Stress management and its impact on work performance of educators in public schools in KwaZulu-Natal

by

Kiveshni Naidoo

21677344

Thesis submitted for the degree Doctor of Philosophy at the Potchefstroom Business School in the Faculty of Economic and Management Sciences of the North-West University

Promoter: Dr. C.J. Botha

Potchefstroom

2011

ABSTRACT

This study focuses on stress management of educators, and specifically in the KwaZulu-Natal geographical region. The study consists of four focus areas (which are presented in article format), namely:

- The first article identifies the role-players and their functions in delivering quality education to all South Africans. The article identifies the role-players from literature research and discusses their influences on the South African educational environment. A biographical profile of the educators of the KwaZulu-Natal area is compiled in the article by means of empirical research.
- The second article employs both theoretical and empirical research to focus on the causes of stress to educators in public schools. In addition to identifying the causes of stress, the article also determines how stress impacts on the work performance of educators in KwaZulu-Natal.
- The third article reports on management and leadership qualities of a school, and how guidance can assist in the transformation process. The study further examines the effects of a principal's leadership behaviour on the school's learning culture in KwaZulu-Natal.
- This final article is a comparative study. It provides an overview of similarly focussed studies by Jackson (2004), Jackson and Rothman (2006) and Van Wyk (2006) with regard to the causes of stress among educators (but in different application settings namely the North West and Free State provinces). The focus in the final article is to determine if the stressors and its influences in education are generic throughout South Africa, or localised to KwaZulu-Natal.

The research design consisted of selecting four districts randomly from the twelve in KwaZulu-Natal. From these districts, a total of 1 500 participants were randomly selected from the total population of 2 123 educators in the four districts. This amounted to a sample of 70.6% of the population). A total of 358 respondents completed the questionnaires resulting in a response rate of 23.3%. The study employed the statistical software programme SPSS 17.0 for Windows to

analyse the data. A number of quantitative statistical techniques befitting the doctoral level of research were used to analyse the data. These techniques are:

- Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy;
- Bartlett's test of sphericity;
- Exploratory factor analysis;
- Cronbach Alpha's reliability coefficient; and
- Pearson's correlation coefficient.

The major findings of the study were that:

- Three major role-players are identified in the first article, namely the educators, the Department of Education and the learners. To effectively facilitate quality education, management is a crucial component, whilst these role-players are also influenced by the macro environment.
- The second article identified causes of stress. These causes account for a favourable 71.6% of the variance explained, and are: *organisational support, overload, remuneration, control, job insecurity, job opportunities* and *growth opportunities.*
- The third article identified seven factors of importance in management and leadership. These factors explained a favourable 78.6% variance and are: *Management and leadership styles, financial security, management and leadership fairness, stressors, empowerment, job security* and *sense of control over the work environment*.
- In the final article it is clear that the stressors are generic to South Africa. The majority of stressors have been identified by studies in the Free State, North West and in this study in KwaZulu-Natal. These stressors are *organisational support, overload, growth opportunities / task characteristics, rewards and remuneration,* and *job insecurity.*

The ultimate recommendation of the study is because stress impacts negatively on the educators and their performance, a national strategy is partly required to improve educator stress as there are a number of common stressors in the three separate studies. Yet, further research is needed to substantiate the prevalence of these factors in all the provinces. A provincial approach is recommended for province specific stressors, while the national strategy could address the

common stressors in conjunction with a provincial stress relieve programme. The study culminates in a final perceptual map of stressors, it causes and educator management that could handsomely assist in the drafting of such a national stress strategy for educators.

Key terms: education, stress, stressors, education management, factor analysis, KwaZulu-Natal Department of Education, educators, Department of Education, DOE.

ACKNOWLEDGEMENTS

I wish to extend my gratitude to various individuals whom, at various stages during the writing of this thesis, were prepared to help, guide and support me to complete this research successfully.

- An undertaking of this magnitude is not possible without the grace of God. I am therefore indebted to Bhagawan Shri Sathya Sai Baba for granting me the courage, strength, wisdom and sustenance to complete my study.
- Professor Yusuf Karodia, who not only inspired me into pursuing this study but who also monitored my progress with regard to this study. At times when my workload became increasingly demanding, he unfailingly provided the necessary support and encouragement.
- My husband, Rodney Naidoo, for his patience, guidance encouragement and support during my time of research. Also for being committed to my aspirations. You really served as power of strength to me. Further, your proofreading and constructive input has helped me enhance the quality of my final product.
- My loving children, Rasaayen and Saishka, for their patience and endurance when I was not always available for them.
- My promotor, Doctor Christoff Botha for your competent guidance throughout my study.
- Professor Christo Bisschoff, for guiding me through this difficult process, assisting me throughout this period and for encouraging me to believe in myself. Also ensuring that I completed this study.
- My work colleagues, Abdulla Paruk, Gyzalia Osman and Reesha Bissessar, for assisting me with my questionnaires and information gathering.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ASSET	-	An Organisational Stress Screening Tool
DBE	-	Department of Basic Education
DHET	-	Department of Higher Education
DOE	-	Department of Education
ECD	-	Early Childhood Developing
EFA	-	Exploratory Factor Analysis
ELRC	-	Education Labour Relations Council
ELRC	-	Education Labour Relations Council
EMIS	-	Education Management System
HSRC	-	Human Sciences Research Council
HSRC	-	Human Sciences Research Council
ILO	-	International Labour Organisation
ILO	-	International Labour Organisation
KMO	-	Kaiser, Meyer & Olkin
KZN	-	KwaZulu-Natal
LER	-	Learner-to-education ratio
LSR	-	Learner-to-school ratio
MANCOSA	-	Management College of South Africa
MEC	-	Member of Executive Council

NEEDU	-	National Education Evaluation and Development Unit
NNSSF	-	National Norms and Standards for School Funding
NPF	-	National Policy Framework
NPF	-	The National Policy Framework for Teacher Education and Development in South Africa
NSNP	-	National Schools Nutrition Programme
NSS	-	National Statistics System
OBE	-	Outcomes-based Education
PED	-	Provincial Education Department
PPN	-	Post Provisioning Norms
SADTU	-	South African Democratic Teachers Union
SASA	-	South African Schools Act
SGB	-	School Governing Body
SMT	-	School Management Team
UKZN	-	University of KwaZulu-Natal
WSE	-	Whole School Evaluation

TERMINOLOGY

Education district

A geographical unit that the relevant provincial legislation determines on the basis of the prevailing provincial practice.

Education region

A sub-provincial administrative unit above the district level.

Educator

Any person who teaches, educates or trains other persons or who provides professional educational services, including professional therapy and educational psychological services, at any public school, FET institution, departmental office or ABET centre and who is appointed in a post in any educator establishment under the Employment of Educators Act, 1998 (Act No. 76 of 1998).

Gross enrolment ratio (GER)

Measures enrolment, regardless of age, in a specific level of education as a percentage of the appropriately aged population for the given level of education.

Learner-to-educator ratio (LER)

The number of learners per educator.

Learner-to-school ratio (LSR)

The number of learners per school.

Principal

The South African Schools Act (SASA) 84 of 1996 indicates that the word ‘principal’ means an educator appointed or acting as head of the school. This word has been used to refer to the school manager who leads and manages the implementation of change management programmes, such

as the implementation of Outcomes-based Education (OBE) in schools. The principal is responsible for ensuring that effective teaching and learning takes place in the school.

Primary school

An ordinary school offering at least one grade in the range Grades R to 7, and no grades in the range Grades 8 to 12.

Public school

A school maintained largely through public funds, which must be made available by the Member of the Executive Council (MEC) for education in a province, in terms of section 12 of the SASA, for the purpose of public education.

School

The South Africa Schools Act (SASA) 84 of 1996 indicates that a school means a public school or an independent school which enrols learners in one or more grades from grade R (reception) to grade twelve. The school in the context means a learning institution where teaching and learning takes place. The formal education of learners takes place in the school.

Secondary school

An ordinary school offering at least one grade in the range Grades 8 to 12 and no grades in the range Grades 1 to 7.

School Governing Body (SGB)

This refers to the democratically elected structure that represents different stakeholders such as parents, educators and non-educators, principal, learners and co-opted members. This structure is responsible for governance and management of the school.

School Management Team (SMT)

This concept refers to a committee of people consisting of the principal, deputy principal, heads of department and educators. This committee is responsible for the day-to-day smooth running of the activities of the school and also to ensure that teaching and learning takes place.

CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

The concept of work wellness is not new to the managerial environment. The industrialist Henry Ford was a pioneer in work wellness. He initiated "welfare capitalism" as far back as 1915 at the Ford Motor Company in order to address high worker turn-over rates (Nevins, 1957:508). This was also a result of his fundamental belief that happy and healthy employees are productive workers. Subsequently, he initiated wellness of employees in his automotive factory by monitoring off-duty alcohol misuse, gambling and family violence of his employees (Ford, 1922:255). Although his meddling in the private lives of his employees was highly controversial, Henry Ford was quoted to state that (Ford, 1922:257):

"*Men need counsel and men need help, oftentimes special help; and all this ought to be rendered for decency's sake. But the broad workable plan of investment and participation will do more to solidify industry and strengthen organisation than will any social work on the outside*."

He used Ford Motor Company resources to assist employees offering rehabilitation and even leave to become well. In addition to work wellness, Ford also introduced the "Ford 5-day Pay System" and effectively paid much better salaries than competitors in Chicago. Incidentally, the combination of wellness and better wages resulted in a drop of worker turn-over by 300% (Nevins, 1957:510). However, if employees did not conform to the better wages and living standards responsibly, or did not respond positively to the Ford employee wellness programmes, they were not welcome as employees of the Ford Motor Company (Nevins, 1957:508).

Modern management philosophies include wellness as an integral part of a company's human resources management function. Wellness is generally defined as being a state

of wellness and the existence of health and positive well-being. More specifically, wellness is defined by Charles Corbin (2010) of Arizona State University as "an active process of becoming aware of and making choices toward a more successful existence", where:

- Process means that improvement is always possible.
- Aware means that we are continuously seeking more information about how we can improve.
- Choices mean that one can consider a variety of options and select those in his/her best interest.
- Success is determined by each individual to be their collection of life accomplishments.

Corbin continues, and defines work (occupational) wellness to be a journey where the employer begins to value the importance of its personal gratification, but also its contribution to the well-being of the community at large. The choice of profession, job satisfaction, career ambitions, and personal performance are all important components of occupational wellness. Corbin (2010) also states that:

- It's better to choose a career which is consistent with one's personal values, interests and beliefs than to select one that is unrewarding.
- It's better to develop functional, transferable skills through structured involvement opportunities than to remain inactive and uninvolved.

This study focuses on the wellness of educators in KwaZulu-Natal. More specifically, it addresses stress and its impact on work performance of educators in public schools in KwaZulu-Natal and the aspect of stress within work wellness. The study examines the factors that cause educator stress and also refers to the management and leadership styles in education. Although studies have been done by various researchers (such as Jackson (2004); Jackson and Rothman (2006) and Van Wyk (2006)) on stress in education, very few research projects have focussed on the KwaZulu-Natal region with a vastly different demographic profile and educator challenges. From these studies, various individual variables have been identified, such as optimism that may also act as moderators in the stress process in KwaZulu-Natal.

