spouse, a sick dog, an inconsiderate smoker, having too many responsibilities, or feeling lonely. These are the *daily hassles* people are faced with every day (Lazarus & Folkman, 1984:311). In comparing life events with daily hassles, Lazarus and Folkman (1984:311) point out that daily hassles are far superior in producing psychological and somatic symptoms. Over time, daily hassles can have a significant cumulative effect (Greenberg, 2004:87; Chaplain, 2001:212).

School principals will be subjected to the general stressors in the course of life, as experienced by people in all areas of work. However, in addition to the

general stressors, they are also likely to experience work-related stress at school.

2.6.2 School stressors

2.6.2.1 The changing role of the principal

Jones (1999:491) in a study of principals' stress in Wales found that the principals were finding difficulty in coping with their jobs because of their changing role. Three of the twelve principals in the study had suffered from stress-related illnesses and in the interview the demanding nature of the job was emphasised. Many of the principals discussed health problems associated with worrying about the job; symptoms mentioned were the inability to sleep, headaches, tiredness and high blood pressure. All the principals in the study claimed the job had become stressful during the last five to six years.

It is found worldwide that the principal's task, which had primarily been that of academic leader, now, includes being mediator, facilitator, counsellor and even comforter (Williams, 1997:12). Although the traditional powers over curriculum and school standards are taken over by the government in return new managerial and financial powers, for which principals have little or no training, are given to them (Ostell, 1998:76). Within the South African context, new and extensive demands are made on school principals. They are increasingly responsible for managing people and financial matters, which makes higher demands on their coping abilities (Niehaus & Myburgh, 1999:9).

2.6.2.2 Isolation

Allison (1997 (a):1103) examined the causes of principals' stress in British Columbian schools in Canada and found that isolation was one of the causes of stress. An American study by Colgan (2003:24) revealed that there are few

people on whom principals could lean for support and encouragement. A similar situation exists in South Africa where educators have little opportunities for social interaction (Beard, 1990:111).

2.6.2.3 Work overload and increasing demands

The increasing demands made on principals across the globe involve excessively taxing administrative responsibilities (Whitaker, 1995:290; Conaway & Coleman, 1984:1) and excessive paperwork (Monteith, Smith & Marais, 2001:89). In addition, Government legislation and greater expectations from school governors, the public and government (Chaplain, 2001:200; Whitaker, 1996:60) add to the stress experienced by school principals. Inconvenient hours and constant deadlines create stress that contributes to poor mental and physical health. The high level of activity and busy work schedule of the principal with numerous interruptions also creates stress (Lyons, 1990:45; Sarros, 1988:184; Nhundu, 1999:261; Carr, 1994:27; Gmelch & Chan, 1994:8). Principals in South Africa are also suffering from work overload due to the wide range of responsibilities (Motholo, 1995:20). They have to work closely with educators, learners, parents, School Governing Bodies and departmental officials.

2.6.2.4 Inadequate resources

Inadequate resources are a worldwide phenomenon impacting negatively on principals' managing competencies and related stress levels. Nhundu (1999:26) reports his findings regarding the lack of learning materials and inadequate resources in a Zimbabwean study. Principals reported having to cope with scarce and limited resources in British Columbia, Canada (Allison, 1997 (a):1103). Monteith et al, (2001:89) refer to the lack of human resources in a South African study where principals reported that there were insufficient personnel to handle assignments adequately. Lack of infrastructure, unpleasant job environments and limited instructional material significantly adds to the frustration and stress

experienced by principals (Motholo, 1995:35; Beard, 1990:111; Engelbrecht, Oswald, Swart & Eloff, 2003:294).

2.6.2.5 Time constraints

The heavy demands of the work to be completed within the limited period of time were reported in Australia (Whan & Thomas, 1996:453), America (Torelli & Gmelch, 1993:378; Lyons, 1990:45; Colgan, 2003:24; Conaway & Coleman, 1984:1) and Canada (Allison, 1997(a):1103). In the South African context Motholo (1995:21) reports that the time frames within which tasks must be completed puts principals under tremendous pressure.

2.6.2.6 Conflict resolution

Managing people is a prime responsibility of principals. Responsibility for people, as opposed to inanimate objects, correlates significantly to stress (Gmelch & Chan, 1994:9). Everyday interactions with staff, students and parents (Torelli & Gmelch, 1993:378; Nhundu, 1999:261; Jones, 1999:492), interpersonal clashes (Conaway & Coleman, 1984:1; Carr, 1994:27; Sarros, 1988:184), resolving conflicts (Lyons, 1990:45), and negative work relationships (Mackler, 1996:84) are some of the stressors experienced by principals in dealing with people. Educators' attitudes and behaviour (Whan & Thomas, 1996:453) also add to the stress levels of principals. In addition, learner behaviour (Chaplain, 2001:200; Whan & Thomas, 1996:453) is a further cause of stress for principals. All of these conditions within a context of dealing with crisis (Monteith et al,2001:89) and the management of conflict within multicultural school environments (Niehaus & Myburgh, 1999:13) are characteristics pertaining to the South African situation.

2.6.2.7 Lack of support

In addition to isolation, principals also reported feelings of a lack of support from the Education Department in an Australian study (Carr, 1994:27), and a lack of support from colleagues and supervisors in an American study (Torelli & Gmelch, 1993:375). In South Africa a lack of support structures with the implementation of a changed curriculum is evident in the declining standards of education. The need exists for Government to support education by listening to legitimate wage demands, improving classroom practices and discipline in order to ensure education recovery (Bloch, 2007:22).

2.6.2.8 Financial management

Handling increased financial management responsibility (Morgan, Dunn, Fraser & Cairns, 1992:219) and having financial difficulties (Gmelch & Chan, 1994:7) were cited as stressors with regard to handling finances. Principals in the United Kingdom interviewed by Chaplain (2001:206) reported that managing the school budget took up 15 to 20 % of their time. Insufficient funds threatened the school's priorities. In South Africa the quintile ranking of schools and the resultant disparity in departmental funding, uncertainty about future financial allocations and a lack of information in this respect creates stress in principals (Dorasamy, 2007:1).

2.6.2.9 Learner achievement

Poor learner results (Nhundu, 1999:261), lack of clear standards (Gmelch & Chan, 1994:8) and maintaining standards of education (Chaplain, 2001:200) are stress factors related to learner achievement. In addition, curriculum development and implementation and frequent changes in the curriculum and assessment policies cause stress (Morgan et al, 1992:219; Whan & Thomas, 1996:453; Ostell, 1998:84). Learner achievement is also affected by a lack of

resources and inadequate training of staff to implement the new curriculum (Chaplain, 2001:206). Principals expressed dissatisfaction with the performance of teaching staff as this affects pupil achievement (Ostell, 1998:84). Within the South African context, the Outcomes Based Education and revised National Curriculum Statement implemented by the ANC Government has resulted in poor foundations in our education and schooling system (Schulze & Steyn, 2003:139; Bloch, 2007:22). In addition learner achievement is negatively impacted by poorly motivated educators who do not give of their best (Monteith et al, 2001:89).

2.6.2.10 Recognition and rewards

In a study of American principals, Mackler (1996:84) found that insufficient respect, recognition and rewards afforded by the job were predictors of burnout for education managers. Sarros (1988:89) also found a deteriorating sense of status and recognition in a Canadian study. Low salaries were found to be causes of stress in South Africa (Monteith et al, 2001:189), Zimbabwe (Nhundu, 1999:261) and America (Colgan, 2003:24).

2.6.2.11 Managing buildings and grounds

Managing the buildings and grounds creates problems for principals that could lead to stress (Gmelch & Chan, 1994:8; Whan & Thomas, 1996:453; Ostell, 1998:84). In South Africa building maintenance poses a challenge for the principal because of limited funds (Dorasamy, 2007:1). The destruction of school property on account of vandalism within a societal sphere of increasingly uncontrollable crime also impacts negatively on South African principals' responsibilities (Motholo, 1995:35).

2.6.2.12 Change

Change alone does not necessarily generate stress. It is a fact that life events such as menopause, the empty nest syndrome and retirement do not necessarily pose problems for most people (Lazarus & Folkman, 1984:309). It is not the change itself, but rather what it means to the person, that creates stress, depending on the person's history, stage of life and circumstances (Lazarus & Folkman, 1984:309).

Educational change is one theme that has resonated through education internationally since the 1960s (Brown, Ralph & Brember, 2002:10) and deems to be a very significant factor in determining and contributing to stress (Brown et al, 2002:10; Jones, 1999:492; Gmelch & Chan, 1994:8). Of course, a change in the education system is of special significance to school principals and most of the stress experienced by principals was found to be due to the rapid and continual changes that have occurred in the last decade (Brown & Ralph, 1998:39). The changing education milieu has meant changing teachers and their practices.

The South African Education system has also undergone major changes due to the political changes in the country. The changes following educational transformation have been fundamental, turbulent and rapid. Since 1994, the new government has been committed to transform educational policies. This has caused considerable stress for educationists, especially principals (Van Zyl & Peterson, 1999:74; Engelbrecht, Oswald, Swart & Eloff, 2003:295).

2.6.2.13 Autonomy

Within the current sphere of accentuating the importance of democratic principles, decreasing autonomy, the loss of control and the perceived loss of power in their jobs have been reported by principals as a source of stress (Mackler, 1996:84; Whitaker, 1995:290; Torelli & Gmelch, 1993:278). In addition,

principals experienced stress due to shared decision-making (Whitaker, 1996:60). This involves obtaining input from many different groups before decisions are made, adding time and complexity to the principal's job (Whitaker, 1995:291).

2.6.2.14 Role conflict

Conflicting role expectations create stress for principals. (Conaway & Coleman, 1984:1; Gmelch & Chan, 1994:7; Lyons, 1990:44; Mackler, 1996:84). A principal may experience role conflict if there are different role expectations from teachers, students, community members and superintendents. For example, the superintendent expects the principal to supervise teachers' work closely, but the teachers expect minimal supervision as they are professionals. The resultant role conflict creates stress for the principal.

2.6.2.15 Job ambiguity

Inadequate information about job responsibilities as well as increased demands from the government, community, teachers and learners has been found to lead to stress for principals (Gmelch & Chan, 1994:7). In the South African context principals are accountable for everything that happens at the school because of expected site-based governance, however, they are subjected to strict government control and restricted by National and Provincial policies.

2.6.2.16 The size of the school

The size of the school and the number of learners and staff (Gmelch & Chan, 1994:7), and overcrowded classes (Nhundu, 1999:261) contribute to the stress levels of principals. In South Africa large classes and an increasingly higher number of learners per class, especially in the previously disadvantaged schools,

affects the tone, discipline and noise levels; creating undue stress to principals (Engelbrecht et al, 2003:294; Niehaus & Myburgh, 1996:104).

2.6.2.17 Lack of opportunity

Limited chances of promotion (Nhundu, 1999:261) and a lack of opportunity for advancement (Monteith et al, 2001:89) were cited as stressors by principals in Zimbabwe and South Africa respectively. There being only a few promotion posts higher than the principal, often principals remain in their positions till retirement.

2.6.2.18 Reflection

There are differences in the main sources of stress between countries based on the precise characteristics of the National Education Department systems, the socio-economic circumstances of countries and schools in those countries; and the prevailing attitudes and values regarding teachers and schools as a whole (Kyriacou, 2001:29). The South African scenario is beset by unruly learners, dismal working conditions, massive workloads and a lack of support (Davids & Makwabe, 2007:1). The low morale and dissatisfaction of many South African educators was evident in the June 2007 public servants' strike and principals have the unenviable task of motivating their staff. This is likely to generate considerable stress amongst principals.

2.7 THE CONSEQUENCES OF STRESS

The potential effects of burnout are serious, both for the individual staff members and for the entire organization (Noworol, Zarczynski, Fafrowicz & Marek, 1993:164). We must, therefore, consider both the individual and the school as an organisation in the stress equation (Brown & Ralph, 1998:41). At school level, the principal, being an important role-player in the education process, is most vulnerable to stress (Motholo, 1995:36). When the head of an institution is

stressed, this can have a negative effect on the school as a whole, affecting educators and learners.

2.7.1 Individual consequences

People who are unable to cope effectively with environmental demands, that they perceive to be threatening, soon begin to show signs of stress. Individual consequences of stress have been found to have a variety of manifestations. The person may experience the following physiological, psychological, behavioural and/or intellectual symptoms of stress (Traverse & Cooper, 1998:59):

2.7.1.1 Physiological manifestations

As described in paragraph 2.3 there are bodily reactions to stress. When a person is threatened, the body prepares to respond by confronting threat or escaping from it. The responses are triggered by the sympathetic nervous system, which stimulates a discharge of hormones, in particular, adrenaline and noradrenaline. The changes that follow include (Usher, 1998:211):

- Near shutdown of the digestive system.
- Improved visual perception and muscle response.
- High blood pressure, blood sugar and cholesterol levels.
- Increased breathing and heart rate.

However, when these threat responses continue for too long, they can become dangerous and can result in physical disturbances. Physical signs of stress could include heart disease, illness, fatigue, and depleted energy resources (Traverse & Cooper, 1998:59); headaches, ulcers, insomnia, increased heart rates and cardiovascular disease (Black, 2003:36); muscular and psychosomatic symptoms, stuttering, dryness of mouth or throat, indigestion, diarrhea, dizziness, increased perspiration, frequent colds and flu, and lower back pain (Woodbridge, 1998:63).

A principal who is suffering from stress may experience one or more of the physiological symptoms of stress described above. In order to counteract the negative bodily reactions to stress, breathing techniques, which reduce stress levels and restore a sense of well-being and good health, are recommended in the Art of Living Workshops (Burge & Boucherle, 1996:20).

2.7.1.2. Psychological manifestations

Psychological distress is manifested as disturbances in thought, emotion and behaviour that are disruptive to normal functioning (Ostell, 1998:77). These disturbances, sometimes known as *stress reactions* or *stress responses*, for example, anxiety, are not indications of organic disease processes but of failure to cope adequately with work, social, domestic or personal circumstances (Ostell, 1998:77).

Some of the emotional signs of stress could include dissatisfaction, fear, frustration and low self-esteem with the possible result of burnout (Traverse & Cooper, 1998:59). Other symptoms listed by Black (2003:37) include outbursts of anger, confusion, indecisiveness and constant worry. Serious stress could lead to panic attacks and feelings of inadequacy. Woodbridge (1998:63) includes feelings of irrationality, nightmares, dramatic mood changes, loneliness, apathy or negative feelings as the psychological symptoms of stress.

In contrast to the physiological reactions of stress which affect the body, the psychological manifestations of stress affect the mind. Principals must become aware of any negative thoughts, feelings or emotions they may experience. The breathing exercises practiced in the Art of Living workshop harmonises the body and mind so that frustration and anger get relieved (Burge & Boucherle, 1996:20).

2.7.1.3 Behavioural manifestations

Behavioural problems could include appetite disorders, excessive smoking and alcohol and/or drug abuse, violence, inability to sleep, and withdrawal from work, that is, absence and/or resignation from the profession (Traverse & Cooper, 1998:59). Deteriorating relationships with other people, impulsive behaviour, fighting, stealing, loss of interest in appearance, poor attitude towards others, attention-seeking antics, accident proneness and shouting are also some of the behavioural symptoms that may be displayed because of stress (Woodbridge, 1998:63).

2.7.1.4 Intellectual symptoms

Intellectual symptoms of stress could include forgetfulness, preoccupation, and poor concentration, lack of attention to detail, reduced creativity, difficulty in making decisions, oversensitivity to criticism and mental confusion (Woodbridge, 1998:63).

2.7.1.5 Reflection

There has been an increase in the demands made on school principals in recent years, and this has resulted in an increase in their stress levels (Williams, 1997:12). Stress can affect the physical and/or psychological well-being of the school principal. It is, therefore, important that principals be sensitised to the effects of stress and to intervention programmes to assist in mediating against the negative effects of stress (Motholo, 1995:17).

2.7.2 Organisational consequences

The following are some of the organisational consequences of stress encountered by individuals including principals and educators that may impact negatively on the school:

2.7.2.1 Early retirement

Educators experience a great deal of stress that may result in depression, exhaustion, poor performance and attitudes. This may be due to burnout where emotional exhaustion, frustration, depersonalisation and feelings of low personal accomplishment pervade the work environment (Schwazer & Greenglass, 1999:238; Whitaker, 1996:61). In the South African context, too much unnecessary stress exists on account of societal circumstances such as high crime rates and a lack of sufficient employable skills which may cause illness, early retirement and even death (Van Der Linde, 2000:375).

2.7.2.2 Absenteeism

Burnout plays an important role in absenteeism (Dierendonck, Garrsen & Visser, 2005:623; Fox, 2005:419; Noworol, Zarczynski, Fafrowicz & Marek, 1993:164; Maslach & Schaufeli, 1993:14). In the South African context, educators who experience stress are often absent, and the school as an organisation is affected (Van Der Linde, 2000:379; Beard, 1990:110; Olivier & Venter, 2003:186). Classes are unattended resulting in discipline problems. Further stress is created for the principal and the educators who are present because they have to do the work of the absent educator.

2.7.2.3 Job turnover

Occupational stress results in job turnover, which will impact negatively on the organisation (Dierendonck et al, 2005:623; Noworol, Zarczynski, Fafrowicz & Marek, 1993:164; Maslach & Schaufeli, 1993: 14). This, in turn, will necessitate the need for employee replacement and training (Fox, 2005:419). High personnel turnover in South Africa because of stress is pointed out by Beard (1990:110).

2.7.2.4 Poor work performance

Poor work performance, in terms of both productivity and the quality of work may follow due to the negative attitudes and behaviour of workers who experience burnout ((Maslach & Schaufeli, 1993:15; Dierendonck et al, 2005:623). In describing South African educators Schulze and Steyn (2003:139) point out those educators who are demotivated, often display signs of apathy and indifference to their work. Educators who are stressed are unable to perform consistently at high levels (Van Der Linde, 2000:375).

2.7.2.5 Low morale

Burnout can lead to deterioration in the quality of care or service provided and it appears to be a factor in the low morale of the workers in the organisation (Maslach & Schaufeli, 1993:14; Noworol et al, 1993:164). In South Africa educators constantly complain about low morale (Olivier & Venter, 2003:186; Motholo, 1995:29). They are reluctant to attend any after school activities and often waste teaching time, doing the bare minimum (Motholo, 1995:29).

It seems that within the South African educational context, the quality of education has declined drastically because of various factors relating to work stress. When educators and principals are unproductive due to stress and the

quality of education is sub-standard, a country's economy is eventually affected (Van Der Linde, 2000:379).

2. 8 COPING WITH STRESS

As described in paragraph 2.2, individuals differ in how they respond to stress. In particular, people interpret and evaluate situations in different ways depending, for instance, on their past experiences, personalities, beliefs, vulnerability and resources (Brown & Ralph, 1998:41). A situation perceived as threatening by one person may be seen as challenging or of no significance by another.