Stress occurs when the perceived demands facing an individual exceeds that person's ability to deal with those demands. Stress is triggered when the situation is perceived as either a challenge or a threat to the individual. For organisations that want to challenge their employees in order to stay competitive in a rapidly changing environment, stress often becomes a severe consequence and concern (Schultz et al., 2003:207).

Every occupation appears to have a stress "footprint" and the education sector is no exception. The KwaZulu-Natal Department of Education is currently faced with the challenge of the shortage of educators caused by an increase in the attrition of a highly skilled workforce over the recent years. Specific jobs have an identifiable set of stressors common to the job. Stress related illness, burnout, alcoholism, drug abuse, marital breakdown, absenteeism, child abuse and a host of other social, physical, organisational and emotional problems are said to be high amongst educators (Hall et al., 2005:15).

According to Van Wyk (2006:35), stress is derived from the Latin word "*strictus*" that translates into taut, meaning stiffly strung. Dr. Hans Seyle (in Van Wyk, 2006:35-37) initially defined stress as, being in physiological terms, a non-specific or generalised bodily response. This response results when any demand is made on the body, whether it is an environmental condition to survive or a demand that we make on ourselves in order to accomplish a personal goal.

The societal costs of stress are already high and are increasing steadily. Society bears the cost of public services such as healthcare for those made ill by stress, pensions for early retirement brought on by stress and disability benefits for accidents occurring because of stress (Heller & Hindle, 2003:767). When people are placed in conditions where they cannot control events, especially where events have negative consequences, responses include depression, rigidity, and an inability to make plans (Philip, 2004:5).

These contributing factors include population increases, diversity in school populations, increase in the cost of living, crime and its effect on learner behaviour,

conditions of service, new rules and regulations of the Department of Education, curriculum changes, performance appraisal systems and demands of unions. As stated by Gold and Roth (1993), causes of stress are organised into three categories, namely:

- **Professional stressors** such as disruptive learners, excessive paperwork, complex scheduling, burdensome workload, lack of mobility, environmental pressures, and administrative entanglement.
- **Situational stressors** such as role conflict and role ambiguity have been reported to effect significant job engagement for many educators. Difficulty in carefully defining the duties of educators can also be stressful and this can lead to a lack of personal achievement which diminishes educators' sense of accomplishment.
- **Personal stressors** include reasons that cause educators to be stressed such as their health, relationships, financial, recreational and living conditions, and add to the many sources of stress with which educators are constantly having to contend with (Saiyadain, 2003:34).

1.1.1 The South African situation

In South Africa, the education system has been undergoing a dramatic transformation. The turbulent changes in the last few years have been as a result of a variety of factors. These include the merger of the apartheid era departments of education, the differing approaches adopted by provincial governments, to retrenchment and recruitment of educators, changes in the framework for educators' qualifications, introduction of the outcomes-based curriculum, and the reorganisation of teacher education provision (Peltzer et al., 2005:48). Other changes include the mergers and closures of training colleges which have led to a decrease in the number of institutions providing teacher education. The merging of institutions has led to a greater centralisation of teacher education operations. Despite all these changes the quality has not improved, as shown by South Africa's performance on the Trends in Mathematics and Science (National Centre for Education Statistics, 2008), as well as poor Grade 12 pass rates. Therefore, there is still a need to identify obstacles to better education and to improve the quality of education (MTCE, 2005).

In recent years, inclusive education has risen to prominence, becoming a dominant issue within education across a range of national contexts. Within the South African context, inequalities resulting from apartheid and economic deprivation have had a significant impact on the provision of education for learners.

The Human Sciences Research Council (HSRC) conducted a national survey of 21 358 educators in more than 1 714 randomly selected schools of which 97% of the educators agreed to participate. This survey revealed that 55% of these educators considered leaving the profession due to the following reasons:

- Inadequate remuneration;
- Increased workload;
- Lack of career development or professional recognition;
- Dissatisfaction with work policies;
- Job insecurity; and
- Lack of choice where to work.

The factors that prevented educators from leaving were mainly a lack of alternative job opportunities available to them, friendship and support that they receive from colleagues and a sense of autonomy that prevails in the profession.

Besides workplace pressures, there are several internal and external factors that also contribute to educator stress. These factors have been listed in the table below:

TABLE 1.1: IDENTIFICATION OF INTERNAL AND EXTERNAL FACTORS OF EDUCATOR STRESS

INTERNAL STRESSORS	EXTERNAL STRESSORS
Lack of discipline – abolishment of corporal punishment	Economic and political changes
Unmotivated learners	Change in government
Large educator - pupil ratios	Change in education system
Introduction of the Governing Body	New curriculum (Curriculum 2020 – change over from OBE)
Management and leadership styles	Role of the Education Department – Nationally and Provincially
Learner pass rates	Introduction of new policies
High levels of violence and crime being experienced in schools – educators are fearful	Re-structuring of departments
Lack of opportunities for upward mobility in the profession	Implementation of the Post-Provisioning Norms policy (PPN)

Often, a contributing factor of stressors for educators is the major changes that are currently underway in South Africa in the empowerment of previously disadvantaged individuals. Schools in South Africa are not excluded from the consequences of change. The South African educational system is in a transitional stage. This country has experienced drastic economic and political changes since 1994, including the change in government, affirmative action policies and a change in the education system (Smit & De Cronje, 2003:180). This collectively contributes to stress and the work performance of educators.

1.1.2 Situation in KwaZulu-Natal

It is widely acknowledged that the provision of quality education in South African schools is one of the greatest challenges facing South Africa in the twenty-first century. Quality education has re-shaped life in most countries and made it possible for millions of people to live a fulfilling life. There could be no socio-economic

development in this province without education. A skilled, sophisticated workforce is a prerequisite to competing in today's global, technology driven economic environment, and education is key to developing such a workforce.

Apartheid and its predecessor, colonial racial segregation policies over 300 hundred years, succeeded in creating in this country a divided education system. Fifteen years after the end of racial segregation schools may have become integrated racially, but are still very segregated in their resource comparison (Burrows, 2009:19).

The grossly inequitable allocation of resources in relation to education has come to the fore. This has resulted in an accurate idea of the enormity of the problem. There is currently a backlog in KwaZulu-Natal schools which allude to the shortage of 15 000 classrooms which will cost in the region of R12 billion, 3 000 media centres, 3 600 computer rooms, 14 000 offices, 28 000 toilets, and 5 500 sports fields. Although today's government is working to rectify the imbalances in education, the apartheid legacy remains (DOE, 2005; DOE, 2009).

The central government provides a national framework for school policy, but administrative responsibility lies with the provinces. Power is further devolved to grassroots level via elected school governing bodies, which have a significant say in the running of their schools.

The greatest challenges lie in the poorer, rural provinces like the Eastern Cape and KwaZulu-Natal. Schools are generally better resourced in the more affluent provinces such as Gauteng and the Western Cape. Illiteracy rates are high at around 24% of adults over 15 years old amongst the black community (6 to 8 million adults), teachers in township schools are poorly trained, and the Grade 12 pass rate remains low (NCES, 2008).

Rapid changes on various levels in the field of education in KwaZulu-Natal have placed many demands on educators, which have had a profound effect on their job engagement and working lives. The problem of under-resourced schools in the province has come to the fore. Rural schools still face unacceptably high teacher-pupil ratios and large classes (Dillon, 2008:56). These schools in the province are faced

with a plethora of challenges because of the large classes with the Educator : Learner Ratio (ELR) being 1:35. This is regarded to be one reason why poor achievement levels, low quality of work and disruptive behaviour amongst learners presents itself in the South African school environment (Peltzer et al., 2005). Furthermore, the educators are faced with heavy workloads which increase teacher apathy, teacher stress and low teacher morale amongst educators. Although schools attempt to adopt different strategies to overcome these problems, the reality is that these problems still prevail in the province.

Initial discussions were held with secondary school educators, and the following stressors have been identified which were investigated and the findings are reported in the articles of this thesis. Some of the stressors identified were (DOE, 2006):

- Workload – large learner numbers and unfavourable post-provisioning norms (PPN) in current schools. This has resulted in very high teacher-pupil ratios;
- Learner discipline – students are not focused on learning;
- Poor academic performance – the pass rates have plummeted and dropout rates at schools are on the increase;
- Curriculum changes – the introduction of OBE into the teaching areas has resulted in clearly both the learner and the educator not coping thus adding to stress;
- Lack of physical resources – these include the lack of textbooks which is seen as a main teaching aid, lack of equipment and progression;
- South Africa has a huge budget allocated for education but there is poor implementation of policy; as a result of this, it has created more administrative duties for educators such as fundraising;
- Apathy of parents – there is a distinct absence of parent commitment and involvement in education;
- Type of leadership – lack of proper guidance from the Head of the school;
- Interpersonal relationships – lack of commitment and major external locus of control prevalent and poor value systems in individuals;
- Labour issues – poor salaries, unqualified educators, docking of pay due to strike action;

- Low teacher morale and lack of motivation; and
- High exodus from the profession.

The topic of stress management and its impact on work performance has been receiving increasing attention but not much research has been undertaken in the province per se. While there has been considerable research in the general area of teacher stress, efficacy and burnout in South Africa, little attention has been given to studying how teachers actually cope with work stress in KwaZulu-Natal (Philip, 2007:45).

Learning is a complex activity that supremely tests students' motivation and physical condition. Teaching resources, teachers' skill, and curriculum – these all play a vital role in a child's education. The school environment includes the physical setting as well as the policy and administrative environment, psychosocial environment, and health promotion for staff. There are physical conditions that also play a role in stress and the overall learning process. The classroom is the most important area within a school as educators and learners spend their time, hopefully in an environment conducive to learning. Learning in the classroom requires a reasonable level of concentration, listening, writing, and reading. Individual classrooms and entire facilities need to be evaluated, not only on how they meet changing educational requirements, but also on how they meet the environmental requirements for health, safety, and security. Environmentally responsive ventilating systems, and visual environment is one of the most important factors in learning, affecting mental attitude, class attendance, and performance. Schools have four times as many occupants per square metre with poor design which often stem from subsequent construction changes and inadequate maintenance (DOE, 2009; DOE, 2000:71).

Recent surveys have shown that between 20% and 40% of teachers experience considerable stress when working in schools. It has also been noted that recently there have been several articles which outline the many challenges that educators face and that many are not able to cope and as a result they are leaving the profession.

Research by Sadhana Manik, a lecturer in the faculty of education and school of tourism at a local university, emphasized the trend of South African teachers leaving the country to embrace teaching opportunities elsewhere in the world (Manik as quoted by Umar, 2010:10). Factors which have been highlighted involved nepotism, bossy school governors and poor management and have led to the flight of educators. Seemingly, the widespread discontentment is particularly amongst Indian educators from the former House of Delegates. This has resulted in a void in the public schooling system and needs to be addressed, according to the provincial secretary, Mbuyiseni Manthonsi, of the South African Democratic Teachers Union (SADTU) (Umar, 2010:10-12).