The question that arises is: How do successful principals cope with pressures and demands while at the same time gaining additional strength and confidence from their work? Gmelch and Chan (1994: xii) believe they do so by utilising stress as a facilitator of performance. The powerful difference in their performance is their ability to recognise the stressor and take control of its effects. Sarros (1988:184) found that principals in general seem to be coping rather well with job demands. His view is that school principals develop coping techniques that buffer them against work stress. He also believes that in general they possess characteristics, which are necessary for administration and leadership (Sarros, 1988:184).

Stress is an inevitable aspect of life, but what makes the difference in human functioning is how people *cope* with it (Lazarus & Folkman, 1984:21). During the *coping process* there is a *constant change* in the way the person thinks about the situation (Lazarus & Folkman, 1984:141). Perception or cognitive appraisal of the situation is the key to the response (Nelson & Simmons, 2005:104).

2.8.1 Appraising the situation

According to the cognitive theory of stress, people with different perceptions of the same stressor would respond differently. Lazarus and Folkman (1984:53) have identified three kinds of cognitive appraisal: primary, secondary and reappraisal.

(1) Primary appraisal

The degree to which a person experiences stress depends on how much is at stake. If an encounter has a potential for harm, loss, threat or challenge, the primary appraisal will be a *stress appraisal*. During a stress appraisal the person experiences emotions such as fear, anxiety or anger, or eagerness, excitement and exhilaration for a challenge appraisal (Lazarus & Folkman, 1984:32-33). While *threat* is clearly a negative appraisal, *challenge* is regarded as a positive appraisal. In the school situation primary appraisals of the situation will involve appraising the situation in terms of harm, loss, threat or challenge to the school as a whole or to the well-being of the principal, staff and/or learners in the school.

(2) Secondary appraisal

Secondary appraisal is a judgement concerning what might and can be done. The person evaluates whether a particular coping strategy may be used and what the consequences of that action will be (Lazarus & Folkman, 1984:35). The principal, staff and/or learners appraise the situation and consider the choices available to cope with the situation.

(3) Reappraisal

Reappraisal refers to a changed appraisal based on new information from the environment and/or the person (Lazarus & Folkman, 1984:38). This will become

necessary if the coping strategy chosen at school has not been suitable to alleviate the stress situation.

The cognitive appraisal processes described above are not necessarily conscious. An individual may be unaware of the thought processes linked to an appraisal (Lazarus & Folkman, 1984:54). In short, in cognitive appraisal, primary appraisal involves an evaluation of what is at stake for the person and secondary appraisal involves an evaluation of the coping options. Thereafter, reappraisal may occur to reevaluate the situation if new information becomes available.

2.8.2 Demands and resources – concept clarification

2.8.2.1 Demands

Demands are the stressful situations, people or events that the person appraises as threatening (Schwazer & Greenglass, 1999:240). These demands may be internal, for example high aspirations or over-commitment; or external, for example heavy workload, time pressure or high expectations from parents. (Schwazer & Greenglass, 1999:240; Cox, Kuk & Leiter, 1993:186).

2.8.2.2 Resources

The resources of the individual in coping with stress may be external, for example, social support, or internal, for example, job experience or perceived professional self-efficacy (Schwazer & Greenglass, 1999:240). Self-efficacy and social support as methods of coping will be discussed under coping strategies below.

Achieving a balance between demands and resources is a central feature of the coping process (Chaplain, 2001:212). Schafer (1996:6) points out that the potential demands and resources influence the coping process.

| Potential demands | Potential resources for coping |
|--------------------------------|--|
| Work | Emotional intelligence, self awareness and assertiveness |
| Relationships | Skills and abilities |
| Family | Spiritual beliefs |
| Home | Social support systems |
| Holidays | Financial resources, nutritional and dietary balance |
| Study courses | Skills and abilities |
| Starting an exercise programme | Physical fitness, medical health and wellness |
| Financial circumstances | Financial resources |

Table 2.1 Potential demands and resources. Adapted from Schafer, (1996:6)

2.8.3 Resources for coping with stress

Table 2.1 lists the demands made on an individual in the coping process, for example, if there are financial demands, the appropriate financial resources will avoid stress. However, if the circumstances are not met, the resultant inability to cope will create stress.

The coping resources at the disposal of school principals and the strategies they use will determine the extent to which they cope successfully with stress. Principals must be able to negate the effects of stress for themselves, as individuals, as well as for the school as an organisation, in order that they create a harmonious, stress-free environment for the educators and learners. Coping resources include social support, self-efficacy and locus of control.

2.8.3.1 Social support

Social support refers to the support one gets in discussing the causes of stress (Greenberg, 2004:86), and is regarded as the most influential external resource (Schwazer & Greenglass, 1999:244). Working in a positive school environment with social support, sharing concerns with colleagues and/or engaging in social activities can reduce stress (Kyriacou, 1998:10; Cherniss, 1983:120). Principals can see that other school principal experience similar problems and that their problems are not unique (Cherniss, 1983:120). In addition, joining professional associations provides support and helps relieve stress and reduce work-related tensions (Chaplain, 2001:208; Torelli & Gmelch, 1993:375).

2.8.3.2 Self-efficacy

Self-efficacy refers to the belief that one *can* change behaviour by personal actions; and is regarded as the most influential internal resource (Schwazer & Greenglass, 1999:243). Principals who believe that that they have the ability to act appropriately and achieve the desired outcomes cope better with the stress and continue to strive in spite of barriers and setbacks that may exist (Chaplain, 2001:203; Schwazer & Greenglass, 1999:244).

2.8.3.3 Locus of control

Locus of control is concerned with the degree to which individuals believe their life is under their own control (internal locus of control) or the control of others (external locus of control). Principals with an internal locus of control will cope effectively, whereas those with an external locus of control will experience stress and burnout (Chaplain, 2001:203; Cartwright & Whatmore, 2005:165).

2.8.4 Coping strategies

The principals' ability to cope during situations involving tension, frustration or agitation will be reflected in the way they respond to the situation (Niehaus & Myburgh, 1999:10). Coping strategies fall into three main types, namely, direct-action or problem-solving techniques, palliative or emotion- focused techniques and preventative coping (Kyriacou, 1998:9).

2.8.4.1 Direct-action or problem-solving coping

Direct-action or problem-solving coping refers to things that one can do that eliminate the source of stress. This involves changing one's behaviour, the situation or both in some way so that the demands no longer exist. An appropriate action is taken to solve an existing problem so that it is managed successfully in the future (Kyriacou, 1998:9).

According to Lazarus and Folkman (1984:318), problem-solving strategies include trying to come up with several solutions to the problem, gathering information, and making a plan of action and following it. They may include developing new knowledge or skills or negotiating with colleagues. In general, direct-action is the best approach to deal with the stress as the cause of the stress is resolved (Kyriacou, 1998:9). By using these strategies principals cope by actively managing or solving the problem (Niehaus & Myburgh, 1999:10).

2.8.4.2 Palliative or emotion-focused coping

Palliative techniques are used when the source of stress cannot be managed effectively by direct-action, in other words, the problem cannot be solved. In such a situation, palliative techniques assist to lessen the feeling of stress. The person feels better without actually solving the problem or attempting to change the situation (Kyriacou, 1998:9). In using emotion-focused coping strategies

principals may seek social support, or emphasise the positive aspects of the situation (Lazarus & Folkman, 1984:318; Niehaus & Myburgh, 1999:10).

In effective coping, problem- and emotion-focused forms of coping will work in a complementary fashion (Lazarus and Folkman, 1984:223). The categories are general guides for the *thoughts* that went through a person's mind in the coping process. Making a plan of action would be regarded as problem solving or direct action; and viewing an event in a positive light would be regarded as an emotion-focused or palliative coping strategy.

2.8.4.3 Preventative coping strategies

Preventative coping strategies are aimed at promoting one's wellness and reducing the likelihood of a potential problem (Keiffer, 1994:195). According to Keiffer (1994:195), a preventative coping strategy is the most effective strategy because it helps one avoid a situation before it becomes unmanageable. In using preventative coping, principals must be proactive and prevent stressful situations at school.

2.8.5 Coping strategies for principals

The most popular coping techniques used by school principals are stress management techniques like keeping a realistic perspective, maintaining a positive attitude, following a good physical health programme or engaging in activities that support intellectual, social and spiritual growth (Allison, 1997 (b):52).

The following are some methods of coping with stress described by researchers who have studied how principals cope with stress:

2.8.5.1 Maintain perspective

Mackler (1996:86) asserts that principals need to keep their jobs in perspective. It is, after all, only a job, and it should not become their entire life. He advises that an emotional distance be kept between the person and his/her work.

2.8.5.2 Good nutrition

Good nutrition is an important stress reducer. Principals need to realise that dietary imbalance can produce stress (Conaway & Coleman, 1984:2).

2.8.5.3 Physical exercise

Vigorous exercise is necessary for the maintenance of health and the relief of tension. This will not prevent stress, but will aid an individual to withstand higher levels of stress (Conaway & Coleman, 1984:2). Whether principals choose to swim, lift weights or walk the dog, commitment to daily exercise will relieve stress (Chase, 1998:13; Lyons, 1990:47).

2.8.5.4 Knowing personal stress limits

It is important to know one's personal stress limits (Conaway & Coleman, 1984:2). Principals must guard against allowing themselves to become weighed down by all the problems brought to them (Lyons, 1990:47).

2.8.5.5 Reserve personal time

Principals must reserve time for themselves (Conaway & Coleman, 1984:2), and develop activities that reduce stress, such as hobbies, home projects, weekend trips, sports activities and vacations (Lyons, 1990:47). Mackler (1996:87) also suggests taking breaks at work and taking regular vacations. Metzger (2003:676)

finds that the activities most frequently used by principals are reading, listening to music and going shopping.

2.8.5.6 Delegating tasks

Delegating tasks or assignments to the Deputy-Principal, Heads of Department and /or educators is one way the principal can reduce stress (Cooper, 1988:86; Lyons, 1990:46).

2.8.5.7 Networking

Discussing concerns with colleagues in education (Cooper, 1988:86), and networking with professional and personal friends (Lyons, 1990:47) helps to reduce stress. Attending conferences is one way to get away from routine and it gives the principal an opportunity to meet colleagues and share concerns (Mackler, 1996:88).

2.8.5.8 Time management

Stress is often caused by a lack of time to complete a task successfully. Therefore, principals should strive for good time management.

2.8.5.9 Yoga

By practicing yoga principals can reduce stress. Yoga consists of exercises that slowly build a person's ability to concentrate and control respiration, aiming at building up a healthy and sensitive balance in the nervous system. Exercises are directed towards toning the nervous system at levels or centres known as "chakras" (Luce & Peper, 1977:57).

2.8.5.10 Meditation

Principals can induce a state of internal peace and quiet by practicing meditation. This helps them to become aware of their internal processes which cannot be felt during the every day activities of ordinary life (Luce & Peper, 1977:57).

2.8.5.11 Employee assistance programmes

Employee assistance programmes (EAPs) for health promotion are offered in workplaces for workers' well being. These may include fitness programmes, smoking cessation courses, reduction in alcohol consumption, eating habits, hypertension courses and lower back pain courses (Fox, 2005:420). Principals need to take advantage of the EAPs offered by the Department of Education both for themselves and their staff.

2.8.5.12 Peer Support Groups

An intervention frequently used by organisations attempting to ameliorate burnout amongst their employees is peer support groups (Shirom & Melamad, 2005:613). Principals should use peer support groups at school to assist new teachers.

2.8.5.13 Maladaptive ways of coping with stress

Individuals vary in terms of the coping strategies they use to deal with stress. Some of the ways are maladaptive and increase the risks of ill health, such as smoking, increased alcohol consumption, drug-abuse or overeating. The problem with such strategies is that they are often habit-forming and seem to offer a quick-fix solution in providing temporary relief. However, they have harmful effects in the longer term (Cartwright & Whatmore, 2005:168).

Since stress cannot be avoided; and it is not always possible for principals to alter their stressful environment, effective coping strategies must be used to reduce the amount of stress and moderate the effects of stress on the individual (Conaway & Coleman, 1984:2; Allison, 1997 (b):39).

Learning to identify and cope with job-related stress can enhance a principal's psychological and physical well-being and contribute to making the education manager a more productive part of the school team. Cherniss (1983:150) recommends that to avoid burnout one must find rewarding and meaningful work, which can make a significant impact on the lives of other people.

2.8.6 Breathing as a coping strategy

The stress intervention programme, that is, the Art of Living workshop, focuses on the importance of breathing techniques in coping with stress. Although stress affects breathing, breathing is also unique in that it can be controlled by an act of will; and slow, deep breathing helps one relax (Fried, 1993:306; Patel, 1989:89; Schafer, 1996:449).

By practicing the breathing techniques, principals will be able to calm themselves in stressful situations. When the lungs slow down, the slow breathing will create a calming effect throughout their systems and serve as a powerful means of creating quiet. In contrast, the faster breathing techniques practiced will serve to make the principal alert and dynamic in taking decisions and actions because more oxygen enables the body to respond at a higher level of arousal to any perceived threat (Schafer, 1996:449; Cannon, 1929:211).

Like sunrise and sunset, sleep and activity, summer and winter, pumping and recovery of the heart, breathing is one of the basic rhythms of life (Schafer, 1996:449), and breathing techniques harmonise the rhythms of the body, mind and emotions (Burge & Boucherle, 1996:11).

2.8.6.1 Benefits of a counter-stress breathing programme

The benefits of the Art of Living workshop in the current study may be compared to a previous study by Fried (1993:324). The study revealed that the counter-stress breathing techniques reduced tension and anxiety. Clients reported that the strategies made them feel good, relaxed and in control. Objective indices of the relaxation strategies resulted in:

- Decreased pulse rate and restoration.
- Improved circulation.
- Decreased blood pressure.
- 'Normalised' EEG (electroencephalogram – which shows electrical impulses and changes in the brain).

2.8.6.2 Breathing and emotion

Our breathing patterns reflect our state of mind and emotions (Patel, 1989:92). Some of the emotions and the corresponding breathing patterns described by Patel (1989:92) are:

- an anxious person tends to breathe rapidly and often, only using the upper part of the chest.
- a depressed person tends to sigh.
- a person who is hysterical tends to overbreathe (hyperventilate).
- a child, during a temper tantrum, holds his breath till he is blue in the face (Patel, 1989:92).

Principals must be aware of the various breathing patterns and learn to observe their breath and rectify the situation by practicing correct breathing techniques.

2.8.6.3 Types of breathing

There are two main types of breathing (Patel, 1989:94):

- Costal (meaning 'of the ribs') or chest breathing.
- Diaphragmatic or abdominal breathing.

Only when we take a maximum breath is a third type of breathing used. This is known as clavicular breathing (Patel, 1989:94). The stress intervention programme, that is, the Art of Living workshop introduced breathing exercises involving all these types of breathing so that principals equipped themselves to relieve stressful situations.

2. 9 SUMMARY

The literature study conducted in this chapter emphasises that an understanding of the definitions of stress, together with the causes, effects and coping strategies are an important part of dealing with stress. Because of the fact that stress is to a very large extent unavoidable, it is not a medical problem but a managerial one. School principals' effective management of their work stress is an important part of their well-being. The challenge in the school situation is to balance the pressures effectively, so that the educational experience is more productive and enjoyable for both educators and learners. The stress intervention programme, the Art of Living workshop, which uses breathing techniques to counteract the negative effects of stress, is a programme that helps people to maintain such a balance. The methodological approach for the empirical investigation to evaluate the success of the workshop is discussed in chapter three.

CHAPTER THREE

RESEARCH DESIGN

3.1 INTRODUCTION

The literature study that was conducted addressed the sub-problem 'What do stress intervention strategies imply?' Various counter-stress strategies were also discussed with emphasis on breathing techniques as a stress intervention strategy.

In order to address the primary problem in this study, which is, 'What impact does a stress intervention programme have on the functioning of primary school principals,' an empirical investigation was undertaken. The researcher administered the Maslach Burnout Inventory (MBI) questionnaire to the 'respondents' before and after the Art of Living workshop. The impact of the workshop on the stress levels of the principals was determined by a comparison of the MBI scores.

In order to gather information on what causes stress to develop in participants and to evaluate the success of the stress intervention programme, semi-structured individual interviews were conducted with the participants. In this way the researcher addressed the sub-problems 'What are the main stressors experienced by primary school principals?' and 'What is the impact of the stress intervention programme on principals' stress relief?'

3.2 RESEARCH DESIGN AND RESEARCH PARADIGMS

The study encompassed a literature study followed by an empirical investigation in order to find answers to the formulated research questions. A combined research approach of both quantitative and qualitative research paradigms were

used for the empirical investigation. However, the main approach was primarily conducted from a qualitative research paradigm perspective.

3.2.1 The qualitative approach

In order to identify the main stressors as perceived by primary school principals and to evaluate the impact of the stress intervention programme, a qualitative approach was employed. A qualitative approach is seen as the appropriate means of investigation to obtain rich descriptions and explanations of situational influences (Brown, Ralph & Brember, 2002:2). When working from a qualitative perspective, the researcher attempts to gain a firsthand, holistic understanding of the phenomenon under investigation (De Vos, Strydom, Fouche & Delport, 2002:364), which in this case relates to the stress encountered by primary school principals and the degree to which an intervention program based on breathing techniques served as a stress alleviation aid.

The main advantages of a qualitative approach are that depth and detail are provided by participants through direct quotations about events, situations and interactions (par 1.6.2). The data are not restricted to responses to predetermined categories as in a highly structured questionnaire (par 1.6.2). Seeing that only a few participants were purposefully selected based on clear criteria, the researcher collected detailed, in-depth information and attempted to understand the world from the participant's view (De Vos et al, 2002:292). This resulted in the gaining of insight into the subject's viewpoint on what was being studied in addition to the point of view of the researcher. The task was to provide a comprehensive understanding of the complex reality surrounding the phenomenon under investigation.

The primary concern of the qualitative research approach is with description and interpretation rather than with measurement and prediction (Brown, Ralph & Brember, 2002:3). However, a main disadvantage of qualitative research is that

the responses are usually much longer and can be difficult to analyse into themes (Ostell & Oakland, 1995:70).

The qualitative research approach was suitable for this study as it allowed the researcher to gain a better understanding of the phenomenon of stress as experienced by principals and the extent to which an intervention programme contributed as a stress alleviation tool. It allowed the participants freedom to express their views which resulted in the advantage of providing depth and detail to the collected data.

3.2.2 The quantitative approach

Although a quantitatively oriented approach was used in this study in terms of data collection, data analysis and data interpretation to determine the stress levels of the principals both before and after the stress intervention programme, the research sample of six 'respondents' does not represent a proper sample for a quantitative research paradigm. The usefulness of the quantitatively collected data in this study is that it facilitated a comparison of stress scores and has, therefore, been considered; however, the main focus of the study is on the qualitative part of the study.