Manik found that while educators were dissatisfied with their salaries, other factors, such as the lack of career growth and governance issues, often sparked decisions to quit. In another research project conducted by the University of KwaZulu-Natal's (UKZN) faculty of education school leadership was investigated in the province. Another observation was level one educators with 5 to 10 years' experience have not been promoted, yet in the United Kingdom, the study showed, South African teachers were being promoted in less than a year. All of these negative impacts have resulted in stressful situations in the province for these educators. This study has been undertaken to introduce and improve ways on how to cope with stress and improve work performance of educators in the province (Umar, 2010:10).

1.2 PROBLEM STATEMENT

While few would deny that teaching is a demanding profession, many would be surprised at how acutely stressed today's educators have become. Current research paints a fairly bleak picture of the working conditions they face, despite efforts on several fronts to address workload and performance pressures (ILO, 2009). The causes of stress, however, are many and diverse. Like the aggregation of a ton of feathers, a multitude of contributing factors weighs heavily on the shoulders of today's educators (Leithwood, 2006:65).

With stressors coming from all directions, no single penance can entirely ease the burden of the educators. While limited amounts of stress can have a positive influence on motivation and creativity, excessive pressure has an overwhelming and debilitating effect (Wilson, 2002:90). Unfortunately, educators experience far greater pressure than beneficial. The incidence of educators experiencing high levels of stress is both a common and widespread concern (Hill, 2008:76).

Occupational stress results in a variety of negative effects, including absenteeism, stress-related illness, high staff turnover and early retirement. Most educators are intrinsically conscientious and dutiful in meeting their learners' learning needs, which drive them harder than all other external pressures (Bubb & Earley, 2004:45). The British Columbia Teachers' Federation in Canada (Naylor, 2001:3) lists the top five causes of educator stress as:

- Unmet needs of learners;
- Class composition;
- Workload;
- Attitudes of provincial governments; and
- Diverse groups.

While the South African classrooms are becoming increasingly diverse in terms of teaching and learning, language barriers, socio-economic status, cultural backgrounds, and mental and behavioural challenges, educators are simultaneously challenged to assume more responsibility (Dillon, 2008:56). Educators, like all other people, have physical and emotional needs that do not cease to exist at work. If educators are to do their professional best, their changing physical and emotional needs must be accommodated. There is enough empirical support in the supporting literature concerning the impact that educators' jobs characteristics have on their health and satisfaction.

Resultantly, it is clear that stress is a significant problem for educators, and that the South African educational environment is stress prone. Literature clearly indicates strong negative correlations between stress and work performance, and as such the

educational environment requires analysis with regard to job stress. In addition, significant problems are due to the situational complexities in education, especially in South Africa. The outcomes-based system, lack of support from parents, learner attitudes and behaviour and environmental issues are extenuating circumstances impacting on educators. The work by Jackson in the North West province (2004), as well as that by Van Wyk in the Free State (2006) indicates clearly that a problem does exist concerning the stress levels of educators. However, no recent research regarding the levels of stress in educators in the KwaZulu-Natal province has been performed. A lack of research opens the opportunity for this study to contribute to the scientific body of knowledge by re-evaluating the current levels of stress in educators in the KwaZulu-Natal region.

1.3 RESEARCH OBJECTIVES

1.3.1 Primary objectives

The primary objective of this study is to investigate the reasons for increasing educator stress, how to manage it and how it impacts on work performance on the educators in public schools in KwaZulu-Natal.

1.3.2 Secondary objectives

In order to reach the primary objective, a number of secondary objectives have been formulated. The secondary objectives pertaining to this study are to:

- Identify the causes of stress in the education sector by applying the research instrument developed by Jackson (2004) and to determine the impact of stress on work performance of educators in KwaZulu-Natal;
- Understand the leadership and management styles in the education sector in order to suggest ways on how it could be guided towards transformational leadership;

- Compare the results obtained in this study to that of similar studies performed by Jackson (2004) and Van Wyk (2006). These studies also researched the causes of stress in the North West and Free State provinces, respectively;
- Determine the coping styles of educators by developing a conceptual framework of work wellness for educators in KwaZulu-Natal; and to
- Make recommendations for future research on the management of stress of educators in KwaZulu-Natal.

1.4 RESEARCH METHODOLOGY

The research methodology consists of a literature review and an empirical study.

1.4.1 Literature review

The literature review focuses on the causes of stress, leadership and management styles and its impact on the work performance of educators. The literature review included textbooks, academic articles, governmental publications, conference proceedings as well as acts, to name but a few sources.

The following electronic databases have been consulted:

- Library catalogues;
- Internet journals;
- International journals;
- Academic search lists;
- Ebscohost;
- Emerald; and
- PsychINFO

In addition, the university libraries of North-West University and Mancosa in Durban were consulted to locate articles and textbooks relevant to the study.

1.4.2 Empirical study

1.4.2.1 Research design

A cross-sectional survey design was used to reach the objectives of this study. In this design, the focus is on relationships between and among variables in a single group.

1.4.2.2 Method of data collection

Data were collected by means of a tried and tested structured questionnaire (see section 1.4.2.3 for details on the "*An Organisational Stress Screening Tool*"). This questionnaire was distributed to all educators in the schools of each of the selected districts in the sample pertaining to KwaZulu-Natal. The process was approved as a research project by the Department of Education, and as a result the data collection was assisted and overseen by the respective district offices.

The Director-General of the KwaZulu-Natal Education Department granted permission to undertake this study. Information was given on the district offices and meetings were convened with district managers to highlight the purpose of the study. Assistance was requested with the process of questionnaire distribution and collections. These questionnaires were distributed on behalf of the researcher by the district managers. The district managers personally handed these questionnaires to the principals at each school for distribution to their staff. Envelopes with stickers were also given to ensure confidentiality. Once the teachers completed questionnaires, the principals collected it from their staff and, in turn, handed the whole bunch of questionnaires to the district manager at the district office.

1.4.2.3 Research instrument

The structured questionnaire is known as the ASSET (which refers to An Organisational Stress Screening Tool). It was developed by Cartwright and Cooper (2002) as an initial screening tool to help organisations assess the risk of occupational stress in their workforce. This questionnaire's main objective is to measures potential exposure to stress in respect of common workplace stressors. It also provides important information on current levels of physical health, psychological well-being and organisational commitment, and provides data to which the organisation can be compared. The questionnaire focuses on individual perceptions of stressors, and consists of seven sub-sections namely:

- Organisational support;
- Overload;
- Remuneration;
- Job insecurity;
- Relationships;
- Job opportunities; and
- Growth opportunities.

These factors measure the commitment from educators which focuses on the individual's physical health, psychological well-being and supplementary information. These items have been specifically customized for the teaching environment.

The questionnaire is scored on a five-point Likert scale that ranged from: *1 = strongly agree* to *5 = strongly disagree*. The ASSET has an established set of norms from a database of responses from 9 188 workers in the public and private sector (non-higher education institutions) organisations in the United Kingdom. The ASSET as measuring instrument was proven to be a reliable tool to use as it returned (based on the split-half co-efficient scale of Shaughnessy and Zechmeister (2003:67)) high reliability coefficients during its development and initial use.

This served as a positive sign to select the ASSET as an appropriate measuring tool for this study. In further evaluating the ASSET as measuring tool, it was important to determine its probable success in the South African application setting. In this regard, Jackson (2004) successfully applied the ASSET as measuring instrument in the North West province of South Africa. In addition, Jackson found that the reliability of the instrument was satisfactory for the South African environment.

While repeated reliability on the ASSET in different environments weighed heavily in its favour to be selected as the appropriate measuring instrument for this study, the fact that it has been successfully applied in the South African education environment (Jackson, 2004) weighed the scale towards the ASSET in its final selection as a tool to gather the data for this study. This choice proved to be a sound one as this study returned in all but two factors, reliability coefficients in excess of 0.70 (one factor even returned a very favourable coefficient of 0.91), while the other two factors exceeded reliability coefficients of 0.60.

1.4.2.4 Study population and sampling

A total of 84 977 educators are employed (at the time of the study) by the KwaZulu-Natal provincial Department of Education. This represents 22.3% of the national total with the largest number of educators in ordinary schools (EMIS, 2009). The breakdown of the learners, educators and schools of the province is shown in the Table 1.2 below.

TABLE 1.2: BREAKDOWN OF SCHOOLS, LEARNERS AND EDUCATORS IN KWAZULU-NATAL

LEARNERS	EDUCATORS	SCHOOLS
2 773 336	84 977	5 907

There are currently 12 districts in the province which are: Amajuba, Empangeni, Ilembe, Obonjeni, Othukela, Pinetown, Sisonke, Port Shepstone, Umgungundlovu, Umlazi, Umzinyathi and Vryheid. From these, a total of four districts were randomly

selected for this study. The districts were selected in terms of accessibility, and they are: Ilembe, Pinetown, Port Shepstone and Empangeni.

Table 1.3 indicates the breakdown of the different types of schools found in the four districts which have been selected for the study (See Annexure B). Consideration was given to the demographics of educators in the province.

TABLE 1.3: DETAILS OF THE FOUR DISTRICTS SELECTED FOR THIS STUDY

DISTRICT	PRIMARY SCHOOLS	SECONDARY SCHOOLS	COMBINED SCHOOLS
1. Empangeni	467	178	37
2. Pinetown	343	115	51
3. Ilembe	319	87	23
4. Port Shepstone	336	126	42
Total	**1465**	**506**	**152**

Source: DOE (2009)

A total of 1 500 participants were randomly selected from a total population of educators from the four districts identified in KwaZulu-Natal (N educators = 2 123), thus targeting 70.6% of the selected population).

Participants were randomly selected from a total population of educators in the selected districts of KwaZulu-Natal (N = 2 123). A total of 358 educators in KwaZulu-Natal had completed the questionnaire by the cut-off date which was set to be the end of March 2010 (representing 23.3% of the sample). A total of 8 of these questionnaires were discarded due to either partial or no completion thereof.

1.5 STATISTICAL ANALYSIS

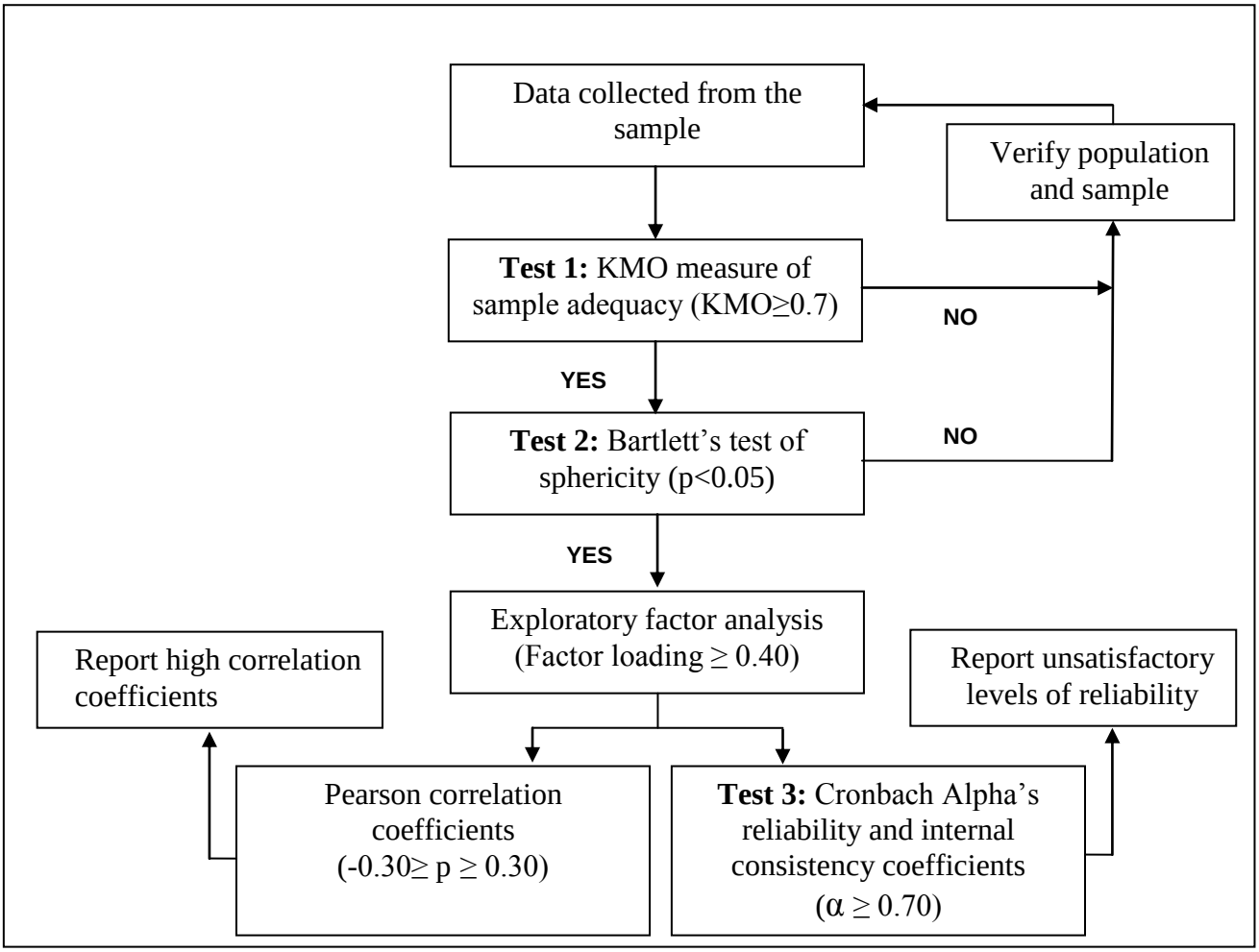
The study employed the statistical software programme SPSS 17.0 for Windows (SPSS Inc., 2009) to analyse the data. A number of quantitative statistical techniques befitting the doctoral level of research were used to analyse the data. These techniques are:

- Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy;
- Bartlett's test of sphericity;
- Exploratory factor analysis;
- Cronbach Alpha's reliability coefficient; and
- Pearson's correlation coefficient.

These techniques were selected because it provides a sound statistical procedure to analyse the data. The KMO measure examines the data collected to determine if the sample size is adequate to use for multivariate analysis. Next, Bartlett's test is used as statistical test because it tests if the data is suitable to be subjected to multivariate statistical analysis (such as factor analysis). If suitable, the primary analysis of determining underlying constructs (or factors) could be used, where after the reliability of the analysis needs to be determined (Cronbach Alpha is a proven technique to do so). Correlations between factors and other variables are identified by means of the Pearson correlation coefficient. Figure 1.1 provides a data analysis decision tree for this research.

Figure 1.1 follows on next page

FIGURE 1.1: DATA ANALYSIS DECISION TREE



Source: Struwig and Stead (2004:16-77); Field (2007: 636-679)

These statistical techniques, the application settings and its interpretation in this study are introduced below.

1.5.1 Kaiser-Meyer-Olkin measure of sampling adequacy

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy tests whether the partial correlations among variables are small. It is defined by Mediaspace (2007) as: "an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients". The KMO can be calculated for individual and multiple variables and represents the ratio of the squared correlation between variables to the partial correlation of variables. The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlation is large

relative to the sum of correlations, indicating diffusion in the pattern of correlations. A value close to 1 indicates that patterns of correlation are relatively compact and so factor analysis should yield distinct and reliable factors. More specific interpretations of the KMO are (Du Plessis, 2009:26; Du Plessis, 2010; Field, 2007:640):

- For values smaller than 0.5, the factor analysis is likely to be inappropriate;
- A KMO value of 0.6 should be present before factor analysis is considered;
- Values between 0.5 and 0.7 are mediocre;
- Values between 0.7 and 0.8 are good;
- Values between 0.8 and 0.9 are excellent; and
- Values between 0.9 and 1 are superb.

The larger the KMO value, the more reliable the factor analysis for this particular sample size. Positive outcomes on these tests validate the use of factor analysis as a statistical tool (Du Plessis, 2009:26). Large values for the KMO measure indicate that a factor analysis of the variables is a good idea. The inverse is also true as the KMO also supplies vital information when not to use factor analysis. The KMO is employed in this study primarily to ensure that the data are suitable for multivariate statistical analyses, because factor analysis is the main statistical analysis tool in this research. A minimum KMO value of 0.7 is set for this study, as advised by the North-West University's Statistical Consultation Services (Du Plessis, 2010).

1.5.2 Bartlett's test of sphericity

Sphericity is a more general condition of compound symmetry. This hold true when both the variables across conditions are equal and the covariances between pairs of conditions are equal. Another indicator of the strength of the relationship among variables is Bartlett's test of sphericity. This test examines whether a variance-covariance matrix is proportional to the identity matrix. Thus, in essence, the Bartlett test of sphericity is an indicator of the strength of the relationship among variables and an indicator of the suitability of the data towards a multivariate statistical technique such as factor analysis (UCLA, 2010). It is, therefore, employed as a test statistic that is used as gatekeeper for further analysis.

The Bartlett test examines the hypothesis that the variables are uncorrelated in the population. Thus, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself (r = 1) but has no correlation with the other variables (r = 0) (Mediaspace, 2007). Bartlett's test of sphericity is used to test the null hypothesis that the variables in the population correlation matrix are uncorrelated (Coakes & Steed, 1997). The observed significance level is .0000. It is small enough to reject the hypothesis. It is concluded that the strength of the relationship among variables is strong. It is a good idea to proceed with a factor analysis because the data should yield a p-value smaller than 0.0001. This indicates that the correlation between the variables is sufficient for factor analysis (Du Plessis, 2009:58). In this study, as suggested by Field (2007:652), the significance of the Bartlett's test of sphericity is its associated probability less than 0.05. This means that values of 0.05 and below are regarded to be significant and that it thus concludes that the strength of the relationship among variables is strong. As such, it shows that the data are suitable to be subjected to multivariate statistical analysis such as factor analysis. This is because Bartlett's test is a good measure to test if the data are suitable to proceed towards a factor analysis (Du Plessis, 2010). This study sets the Bartlett's test of sphericity value to be a minimum of 0.005 (as suggested by the University of California: Los Angeles (ULA, 2010) and the Statistical Consultation Services of the NWU (Du Plessis, 2010)).

1.5.3 Exploratory factor analysis

Exploratory factor analysis (EFA) is an important tool for organisational researchers. It can be useful for refining measures, evaluating construct validity, and in some cases testing hypotheses. Factor analysis is a technique for identifying groups and clusters of variables (Costello & Osborne, 2005:5) This technique has three main uses; namely to understand the structure of a set of variables, to construct a questionnaire to measure an underlying variable and to reduce a data set to a more manageable size while retaining as much of the original information as possible. The underlying dimensions are known as factors and or latent variables. Factor analysis achieves the parsimony by explaining the maximum amount of common variance in a correlation matrix using the smallest number of explanatory concepts (Zikmund, 2008:134).

The exploratory factor analysis is a statistical approach used to examine the internal reliability of a measure (Grafarend, 2008). It is also used to investigate the theoretical constructs, or factors, that might be represented by a set of items. The exploratory factor analysis has three basic decision points, namely the:

- Number of factors;
- Extraction method; and
- Method of rotation.

In exploratory factor analysis, the Normalised Varimax rotation is a suitable rotational method to use to extract the factors from the component matrix. This is because this method of rotation attempts to maximise the dispersion of factor loadings within the factors (Field, 2007:749). In determining the factors in this study, only Eigenvalues greater than 1 were considered (Du Plessis, 2010). The factor loading (which is a regression coefficient of a variable in the linear model) determines the relative importance or weight of a criterion in relation to a specific factor where it loads and can be regarded similar to the Pearson correlation coefficient between a factor and a criterion (Field, 2007:622; 731). A minimum of 0.40 was set for this study as it is in line with Jackson's research (2004) and also in accordance to statistical guidelines for exploratory research (Gupta, 2007:112; Field, 2007:621-622). Regarding the cumulative variance explained, a variance of 60% or higher in this study is regarded to be a "*good fit of the data*" (Shukia, 2004).

1.5.4 Cronbach Alpha's reliability coefficient

Due to this study utilizing a questionnaire and in order to validate this it is useful to test the reliability thereof. Reliability is commonly defined as: "*the consistency of a set of measurements or measuring instrument often used to describe a test*" (Bisschoff & Kade, 2010:4). This means that the scale should consistently reflect the construct it is measuring. Reliability has to do with the quality of measurement. In its everyday sense, reliability is the "consistency" or "repeatability" of the measures (Knowledgebase, 2006). An instrument, such as a questionnaire, that produces

different scores every time it is used under the same conditions, has low reliability (Field, 2007:668-669). The question, however, is how to determine the reliability of research data.

According to Santos (1999:2), one of the most popular reliability statistics is Cronbach's Alpha as published by the mathematician Cronbach in 1951. Cronbach's Alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Wuensch, 2009:9). For this research, the minimum coefficient is set at $\alpha \geq 0.70$ (Boshoff & Hoole, 1998:77; Statistica, 2006; Kothari, 2004:32). However, Kline (1999) in Field (2007:668) reasons that with attitudinal or behavioural constructs, an alpha coefficient of 0.58 is sufficient and that such data are suitable to use for subsequent analytical scrutiny, while Moss et al. (1998) (in Moola, 2010:170) suggest that 0.60 is also an acceptable level of reliability. Regarding other data types, Kline as well as Santos (1999) supports Boshoff and Hoole on a minimum coefficient alpha of 0.70. The Cronbach alpha coefficients, as defined above (0.70), were used to assess the reliability and internal stability of the data used in this study.

1.5.5 Pearson correlation coefficient

The Pearson correlation coefficient indicates the relationship of one variable to another. It is regarded to be a simple correlational analysis which shows the various relationships between the different variables by means of a correlation matrix (Du Plessis, 2010). These correlation coefficients are statistical measures of the co-variation, or association between two variables. The correlation coefficient varies from -1 to 1 and the value near -1 or 1 means that a highly negative correlation or highly positive correlation, respectively, is in existence between two variables (Xiong et al., 2003:4).

The Pearson correlation plays an integral role in the analysis of relationships (correlations) between variables, and also to determine if these relationships are positive of negative. It has a wide variety of applications in business research and is widely applied. The cut-off correlation for this study was determined to be an absolute Pearson correlation coefficient of 0.30, signifying a medium relationship or correlation between variables (Du Plessis, 2010; Zikmund, 2008:551).