The quantitative approach involved 'respondents' responding to the structured Maslach Burnout Inventory (MBI) questionnaire, which is a self-report based questionnaire involving self-reflection on encountered levels of stress; and comprises general response statements on stress (1.6.2.1(a)). The main advantage of employing the structured MBI questionnaire was that the quantitative data allowed for a comparison of the stress levels before and after the intervention programme; and for confirmation purposes. The quantitatively collected data firstly confirmed the levels of stress encountered by primary school principals and secondly proved that the stress intervention programme that is based on breathing techniques served as a functional stress relief aid.

Lazarus and Folkman (1984:321) point to some disadvantages of self-reporting as data collecting instruments.

The following are some of the main disadvantages:

- The problem of memory
- The desire to present oneself in a positive light
- Language ambiguity
- The use of verbal reports as an ego defense

Maslach (1993:30) adds that the use of self-report questionnaires removes the researcher from direct contact with the people being studied, and this makes it difficult to gain a true understanding of the processes involved.

Benefits of self-reporting however relate to the fact that what people say about their feelings, although highly subjective, are important to reach a deeper understanding of the phenomenon under study. Thus, in researching emotion, subjective reports cannot be disregarded (Lazarus & Folkman, 1984:321).

Apart from the advantages and disadvantages with self-reporting, Carr (1994:18) also points to the inadequacies of self-report questionnaires. This relates to the fact that findings of past research into, for example, stress amongst school personnel and principals would reveal information whose usefulness could be considered questionable in that many studies concentrate on the self-report and quantitative/quick measure approach. A major inadequacy referred to in the approach is that of using general, meaningless questions like “how stressful do you find your work?” (Carr, 1994:18).

Carr (1994:20) also points out that most of the questionnaire-type approaches seek information about facets of the work that a researcher believes may be stressful and it excludes reporting on sources of stress that the workers themselves may perceive to be significant. For that reason recent studies of stress in principals have shown evidence of a strong move away from the use of

structured questionnaires only. In particular, observations, the use of diaries, and the application of physiological measures have become more appropriate to collect meaningful data (Whan & Thomas, 1996:447).

Hence the researcher employed a combined approach in this study involving both qualitative and quantitative measures. However, a larger focus was on qualitative measures for a greater depth of understanding of the concept being studied (De Vos et al, 2002:31), namely, the impact of a stress intervention programme based on breathing techniques.

3.2.3 Programme of empirical investigation

The programme according to which the empirical investigation was executed, was as follows:

- Research data was collected by means of a quantitatively structured questionnaire, the Maslach Burnout Inventory (Annexure C), which assessed the stress levels of the 'respondents'. The collected data was interpreted in terms of the frequencies of stress encounters. The aim was to determine the stress levels of the 'respondents' and whether there was a need to alleviate the situation.
- This was followed by conducting semi-structured individual interviews with participants to find out what their main stressors were. Probing questions and follow-up questions were asked to obtain a deep understanding based on first hand accounts of the participants' perceptions of what their stressors were and how they experience and deal with stressful situations.
- The third step entailed a stress intervention programme, the Art of Living workshop, with the participants. The Art of Living workshop entails breathing techniques focusing on the three stages of Pranayama which expands the three lobes of the lungs; Bhastrika which involves forceful

bellowed breathing; and Sudarshan Kriya which is a rhythmic breathing technique, all of which are stress relief breathing techniques (par 1.6.2.1).

- The breathing technique workshop for stress relief was followed by a second application of the Maslach Burnout Inventory questionnaire to determine whether stress levels had indeed decreased.
- Finally, semi-structured individual interviews were conducted after the Art of Living workshop. This allowed for a deep understanding of the effects of the stress intervention programme and assisted the researcher to evaluate the impact of the stress intervention programme as a stress alleviation mechanism.

3.3 RESEARCH METHODS

3.3.1 Selection of participants

The research sample consisted of six primary school principals. Goss (1985:130) found that factors such as age and experience influenced stress levels of school principals. Selection of the principals in this study was thus based on gender, age, years of experience and marital status. By choosing a cross section of principals, the study ensured a varied sample of principals who then participated in the empirical investigation.

Five of the participants were male and one participant was female. They were of varying ages and years of experience. The experiences of the principals were measured in terms of the total years of experience as educators.

The geographical demarcation for the selection of the six primary school principals was that of the Phoenix circuit in KwaZulu Natal. The Phoenix circuit has 49 primary schools which are divided into Ward 141 and Ward 142. The sample in this study was based on purposeful selection and convenience for the

researcher. Convenience related to the advantage of concentrating the research in the specific geographical area in which the researcher resides, which helped with the saving of costs and time (De Vos et al, 2002:206).

Purposeful selection was based on primary school principals' attending of the Art of Living workshop and their willingness to participate in the study. The fact that the participants attended the stress relief workshop out of free will, served as an indicator that they were presumably experiencing stress and wanted to be empowered on alleviation mechanisms.

The schools in this circuit service learners from the Phoenix area and the neighbouring townships of Kwa Mashu and Inanda, which is affected by high crime rates (Meyer, 2007:18; par 1.6.2.2), It is generally accepted that people who are negatively affected by crime and violence experience more stress. In addition the learners in this area are negatively affected by poor socio-economic factors. Apart from researcher convenience, this area was chosen because the possibility exists that principals of schools in low socio-economic status environments in which crime rates are high may experience higher than normal stress levels (par 1.6.2.2).

3.3.2 Data collection

A combined research paradigm was applied to collect data to answer the research questions pertaining to the effects of the stress alleviation programme on the stress levels encountered by primary school principals (par 3.2 (a)). In that regard a quantitatively oriented structured questionnaire and qualitatively oriented semi structured individual interviews served as data collection instruments.

3.3.2.1 Structured questionnaire – the Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) questionnaire was used to determine the stress levels of the participants. The MBI is a questionnaire designed by Maslach and her colleagues to measure three dimensions of professional burnout, namely emotional exhaustion, depersonalisation and personal accomplishment (Maslach, Jackson & Leiter, 1997:192; Maslach, 1999:215; par 1.6.2.1(a)).

It is a self-report questionnaire consisting of 22 questions which are sub-divided into three categories.

- Emotional Exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. It has also been described as being worn out, a loss of energy and fatigue. Specifically, the person is exhausted by his/her work. As emotional resources are depleted, workers feel they are no longer able to give of themselves at a psychological level.
- Personal Accomplishment, when reduced, pertains to the tendency to evaluate oneself negatively, particularly with regard to one's work with clients. Workers with personal accomplishment burnout may feel unhappy about themselves and dissatisfied with their accomplishments in their jobs, which may result in a decline in their feelings of competence and may manifest as reduced productivity, low morale, withdrawal and an inability to cope (Maslach, Jackson & Leiter, 1997:192; Maslach, 1999:215).
- Depersonalisation refers to negative, callous or excessively detached responses to other people, usually recipients of one's service, care, treatment or instruction. The depersonalisation component of the burnout inventory focuses on relationships with other people and an evaluation of others (Maslach, Jackson & Leiter, 1997:192; Maslach, 1999:215).

The Maslach Burnout Inventory questionnaire (Maslach, Jackson & Leiter, 1997:192) assesses these three components of the burnout syndrome, namely emotional exhaustion, personal accomplishment and depersonalisation by means of 22 items. The items are written in the form of statements about personal feelings or attitudes, for example, “I feel burned out from my work,” “I don’t really care what happens to some recipients” - ‘recipients’ referring to the people for whom the respondent provides a service, care or treatment.

Respondents indicate the frequency of their feelings about each item on a 7-point Likert type scale ranging from a feeling/attitude value of 0, for “never” to 6, for “everyday”.

As stated in paragraph 1.6.2.1(a), higher scores on emotional exhaustion and depersonalisation and lower scores in the personal accomplishment category would reflect a higher degree of burnout. The scores for each category are considered separately and are not combined into a single, total score, thus three scores are computed for each respondent. Each score can then be coded as low, average or high by using the numerical cutoff points listed on the scoring key which is self-administered (Maslach, Jackson & Leiter, 1997:192; par 3.3.3 table 3.1).

Complete instructions were provided for the ‘respondents’. To minimise response biases the following ethical considerations were adhered to (Maslach et al, 1997:195):

- Respondent privacy.
The respondents completed the MBI privately and individually.
- Respondent confidentiality.
The respondents were reassured of the confidentiality of their results; which served to let them feel at ease to express their true feelings.
- Avoidance of sensitisation to the term burnout.

Respondents were unaware that MBI is a burnout measure. The questionnaire was presented as a survey of job-related attitudes that were not linked to burnout in any way to avoid any reactive effect to the term burnout. For this reason the questionnaire was labeled Human Services Survey rather than Maslach Burnout Inventory.

- The examiner.

The researcher as examiner acted as a neutral person with as major responsibilities the minimising of response bias and ensuring completion of all items.

3.3.2.2 Semi-structured individual interviews

The first completion of the Maslach Burnout Inventory questionnaire was followed by the initial interviews in which information was gathered on the causes of stress in participants. In this way the researcher addressed the sub-problem 'What are the main stressors experienced by primary school principals?' Interviews were also conducted after the stress intervention programme in order to evaluate the success of the intervention programme as a stress relief aid.

The responses of the participants were used to categorise stressors into broad categories according to the commonality of the stressors experienced by them. The purpose of the follow up interviews conducted after the stress intervention programme was to evaluate whether there was any change in participants' experience of stress. There were thus two sessions of interviewing.

The open ended questions as captured in the interview schedules (Annexures D & E) served as a guide and focused on the challenges principals face in schools, their main concerns, and the main causes of stress as experienced by the principals at school; and on the impact of the stress intervention programme to alleviate stress. As the advantages of interviews are that they produce concentrated amounts of data on the topic of interest (Greenbaum, 1998:1), extensive information on the stressors experienced by principals and the extent to which the intervention programme impacts as an alleviation aid was collected.

3.3.2.3 The stress intervention programme – the Art of Living workshop based on breathing techniques

The stress intervention programme, the Art of Living workshop, was conducted with a group of primary school principals, who volunteered to participate in the empirical investigation. From this group of primary school principals, the research sample of six principals was selected. An Art of Living teacher who was trained as a teacher in Bangalore, India by the founder of the Art of Living Foundation, Sri Sri Ravi Shanker, conducted the programme in Phoenix, Durban. The workshop was held over five consecutive days during the school holidays, from Monday to Friday. Each session of the workshop lasted approximately three hours from 9:00 am to 12:00 noon. The workshop was held free of charge.

The researcher, who had attended the programme previously, also participated in the workshop; and assisted the Art of Living teacher with minor tasks, for example, opening the windows and arranging the room. The researcher also checked whether the participant principals attended all the sessions of the workshop for the purposes of the empirical investigation.

The Art of Living foundation is a non-profit organization run by volunteers in over 136 countries (Burge & Boucherle, 1996: 82; Murarka & Kashikar, 2000: ii).

With reference to the introduction in paragraph 1.6.2.1(b), the stress intervention programme focused on the use of breathing techniques to relieve stress. The breathing exercises begin with *Pranayama*, (long and deep breaths with constriction at the base of the throat). This breathing technique opens the lungs and maximises the absorption of *prana* (the vital life energy in the body). It recharges the cells, keeping a person energised, with resilient health and brilliant clarity of mind.



Fig 3.1. Breathing technique – *Pranayama*
(Burge & Boucherle, 1996: 10).

Figure 3.1 depicts the three stages of pranayama breathing that aim to expand the lower, middle and upper lobes of the lungs (Burge & Boucherle, 1996:10). The positions of the hands influence the amount of oxygen taken in as the participant breathes in, and assist in maximum expansion and contraction of the lungs.

In the first stage, the hands are placed on the hip bone thereby expanding and contracting the lower lobes of the lungs while the participant breathes slowly and deeply.

The second stage aims to expand the middle lobes of the lungs and the participant places his hands across the chest while breathing.

During the third stage, the hands are placed on the back and the elbows point upwards expanding the upper lobes of the lungs.

The person sits with the spine erect for maximum inhalation and exhalation. A chair may be used if preferred. The activity may be done indoors or outdoors where the ventilation is good. Loose, comfortable clothing are preferable to allow for free movement of the arms and maximum expansion of the diaphragm, chest and shoulders when doing the breathing.

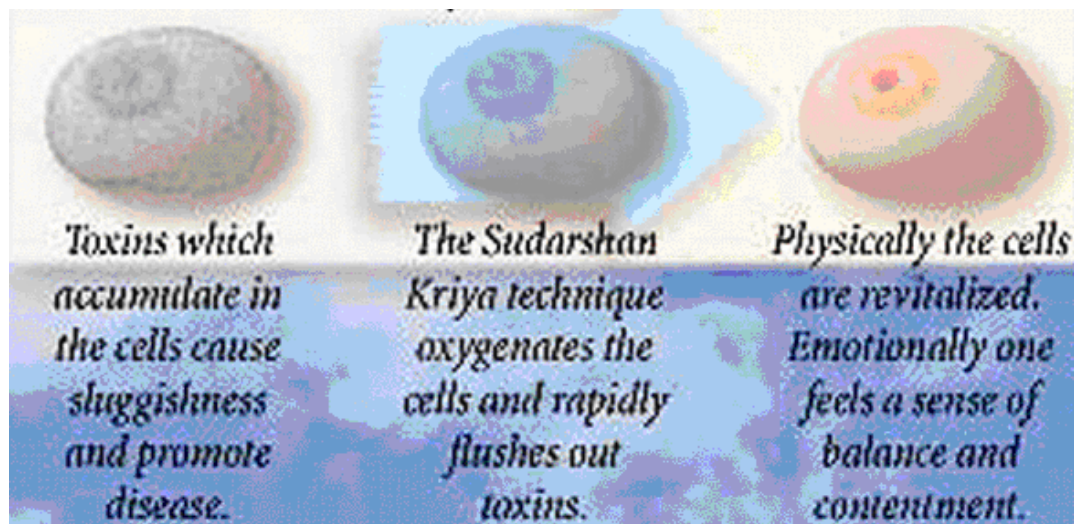


Fig 3.2 Breathing technique - *Bhastrika*
(Burge & Boucherle, 1996: 10).

As shown in figure 3.2, the participant now engages in doing *Bhastrika*, which is a breathing technique using fast and forceful breaths through the nose with arm movements (Sharma, Sen, Singh, Bhardwaj, Kochupillai & Singh, 2003:262). This breathing technique involves sitting in an upright position, and using arm movements when breathing. The arms are thrown up on the in-breath and brought down forcefully on the out-breath; making the breathing short but forceful and energising the person. This is followed by a short period of rest, making the person calm after the exercise.

The highlight of the Art of Living workshop is the re-vitalising breathing process known as '*Sudarshan Kriya*' which relieves stress and neutralises toxins at the physical, mental and emotional levels, promoting health on all three levels. Sudarshan Kriya (Su=right; Darshan=vision; Kriya=procedure) was devised by Sri Sri Ravi Shanker, founder of the Art of Living foundation, Bangalore, India. It has been used as a practical stress management strategy. The Sudarshan Kriya is a breathing technique which involves rhythmic breathing interspersed with normal breathing (Janakiramiah et al, 2000:256; par 1.6.2.2(b)). The intervention programme aims to help sufferers to recognise the symptoms and causes of stress they experience and the breathing techniques aim to assist them in managing their stress. Figure 3.3 below shows how the breathing during

Sudarshan Kriya oxygenates and revitalizes the cells, thereby bringing about a sense of balance and contentment in the person.



**Fig 3.3 Cells in the body change during *Sudarshan Kriya*
(Burge & Boucherle, 1996: 13).**

Figure 3.3 depicts the cleansing of cells in the human body brought about by the breathing exercises.

The picture on the extreme left (figure 3.3) depicts a cell that is polluted with toxins, which could have resulted because of stress and/or environmental factors. The cell is dark in colour due to having less oxygen. This causes the person to be sluggish and may cause diseases.

The picture in the middle (figure 3.3) shows a gradual clearing of the toxins in the cell due to an increase in oxygen intake which occurs during the breathing technique called *Sudarshan Kriya* (par 1.6.2.1). The colour of the cell has lightened because of the greater oxygen levels.

The picture on the extreme right (figure 3.3) is typical of a cell which has been cleared of toxins to a greater extent and is light in colour. The oxygen levels have

increased considerably and the cells are revitalised making the person physically energised and emotionally balanced.

The participants were thus introduced to the three types of breathing techniques in the workshop with the purpose being to ascertain whether the breathing techniques served as a stress relief aid.

3.3.3 DATA PROCESSING

3.3.3.1 The processing of qualitatively collected data

Data processing in qualitative research aims to bring order, structure and meaning to the mass of collected data. It is a search for general statements and relationships among categories of data. The mere amount of data gathered by qualitative research, in the form of notes or dictations on tapes is often awe-inspiring. The qualitative researcher must present the descriptive data in such a way that it leads the reader to an understanding of the phenomenon being studied (De Vos et al, 2002:340).

In this study, the qualitative data analysis was done by considering the responses from the semi-structured individual interviews taking into consideration the research problem. The data analysis was based on the following steps as suggested by De Vos et al, (2002:340):

1. Data collection and recording. Apart from tape recording the interviews, notes were also taken to record responses to the interview questions comprehensively.
2. Managing data. The transcriptions and additional notes of the interviews were clearly labelled and consecutively numbered for easy access.
3. Reading and writing memos. This included reading the transcriptions and additional notes in their entirety several times and then writing memos in the margins, in the form of short phrases and keywords. In this initial

process of exploring the data people, events and quotes became clearer and categories began to emerge.

4. Describing, classifying and interpreting. This step included identifying salient themes, recurring ideas and language, and patterns of belief that link people and settings together. A manageable set of themes were identified to write into the final narrative.
5. Representing and visualising. Comparison tables and flow diagrams were used to present the data as a visual image to allow for easy comparison and understanding.

After the categorisation of the data into related themes the researcher was able to answer the research questions. Research findings are presented in chapter four.

3.3.3.2 The processing of quantitatively collected data

The data of the completed Maslach Burnout Inventory questionnaires was analysed by drawing a comparison between the results before attending the Art of Living workshop and the results after attending the workshop.

Each 'respondent's' completed questionnaire was interpreted by using a template containing directions for assessing category responses as low, moderate or high using numerical cut-off points as shown in table 3.1.

Table 3.1 – Directions for interpreting MBI questionnaires (Maslach et al, 1981:2).

| MBI Category | Low (Lower third) | Moderate (Middle third) | High (Upper third) |
|--------------------------------|------------------------------|------------------------------------|-------------------------------|
| Emotional Exhaustion | ≤ 17 | 18-29 | ≥ 30 |
| Depersonalisation | ≤ 5 | 6-11 | ≥ 12 |
| Personal Accomplishment | ≥ 40 | 39-34 | ≤ 33 |

Table 3.1 is a template based on the Maslach Burnout Inventory (MBI) scoring keys as set out in the Maslach Burnout Inventory Manual (Maslach & Jackson, 1981:2). The aggregate for the MBI scores are calculated for the group of 'respondents' in the three subscales and the mean scores computed for the entire group.