1.6 LAYOUT OF THE STUDY

This study is presented in the article format. The study consists of six chapters, commencing with an introductory chapter, followed by four stand-alone scientific article-format chapters, and then a final chapter. In the final chapter, a summary of the study is provided. It is also noteworthy that the four articles contain the respective conclusions and recommendations. As a result, the final chapter does not merely repeat all the conclusions and recommendation reported on in the articles. However, the chapter does offer conclusions and makes recommendations on complementary aspects of the study (such as research methodology) while providing a summary of the conclusions and recommendations already drawn within the articles itself. The chapters more specifically deal with:

Chapter 1: Introduction. This chapter introduces the research environment and focuses on the problem statement. The primary and secondary objectives are formulated and the research methodology and statistics employed in this study are discussed.

Chapter 2: Article 1 – A review of the South African educational environment with focus on the role-players. In this first article of the study, the educational environment where the educators function is examined. This is done to ensure that the context of educator stress and its environment is contextualised. This is done to comprehend the environment educators work in and to better understand their stressors' origin. Then, the educators themselves are analysed and a biographical profile of them is drafted from the empirical research. The profile pertains to the geographical area of the study, namely the KwaZulu-Natal region.

Chapter 3: Article 2 – Causes of stress in public schools and its impact on work performance of educators in KwaZulu-Natal. The second article focuses on the identification of factors that cause stress in educators.

Chapter 4: Article 3 – An investigation of how traditional leadership and management can be guided towards transformational leadership. Managerial inputs

to address the causes of stress identified in the previous article are needed. The third article deals with how to address these stress factors, and examines the managerial style most befitting to do so.

Chapter 5: Article 4 – A comparative study of the causes of stress of educators in North West, Free State and KwaZulu-Natal. The fourth article is the final article of the study. It compares the findings of this study to that of similar studies performed in other regions of South Africa, namely the North West Province and Free State. The study also compares the biographical profiles of the studies in addition to the stress factors (and their comparative importance) identified by all three studies.

Chapter 6: Conclusions and recommendations. This is the final chapter. It deals with the overall conclusions and recommendations of the study. This chapter summarises the main findings of the study, draws conclusions and makes recommendations. The chapter also summarises all the findings and provides the main contribution of the study as an integrated whole, namely a conceptual framework for educator stress in the KwaZulu-Natal province of South Africa. The chapter culminates by identifying areas for future research and providing a final summary of the study as a whole.

1.7 LIMITATIONS OF THE STUDY

There are some areas where the study experienced limitations. These areas are:

- Design aspects made it impossible to gain access to educators from the public schools in the country as a whole. As such, this study is limited to the geographical region of KwaZulu-Natal. Although the research was conducted in only one province, generalisations are made as to what is occurring in other provinces. However, although this study was limited to KwaZulu-Natal, the results were also compared to similarly focussed burnout studies that were performed in the Free State and North West province (see Article 4).
- Language barriers exist as a result of the different racial groups. English is most of the respondents' second language. There may have been misinterpretation and misunderstanding of the questions, although this

scenario is unlikely because English is the recognised business and work language in South Africa. In addition, the sample consisted of educators who possess tertiary qualifications such as university degrees. However, no evidence presented itself to substantiate this limitation and it thus should not have had any negative effect on the quality of the data collected.

- The normal limitations regarding the use of questionnaires as data-gathering tool are recognised. Resultantly, this study acknowledges the shortcoming pertaining to additional information that could be obtained during friendly interaction obtained during interviews. The other side of the coin, however, is that a large sample could be drawn and sound quantitative analysis was possible as a result of the use a questionnaire.

Finally, it is not a good practice to rely on district offices to assist with the distribution of questionnaires. These personnel are not time sensitive and delays are inevitable. As a result, the researcher was bound to experience time constraints that were out of her control. Although this did not influence the quality of the data collected, it did extend the data-collection period to the frustration of the researcher.

1.8 SUMMARY

In this chapter, the overall perspective of this study was presented. The scientific and research objectives and the research methodology, as well as the population, sample and gathering of data were explained. The various statistical techniques required to analyse the data were discussed and the criteria pertaining to each technique were set out for this study. Chapter 1 contributes to a general understanding of the research need and the research problems. Some perspectives from previously conducted studies are taken from the literature. Lastly, an outline of the different chapters in this study is given.

The next chapter presents the first research article of the study. It deals with the educational environment educators operate in, while it also researches the biographic profile of educators in the KwaZulu-Natal geographical area.

REFERENCES

BISSCHOFF, C.A. & KADE, A. 2010. Validation of a customer service measuring instrument for the ophthalmology industry. Paper delivered at the Annual conference of the South African Institute of Management Sciences (SAIMS), Mpekweni, South Africa. September. Published in the conference proceedings.

BOSHOFF, A.B. & HOOLE, C. 1998. Portability of job involvement and job satisfaction constructs between the USA and RSA. *South African Journal for Economic Management Sciences*, 1(1):73-84.

BUBB, S. & EARLEY, P. 2004. Managing teacher workload: Work-life balance and wellbeing. London: Paul Chapman Publishing.

BURROWS, R. 2009. Apartheid's costly burden. *Daily News:* 19. May 21.

CARTWRIGHT, S. & COOPER, C.L. 2002. ASSET: An Organisational Stress Screening Tool – The Management guide. Manchester: RCL.

COAKES S.J. & STEED, L.G. 1997. SPSS: Analysis without anguish. Brisbane: Wiley.

CORBIN, C.B. 2010. Definition of wellness. Arizona State University. [Web:] http://www.definitionofwellness.com/ Date of access: 10 Dec. 2010.

COSTELLO, A. & OSBORNE, J. 2005. Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation,* 10:1-9.

DEPARTMENT OF EDUCATION. 2009. Education Statistics in South Africa, Pretoria, Published by the Department of Basic Education. [Web:] http://www.education.gov.za Date of access: 27 Dec. 2009.

DEPARTMENT OF EDUCATION. 2000. Projections of education statistics to 2010. National Centre for Education Statistics. NCES 2000-071. Pretoria: Department of Education.

DEPARTMENT OF EDUCATION. 2005. Teachers for the future: meeting teacher shortages to meet education for all. International Labour Organisation. [Web:] http://www.ilo.org/public/english/dialogue/sector/ap/educat/docs.htm Date of access: 15 May 2009.

DILLON, S. 2008. Teacher turnover leaves void in U.S. schools. *International Herald Tribune*. [Web:] http://www.iht.com/articles/america/teachers.php Date of access: 27 Aug. 2009.

DOE ***See*** DEPARTMENT OF EDUCATION.

DOE. 2006. The national policy framework for teacher education and development in South Africa. [Web:] http://www.ukzneducation.gov.za Date of access: 10 Apr. 2010.

DU PLESSIS, J.L. 2010. Statistical consultation services. Department of Statistics. North-West University. Potchefstroom.

DU PLESSIS, T.E. 2009. South African expatriates as potential entrepreneurs: an exploratory study. Potchefstroom: North-West University (Ph.D – Thesis). 260p.

EMIS. 2009. School realities. *EMIS*, 2009, Sept. [Web:] http://www.education.gov.za/emis/emisweb/flyer/School%20Realties%20 (EMIS)% 202009.pdfm http:education.gov.za Date of access: 4 Oct. 2009.

FIELD, A. 2007. Discovering statistics using SPSS. London: Sage.

FORD, H. 1922. My life and work. Garden City, New York, NY.: Garden City.

GOLD, Y. & ROTH, R.A. 1993. Teachers managing stress and preventing burnout. The professional health solution. London: Falmer. [Web:] eprints.utm.my/5912/1/Aziziyahtechnical.pdf Date of access: 10 Feb. 2009.

GRAFAREND, J. 2008. Exploratory factor analysis. [Web:] http://www.12manage.com/methods_exploratory_factor_analysis.html Date of access: 23 April 2009.

GUPTA, S. 2007. Research methodology and statistical techniques. New Delhi: Deep & Deep.

HALL E, A.M., NKOMO, N., PELTZER, K. & ZUMA, K. 2005. Potential attrition in education: the impact of job satisfaction, morale, workload and HIV/AIDS. Cape Town: HSRC.

HELLER, R. & HINDLE, T. 2003. Essential manager's manual. London: Dorling Kindersley.

HILL, A. 2008. Depressed, stressed: teacher in crisis. The Guardian. [Web:] http://www.guardian.co.uk/education/teaching.teachworkload Date of access: 31 Aug. 2008.

ILO ***See*** INTERNATIONAL LABOUR ORGANISATION

INTERNATIONAL LABOUR ORGANISATION. 2009. [Web:] http://www.ilo.org/global/lang-en/index.html Date of access: 20 Feb. 2009.

JACKSON, L.T.B. 2004. An adapted model of burnout for teachers in South Africa. Unpublished doctoral thesis. Potchefstroom, Potchefstroom University for Christian Higher Education.

JACKSON, L.T.B., ROTHMAN, S. & DE VIJVER, F.V. 2006. A model of work-related well-being for educators in South Africa. *Stress and Health*, 22(4):263-274.

KNOWLEDGE BASE. 2006. Research methods. Knowledge base. [Web]: http://www.socialresearchmethods.net/kb/reliable.php Date of access: 26 April 2010.

KOTHARI, C.R. 2004. Research methodology: methods and techniques. 2nd ed. New Delhi: New Age International.

LEITHWOOD, K. 2006. Teacher working conditions that matter: Evidence for change. Elementary Teachers' Federation of Ontario. [Web:] http://www.etfo.ca/Resources/ ForTeachers/Documents/Teacher,%20Working%20 Conditions% Date of access: 17 Aug. 2009.

MEDIASPACE. 2007. Statistical methods. Mediaspace. [Web:] http://evolutionarymedia.com/cgi-bin/wiki.cgi?StatisticalMethods,template.html Date of access: 21 April 2010.

MINISTERIAL COMMITTEE ON TEACHER EDUCATION. 2005. A national framework for teacher education in South Africa. Pretoria: Department of Education.

MOOLA, A.I. 2010. A conceptual model to measure brand loyalty in fast moving consumer goods (FMCG). Unpublished doctoral thesis. Potchefstroom, North-West University.

MTCE ***See*** MINISTERIAL COMMITTEE ON TEACHER EDUCATION

NATIONAL CENTER FOR EDUCATION STATISTICS. 2008. Highlights from times 2007: Mathematics and Science Achievement of U.S. fourth- and eighth-grade students in an international context. New York, NY.: USA Department of Education.

NAYLOR, C. 2001. Teacher workload and stress: An international perspective on human costs and systemic failure. BC Teacher's Federation Research Report: Section III. [Web:] http://bctf.ca/publications/ResearchReports.aspx?id=5566 Date of access: 10 Jun. 2010.

NCES ***See*** NATIONAL CENTER FOR EDUCATION STATISTICS.

NEVINS, F.E. 1957. Ford expansion and challenge 1915-1933. New York, NY.: Allan & Hill.