As per table 3.1, emotional exhaustion scores that are less than or equal to 17 would be regarded as low. Scores of 18 to 29 would be regarded as moderate and scores that are more than or equal to 30 would be regarded as high, depicting conditions of burnout.

Depersonalisation scores that are less than or equal to 5 would be regarded as low. Scores of 6 to 11 would be regarded as moderate and scores that are more than or equal to 12 would be regarded as high pointing to conditions of burnout.

Personal accomplishment scores represent opposite indicators. In this category, lower scores would depict higher levels of burnout. Therefore, scores more than or equal to 40 would be regarded as low, scores of 34 to 39 would be moderate and scores that are equal to or less than 33 would show a high degree of burnout (Maslach et al, 1981:2).

3.4 RELIABILITY AND VALIDITY

In order to ensure reliability and validity of the research, triangulation, which is a combination of data gathering methods, was used. The Maslach Burnout Inventory questionnaire was used as the quantitative data collection instrument while the semi-structured individual interviews served as qualitative data collection measure.

As was explained in paragraph 1.6.2.4 the Maslach Burnout Inventory questionnaire was one of the first scientifically validated instruments to determine burnout and it has been the most widely used in scholarly research (Enzmann, 2005:495). The reliability was estimated by Cronbach's coefficient alpha (n=1,316). The reliability coefficients for the subscales (categories) were the following: .90 emotional exhaustion; .79 for depersonalisation and .71 for personal accomplishment. The Standard Error of measurement for each subscale is as follows: 3, 80 for emotional exhaustion; 3, 16 for depersonalisation and 3, 73 for personal accomplishment (Maslach, Jackson & Leiter, 1997:7; par 1.6.2.4).

The qualitative researcher is concerned with trustworthiness and transferability to prevent bias in the research. In addition to what was said about trustworthiness and transferability in paragraph 1.6.2.4, the researcher arranged for trustworthiness in that the semi-structured interviews were conducted in a natural setting for the research, i.e. the school environment. Questionnaire information was complemented with interview data and concrete, precise descriptions were used from field notes and transcriptions. The interpretation of participants' views was confirmed with them and the researcher monitored herself continuously for bias.

3.5 ETHICAL CONSIDERATIONS

Ethical considerations refer to the rights of the 'respondents' to be fully informed about the research being undertaken (De Vos et al, 2002:64).

In addition to the ethical measures relating to the Maslach Burnout Inventory questionnaire discussed in paragraph 3.3.2.1, 'respondents' were informed of the following:

- That participation was voluntary and they had the opportunity to withdraw from the investigation at any time if they so wished (De Vos et al, 2002:64).
- The procedures to be followed were explained so that 'respondents' could make an informed decision on their possible participation (De Vos et al, 2002:65).
- Writing the 'respondent's' name on the questionnaire was for the purpose of comparing the Maslach Burnout Inventory questionnaire scores before and after the Art of Living programme.
- Names and individual scores were confidential and would not be used in the reporting process.
- The reporting would be based on the responses of the group as a whole.
- Each of the 'respondents' would have access to the findings of the investigation.

3.6 SUMMARY

In order to find clear answers to the research questions and to reach a deep understanding of the studied phenomenon, the research design for the empirical investigation included both quantitative and qualitative research measures. This related to an application of the quantitatively oriented research questionnaire, that is, the Maslach Burnout Inventory questionnaire and semi-structured individual interviews as qualitative measure. The main emphasis however was on a qualitative approach of gaining a deeper understanding of the impact of a

stress intervention programme consisting of breathing techniques on the stress levels of primary school principals.

In chapter four the research findings are discussed representing an answer to the main research question, namely “What impact does a stress intervention programme have on the functioning of primary school principals” (par 1.6; par 3.1). The sub-problems, which relate to identifying the main stressors as experienced by primary school principals, the purpose and nature of a stress intervention strategy and the impact thereof as alleviation mechanism are inclusively also addressed.

CHAPTER FOUR

RESEARCH FINDINGS

4.1. INTRODUCTION

Chapter four reports on the findings of the empirical investigation conducted to address the research problem and the accompanying research questions outlined in Chapter one and repeated in Chapter three.

The primary problem this study investigated was:

- What impact does a stress intervention programme have on the functioning of primary school principals?

The sub-questions this study addressed were:

- What are the main stressors experienced by primary school principals?
- What do stress intervention strategies imply?
- What is the impact of the stress intervention programme on principals' stress relief?

The literature study that was conducted in Chapter two addressed the sub-question "What do stress intervention strategies imply." The findings in respect of the main stressors experienced by primary school principals and the impact of the stress intervention programme on principals' stress relief are addressed in paragraphs 4.3.2 and 4.3.3 respectively. Views gathered through the collection of data from the 'respondents'/participants are thus analysed, compared, interpreted and discussed in paragraph 4.3.

4.2 DEMOGRAPHIC DATA

The respondents/participants in the study comprised of six principals from the Phoenix Circuit who were purposefully selected. Purposeful selection was based on gender, age, years of teaching experience and marital status (par 3.3.1); and the principals willingness to act as participants in the stress relief programme to alleviate the stress they encounter at school on a daily basis. It was the participant principals' themselves, who decided to attend the Art of Living workshop, based on breathing techniques for stress alleviation; this served as an indicator that they were experiencing stress.

There were five male participants and one female participant. This ratio was accepted owing to the fact that male principals dominated in the Phoenix Circuit. It was also found that female principals were often unavailable to attend the programme because of additional family commitments. The participants ranged from forty-six to fifty-eight years of age while their total years of experience ranged from twenty-six years to thirty-five years. Three of the respondents were married while three of them were single /divorced. The demographic data of the respondents indicated that the population sample consisted of a heterogeneous group as far as gender, age, years of experience and marital status were concerned.

4.3 DISCUSSION OF FINDINGS

The discussion of the research findings focused firstly on the quantitatively collected data based on the scores of the Maslach Burnout Inventory (MBI) questionnaires. Thereafter a discussion of the findings based on the qualitatively collected data via the semi structured individual interviewing followed.

Although both quantitative and qualitative research paradigms were employed in this study, the quantitative approach which was used in data collection and analysis, does not represent a proper sample for a quantitative approach

because the research sample consisted of only six 'respondents'. The findings of the quantitatively data, albeit not a viable sample, were however, employed to confirm the stress levels of 'respondents'. Therefore, greater attention was paid to the qualitative approach, in order to gain a deeper understanding of the phenomenon of stress and the impact of the stress intervention programme (par 3.2.2).

4.3.1 FINDINGS ON QUANTITATIVELY RELATED DATA COLLECTION

The Maslach Burnout Inventory questionnaire (Annexure C) was employed to assess the burnout related stress levels of the 'respondents.' The three dimensions of professional burnout that were assessed were emotional exhaustion, depersonalisation and personal accomplishment (Maslach, Jackson & Leiter, 1997:1; par 3.3.2.1). These three dimensions were assessed by means of the three subscales of the MBI questionnaire. Maslach and Jackson (1981:2) emphasise that given the limited knowledge about the relationship between the three dimensions of burnout, the scores for each category should be considered separately and should not be combined into a single score.

Of the total of 22 questions of the Maslach Burnout Inventory questionnaire, the first nine items represented the emotional exhaustion subscale measuring feelings of being emotionally over extended and exhausted by one's work. The next eight items represented the personal accomplishment subscale measuring the extent of competence and success one enjoys in one's work. The last five items of the questionnaire represented the depersonalisation subscale measuring conditions of unfeeling and impersonal responses towards recipients of one's service, care, treatment and instruction. (Maslach, Jackson & Leiter, 1997:192; Maslach, 1999:215; par 3.3.2.1).

As explained in paragraph 1.6.2.1(a) 'respondents' indicated the frequency of their feelings about each item on a 7-point Likert type scale (i.e. Never = 0;

Everyday = 6). The items were statements about personal feelings or attitudes (Annexure C).

Based on the Maslach Burnout Inventory (MBI) scoring keys as set out in the Maslach Burnout Inventory manual, higher scores on the emotional exhaustion and depersonalisation subscales and lower scores on the personal accomplishment subscale reflected a high degree of burnout (Maslach, Jackson & Leiter, 1997:1; par 1.6.2.1(a); par 3.3.2.1).

Burnout however is not viewed as a dichotomous variable, which is either present or absent, but is conceptualised as a continuous variable, ranging from low to moderate to high degrees of experienced feelings (Maslach & Jackson, 1981:1). For that reason a high degree of burnout is reflected in high scores on the emotional exhaustion and depersonalisation subscales and in low scores on the personal accomplishment subscale. A moderate degree of burnout is reflected in moderate scores on the three subscales whereas a low degree of burnout, which is a positive condition, is reflected in low scores on the emotional exhaustion and depersonalisation subscale and in high scores on the personal accomplishment subscale (Maslach & Jackson, 1981:1).

As the scores for each of the three categories were separately considered and measured, each 'respondent's' completed questionnaire was interpreted by using the template containing directions for assessing category responses as low, moderate or high using numerical cut-off points (paragraph 3.3.3.2, table 3.1). In that regard and as was already explained in paragraph 3.3.3.2 with table 3.1, emotional exhaustion scores that were less than or equal to 17 were regarded as low, scores of 18 to 29 as moderate and scores that were more than or equal to 30 were regarded as high. The same applied to the depersonalisation category where scores less than or equal to 5 were regarded as low, scores of 6 to 11 regarded as moderate and scores more than or equal to 12 regarded as high.

With regard to the personal accomplishment category, the reverse applied; higher scores represented lower levels of burnout as the person felt a higher

sense of accomplishment in his work. Therefore, scores more than or equal to 40 were regarded as low, scores of 34 to 39 as moderate and scores equal to or less than 33 as high levels of burnout (Maslach et al, 1981:2).

The impact of the Art of Living workshop based on breathing techniques (paragraph 1.6.2.1(b) & 3.3.2.3) on the stress levels of the participant principals was determined by a comparison of the MBI scores before and after attending the Art of Living workshop.

Analysis of the Maslach Burnout Inventory scores

SPSS version 15.0 (SPSS Inc., Chicago, Illinois, USA) was used to analyze the data.

The scores for emotional exhaustion were computed by adding together each 'respondent's' answers to the items 1 to 9 and dividing by 9. The scores for personal accomplishment were computed by adding together each 'respondent's' answers to the items 10 to 17 and dividing by 8. The scores for depersonalisation were computed by adding together each 'respondent's' answers to the items 18 to 22 and dividing by 5.

The mean scores reflected in Table 4.1 were computed by averaging the individual scores of the 6 'respondents.'

Table 4.1: Comparison of means for the Maslach Burnout Inventory questionnaire- before and after the stress intervention programme

| Paired Samples t Test | | | | | | | |
|-------------------------|--------|------|---|----------------|--------|----|-------|
| | | Mean | N | Std. Deviation | t | df | P |
| Emotional Exhaustion | Before | 3.52 | 6 | 1.32 | 2.533 | 5 | 0.052 |
| | After | 2.04 | 6 | 0.56 | | | |
| Personal Accomplishment | Before | 5.00 | 6 | 0.79 | -3.631 | 5 | 0.015 |
| | After | 6.56 | 6 | 0.62 | | | |
| Depersonalisation | Before | 2.73 | 6 | 1.41 | 1.297 | 5 | 0.251 |
| | After | 1.77 | 6 | 0.67 | | | |

The data in Table 4.1 reflect the results of the Paired Samples t Test which was used to compare the means of the three aspects before and after the stress intervention programme.

The mean score for emotional exhaustion after the stress intervention programme is lower than the mean score before the programme. This difference is statistically significant at the 90% level ($p < 0.10$).

The mean score for personal accomplishment after the stress intervention programme is higher than the mean score before the programme. This difference is statistically significant at the 95% level ($p < 0.05$).

The mean score for depersonalisation after the stress intervention programme is lower than the mean score before the programme. However, this difference is not statistically significant at the 95% level ($p > 0.05$).

Table 4.2: Comparison of means in the 22 questions of the Maslach Burnout Inventory questionnaire - before and after the stress intervention programme

Statistics

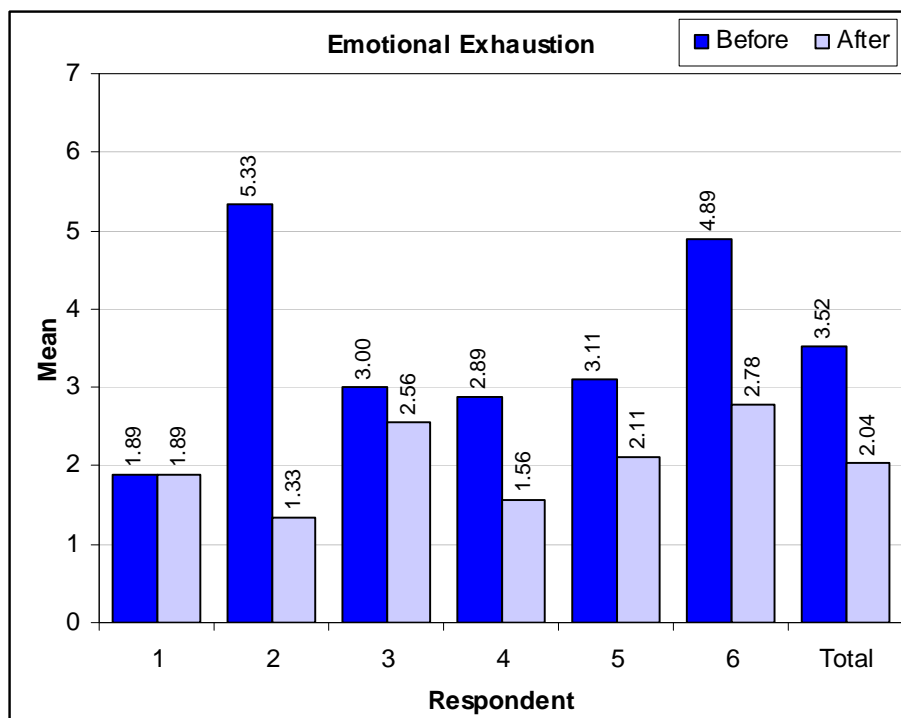
| | Group | | | |
|--|--------|------|-------|------|
| | Before | | After | |
| | N | Mean | N | Mean |
| I feel emotionally drained after work | 6 | 3.7 | 6 | 2.7 |
| I feel used up at the end of the day | 6 | 4.7 | 6 | 2.2 |
| I feel tired when I get up in the morning and have to face another day at work | 6 | 4.5 | 6 | 2.8 |
| Working with people all day is usually a strain for me | 6 | 3.8 | 6 | 1.7 |
| I feel burned out from my job | 6 | 3.2 | 6 | 1.5 |
| I feel frustrated by me job | 6 | 2.7 | 6 | 1.3 |
| I feel I am working too hard on the job | 6 | 4.5 | 6 | 3.0 |
| Working with people directly puts too much strain on me | 6 | 3.0 | 6 | 2.0 |
| I feel like I am at the end of the rope | 6 | 1.7 | 6 | 1.2 |
| I can easily understand how my clients feel | 6 | 5.5 | 6 | 6.7 |
| I deal effectively with the problems of my clients | 6 | 6.2 | 6 | 6.5 |
| I feel I am positively influencing other people's lives through my work | 6 | 6.2 | 6 | 6.3 |
| I feel very energetic | 6 | 4.5 | 6 | 7.0 |
| I can easily create a relaxed atmosphere with my clients | 6 | 5.0 | 6 | 6.8 |
| I feel exhilarated after working closely with my clients | 6 | 4.2 | 6 | 6.7 |
| I have accomplished very worthwhile things in my work | 6 | 4.2 | 6 | 5.8 |
| In my work I deal with emotional problems very calmly | 6 | 4.3 | 6 | 6.7 |
| I feel I treat some clients as if they were impersonal objects | 6 | 2.3 | 6 | 2.3 |
| I've become harder towards people since I took this job | 6 | 3.5 | 6 | 2.0 |
| I worry that this job is hardening me emotionally | 6 | 3.5 | 6 | 1.5 |
| I don't really care what happens to some clients | 6 | 1.8 | 6 | 1.0 |
| I feel clients blame me for some of their problems | 6 | 2.5 | 6 | 2.0 |

Table 4.2 represents the responses of all six principal 'respondents' to the MBI questionnaire calculated jointly. The first nine items reveal 'respondents' feelings and attitudes on emotional exhaustion, the next eight items their feelings and attitudes on personal accomplishment and the last five items their feelings and attitudes on depersonalization. Table 4.2 includes responses both before and after attending the workshop.

As already explained, the scores for the three aspects of burnout, i.e. emotional exhaustion, personal accomplishment and depersonalization are considered separately due to the limited knowledge about the relationship between these three dimensions of burnout (Maslach & Jackson, 1981:2). For that reason figures 4.1(a) and 4.1 (b) represent the results of the dimension of emotional

exhaustion burnout, figures 4.2 (a) and 4.2 (b) the dimension of personal accomplishment burnout and figures 4.3 (a) and 4.3 (b) the dimension of depersonalisation burnout.

Figure 4.1(a): Emotional exhaustion- Comparison of scores of the six respondents - before and after the stress intervention programme



- **Emotional exhaustion**

Figure 4.1 (a) depicts the scores of the six 'respondents' in the emotional exhaustion subscale before and after the stress intervention programme. The figure shows that the scores of 'respondent' one remained the same at 1.89 whereas the scores of 'respondents' two to six had significant reductions in their stress levels after the programme. The total in this subscale decreased from 3.52 to 2.04. It can be concluded from this information that the stress intervention programme was highly successful in reducing stress in the emotional exhaustion burnout subscale.