PELTZER, K., SHISANA, O., UDJO, E., WILSON, D., REHLE, T., CONNOLLY, C., ZUMA, K., LETLAPE, L., LOUW, J., SIMBAYI, L., ZUNGU-DIRWAYI, N., RAMLAGAN, S., MAGOME, K., HALL, E. & PHURUTSE, M. 2005. Educator supply and demand in the South African public education system. An Integrated Report. Cape Town: HSRC.

PHILIP, J. 2004. The impacts of globalization on the development of occupational stress. *African newsletter*, 8:5.

PHILIP, K. 2007. A reality check: worker co-ops in South Africa. *Labour Bulletin* 31(1):45-47.

SAIYADAIN, S.M. 2003. Organisational behaviour. New Delhi: McGraw-Hill.

SANTOS, J.R.A. 1999. Cronbach's Alpha: a tool for assessing the reliability of scales. *Journal of Extension*, 37(2):1-15.

SCHULTZ, H., BAGRAIM, J., POTGIETER, T.; VIEDGE, C. & WERNER, A. 2003. Organisational behaviour: a contemporary South African perspective. Pretoria: Van Schaik.

SHAUGHNESSY, J.J. & ZECHMEISTER, E.B. 2003. Research methods in psychology. 4th ed. New York, NY.: McGraw-Hill.

SHUKIA, P. 2004. T-Test and factor analysis. University of Brighton. [Web:] http://www.pauravshukla.com/marketing/research-methods/t-test-factor-analysis.pdf Date of access: 19 Apr. 2010.

SMIT, P.J. & DE CRONJE, G.J. 2003. Management principles: a contemporary edition for Africa. 2nd ed. Cape Town: Juta & Co.

SPSS INC. 2009. SPSS 17.0 for Windows. Chicago, IL. [Web:] http://spss.com/software /statistics. Date of access: 10 Apr. 2010.

STATISTICA. 2006. Help Index. StatSoft Incorporated. Data analysis software system. Version 8.0, No. AGA6125292805AR. [Web:] www.statsoft.com. Date of access: 10 Jun. 2008.

STRUWIG, F.W. & STEAD, G.B. 2004. Planning, designing and reporting research. Cape Town: Maskew Miller Longman.

UCLA. 2010. Principalcomponents analysis. University of California: Los Angeles Academic Technology Services. [Web:] http://www.ats.ucla.edu/stat/SPSS/output/principal_ components.htm Date of access: 20 Apr. 2010.

UMAR, R. 2010. Teachers leave for foreign work – poor conditions contributing to exodus, Daily News, .10. 5 May 2010. [Web:] http://www.iol.co.za/news/south-africa/kzn-teachers-leave-for-foreign-work-1.479516 Date of access: 20 Jun. 2010.

VAN WYK, D. 2006. Work wellness among secondary school teachers in the Goldfields Region of the Free State Province. Unpublished Doctoral thesis, Potchefstroom: Potchefstroom University for Christian Higher Education.

WILDERMAN, R. & LEFKO-EVERETTE, K. 2008. Reviewing Provincial Education Budgets, 2004 -2010. [Web:] http;//idasa.org.za Date of access: **5** Dec. 2010.

WILDERMAN, R.A. 2008. Reviewing eight years of the implementation of the school funding norms, 2002-2008. Cape Town: Idasa.

WILSON, V. 2002. Feeling the strain: an overview of literature on teacher stress. The Scottish Council for Research in Education: [Web:] http://dspace.gla.ac.uk/bitstream/ 1905/213/1/109.pdf Date of access: 12 Mar. 2009.

WUENSCH, K.L. 2009. Factor analysis – SPSS. FA-SPSS doc. SPSS Help Index. Version17. [Web:] http://spss.com/software/statistics. Date of access: 6 May 2010.

XIONG, H., SHEKHAR, S., TAN, P. & KUMAR, V. 2003. An efficient two-step approach for all-pairs correlation query in transaction databases. In Technical Report 03-020, Computer Science and Engineering: University of Minnesota. May.

ZIKMUND, W.G. 2008. Business research methods. 7th ed. London: Thomson Learning.

CHAPTER 2

ARTICLE 1:

A REVIEW OF THE SOUTH AFRICAN EDUCATIONAL ENVIRONMENT WITH FOCUS ON THE ROLE-PLAYERS

ABSTRACT

This article reviews the South African educational environment and examines the biographical profile of its educators. South African education is undergoing fundamental changes because of political changes in the country, and major role-players, namely the Department of Education, the educators and also the learners, have to adapt to the new reality. These changes in the basic occupational structure of teaching show that educators are exposed to a wide variety of multi-dimensional stressors within the work situation. In addition to these three core role-players, this article also focuses on the concept of quality education as common goal and how the role-players are influenced by the macro-environment in their strive to achieve quality education for all. The importance of management and the management structures in education, as integral part of the journey to quality education, are also discussed in the South African context. The analysis of all the role-players and influences are based on secondary and literature research. However, the educator profile was determined by means of empirical and primary research.

In this regard, the importance of the educator and his/her biographical profile plays a central part. The biographical profile was compiled by means of the following biographical categories: gender, marital status, home language, qualifications, perceived productivity level and stress experiences. The profile was based on a cross-sectional survey design. A random sample of 1 500 was selected from educators in the KwaZulu-Natal province in South Africa. A total of 350 responded by completing the structured biographical questionnaire that was administered to them. The biographic variables identified to describe educator stress included the gender, marital status,

number of years in the profession, qualifications, productivity and reasons for wanting to quit the profession.

Keywords: educational environment, biographic profile, public educators, school, stress, work performance.

2.1 INTRODUCTION

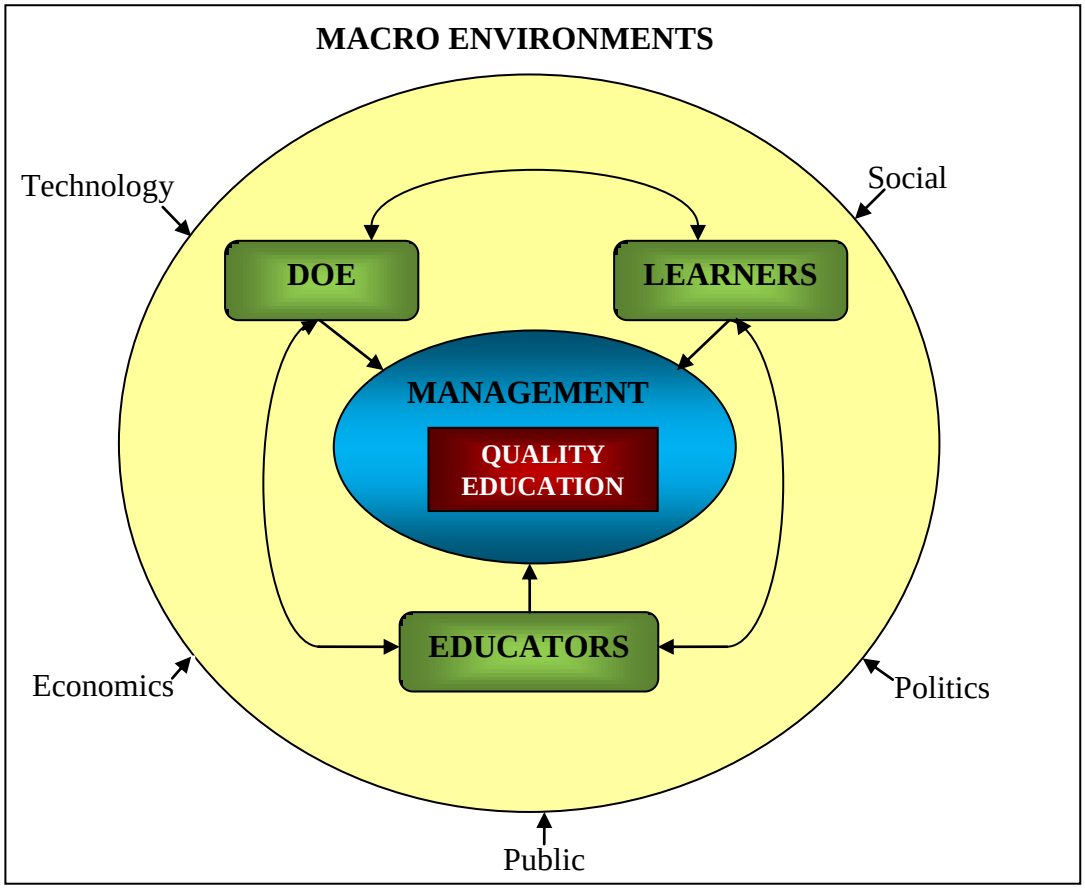
Historically, the South African apartheid government made educational decisions following a segregated approach based on ethnic dividers. However, after the first democratic elections in 1994, bringing the first ANC-led government into power, this approach changed the educational landscape of the country and the Department of Education followed an approach where quality education to all children is regarded to be the main focus point. Central to this ongoing transformational strategy is the establishment of a quality, equitable and democratic education system. One of the changes in policy has been on access: both in relation to increased input and output goals in schools and in terms of meaningful access to quality education. Much attention has been given in the last ten years to how and whether equity and access goals have been achieved (Young & Gamble, 2006:12). Education is a key component in economic and social empowerment, and has reshaped life in most countries where millions of people live fulfilling lives as a result of a good education. Without quality education, there is limited socio-economic development (Beckmann, 2009:128). The long-term benefit of working as a collective on the education front is that the nation as a whole will earn maximum benefits from the educated populace (Beckmann, 2009:128). The apartheid policies have left a legacy of a large school infrastructure backlog in the rural areas. In addition, policies and funding norms applied which was aimed to make provision in different areas equitably (Gibberd, 2007:01). These changes in policy resulted in a changed educational environment, which necessitated educators to adapt and change, which in turn led to elevated stress levels.

Some of the most intractable and urgent challenges that South Africans are facing include the need to eradicate poverty, ameliorate income inequality and demographic inequalities. Schools and educators are the epicentre of the scale of what transformation leaders want to achieve. According to Unicef (2008), quality education can only take place in a learning environment where children are free to learn, are treated equally, where they have the tools and resources to learn and have the support from their educators and parents. The world renowned educationalist Dr Art Costa (2010) stated that: “Changing public education is like punching a pillow or moving a cemetery, after you’ve done all the work you still have a cemetery”. The Department of Education (DOE) commits itself on an ongoing basis to intensify its efforts in

improving their efficiency to ensure that learners will have the physical, cognitive, emotional and social skills to anticipate and adapt to an ever changing world with new technologies, increased performance standards and global competition and expectations (DOE, 2009).

The role-players in the educational environment can be organised into a three-level structure, namely the macro environment, the enabling environment (DOE, educators and learners) and then management that integrate the environmental influences into the delivery a quality education.

FIGURE 2.1: ROLE-PLAYERS IN THE EDUCATION ENVIRONMENT



Source: Own compilation

2.2 QUALITY EDUCATION

Quality education is defined as the ability to fulfil the educational aspirations of a given community, and a quality education can be described as one that satisfies the expectations of the community and achieves the goals of education within that community (Pertl, 2006:31). Thus, the goals and objectives by which quality in education may be determined may differ from country to country. In South Africa, the following principles (ANC, 1994:68) provide the basis for specific goals and objectives that the country's education system should seek to achieve:

- Prepare individuals for the world of work;
- Prepare individuals for social and political participation in the context of the rapidly changing and dynamic global economy and society;
- Be learner-centred and non-authoritarian;
- Encourage active participation of students in the learning process; and
- Problematise knowledge as provisional and contested.