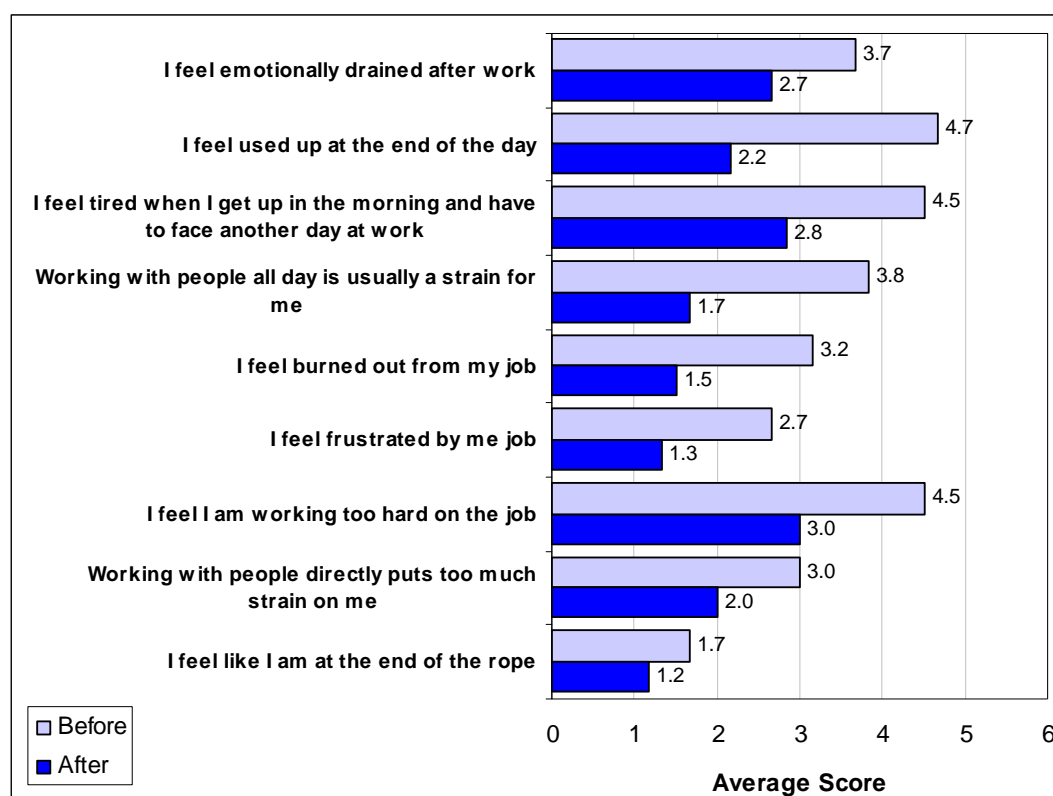


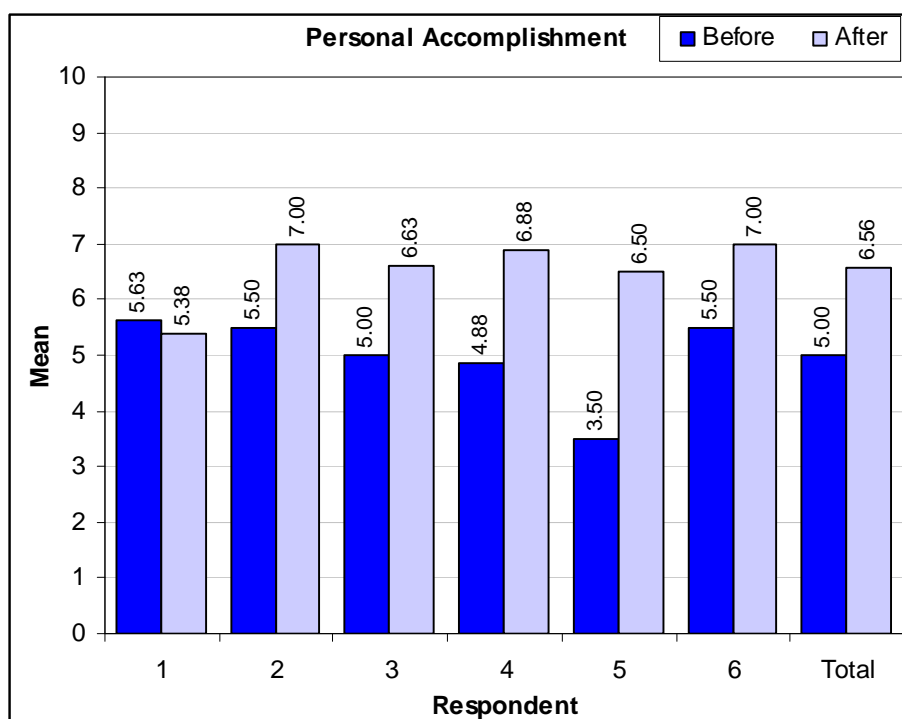
Figure 4.1(b) Emotional exhaustion – comparison of scores in the nine questions of the MBI before and after the stress intervention programme

Figure 4.1(b) reveals the responses on feelings and attitudes relating to emotional exhaustion of all six ‘respondents’ jointly calculated. The results of the Paired Samples t Test reflects that this difference is statistically significant at the 90% level ($p < 0.10$).

The average score of the nine items in the emotional exhaustion subscale *before* the Art of Living intervention programme is 3.52. On the MBI subscale for emotional exhaustion the scores fall into the lower third category indicating a relatively low level of emotional exhaustion (table 3.1). The emotional exhaustion levels of the ‘respondents’ were relatively low to begin with despite the high crime rate and low socio-economic status of the population that the school serves (par 1.6.2.2 & 3.3.1).

The average score on this subscale *after* the intervention programme is 2.04. There is therefore an improvement on the 'after' scores in that the average is down from 3.52 to 2.04, which proves that the intervention programme was effective in reducing stress levels of the principals in the emotional exhaustion subscale.

Figure 4.2 (a): Personal accomplishment - Comparison of scores of the six respondents - before and after the stress intervention programme



- **Personal accomplishment**

Figure 4.2 (a) shows the six 'respondents' scores before and after the stress intervention programme. There was a decrease in the scores of 'respondent' one, whereas the other five 'respondents' experienced an increase in personal accomplishment after the programme. The total scores in this category increased from 5.00 to 6.56. In this subscale success is measured

by an increase in scores. Looking at the 'respondents' scores before and after the stress intervention programme, we can conclude that the stress intervention programme was successful in improving personal accomplishment and reducing burnout.

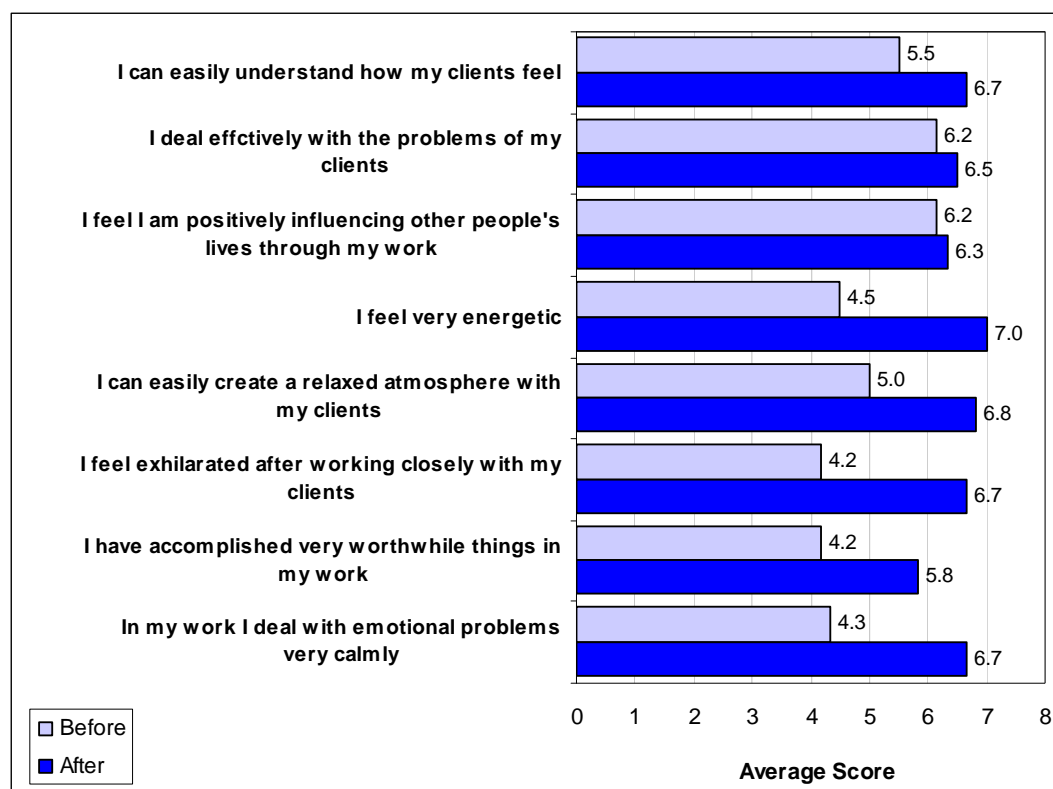


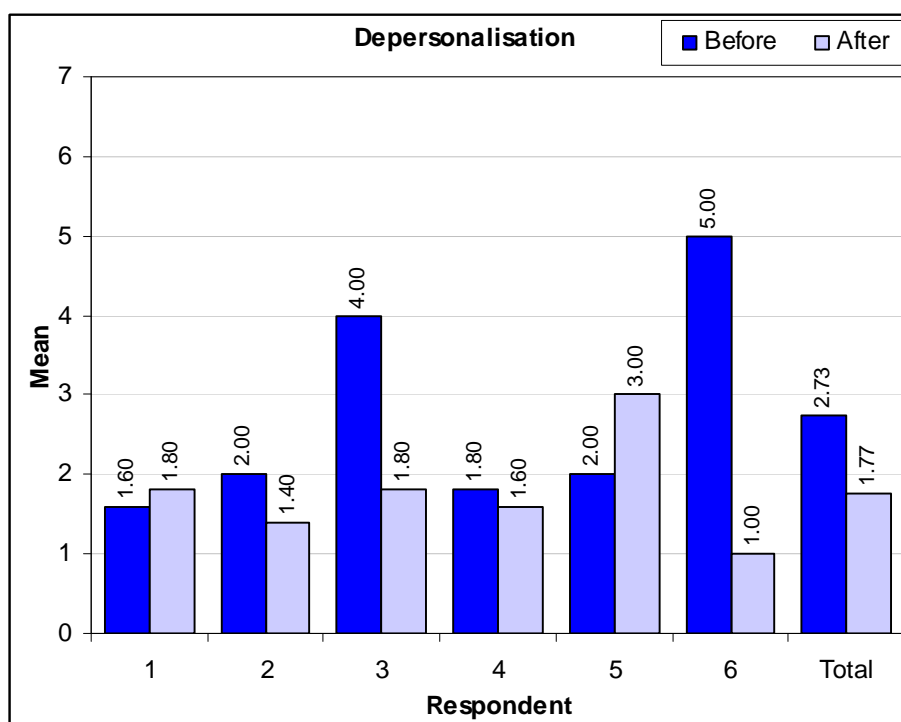
Figure 4.2 (b) Personal accomplishment – comparison of scores in the eight questions of the MBI before and after the stress intervention programme

Figure 4.2 (b) reveals the responses on feelings and attitudes relating to personal accomplishment of all six 'respondents' jointly calculated. The results of the Paired Samples t Test reflects that this difference is statistically significant at the 95% level ($p < 0.05$). The average score of the eight items of the personal

accomplishment subscale before the workshop was 5.00. The average score after the stress relief workshop was 6.56.

On the MBI subscale for personal accomplishment the scores fall into the upper third indicating a high level of personal accomplishment burnout both before and after the stress intervention programme (Table 3.1). The information in figures 4.2 (a) and 4.2 (b) has shown that the stress intervention programme was effective in reducing the stress levels in the personal accomplishment burnout subscale.

Figure 4.3 (a): Depersonalisation- Comparison of scores of the six respondents - before and after the stress intervention programme



- **Depersonalisation**

Figure 4.3 (a) shows the scores of the six 'respondents' before and after the stress intervention programme. There has been an increase in depersonalisation burnout in 'respondents' one and five; and a decrease in the depersonalisation burnout in 'respondents' two, three, four and six. The total scores, however, have revealed a decrease in depersonalisation burnout by a small margin, from 2.73 to 1.77. This brings us to the conclusion that the stress intervention programme was successful in reducing burnout levels in the depersonalisation subscale.

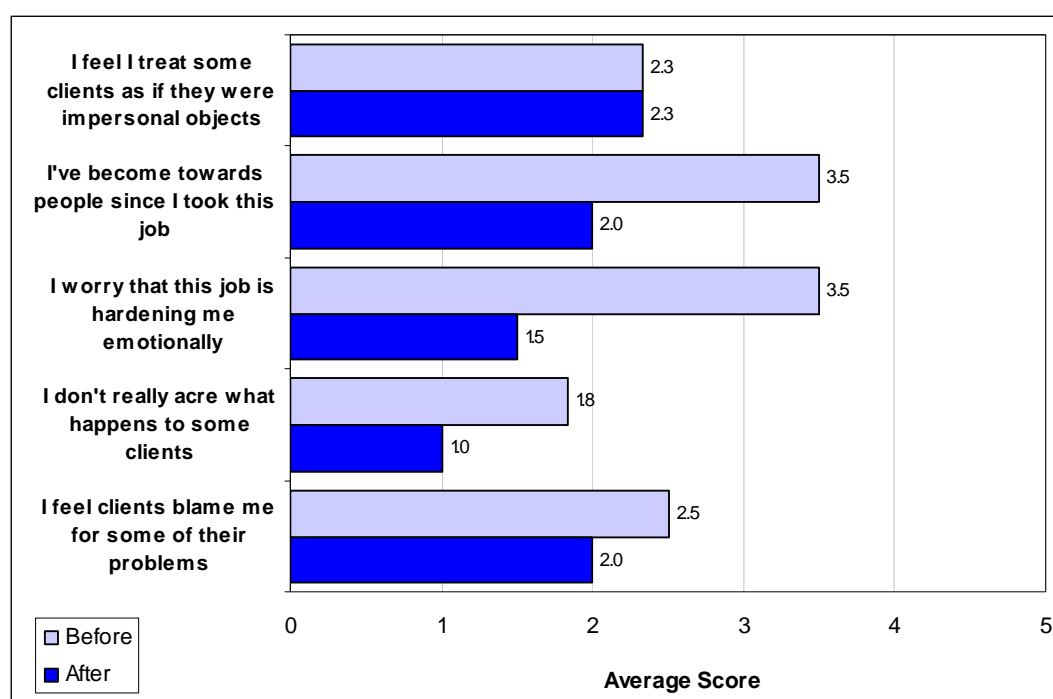


Figure 4.3 (b) Depersonalisation – comparison of scores in the five questions of the MBI before and after the stress intervention programme

Figure 4.3 (b) reveals the responses on feelings and attitudes relating to depersonalisation of all six 'respondents' jointly calculated.

The average score for all six 'respondents' of the five items in the depersonalisation subscale before the intervention programme was 2.73. The

average score after the programme was 1.77. There is a decrease in scores from 2.73 to 1.77. However, this difference is not statistically significant at the 95% level ($p>0.05$). This proves that there is evidence to prove that the intervention programme was effective in reducing the stress levels of the principals in the depersonalisation subscale.

On the Maslach Burnout Inventory scale for depersonalisation, the scores fall into the lower third, indicating a low level of depersonalization burnout both before and after the stress intervention programme (table 3.1). The scores of the 'respondents' before and after the stress intervention programme reveal that the programme was, in fact, successful in lowering the levels of depersonalisation burnout further.

The quantitatively collected data firstly confirmed the levels of stress encountered by primary school principals in the three subscales. Secondly it proved that the stress intervention programme that is based on breathing techniques served as a functional stress relief aid and reduced stress levels of the respondent principals in the three subscales of burnout, namely, emotional exhaustion, personal accomplishment and depersonalisation.

4.3.2 PRINCIPALS' STRESS AND STRESSORS – FIRST SESSION OF INTERVIEWING

To address the sub question, "What are the main stressors experienced by primary school principals," six primary school principals were each subjected to semi-structured individual interviews before they participated in the stress intervention programme. Upon interviewing the principals, the effect that stress had on the participants' physical, mental and emotional well-being was examined. In that regard principals were questioned on the main causes of their stress.

Questions in the interview schedule, Annexure D, were used as a guide during the interview process. Collected data was analysed according to qualitative methods and organised into categories (par 3.3.3.1). Based on the findings of the qualitative investigation, the stress participant principals experienced is presented according to eight categories which are discussed in the ensuing paragraphs. Findings are substantiated by verbatim excerpts from the interviews. To show the various responses of the six participant principals, they are numbered P1 to P6 so that confidentiality and anonymity may be maintained.

4.3.2.1 Principals stress experience

The first objective with the qualitative investigation was to ascertain whether participants were indeed experiencing stress/burnout and if the case, how did they perceive their stress. In that regard the term 'burnout' is defined as a metaphor that refers to the draining of energy; that is, more energy is lost than replenished (par 2.4.3). From the responses of the participant principals it was clear that they do indeed experience high levels of stress and they acknowledged that they suffer from low energy levels and a continuous feeling of tiredness. This impacted differently on individual participants.

For principal P2, low energy levels mainly resulted in feelings of consistent agitation that impacted on his ability to think straight; leaving him defenseless. He explained this as follows: *"I am agitated and tight ... unable to think clearly ... too many issues cloud my mind. I am uneasy ... always thinking about the problems... I am not my natural self"* (P2). For principal P1 the encountering of high levels of stress was visible in moods of agitation, anger and incompetency that were experienced due to continuously feeling *"irritable ... snapping at little things...experiencing usual tasks as heavy and unmanageable"* (P1).

Exhaustion that causes anxiety and an inability to relax was a major problem encountered by the majority of participants. They pointed out that feelings of

anxiety overshadow them and the continuous stress resulted in an inability to distance themselves from their work. Principal P4 blamed his inability to relax on the stress related condition of “.. *the tendency to worry about what has to be done!*” which principal P6 agreed with by admitting: “*I think about unfinished tasks all the time*”.

A significant factor of principal stress that was pointed out by some of the participants was their accountability for the total well being of the school within an environment in which some educators fail to practice positive work ethics. The stress related feeling caused by such a condition is one of “*hopelessness because the others tasked to do their duties often fail or just don’t care, so it becomes your responsibility to get everything completed satisfactorily ...this is just not possible.*” (P5).

In keeping with the literature review where isolation was identified as one of the significant causes of stress (par 2.6.2.2), two participant principals expressed their desire to be left alone as a result of the stress they experienced in their work. Principal P3 felt the need to be left alone and not wanting to be in the company of others, but to rather sleep, however, he was still “ ... *not relaxed after sleep*” (P3). Principal P1 stressed the urge to be isolated. He acclaimed: “*I want to be left alone... I just don’t want to talk to anyone or listen to any talking*”.

It was evident that the participant principals did encounter stress which was manifested by a continuous feeling of tiredness and feelings of anger and frustration, an inability to relax and the need to be left alone.

4.3.2.2 Consequences of stress-biochemical reactions

The effect that stress had on the participant principals’ physical, mental and emotional well-being was also examined in the qualitative investigation. During the interviews the participants were questioned on the consequences of their

stress in terms of the biochemical reactions they may be aware of in their bodies. From the responses of the participant principals it was clear that they do suffer with various bodily changes when they are stressed ranging from serious ailments such as cardiovascular diseases to an inability to think clearly or concentrate on tasks.

A change in body temperatures was identified by principal P5 as his stress reaction. He experienced "*higher temperatures*" in stress situations. A similar response was elicited from principal P6 as she experienced "*hot flushes*" when stressed whereas principal P3 experienced "*night sweats*" as a result of his stress experiences. These stress experiences are in keeping with the literature review where increased perspiration was identified as one of the significant consequences of stress experienced by principals in previous studies (par 2.7.1.1).

Stress inadvertently affects the digestive system which was evident from the response of principal P6 who experienced "*stomach cramps*" and principal P4 who revealed an "*increase in acidity levels*". The literature review points to similar consequences of stress where people suffered from indigestion and/ or ulcers as a result of stress (par 2.7.1.1).

Disturbance in sleep patterns as a consequence of stress was a major problem encountered by principal P2 who experienced "*restlessness at night*," and "*nightmares*" which negatively impacted on the quality of sleep. Insomnia and the inability to sleep have been identified as consequences of stress in the literature study (par 2.7.1.1).

A change in breathing patterns as a result of stress was experienced by principal P5 who found that his "*breathing was shallow*" due to the stress experienced. In keeping with the findings in the literature study the slow breathing patterns are symptoms of stress when a person is experiencing depression (par 1.2.1).

Principal P4 who complained of “*muscle tightness*” when faced with stressful situations felt the effects of stress on the muscular system of his body. These symptoms have been described in the literature review as the effects of stress experienced by principals in previous studies (par 2.7.1.1).

Thought processes and concentration levels are also affected by stress as is evident from the responses of principal P4 who experienced “*a decrease in concentration levels*” when stressed. Principal P5 had a similar experience and revealed “*an inability to think logically*”. This is in keeping with the psychological consequences of stress described in the literature review (2.7.1.2).

The most serious physical symptoms of stress were experienced by principal P2 who experienced “*chest pains*” and was diagnosed with “*high cholesterol.*” The literature review has been explicit in describing increased heart rates and cardiovascular disease as significant health problems associated with stress (par 2.7.1.1). The stress experienced by principal P2 is similar to that experienced by Type A personalities and is a contributory factor to heart attacks (par 2.5).

The serious effects of stress on the biochemical functioning of the body are evident from the participant principals’ responses. Their experiences included increased body temperatures, disturbed sleep patterns, and the negative effects of stress on the muscular, digestive and cardiovascular systems of the body.

4.3.2.3 Positive stress

A significant factor with regard to stress encounters was the fact that all the participant principals admitted that in addition to the negative stress they encounter on a daily basis, they also experience positive stress, that is, eustress (par 2.4.1). All the participants agreed that they do, in fact, experience positive stress in their jobs as principals on a regular basis. The positive stress

experienced was motivational and resulted in job satisfaction as is evident in the responses from the participant principals.

The positive consequences of small amounts of stress were highlighted by principal P4 whose response was that *“a small percentage of stress keeps one focused... one works harder to achieve.”* The importance of being able to work within time-frames in a principal’s job and the positive stress experienced when tasks are completed on time were pointed out by principal P6. She explained as follows: *“I do experience positive stress... knowing that tasks are to be completed within a certain time-frame...managing to meet these timeframes gives me job satisfaction”* (P6). Principals P1 and P2 expressed similar experiences of positive stress, they resorted to prioritizing and *“did things immediately”* (P1), and *“...finished things quickly”* (P2). Principal P5 found that he experienced positive stress when he *“achieved goals and benchmarks”* that he had set for himself.

It was clear from the responses that the positive consequences of stress that the participant principals experienced resulted in focused, more efficient goal oriented leadership. The satisfaction of accomplishing goals motivated the principals and gave them a sense of achievement which served as an impetus and was experienced as positive stress. However, the majority of stressful experiences that the participant principals experienced were negative, resulting in physical, psychological and behavioural consequences of stress (par 2.7). These negative stress experiences can be counteracted with appropriate coping mechanisms and it was therefore necessary that the participants engage in the stress intervention programme.

4.3.2.4 Coping with stress

From the responses of the participant principals it emerged that they had developed various coping mechanisms to deal with their stress levels prior to

participating in the stress intervention programme. Some of the principals had engaged in physical exercises, for example, playing soccer, tennis and swimming (P2, P3), while others were conscious about their diets and nutrition and resolved to keep to a healthy eating plan (P1, P3).

Apart from being active and pursuing healthy eating habits, principals P3 and P6 found that reading helped them to relieve stress, whilst prayer, yoga and meditation were used by principals P1, P2 and P6 to combat stress. The soothing influence of humour to alleviate stress was pointed out by principal P5 who explained as follows: *“I always maintain a positive and cheerful disposition...am able to find humour in most situations.”*

The responses by the participant principals on the coping techniques they use to relieve stress are in keeping with those used by principals in previous studies (par 2.8.5) which include doing physical exercises, maintaining a balanced diet and engaging in hobbies, for example, reading.

4.3.2.5 Stressors experienced by principals

From the participant principals' responses during the interviews, eight major themes that contributed to the principals' stress were identified. Principals found that improvising due to a lack of resources in their schools, managing school finances, disciplining learners, a lack of parental involvement, educators' attitudes, increased workloads, a lack of support and resolving conflicts created stress. These stressors are individually discussed in the ensuing paragraphs.

(a) A lack of resources

All the principals in the study cited limited resources as a major cause of stress as this tends to impact on service delivery in the schools. Principal P6 remarked that *“basic requirements like books, charts, stationery, and duplicating paper are*

in limited supply.” Principal P4 agreed with this statement and pointed out that due to a shortage of material resources in his school the optimal achievement of teaching/learning experiences were unattainable. His concern was that he could not provide adequately for the realising of the core functions of his school, i.e. teaching and learning due to “*a shortage of desks, chairs, duplicating machines, library resources, computers and sports equipment...these impact negatively on the delivery of quality education*” (P4). A lack of resources also impacts negatively on the delivery of the Revised National Curriculum as was pointed out by principal P1 who found that, “*there is always a shortage of resources...text books are limited and expensive and ...not suitable to the new curriculum*” (P1).

It was clear that principals experienced stress and frustration because they could not provide the necessary teaching/learning resources for their educators and learners. This compromised the high standards that they had set for their schools and impacted negatively on the quality of education. The lack of teaching/learning resources reported by the principals in this study is in keeping with the literature review. Inadequate resources also created stress in principals as reported in previous studies (par 2.6.2.4).

A shortage of human resources in education because of the low Post Provisioning Norms (PPN) was reported as a major stressor by the participant principals. The PPN, which is a formula used to allocate educators to schools, determines the teacher / pupil ratio, and is based on provincial budgets. The need to employ School Governing Body educators because of a shortage of educators to cater for the curriculum needs of the school was reported by principal P4 who said: “*There is a shortage of personnel to cater for physical education, library and computers in primary schools and this impacts on delivery*” (P4). The class sizes are also dependent on the PPN and results in large class sizes as pointed out by principal P2 who stated that: “*Limited staff leads to larger class sizes*” (P2).

In addition to the stress caused by personnel shortages and large class sizes is the stress brought about by the demand on the principal, as the liable person, to arrange for the replacement of educators who go on leave. This was identified as a significant stressor by principal P3 who found that *“educators are difficult to recruit and this... becomes the direct responsibility of the principal”* (P3). Related to the demand of finding replacements for teachers on longer periods of leave is the stress caused by the arranging of relief teaching rosters for educators who are absent and for educators that attend workshops during teaching time. Principal P3 reported that *“departmental workshops that are scheduled during teaching time create serious relief problems”* (P3).

The magnitude of school size in terms of learner numbers was a pertinent contributory factor to principal stress as pointed out by principal P5 who acclaimed that *“the bigger a school, the more work there is... human resource management, discipline problems, school safety and infrastructure maintenance”* (P5).

The literature review has also shown that a shortage of human resources creates stress for principals (par 2.6.2.4). The size of the school and the number of learners and staff also contribute to the stress levels of principals affecting the tone, discipline and noise levels (par 2.6.2.12).

(b) Financial management

Participants cited finances of the school as a major stressor as they found that the state subsidy was insufficient to meet even the essential financial needs of the school. *“The monetary allocation from the Department is completely insufficient to meet the basic expenses”*, was the response from principal P3 who found that it was almost impossible to sustain an institution with the limited funding provided by the state. Principal P5 complained that the shortage of funds resulted in compromising standards in extracurricular activities in his school and

he could not compete with other more affluent schools. His comment was: *“We have always been running on a shoe-string budget ... to compare with the ex-Model C schools on the sports fields is unreasonable (P5).*

Due to decentralised school governance, schools are now required to plan budgets and ensure that all expenses are met. This has necessitated the collection of school fees and fund-raising efforts to supplement the subsidy received from the state. Collection of school fees was seen as a major stressor by the principals as many parents are indolent and do not cooperate with schools in the payment of school fees. Principal P1 commented as follows: *“Our main source of finance is school fees ...we receive about fifty percent.... some parents who can afford school fees refuse to pay” (P1).* Principal P3 echoed the same sentiments and reported on *“the low school fund retrieval”* which results in a shortage of funds and which creates a huge amount of stress for principals who are held responsible for viable teaching/learning provisioning at their schools.

As a result of the inadequate state subsidies and low school fund retrieval, schools were forced to embark on fund-raising drives to maintain solvency and manage the institutions. Constant fund-raising initiatives were experienced as a stressor because it was time-consuming and affected teaching and learning time. Principal P4 found that *“constant fund-raising interferes with curriculum delivery. If the state removes this financial burden, the child will be a priority” (P4).* Added to the huge demand of arranging for additional funds, is the accountability aspect of the principal’s work with regard to financial control to ensure that no fraudulent transactions occur. Principal P1 explained as follows: *“Finance is a big bug-bear. The principal has to manage the finances with proper checks and balances to prevent fraud” (P1).*

There are similarities in the literature study and the empirical investigation with regard to principal stress caused by the financial management of a school. The literature study revealed that increased financial responsibilities, having financial

difficulties and having insufficient funds are common causes of stress (par 2.6.2.8). The South African quintile ranking of schools and the resultant disparity in departmental funding add to the problem of financial management and increases the principals' stress levels (par 2.6.2.8).

A specific aspect that relates to school finances and which participant principals had consensus on as one of their major stressors, is the maintenance of school buildings and the school environment. Limited finances made the maintaining of the school buildings difficult and created stress for principals. Principal P2 responded as follows: *"Maintenance of buildings depends on the resources we have...there are no finances for maintenance of buildings...this is killing me"* (P2). For principal P4 the stress of maintaining his school was exacerbated by the fact that the buildings are old and difficult to maintain. *"The age of my school is a major problem and maintenance is a mammoth task"* (P4). Principal P3 agreed that *"the cost of maintaining the infrastructure and the school environment creates incredible stress."* In the face of increasingly out of control crime rates in South Africa, the stress caused by the responsibility of maintaining physical facilities was aggravated by the stress of increased maintenance costs as a result of burglaries and vandalism. This was reported by principal P3 who found that *"the lack of proper school fencing leads to increased vandalism and burglaries, resulting in increased maintenance costs"* (P3).

In the literature study, managing school buildings and grounds was found to be stressful for principals on a world wide scale. In South Africa it was found that limited funds, and destruction of school property on account of vandalism made building maintenance even more difficult (par 2.6.2.11).

(c) Learner discipline

All the principals in this study found that the disciplining of learners generated stress. A decline in the standard of discipline due to learner attitudes that relate

to general disobedience and a lack of work ethics were factors that contributed to principals' stress. Principal P1 identified behaviours of "*cheating, stealing, fighting, vandalism and truancy*" as part of the repertoire of unacceptable behaviour and pointed out that "*dealing with discipline problems takes up most of my time and is most frustrating*" (P1). Principal P4 emphasised that "*discipline is on the decline (because) interference, bullying, and wild play present problems on a regular basis*" (P4). The learners' attitude to their schoolwork impacted negatively on their academic achievement which was an even more intense stressor for principal P6. She acclaimed as follows: "*The learners' general attitude towards their work, their late-coming, homework not being done... impact on their progress. Their bad progress makes me stress even more!*" (P6). For principal P3 discipline problems and a non-adherence to the school code of conduct manifested in a continuous "*non-adherence to the school's dress code*" (P3).

The frustration experienced by principals in disciplining learners that were continuously misbehaving was apparent from the interviews. These findings are in keeping with the literature review where learner behaviour was also found to be stressful for principals (par 2.6.2.6).

(d) A lack of parental involvement

The problem of disciplining learners was compounded by a lack of parental involvement and the non co-operation of parents. The lack of parental interest in their children's education was stressful for principals as there were some parents who did not call at school when requested to do so. Principal P6 encountered cases where she only met some parents when they admitted their children at school on the first day. She commented that: "*Parents do not respond... the only time we see the parents is during enrolment*" (P6).

The crucial partnership between parents, educators and learners in the education process was emphasised by principal P3. He expressed his disappointment with parents who do not play their role in this partnership as follows: *“Parents are a formidable partner in the pedagogic triangle, yet some are not interested in fulfilling their parental obligations, what a severe shame!”* (P3).

In addition to the stress generated by indifferent parents is the phenomenon of parents who defend the wrong-doing of their children with regard to discipline problems. Principal P5 explained as follows: *“Learners who abuse other learners and frustrate educators are often defended by their parents* (P5). Principal P3 added to this by pointing out that many parents claim not to be conversant with the school’s code of conduct although the school rules are distributed to parents at the beginning of every year. Learners who do not adhere to the code of conduct are defended by their parents repeatedly; *“(who) claim to be ignorant of the school code of conduct despite the distribution... early every year* (P3).

Participant principals agreed on the negative effect of indifferent parents on learner achievement. Principal P2 vocalised his concern on the correlation between parent involvement and learner success as follows: *“Where there is a lack of parental interest, poor academic performance is the end result”* (P2).

(e) Educators’ attitudes

The educator’s attitude to the learners can influence learner discipline and achievement positively or negatively – contributing to either positive or negative principal stress - as is evident from the participant principals’ responses. Principal P1 cited the educators’ attitudes as a major stressor. *“Educator attitude to work can be depressing especially ...the same adult has to be dealt with on many occasions”* (P1). It was clear that negative educator attitude manifested mainly in a lack of commitment and an unwillingness to take dedicated ownership for the classroom teaching situation. This resulted in increased stress for the principal

who was expected to attend to class related misconduct. In this regard principal P1 explained that “*the teachers send the children to the office all the time*” which principal P6 confirmed by emphasizing that “*almost all the cases are referred to the principal to sort out*” (P1).

In addition to an unwillingness of some educators to take full responsibility for the classroom situation, educator absenteeism and educator punctuality were also identified by participant principals as aspects responsible for principal stress. Principal P2 emphasised that “*absenteeism and leave-taking (of staff) is a disaster*” (P2).

It was clear from the interviews that educator absenteeism and late-coming, a lack of commitment from some educators, and the indifferent attitude of some educators to their work were aspects manifesting in serious stressors encountered by participant principals. In the literature review, educator attitudes and behaviour were found to be a significant cause of stress encountered by principals. Principals expressed dissatisfaction with the performance of poorly motivated educators who do not give of their best as this affects learner achievement negatively and hampers school excellence seriously (par 2.6.2.9).

(f) Increased workload

With regard to the job description of the present day principal, all the principals in the study found that the present day principal has a more stressful job than that of the principal of the past. The wide range of principal responsibilities spread across a varied spectrum of competency demands, created significant stress for principals. Principal P4 emphasised the wide range of functions of the present day principal, ranging from the “*maintenance of the school, (to the) provision of resources, (to) security*” for which the principal is held accountable. Principal P4 felt strongly that these functions did not belong to the principal but “*should be the responsibility of the Department as employer.*” This was confirmed by principal

P2 who juxtaposed the positions of past and present day principals to point out that the responsibilities of the present day principal have multiplied substantially. Principal P2 explained: *“Previously, principals were better off... they had more staff and more funding...department did the maintenance of buildings ...paid for water and electricity, now we have to see to EVERYTHING”* (P2). Principal P3 agreed with this and pointed out that in fact the magnitude and complexity of the present day principal’s job description related to being a *“Jack of all trades and a Master of ALL’* (P3) in which *“the hidden job seems to overpower the stipulated job description”* (P3). Such a condition has the potential for substantially increased stress encounters.

With regard to the manifold communication duties of the principal, principal P5 explained that the present day principal *“interacts with the Department, with unions, with the SGB, with the community at large, with parents, with non-government organizations and with educators”* (P5). Part of the principal’s communication and liaison responsibilities is the task of assisting the School Governing Body (SGB) which results in a substantial increase of workload, especially when SGBs do not perform their role functions properly. Principal P2 acclaimed that due to the SGB’s inefficiency *“the principal carries the complete SGB...does everything for the SGB”* (P2). Principal P4 agreed with this and ascribed Governing Body inefficiency to a lack of time and competency on the part of parents. In principal P4’s own words: *“Parents have neither the time nor the capacity to carry out the functions”* (P4).

As far as participant principals’ professional responsibilities were concerned, they were generally happy to spend contact time with the learners, but found that the teaching aspect of the principal’s role is sometimes neglected due to numerous disturbances in class and when attending meetings and workshops. Principal P6 quipped that: *“I am always disturbed while teaching a class... this does not allow me to concentrate on teaching/learning... affects learners’ progress”* (P6).

The findings from the interviews with regard to principals' workloads are in keeping with the literature review where the changing roles of the principals created stress (par 2.6.2.1). Motholo (1995:20) emphasised that principals in South Africa are suffering from work overload due to the wide range of responsibilities. They have to work closely with educators, learners, parents, School Governing Bodies and departmental officials which results in a substantial increase in the principals' responsibilities and an increase in the workload.

(g) Lack of support

A lack of stakeholder support added to the workload of principals. For the sake of improved school excellence stakeholder support is inevitable as emphasized by principal P4: *"To achieve success, we need the full support of the School Governing Body, the School Management Team and the educators"* (P4). The stakeholder support that is needed is however not limited to educators, parents, the School Management Team and the SGB, but also includes the important input of psychologists and the full range of therapists. In that regard principal P1 pointed to the scarcity of provisioning in that *"very little or no support is received in certain areas... there are hundreds of cases to be dealt with by a limited number of psychologists and therapists"* (P1).

The literature study also points to a lack of support from the Education Department, colleagues and supervisors (par 2.6.2.7). In South Africa a lack of support from Government in respect of legitimate wage demands and improvement of classroom practices and discipline causes stress for principals (par 2.6.2.7).

(h) Resolving conflicts

Conflict situations which involved learners, educators, parents, the School Governing Body (SGB) and the Department were cited as major stressors for

principals in this study. Principal P2 found that he was responsible for resolving conflicts at all levels. He explained as follows: *“There is a lot of conflict between learners, educators and parents...it all comes to the office”* (P2). Conflict resolution relating to learners was stressful and was described by principal P1 as pertaining to *“minor assaults, petty thieving, vandalism, brand clothing, fancy hairstyles”*. Resolving conflicts amongst educators was also identified as a major stressor by all the participant principals.