2.3 EDUCATIONAL ENVIRONMENT AND ROLE-PLAYERS

The educational environment focuses on four dimensions:

- Buildings and physical facilities;
- Human factors, which refer to the people component in the schools;
- Organisational and administrative structure; and
- School culture (values, beliefs, norms and ways of thinking).

An educational environment results from the dynamic interaction of these four variables, which, in turn, determines how educators, learners and parents perceive and experience the school's environment (Lubisi, 2008). Butler (2009:18) continues to report on research that investigated the influence of the environment on the learning process. In this study, it was found that an educational environment which gives security and encouragement to learners and supports quality education because:

- It is organised to meet learning needs;
- Enables learners and educators to access a range of resources; and because it
- Provides the most purposeful learning (Butler, 2009:18-20).

These findings are also in line with West-Burnham's study (1997:239-241) which states that inherent in the educational environment, facilities are also required to achieve quality education. This would include aspects such as the availability of fixed assets (for example, school buildings and how well it is equipped with educational aids (libraries, computer facilities and study facilities)), the maintenance of these buildings, and the quantity and quality of the learning materials. West-Burnham's study, interestingly, showed that the number of learners in a classroom is not primary to learning if all have access to the learning facilities.

There are several role-players in the education environment in South Africa. These role-players are (Beckmann, 2009:130):

- **Department of Basic Education (DOBE)** – the DOBE is the custodian of Education in the country. Its primary responsibility is to take care of the education of the country. This is generally achieved by:
    - The implementation of the various acts applicable to schools;
    - Ensuring that there is proper implementation of budgets;
    - Monitoring and benchmarking the education process of the country;
    - Responsible for the appointment of educators; and
    - Dealing with all matters in respect of educators and learners.

- **School Management -** leads the human resource development by encouraging both educators and learners to embrace and share knowledge in creating a learning community. They are responsible for:
    - The overall improvement of the schools which includes teaching and learning, learner results, educator performance and the improvement of professional practice;

- The school principal is the acting head of the school and a key delivery agent in the education system. As executive manager, the school principal is regarded as the most important partners in education, and educational outcomes are positively correlated with the school principal. Additionally, school academic performance is highly correlated with the abilities and commitment of the principal. Some key performance areas of successful principals are that they (Nengwekhulu, 2008:340);
- Hire qualified teachers, or ensure the training of the unqualified teachers on their staff;
- Ensure distribution of workbooks and textbooks on time. This is critical to successful learning. It empowers pupils and helps to ensure that they complete the syllabus;
- Check that teachers are in class-teaching;
- Monitor and evaluate the quality of learning with the children, and keep parents informed of their children's progress; and
- Work with the community and the department to remove obstacles to learning.

- **The School Governing Body (SGB)** is responsible for the governance of public schools to ensure that schools are democratised. They act within the framework set by legislation and the policies and ensure that the school performs in a manner that enables the provision of the best possible education for its learners.

- **Educators** provide schooling for pupils. The core responsibilities of the educators are to (Anon., 2010:5):
  - Provide education instruction in literacy and numeracy, craftsmanship or vocational training, the Arts, religion or spirituality, civics, community roles, or life skills;
  - Outside of the classroom educators may accompany students on field trips, supervise study halls, help with the organisation of school functions, and serve as supervisors for extracurricular activities; and

- In some education systems, teachers may have responsibility for student discipline.

- The **learners**. Educators direct the learning process and learners assume a receptive role in their education. Learners work to achieve curricular objectives in order to become critical thinkers. Students respond to positive expectations set by the educator as they progress through activities.

2.3.1 Macro-economic factors

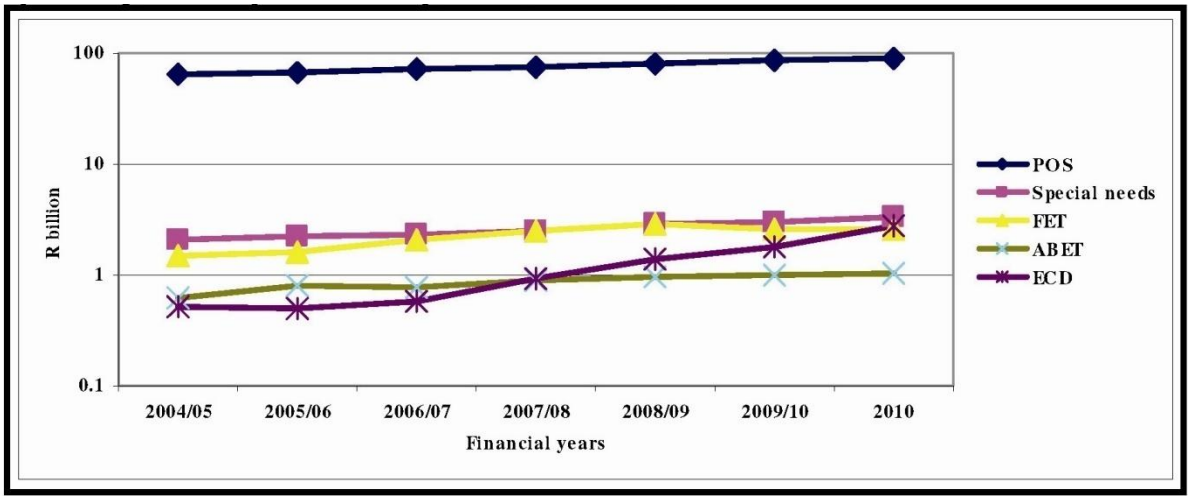
2.3.1.1 Economic policy and the DOE

The DOE is largely shielded from normal macro-economic aspects as a State department. Therefore, aspects such as interest rates, exchange rates and fiscal policy plays little role in the management aspects of the DOE. However, the effect of macro-economic factors are acknowledged, and the DOE is faced with inflation figures and its effects on the salaries account, the higher cost of equipment, and the increased cost of supplies (such as stationery and textbooks). The DOE does take these higher costs into account when compiling the budgets for the year to come, and as a result, shields itself from the effects of the macro environment. It is, however, important to analyse the budgets allocated as well as the actual spending of this allocation by the DOE.

2.3.1.1.1 Budgetary allocations to the DOE

Annually, Parliament debates the total investment in education services and the aggregate resources available to the nine provinces. Figure 2.2 provides information on the programme expenditure framework and indicates how the same sum of resources is divided across key service delivery programmes (Wilderman, 2008:3).

FIGURE 2.2: THE PROVINCIAL EDUCATION EXPENDITURE FRAMEWORK: REAL SPENDING TRENDS (2007 RANDS), 2004/05-2010/11



Source: National Treasury (2009)

Expenditure on consolidated provincial education has grown consistently over the period depicted above and all the main service delivery programmes have benefited from such growth. Public schools will also benefit from slow, but steady real increases in compensation for teachers (Wilderman & Lefko-Everette, 2008:4). The detailed breakdown with regard to the different structures in the Department is seen in Tables 2.1 and 2.2.

TABLE 2.1: BREAKDOWN OF BUDGET ALLOCATION – 2010

R165 BILLION (10.9%)	
Tertiary Education	R23.3 billion – 12.4%
Basic Education	**R127 billion – 11.8%**
Education Administration	R9 billion – 0.6%
Further Education & Training Adult education	R5.7 billion – 5.3%

Source: National Treasury (2010)

TABLE 2.2: BREAKDOWN OF BUDGET ALLOCATION – 2011

R189.5 BILLION (9.7%)	
Tertiary Education	R26.3 billion – 6.8%
Basic Education	**R145.5 billion – 10.6%**
Education Administration	R11.7 billion – 7.9%
Further Education & Training & Adult Education	R6.2 billion – 6.7%

Source: Provincial Treasury (2011)

In the recent budget speech (National Treasury, 2010) by the Finance Minister, it was announced that education will take up the largest share of government spending which equates to 21% of the total budget. Table 2.2 highlights the allocation of the budget. By reviewing these budget figures one is able to conclude that concerted efforts are being made to improve basic education in the country. This is seen as a positive investment for the future of the country. Budget allocations are just one aspect of the government's intervention to improve education across the provinces. The challenge lies with the accountability, the measure of effectiveness of these allocations and reporting on the successes and failures.

Consideration of the absolute size of provincial education allocations is useful, but it is also important to take into account the inequities in school infrastructure, adequacy of resources available to learners in certain areas and the high financial burden faced by parents. In 2006/2007, inequality in the per capita spending on education between provinces increased slightly, but remains little. Traditionally, "poor" provinces achieved parity with the national per capita average.

TABLE 2.3: PROVINCIAL EDUCATION BUDGETS (R'000), 2004/05 - 2010/11

Province	2007/08	2008/09	2009/10	2010/11	Real change between 2007/08-2008/09 (%)	Real av. Ann. Change between 2007/08-2010/11 (%)	Real av. Ann. Change between 2004/05-2010/11 (%)
Eastern Cape	14,505,263	17,810,197	18,881,136	20,238,193	15.6	6.4	5.7
Free State	5,677,502	6,598,569	7,169,708	7,748,108	9.4	5.4	4.4
Gauteng	14,649,391	16,629,082	18,461,601	19,882,314	6.9	5.2	6.9
KwaZulu-Natal	19,003,096	21,389,127	23,914,043	26,420,070	6.0	6.1	6.8
Limpopo	12,025,666	14,221,050	15,925,244	17,341,802	11.4	7.4	4.8
Mpumalanga	8,118,307	8,934,232	9,739,439	10,676,178	3.6	4.1	8.4
Northern Cape	2,286,860	2,601,238	2,902,401	3,159,825	7.1	5.9	9.1
North West	6,096,036	6,995,482	7,995,239	8,842,782	8.1	7.6	4.2
Western Cape	7,822,732	9,019,913	10,013,961	10,864,296	8.6	6.0	5.8
Total	**90,184,853**	**104,198,890**	**115,002,772**	**125,173,568**	**8.8**	**6.0**	**6.0**

Note: Data for 2007/08 to 2010/11 period are displayed for the ease of reading of the table, although the full period, namely 2004/05 to 2010/11, was used to calculate the six year average in the final column.

Source: Provincial Treasury (2011)

KwaZulu-Natal has the largest budget allocation (R21.4 billion), while the Northern Cape has the smallest nominal allocation (R2.6 billion). Consideration of absolute sizes of provincial education allocations is useful, but their respective service delivery burdens should be taken into account. The demographics of the province, the types and number of ordinary schools, current resources and the locations of these schools impact on the spending of the provincial governments.