For principal P4 the resolving of conflict amongst educators took more of his time than general school improvements which he encountered as a serious concern. He acclaimed: *“The head spends more time on conflict management rather than on improvements and on important developments in a school...what a waste of valuable time”* (P4). For principal P5 the lack of professionalism of some educators which is in many instances accompanied by huge egos to compensate for the lack of competency is the reason for most of the conflict eruptions at his school. Principal P4 concurred with his opinion that educators who fail to do their work are generally found to create conflict. In principal P4's own words: *“shirkers’ are the root causes of conflict...they instigate others”* (P4).

Apart from learner and educator conflicts participant principals also identified the School Governing Body (SGB) as a creator of conflict. The reason for conflict with the SGB related mainly to incidences of *“SGBs interferences in professional matters”* which was worsened by the fact that *“their own role functions are not in order”* (P4).

Another significant stressor identified by participant principals was the lack of direction by the Department of Education in the face of constant changes. This resulted in uncertainty in some schools creating conflict amongst educators and School Management Teams. Principal P4 stated that: *“The Department’s directives are often confusing... constant changes with regard to Outcomes*

Based Education and National Curriculum Statements result in confusion and frustration, instability and conflict eruptions “(P4).

The literature review, also points out that resolving conflicts, and negative work relationships, are some of the stressors experienced by principals in dealing with people. Educator attitudes and behaviour are serious causes of conflict (par 2.6.2.6). So is confusion with regard to curriculum development, curriculum implementation and frequent changes in the curriculum and assessment policies which have been reported to create stress (par 2.6.2.9).

4.3.2.6 Retrospection on principals' stress and stressors

Findings revealed that principals experienced stress as a result of the impediments that prevented them from achieving the excellence they strived for. Principals felt that they were unable to provide adequate educational resources for educators and learners due to budgetary constraints. Their financial responsibilities were challenging as a result of insufficient state subsidies and low school fund retrieval. The time-consuming fund-raising drives that schools embarked upon impacted negatively on teaching and learning and inadvertently on the academic performance of the school.

Learner discipline has deteriorated in recent years and the learners' attitude to their schoolwork was a cause for great concern. Learners who were involved in misdemeanors often produced poor results, creating added stress for principals. Parents who did not show an interest in their children's education and who defended their children's lack of discipline created stress for principals, as principals felt strongly that the parent was an important partner in the education process and had a strong influence over the children's academic results.

Another cause for concern was a lack of commitment from some educators. Educators' absenteeism and late-coming was common and created stress for

principals who had to make relief arrangements and ascertain that classes were attended to. The lack of educators' commitment was also an important indicator in the learners' scholastic performance.

A lack of support from School Governing Bodies, Departmental Officials, therapists and psychologists added to the principals' workload and created stress. The time and energy spent in resolving conflicts were found to be wasteful by the participant principals who felt that they could have used the time towards academic and professional development at their schools. Finally, principals were stressed by their increased workloads as they found that they were accountable for *everything* in schools from communication with stakeholders, maintaining buildings, assisting the School Governing Bodies to safety and security of the school.

4.3.3 THE IMPACT OF THE STRESS INTERVENTION PROGRAMME – SECOND SESSION OF INTERVIEWING

To address the primary problem of the study, "What impact does a stress intervention programme have on the functioning of primary school principals," semi-structured individual interviews were conducted after the breathing technique intervention programme. Open-ended questions in the interview schedule, Annexure E, were used as a guide during the interviews to determine whether the principals benefited from the stress intervention programme and to determine what coping skills they had acquired at the workshop. The principals' experiences are described under the following six themes that were identified from their responses:

(a) Being calm and relaxed

Participants subjected to the programme unanimously agreed that the breathing technique workshop had been of immense benefit to them. In describing their

experiences of the programme and the benefits gained in relieving stress, the ability to relax and remain calm was a common response from the participants.

For principal P1 the benefits of the breathing techniques mainly resided in calming the mind and body. He explained as follows: *“Breathing correctly helped me especially to calm the mind and body”* (P1). For principal P5 the main virtue of correct breathing related to the ability to relax which positively influenced his capacity to function more effectively. In principal P5’s own words: *“The breathing programme helped me to relax my mind and thereby relax the body, enabling me to become calm... helped me to function more effectively”* (P5).

The observation that when one is relaxed the tendency to worry diminishes was made by principal P4 who found that the programme helped him to relax and reduce his worries. In his own words; *“The programme was highly relaxing....nothing seems to worry me”* (P4). Added to the ability to relax was the virtue of being able to focus on the moment as identified by principal P3 who found that: *“I tend to relax more and to accept people and situations better, to be able to focus on the moment again”* (P3). Linked to the development of creating for oneself an inner atmosphere of serenity with the help of correct breathing techniques, principal P2 explained that such a condition enabled him to put his problems and fears into perspective. He explained: *“With correct breathing the atmosphere became serene.... made me talk about my problems and fears and cast them away... put the present moment into perspective”* (P2). Principal P5 elaborated on this condition by determining the enabling virtue of logical thinking and a more objective approach to matters as a result of proper breathing. Principal P5 admitted that he was able to *“see situations in perspective...become more objective... apply logic in a much calmer mental state”* (P5).

Participant principals established the fact that the application of the breathing techniques could benefit them at any time of the day as vocalised by principal

P2: *"If stress is getting to me during the day, I take a small break and do my breathing exercises... calms me down and gives me renewed energy"* (P2).

(b) Improved sleep

Although all the participants acknowledged a direct correlation between engaging in correct breathing exercises and improved sleeping patterns, principals P2 and P3 identified the specific improvements in their sleeping habits. For principal P3 who was diagnosed with the sleeping disorder of sleep apnea and who therefore suffered from too little quality sleeping time, the application of the proper breathing exercises resulted in more hours of proper rest. He explained as follows: *"I have a difficult sleep routine because of my sleep apnea...the breathing programme has improved my sleep patterns.... I now sleep for more quality hours"* (P3). For principal P2 who suffered from waking up in the middle of the night and struggling to go back to sleep again, an application of the breathing exercises ensured that he *"was not disturbed in the middle of the night"* (P2).

(c) Increased energy levels

Participant principals experienced an increase in their energy levels as a result of the breathing techniques that they practiced. This resulted in an increased ability to concentrate and to achieve more within limited time periods. The increased energy levels enhanced their alertness and enthusiasm; they were now able to work for longer periods of time without showing signs of weariness.

Principals P3 and P4 experienced an increase in vibrancy as a result of practicing the breathing exercises. *"My mind is totally calm and I feel more vibrant"* was the response from principal (P4), whereas the response from principal (P3) was *"I feel more energised and alert."*

The breathing technique which increases energy levels is called '*Bhastrika*' or bellows breathing (par 3.3.2.3). Principal (P6) practiced this technique whenever she experienced a depletion of her energy levels, and she found that she was energized instantly. Her response was: "*Bhastrika energises me immediately*" (P6).

The stress intervention programme therefore was beneficial in increasing the energy levels of the participant principals. Participants felt energetic, and experienced increased concentration levels.

(d) Improved human relations

A very important coping skill that the participants indicated they had acquired to help them cope with stress included the ability to be positive and develop good human relationships. A positive attitude, good human values and the ability to work in a team are described by principal P4 who stated: "*I realised the importance of being positive...cultivating ideal human values ... working in a team.....developing good human relations and maintaining harmony*" (P4).

The need to see the good in every person and situation was an important skill acquired by principal P3 who found that: "*I have a calmer and interactive mind resulting from the breathing techniques ...see the good and positive in everyone and in every situation*" (P3).

(e) Control anger and emotions

The ability to control anger and one's emotions were benefits gained by the majority of the participant principals. Principal P4 emphasised the absolute necessity for principals to be able to control their anger; and pointed to the value of applying the breathing techniques to stay controlled and be able to sustain a condition of rational thinking. Principal P4 explained as follows: "*It helps control*

anger and emotions which is absolutely important in the work of a principal ... rational thinking prevails" (P4). Principal P5 concurred with this and described the danger of a principal becoming emotional in his/her work and the negative effects thereof. He also stressed that the breathing exercises empowered him to "*avoid being on an emotional roller coaster*" (P5).

A distinct coping skill gained by principal P3 in addition to the ability to remain calm and rational, is the ability to "*accept the conditions which cannot be changed*" (P3); which helped the participant principals in relieving stress.

(f) Discipline of body and mind

The importance of holistic discipline and inculcating the habit of regular practice of the breathing exercises were skills gained by the participant principals. This results in a calm and disciplined body and mind and helps one cope with stress as is evident in the responses from the participant principals. The practice of the breathing exercises whenever needed but especially every morning was found to be beneficial by principal P2, because the morning exercises helped him to have a good start to the day and helped him to remain calm throughout the school day. This is described by principal P2 as follows: "*The mornings are the most important... I start the day with the programme...the breathing exercises.....this sets me in a serene mood, a calm state of mind to handle any kind of situation in my day*" (P2). Principal P1 agreed with this, but pointed to the special value of the breathing exercises which pertains to "*the importance of regular practice*" in order to develop concentration and improved memory. To this observation principal P2 added the virtue of becoming "*more disciplined*" and principal P4 the benefit of "*diet control to alleviate excessive stress*".

Participants were unanimous that in conjunction with the acquired skills of being disciplined and conscientious in one's perseverance to correct life style habits, the importance of introspection and a serene acceptance of situations that

cannot be changed, was gained from practicing correct breathing techniques. This was highlighted by principal P1 who emphasised the “*need to listen...to resolve to introspect...to feel satisfied that you tried your best...*” (P1). In order to be able to engage in introspection, principal P6 pointed to the “(acquired) *technique of silent sitting... just sit quietly... reflect on all that has happened*” (P6).

(g) Retrospection

All the principals acknowledged that they had benefited from the programme and that they were now better equipped to deal with stress. The coping skills they had acquired included the ability to remain calm and relaxed, despite the stressful situations they encountered while performing their tasks as principals. An awareness of their emotions assisted them to control their anger in volatile situations thereby reducing their stress levels. The breathing techniques also impacted positively on the quality of their sleep, which, in turn increased their energy levels making them more focused, alert and dynamic in carrying out their duties. An improvement in human relations was noted promoting positive attitudes and cooperation in the workplace. Overall, the positive outcomes of the programme had assisted the participant principals in the alleviation of stress. A new dimension to their views of life are evident by the general comments made by principals P4 and P1 in respect of the programme; P4 described the programme as “*an excellent manual to living*” and for principal P1 “*it opened new windows to living*” (P1).

4.3.4 THE VALUE OF THE ‘ART OF LIVING’ BREATHING TECHNIQUE WORKSHOP FOR STRESS RELIEF

In response to the question ‘Would you recommend the workshop to other principals?’ the participants unanimously agreed that they would indeed recommend the programme to all principals. Their reasons for recommending the

workshop to other principals related to the advantages pertaining to the calming effect that the breathing techniques had in the alleviation of stress on the participant principals.

Each participant identified a distinct advantage for engaging in the practice of correct breathing to alleviate stress. For principal P6 the main advantage related to the ability *“to feel more relaxed and therefore feel more equipped to handle stress better”* (P6). For principal P5 the major aspect on which to promote the workshop is the fact that a regular practicing of the breathing techniques will equip principals with the skill of being effective transformation leaders due to an increased receptiveness for improved ideas. In principal P5’s own words: *“They (principals) will definitely benefit from the breathing techniques.... will become more receptive to new ideas which is essential for a principal in a transforming society”* (P5).

Improvement in human relations is another important aspect that participant principals pointed out as an advantage of the workshop which other principals could also gain from by attending the workshop. This is described by principal P3 who explained that *“(an) improvement in staff relations will be noticeable (which will) enhance human relations in the workplace (and will) reduce potential conflict situations”* (P3).

Participant principals acknowledged the holistic nature of the workshop as an all embracing programme which equips one with the techniques needed to cope better with stressful situations. Principal P2 commented on the all-encompassing nature of the programme by pointing out that *“the programme has all the key ingredients in making one calm and rational”* (P2).

The Art of Living breathing technique workshop was highly recommended to other principals because the participant principals regarded the programme as effective tool in relieving stress. They were now receptive to new ideas, enjoyed

better human relations and were better equipped to take on the challenges of their role as transformational leaders.

4.4 Summary

The research findings presented in this chapter reported on the results of the empirical investigation undertaken. The findings of the quantitative analysis revealed that primary school principals experience low levels of emotional exhaustion and depersonalisation burnout and high levels of personal accomplishment burnout. The impact of the stress intervention programme on the functioning of primary school principals revealed that the breathing technique programme was successful in reducing principals' stress in all three subscales of the Maslach Burnout Inventory questionnaire.

The findings of the qualitative analysis which highlighted the main stressors as experienced by primary school principals revealed that a lack of resources across the broad spectrum of resource provisioning, extended demands with regards to financial management, a deterioration of learner discipline on account of their non-adherence to the school's code of conduct, increased workloads relating to a wide range of responsibilities and an insurmountable demand of time and energy in resolving conflicts were the main causes of principals' stress.

In describing the benefits of the stress intervention programme to relieve stress, the participant principals pointed out that the relaxing effect of employing correct breathing techniques made them feel relaxed and calm and increased their energy levels. They were also able to control anger better and experienced an improvement in human relations. The programme helped them develop lifestyle changes whereby they learned to discipline their bodies and minds which impacted positively on stress alleviation.

In the next chapter, the results obtained from the literature study and the empirical investigation will be discussed in relation to the research questions, research aims and research motivations proposed in chapter one and extended on in chapter 3. Finally, recommendations will be made regarding the alleviation of stress and recommendations for further study postulated.

CHAPTER FIVE SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

School principals are increasingly prone to experiencing high levels of stress. When schools are served by such leaders, the entire school is affected and the mission of maximising teaching and learning is hampered (Metzger, 2003:657). In addition stress can have an adverse effect on the principal's well-being at an individual level and may have serious physical and psychological effects (par 2.7.1). Principals who experience stress which leads to burnout are therefore compromising their own well being as well as that of the school as an organisation.

Since stress cannot be avoided, identification of effective coping strategies may provide school principals with the tools which can be used to reduce the amount of stress from the environment and to moderate the effect of stress on the individual (Allison, 1997(b):39). This study evaluated the role and impact of a stress intervention programme, the Art of living workshop, in the alleviation of stress by means of correct breathing techniques on a group of primary school principals in the Phoenix Circuit.

The findings of the empirical investigation discussed in Chapter four were based on the interpretations of the data gathered from the responses to the Maslach Burnout questionnaires and from the semi- structured individual interviews conducted before and after the stress intervention programme. This chapter gives a summary, conclusions and recommendations that were established during the course of the investigation.

5.2 SUMMARY

The summary and conclusions are guided by the aims and sub-aims of the study as set out in paragraph 1.5.

5.2.1 The impact of the stress intervention programme- the Maslach Burnout Inventory

The main aim of the study was to determine the role and impact of a stress intervention programme based on correct breathing techniques on the functioning of primary school principals. This was done by investigating the effect of the stress intervention programme on the stress levels of the participant principals before and after the Art of Living workshop based on breathing techniques. The responses to the Maslach Burnout Inventory questionnaire before and after the stress intervention programme were used to ascertain whether the coping strategies were successful in alleviating stress amongst the primary school principals.

The population sample selected in the empirical investigation consisted of a heterogeneous group as far as gender, age, years of experience and marital status were concerned. Six principals from the Phoenix Circuit were purposefully selected to take part in the investigation.

The comparison of the stress levels of principals in the literature review and that of the 'respondents' in this study revealed that contradictory data existed on the stress levels experienced by school principals in different countries at different times. Stress levels varied from low, to moderate, to high depending on the state of the education systems in their countries (par1.2.3).

In previous studies that used the Maslach Burnout Inventory (MBI) questionnaire to measure stress levels, it was found that overall principals experienced low to

moderate levels of emotional exhaustion and depersonalisation burnout; and high levels of personal accomplishment burnout (Gmelch & Chan, 1994:279; Sarros, 1988:191).

In this study, the 'respondents' experienced low levels of burnout in the emotional exhaustion and depersonalisation subscales and extremely high levels of burnout in the personal accomplishment subscale both before and after the stress intervention programme. The stress intervention programme, the Art of Living workshop based on breathing techniques, did however, have a positive impact in reducing the stress levels of the 'respondents'. We can therefore conclude that the breathing strategies were successful in reducing the stress levels of the 'respondents' in the three subscales of the MBI (par 4.3.1).

The responses to the three subscales in the Maslach Burnout Inventory (MBI) questionnaire, that is, emotional exhaustion, depersonalisation and personal accomplishment, can be summarised as follows:

There was a reduction in the emotional exhaustion burnout scores before and after the stress intervention programme from 3.52 to 2.04. This proves that the intervention programme was effective in reducing stress levels of the principals in this subscale (par 4.3.1; Table 4.1; Fig 4.1(a)).

Similarly, there was a reduction in the stress scores before and after the stress intervention programme in the depersonalisation subscale from 2.73 to 1.77 proving that the intervention programme was effective in reducing the stress levels of the principals in the depersonalisation subscale (par 4.3.1; Table 4.1; Fig 4.3(a)).

In the personal accomplishment subscale, where high scores indicate low levels of burnout, the scores increased from 5.00 to 6.56 before and after the stress intervention programme. This improvement is an indication that the intervention

programme was also effective in reducing the stress levels in this subscale (par 4.3.1; Table 4.1; Fig 4.2 (a)).

The quantitatively collected data, therefore, prove that the stress intervention programme that is based on breathing techniques was successful in reducing the principals' stress levels in this study.

5.2.2 Stressors experienced by primary school principals

In order to address the sub-aim 'To identify the main stressors as perceived by primary school principals,' a qualitative investigation was undertaken. Semi-structured individual interviews were conducted to gather information on the main stressors experienced by primary school principals (Annexure D). The major categories of stressors that were identified were:

- **A lack of resources**

Inadequate instructional material, which impacted negatively on teaching and learning were reported in the literature study (par 2.6.2.4). Similarly, the participant principals in this study have cited a shortage of basic requirements such as stationery and text books, which impacts on the delivery of quality education (par 4.3.2.5(a)).

- **Financial management**

The literature study revealed that the additional responsibility in respect of handling school finances was a major stressor for principals (par 2.6.2.8). In addition to monitoring budgets, the challenges that the participant principals in this study faced were fund-raising and school fee retrieval due to the low socio-economic status of the communities they serviced (par 4.3.2.5(b)).

- **Learner discipline**

According to the literature study, poor discipline, due to large class sizes, affected the tone and noise levels in South African schools, especially in previously disadvantaged areas (par 2.6.2.16). The participant principals in this study were faced with a decline in the discipline which they also attributed to large class sizes, learner attitudes and inconsistency in enforcing the school's code of conduct (par 4.3.2.5(c)).

- **A lack of parental involvement**

A lack of parental interest in their childrens' education and the resultant negative impact on the learners' academic performance created stress for the participant principals in this study. Some of the parents did not call at school when called in for parent-teacher interviews and this caused a further retrogression in learner discipline (par 4.3.2.5(d)).

- **Educators' attitudes**

The educators' attitudes and behaviour were reported in the literature to create stress for principals (par 2.6.2.6). The participant principals in this study also cited negative educatos' attitudes, a lack of commitment by poorly motivated educators and teacher absenteeism and leave-taking as causes of stress; as this ultimately impacts on learner achievement negatively (par 4.3.2.5(e)).

- **Increased workload**

The increase in the principals' administrative responsibilities and the need to meet constant deadlines created stress for principals according to the literature study. In addition the work overload was attributed to the wide range of responsibilities the principals are tasked to perform; and the various stakeholders

they have to liaise with (par 2.6.2.3). The findings in this study were similar, in that the participant principals commented that they were accountable for *everything* in their schools, and that the principal's workload far exceeded the job description (par 4.3.2.5(f)).

- **A lack of support**

A lack of support from the education department, colleagues and supervisors were cited as stressors in the literature study (par 2.6.2.7). The empirical investigation in this study revealed that there is also a lack of support from the School Governing Bodies and various other support structures, for example psychologists and therapists who have far too many schools to service (par 4.3.2.5(g)).

- **Resolving conflicts**

The principals' responsibilities in interacting with and resolving conflicts amongst staff, students and parents were causes of stress in the literature study. Dealing with interpersonal clashes and crisis situations also add to the principals' stress levels (par 2.6.2.6). The participant principals in this study also cited resolving conflicts as a major stressor. Disharmony among staff members, interference from School Governing Bodies in professional matters and learners who are referred to the office for discipline problems all the time added to the conflict resolution responsibilities of principals (4.3.2.5(h)).

There is a similarity in the stressors experienced by the participant principals in this study to those experienced by primary school principals in previous studies. The socio-economic conditions relating to budgets and resource provisioning and the state of the National Departments of Education in terms of educator morale and curriculum implementation in different countries being the determining factors in respect of principals' stress levels and the causes of stress.

5.2.3 Stress intervention strategies

In order to address the sub-aim 'to determine what is implied by stress intervention strategies,' the literature review provided the necessary background to the study in defining stress and burnout and provided the conceptual framework on which the investigation of the principals' experience of stress was based. For the purposes of this study, stress and burnout referred to the principals' responses to the stressors and the resultant stress they experienced.

The literature study highlighted the causes of stress as experienced by primary school principals (par 2.6), the physiological, psychological and behavioural effects of stress on the individual (par 2.7) and the coping strategies that may be employed by principals to relieve stress (par 2.8.5).

The breathing techniques that may be employed as a stress intervention strategy in alleviating stress were explained in the literature study (par 2.8.6; par 3.3.2.3). The breathing techniques in the stress intervention programme that the principals participated in, that is, the Art of Living workshop, included:

- The three stages of *pranayama* breathing, which maximises oxygen intake and energises the person.
- The breathing technique *bhastrika*, or bellows breath which involved short, forceful breathing, and is followed by a short period of rest, thereby making one mentally alert yet emotionally calm.
- The *Sudarshan Kriya* which is the revitalising breathing technique and relieves stress at the physical, mental and emotional levels by neutralising toxins (par 3.3.2.3).

The stress intervention strategies outlined above were employed in the empirical investigation; the findings of which were used to draw further conclusions on the role and impact of the stress intervention programme on the functioning of primary school principals.

5.2.4 The impact of the Art of Living breathing technique workshop

In order to address the sub-aim, 'To evaluate the impact of the stress intervention programme on principals' stress relief,' semi-structured individual interviews were conducted to gather information on the benefits gained from the stress intervention programme, the Art of Living breathing technique workshop (Annexure E).

The benefits that the participant principals acquired in coping with stress (par 4.3.3), are as follows:

- **Being calm and relaxed**

The relationship between breathing patterns and emotions have been reviewed in the literature, and breathing was seen as a voluntary process of the body; and deep breathing could be used to help one relax (par 2.8.6; par 2.7.2.1). The success of the breathing techniques to relieve stress was evident by the responses of the participant principals in this study. All the participants acknowledged that they had acquired the ability to remain calm and relaxed. The breathing techniques created an inner peace which was influential in calming both the body and the mind, bringing with it logical thinking and objectivity; a focus on the present moment and an acceptance of people and situations (par 4.3.3(a)).

- **Improved sleep**

One of the symptoms of stress caused by worrying about the job is an inability to sleep (par 2.6.2.1). The improvement in the quality of their sleep was a benefit gained by the participant principals in this study due to practicing the breathing techniques. They enjoyed more hours of proper rest, were able to wake up refreshed and energised because of the improved sleep (par 4.3.3(b)).

- **Increased energy levels**

When one is stressed, one tires easily; and this is often caused by constant worry (par 2.6.2.1). In this study, the stress intervention programme was instrumental in increasing the energy levels of the participant principals. This increased their alertness and concentration levels thereby making them more productive. Whenever they experienced a depletion of energy, they used the breathing techniques which energised them immediately (par 4.3.3(c)).

- **Improved human relations**

Deteriorating relationships with other people was cited as one of the consequences of stress (par 2.7.1.3). An improvement in human relations was noted in this study because of increased positivity that the participant principals experienced after practicing the breathing techniques. Co-operation and teamwork were resultant from the positive attitudes they gained from the stress intervention programme (par 4.3.3(d)).

- **Control anger and emotions**

Outbursts of anger were seen as a psychological consequence of stress in the literature (par 2.7.1.2). The breathing techniques helped the participant principals in this study to be able to control their anger in volatile situations. The realisation that rational thinking occurs when the mind is calm averted the anger and helped during conflict situations (par 4.3.3(e)).

- **Discipline of body and mind**

The connection between the body and the mind has been pointed out in the literature where it is advised that the body and the mind be regarded as a single unit (par 2.3.4). Regular exercises and maintaining a healthy diet disciplines the

body which in turn assists in disciplining the mind. The importance of regularity in doing the breathing exercises helped the participant principals to create this sense of discipline in them; and they resolved to do their breathing exercises regularly to alleviate stress (par 4.3.3(f)).

The positive impact of the stress intervention programme to reduce stress levels of the primary school principals as summarised in the six points listed above serve as important indicators for stress relief. Principals who remain calm and relaxed as a result of engaging in correct breathing, are able to control anger and emotions, do experience improved sleep and increased energy levels, are able to engage in improved human relations with staff and acquire discipline of body and mind. All of these are possible despite the situations and circumstances responsible for the high levels of stress that principals encounter on a daily basis.

5.3 CONCLUSIONS

The pertinent conclusions of this study are as follows:

Principals encounter significant stressors

The main stressors experienced by primary school principals were related to an increase in workload as a result of managing the school finances, a lack of educational resources across the broad spectrum of resource provisioning and a lack of support from departmental officials and parents. Principals also identified learner discipline, educators' attitudes, a lack of parental involvement and resolving conflicts on a continuous basis as major stressors.

Stress intervention strategies help principals to improve their responses to work related stressors and to bring stress relief.

The breathing techniques in the Art of Living workshop helped the participant principals to reduce their stress levels. The overwhelming response of all the principals in the investigation was that they felt calmer and more relaxed after the workshop. The benefits of the Art of Living workshop in the current study may be compared to previous studies that have emphasised the advantages of breathing techniques to control stress, reduce tension and anxiety and feel relaxed and in control (Fried, 1993:306; Patel, 1989:89 & Schafer, 1996:449; par 2.8.6). It was confirmed that a very good way to relax is to take several deep breaths and exhale slowly when you feel stress building up.

With a greater awareness and understanding of coping techniques principals are able to lead healthier, more stress-free lives and perform their roles more effectively.

This study has demonstrated that a coping strategy in the form of constructive breathing techniques enabled primary school principals to manage their stress better.

5.4 RECOMMENDATIONS

Although generalisations cannot be drawn due to the qualitatively oriented investigation comprising of a small sample, the main aim being a deeper understanding of the phenomenon of stress relief via correct breathing techniques, several recommendations are offered to primary school principals to alleviate stress. The following recommendations are made to assist principals with stress relief in order to prevent principal burnout:

- **Recognise the demanding role of the principal.**

The principal is suffering from work overload (par 4.3.2.5(f)), and needs to be acknowledged by the Department of Education and parents. The principal's job description should be compared against the tasks the principal really performs for a better understanding of the extent of the work overload.

- **Develop better support systems for principals.**

A lack of support (par 4.3.2.5(g)) was seen as a cause of stress in this study. It is therefore imperative that proper support structures are put into place to reduce the stress experienced by principals. Departmental officials, school counselors, therapists and psychologists must be made available to schools and the principal must be able to access the support when needed.

- **The stress intervention programme, the Art of Living workshop**

The stress intervention programme should be undertaken by all principals, as a means of preventing burnout among principals. The results in this study have shown that the breathing techniques have been effective in reducing stress levels of the principals, helping them to be relaxed and calm (par 4.3.3). The Department of Education must, therefore, incorporate the programme into the professional development training of principals to help them develop correct breathing techniques to counteract stress.

- **Provision of adequate resources**

The provision of educational resources by the Department of Education must be a priority. The responses from the participant principals showed clearly that the shortage of educational resources across the broad spectrum of resource provisioning was a major stressor (par 4.3.2.5(a)). Every school must be well

equipped with the basic requirements like furniture, books, stationery and sports equipment. There is also a need to provide adequate human resources which will improve teacher/pupil ratios and reduce class sizes.

- **Training of School Governing Bodies**

Training should be provided for School Governing Body members so that they are competent to fulfill the tasks assigned to them on account of decentralised school governance policies. This will provide principals with the required time to perform their own role functions.

One of the important responsibilities assigned to School Governing Bodies as a result of decentralized school governance, is the management of the school finances. The financial management responsibilities include the drawing up and monitoring of budgets, fund-raising and paying of the financial accounts. These activities are carried out by the principal as the School Governing Bodies often lack the time and capacity to perform the functions. If the School Governing Bodies are trained and become competent, the principal can then focus valuable time and energy on professional and academic tasks; and his/her professional expertise can then be channeled in improving learner performance (par 4.3.2.5(b); par 4.3.2.5(h)).

The same applies to the task of maintaining the school buildings which has also become the responsibility of the principal with the assistance of the School Governing Body. School Governing Bodies and the principal have neither the time nor the expertise to perform this mammoth task; and building maintenance must be the responsibility of the state as the employer (par 4.3.2.5(b)).

- **Research on policy changes**

Policy changes, especially in respect of the curriculum, must be thoroughly piloted before being implemented (par 4.3.2.5(h)). Adequate research on the success/ failure of policies is imperative as the national curriculum affects learners' academic levels. Apart from increased stress for principals, inadequate learning impacts on entrance to universities, job prospects, and the economy of the country as a whole.

- **Learner discipline**

All schools should be provided with guidance counselors to improve discipline in schools. The guidance counselors can liaise with parents on matters concerning their children, thereby increasing parental involvement. The social problems experienced by the school community can be addressed, and the standard of discipline in schools can improve (par 4.3.2.5(c)).

5.5 SUGGESTIONS FOR FURTHER STUDY

The following suggestions are made for further research in the area of stress intervention programmes:

- The use of longitudinal studies, for six months or more can be undertaken to gauge the long-term benefits of the stress intervention programme, the Art of Living workshop, allowing participants a longer time to practice the breathing techniques.
- The methodology may be varied, for example, a combination of observations, case studies or biological indicators such as monitoring blood pressure may be used. The advantages of combining varied methods are that different results may be obtained giving researchers new perspectives and new information.

- The geographical areas can span across varying areas, for example, urban, suburban and rural areas. Conditions in different areas may vary in terms of socio-economic factors, moral values, education levels, crime rates and priorities that the people consider as important; and these factors are likely to yield different results in respect of the stress levels they experience.

5.6 LIMITATIONS OF THE STUDY

This study, while identifying principals' stressors and the impact of the stress intervention programme has the following limitations:

Firstly, the small sample size does not allow for a generalising of the findings. A convenience sample was chosen in order to facilitate travel to nearby venues to attend the workshop. The sample, therefore, may not be representative of all primary school principals.

Secondly, there is a limitation in the geographical area chosen as the conditions in Phoenix may not be representative of other areas. Stress levels are not the same for all school districts and vary from school to school (Gmelch & Chan, 1994:6).

Thirdly, the time period for the stress intervention to be practiced was inadequate to assess the long-term benefits of the programme.

5.7 SUMMARY

This study investigated the role and impact of a stress intervention programme on the functioning of primary school principals. The Art of Living workshop, based on breathing techniques, was introduced to the participants and the stress levels compared before and after the stress intervention programme. It was found that

the stress intervention programme was successful in reducing the stress levels of the principals.

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Annexure A

Letter to the Department of Education requesting permission to conduct research.

9 Effingham Gardens

337 Effingham Road

Effingham Heights

4051

31 July 2007

Superintendent General- Dept of Education

Private Bag X54323

Durban

4000

Dear Sir,

PERMISSION TO CONDUCT RESEARCH

I am a student at the University of South Africa and am currently conducting research on 'The role and impact of a stress intervention programme for primary school principals'. The participants will be required to fill out a questionnaire, engage in group discussions and attend a stress intervention programme. This will be done after school hours and no lesson time will be used.

I hereby request permission to conduct the research with a group of six primary school principals from the Phoenix area. The responses of individual participants will be confidential, and names of participants will not be revealed when reporting the findings. I trust that the above information meets with your approval.

Yours faithfully

Mrs A M Parsotam

Tel: 031(5639805) Cell: 0834120065 Email: anilajgd@webmail.co.za


COASTAL CLUSTER - PINETOWN DISTRICT

Address: 41 VOORTREKKER STREET
 Ikhele: **ASHLEY**
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 Date: 21 January 2009
 Usuku:
 Datum:

Enquiries: Dr P P Nyembe Kganye
 Imibuzo:
 Navrae:

Reference: Request To Conduct Research
 Inkomba:
 Verwysing:

**TO: THE PRINCIPAL
 WEMBLEY PRIMARY SCHOOL.**

ATTENTION: MRS A.M PARSOTAM

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

The above subject refers

1. The Department of Education has received your request to conduct research at schools within the Phoenix Circuit – Ward 141 & Ward 142
2. Approval is hereby granted for you to conduct your survey provided that effective teaching and learning will not be disturbed in any way.
3. The Department takes this opportunity to wish you everything of the best in your endeavours and hope to get a copy of your findings once the investigation is completed.

Dr. P.P. Nyembe-Kganye
C.E.S District Planning

21-01-2009
 Date

Annexure B - Demographic data

Please note that this information will be kept strictly confidential. The findings of the investigation will be reported as aggregate findings of the group, and not as individual findings of any one participant. Please be honest. There is no right or wrong answer. It is a matter of your personal experience. Thank you. Anila Parsotam.

To complete this section please fill in the information required.

| | |
|---|--|
| Name: | |
| Surname: | |
| Age on your last birthday | |
| Gender | |
| Home language | |
| Highest academic qualification | |
| Highest professional qualification | |
| Marital status | |
| Total years of experience | |
| Number of years in current position | |
| Learner enrolment at your school | |
| Staff establishment (Number of educators) | |

Annexure C – Questionnaire

The following items refer to feelings or attitudes. Please rate each item in terms of the frequency (How often) you experience the feeling or attitude. If the feeling or attitude is never experienced, simply place an 'X' in the column labeled 'NEVER'

| How often: | Never | Few times a year | Monthly | Few times a month | Few times a week | Every week | Every day |
|--|-------|------------------|---------|-------------------|------------------|------------|-----------|
| 1. I feel emotionally drained after my work. | | | | | | | |
| 2. I feel used up at the end of the day. | | | | | | | |
| 3. I feel tired when I get up in the morning and have to face another day on the job | | | | | | | |
| 4. Working with people all day is usually a strain for me. | | | | | | | |
| 5. I feel burned out from my job. | | | | | | | |
| 6. I feel frustrated by my job. | | | | | | | |
| 7. I feel I am working too hard on the job. | | | | | | | |
| 8. Working with people directly puts too much strain on me. | | | | | | | |
| 9. I feel like I am at the end of the rope. | | | | | | | |
| 10. I can easily understand how my clients feel. | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| 11. I deal effectively with the problems of my clients. | | | | | | | |
| 12. I feel I am positively influencing other people's lives through my work. | | | | | | | |
| 13. I feel very energetic. | | | | | | | |
| 14. I can easily create a relaxed atmosphere with my clients. | | | | | | | |
| 15. I feel exhilarated (very happy and excited) after working closely with my clients | | | | | | | |
| 16. I have accomplished many worthwhile things in my work | | | | | | | |
| 17. In my work I deal with emotional problems very calmly. | | | | | | | |
| 18. I feel I treat some clients as if they were impersonal objects. | | | | | | | |
| 19. I've become harder towards people since I took this job. | | | | | | | |
| 20. I worry that this job is hardening me emotionally. | | | | | | | |
| 21. I don't really care what happens to some clients. | | | | | | | |
| 22. I feel clients blame me for some of their problems | | | | | | | |

ANNEXURE D

INTERVIEW SCHEDULE FOR THE FIRST INTERVIEW

1 Do you experience stress? How would you describe your stress?

2 How do you know that you are experiencing stress? Describe the thoughts, feelings or emotions that you may experience.

3 Is all the stress that you experience negative or can you also point to positive stress? Explain.

4 Are you able to identify visible consequences of stress in yourself? What biochemical reactions are you aware of that take place in your body?

5 How does your current work stress as a principal differ from past work stress as a principal, if at all?

6 What are the major reasons/causes of the current stress?

6.1 How does the management of school resources impact on your stress? (For example, finances, materials, buildings, staff). Specify the type of resources that may be limited and how they impact on the service delivery at your school.

6.2 How does the management of discipline impact on your stress? (For example learner discipline in terms of the code of conduct; the relation between learner discipline and learner achievement; and staff discipline, attitudes and work commitment).

6.3 How does increased workload impact on principal stress? Explain what you understand as an 'increased workload'? (For example changing roles, isolation-in that support may be lacking, school size due to freedom of access).

6.4 Identify the most common causes of conflict situations in schools that principals have to deal with. How does this impact on their stress?

7 How do *you* cope with your stress?

ANNEXURE E

INTERVIEW SCHEDULE FOR THE SECOND INTERVIEW.

1. Have you benefited from the breathing technique workshop? Describe your experience of the programme.
2. How have you benefited from the workshop?
3. What coping skills have you acquired that help to cope with stress?
4. How will you be able to apply the techniques learned at the workshop to relieve stress in your work as a principal?
5. Would you recommend the workshop to other principals? Explain why you think the techniques will be of benefit to other principals.