2.3.1.1.2 Expenditure of the DOE

At about 5.3% of gross domestic product (GDP) and 20% of total state expenditure, South Africa has one of the highest rates of public investment in education in the world. The main areas that have an impact on the budgets are detailed below:

- Spending is at R94.7 billion or 75.9% against R124.8 billion adjusted budget:
  - Main budget increased by R6.5 billion – mainly for Improvement of Condition of Service (ICS) and Occupational Specific Dispensation (OSD)

- 41.1% of total provincial adjusted budgets
- Increase of R13 billion or 15.9% compared to same period of last year

- Eastern Cape – 22.5%; North West – 19.3%; Limpopo Province – 18.7%; Gauteng Province – 18.1%

- Projected overspending of R1.7 billion in 7 provinces
  - Bulk in Eastern Cape (R640 million on Personnel)

- Personnel spending at R72.7 billion or 74.5% (R97.6 billion adjusted budget)
  - Projected overspending of R1.7 billion in 6 provinces (Eastern Cape – R559.4 million; KwaZulu-Natal – R387.4 million)

- Goods and services (includes LTSM, Scholar Transport, etc.) at R9.4bn or 73.5% (R12.8 billion adjusted budget)
  - Projected under spending of R306million in 5 provinces (KwaZulu-Natal – R107.4 million; Gauteng Province – R96.2 million; Limpopo Province – R59.3 million)
  - Projected overspending of R120m in Mpumalanga Province.
  - Negative/Low y-on-y growth rates in Free State (-5%); and Mpumalanga (-2.9%)

- Capital spending at R4.5 billion or 84%
  - Projected overspending of R211.2 million in 7 provinces (Mpumalanga – R110.7 million; Eastern Cape – R47.8 million)
  - Low rate of capital spending in Mpumalanga (63.5%) and WC (69.1%)
  - Northern Cape (97.2%) and EC (96.7%) reflects the highest rate of capital spending in education

- Transfers at R8.1 billion or 90.5% against R9 billion adjusted budgets

2.3.1.1.3 National expenditure

The National expenditure per province is highlighted in tables 2.4 to 2.6 below.

TABLE 2.4: EDUCATION – BUDGET ALLOCATION FOR PUBLIC ORDINARY SCHOOL (POS) (FEBRUARY 2011)

Eastern Cape	17,089,030	17,842,304	14,073,165	*82.4%*	-753,274	–	*-4.4%*	*39.8%*	*85.1%*
Free State	6,164,767	6,164,598	4,470,391	*72.5%*	–	169	*0.0%*	*33.1%*	*77.3%*
Gauteng	15,537,548	15,502,298	11,569,523	*74.5%*	–	35,250	*0.2%*	*26.1%*	*77.4%*
KwaZulu-Natal	22,602,926	22,777,964	17,053,929	*75.5%*	-175,038	–	*-0.8%*	*36.3%*	*86.6%*
Limpopo	14,710,635	14,972,972	11,333,557	*77.0%*	-262,337	–	*-1.8%*	*43.7%*	*87.2%*
Mpumalanga	8,991,478	9,393,216	6,884,176	*76.6%*	-401,738	–	*-4.5%*	*39.3%*	*85.7%*
Northern Cape	2,545,162	2,626,952	1,962,987	*77.1%*	-81,790	–	*-3.2%*	*32.3%*	*80.4%*
North West	7,173,318	7,186,618	5,379,175	*75.0%*	-13,300	–	*-0.2%*	*35.3%*	*84.8%*
Western Cape	8,653,075	8,653,075	6,441,971	*74.4%*	–	–	*0.0%*	*29.5%*	*81.0%*
Total	**103,467,939**	**105,119,997**	**79,168,874**	***76.5%***	**-1,687,477**	**35,419**	***-1.6%***	***34.9%***	***83.6%***
				Net	**-1,652,058**				

Source: National Treasury (2010)

TABLE 2.5: HIV AND AIDS LIFE SKILLS EDUCATION (FEBRUARY 2011)

HIV AND AIDS (LIFE SKILLS EDUCATION)									
Province **R thousand**	**Division of Revenue Act, 2009**	**Government Gazette: Other**	**Provincial roll-overs**	**Total available**	**Received by province:**	**Provincial actual payments**	**% Actual payments of total**	**Projected outcome for financial**	**Projected (over)/under**
Eastern Cape	30 168	-	-	30 168	30 168	21 637	71.7%	22 307	7 861
Free State	10 341	-	-	10 341	10 341	9 295	89.9%	9 888	453
Gauteng	25 253	-	-	25 253	25 253	19 416	76.9%	25 616	(363)
KwaZulu-Natal	39 765	-	-	39 765	39 765	41 148	103.5%	43 422	(3 657)
Limpopo	25 882	3 474	433	29 789	29 356	15 873	53.3%	29 789	-
Mpumalanga	14 626	-	356	14 982	14 626	8 962	59.8%	14 626	356
Northern Cape	3 828	-	-	3 828	3 828	2 577	67.3%	4 005	(177)
North West	12 912	-	1 207	14 119	12 912	8 358	59.2%	14 119	-
Western Cape	14 626	-	-	14 626	14 626	9 866	67.5%	14 626	-
Total	**177 401**	**3 474**	**1 996**	**182 871**	**180 875**	**137 132**	**75.0%**	**178 398**	**4 473**

Source: National Treasury (2010)

TABLE 2.6: NATIONAL SCHOOL NUTRITION PROGRAMME (FEBRUARY DATA)

NATIONAL SCHOOL NUTRITION PROGRAMME								
Province **R thousand**	**Division of Revenue Act, 2009 (Act No. 12 of 2009)**	**Provincial roll-overs**	**Total available**	**Received by province: Year to date**	**Provincial actual payments**	**% Actual payments of total available**	**Projected outcome for financial year**	**Projected (over)/under**
Eastern Cape	486 695	-	486 695	486 695	474 839	97.6%	489 660	(2 965)
Free State	122 306	19 518	141 824	122 306	117 283	82.7%	141 824	-
Gauteng	251 590	-	251 590	251 590	240 368	95.5%	252 003	(413)
KwaZulu-Natal	555 917	38 279	594 196	555 917	534 428	89.9%	577 032	17 164
Limpopo	419 185	46 807	465 992	419 185	369 265	79.2%	465 992	-
Mpumalanga	229 534	22 949	252 483	229 534	202 971	80.4%	229 534	22 949
Northern Cape	55 690	-	55 690	55 690	46 134	82.8%	55 594	96
North West	161 063	8 464	169 527	161 063	154 696	91.3%	169 527	-
Western Cape	112 548	5 195	117 743	112 548	107 334	91.2%	117 743	-
Total	**2 394 528**	**141 212**	**2 535 740**	**2 394 528**	**2 247 318**	**88.6%**	**2 498 909**	**36 831**

Source: National Treasury (2010)

Quality education to the poor is a target of the government with two notable programmes. These programmes are:

- **Fee-free schools**: these institutions that receive all their required funding from the state and so do not have to charge school fees. These have been carefully identified in the country's most poverty-stricken areas, and will make up 40% of all schools in 2009.
- **The national schools nutrition programme** feeds about 7-million school children every day, including all those attending primary schools in 13 rural and 8 urban poverty nodes (see the allocated budget and spending as shown in Table 2.6). The programme was extended in 2009 to 1 500 secondary schools around the country, feeding 1-million secondary school pupils from grades 8 to 12. Under this programme, the Department of Education has also established almost 2 100 school gardens with the support of the Department of Agriculture, local government structures and a number of NGOs.

Other governmental priorities in education include early childhood development, HIV/Aids awareness programmes in schools, and adult basic education and training.

- While provinces are projecting to over-spend by over R1 billion, goods and services (such as learner support materials) are projected to *under-spend* by R700m in 2009/10.
- Specifically, *Compensation* appears to be crowding out other spending items.
- Provincial spending on NSNP has improved significantly.
- At the end of 2008/09 the NSNP grant under-spent by R402 million. Current trends indicate that under-spending will not be higher than R40 million.
- However, spending on HIV & AIDS Life Skills grant is 10 per cent slower than at the same time in the previous year.
- Eastern Cape (-24%), Mpumalanga (-28%) and North West (-47%) show the biggest declines on this grant.

Spending on HIV & AIDS Life Skills indicates that provincial and national education needs to manage cash flows accurately, as funds are made available to provinces during parts of the year in which they are not needed (South African Government Online, 2010).

2.3.1.1.3.1 KwaZulu-Natal provincial expenditure

The province of KwaZulu-Natal receives the lion's share of the equitable share allocation from the national fiscus, and has a total budget of R78.248 billion for the 2011/12 financial year, increasing to R88.631 billion in the outer year, 2013/14.

TABLE 2.7: SUMMARY OF BUDGETS ALLOCATED IN KWAZULU-NATAL - 2011/2012

Department	Allocation	% of Budget
Education	**R32.6 billion**	**42.2%**
Health	R24.4 billion	31.7%
Transport	R 6.5 billion	8.5%
Human Settlements	R 3.9 billion	3.95%
Agriculture	R 2.2 billion	3.2%
Social Dev.	R 1.9 billion	2.5%
Economic dev. & Tourism	R 1.4 billion	1.9%
Public Works	R 1.2 billion	1.6%

Department	Allocation	% of Budget
Cooperative Govern & Trade Affairs	R 1.1 billion	1.5%
Provincial Treasury	R536.4 billion	0.7%
Office of the Premier	R471.1 billion	0.6%
Arts & Culture	R364.8 billion	0.5%
Provincial Legislature	R322.2 billion	0.5%
Sports & Recreation	R307.1 billion	0.5%
Community Safety & Liaison	R150.1 billion	0.2%

Source: Provincial Treasury (2010)

The budget allocation speech delivered by the MEC of Finance, Ms Ina Cronje (KZN Treasury, 2011) highlights that education increases from R29.570 billion in 2010/11 to R32.618 billion in 2011/12 and R36.492 billion in 2013/14. More specifically, the KZN Department of Education allocated funds towards:

- **Infrastructure provision**

  The Department continues to make recognisable strides in addressing backlogs in the provision of classrooms, toilets, computer rooms, laboratories and media centres.

  According to the Minister of Education (DOE, 2010) in KwaZulu-Natal, education is the key to break the shackles of poverty. There have been several interventions by the provincial government and part of the mission of the provincial government is to *"provide opportunities*

for all our people to access quality education which will improve their position in life and contribute to the advancement of a democratic culture in KwaZulu-Natal." (DOE, 2010).

The provincial government has highlighted that a budget of R974 million was spent during 2010 and the following was done:

- 5 whole new schools built in the Pinetown, Umzinyathi, Emapangeni and Ugu districts;
- 1 471 classrooms were built;
- 3 180 toilets built;
- 40 media rooms (libraries);
- 42 computer rooms;
- 36 science laboratories;
- 18 nutrition blocks;
- 160 administrative blocks;
- 25 boreholes;
- 1 200 water tanks provided;
- 100 schools were assisted to connect existing electricity lines;
- 50 schools provided with piped water; and
- 237 schools were fenced.

- **Social projects**

Other interventions of the provincial government were the introduction of:

- *No School Fee policy:* This policy is aimed at bringing relief to the poorer parents and the policy was introduced in 2006. In the 2007/2008 financial year an additional 2 000 schools were added to the "no-fee" school list bringing the total number to 3 341 benefitting 1 170 965 learners (representing 43% of the learner population). Almost 80% of KZN schools are *No Fee Schools*). Learners benefiting increased from 1 279 769 in 2009/10 to 1 740 965 in 2010/11 and will increase to 1 750 721 in 2011/12, 1 760 882 in 2012/13 and 1 870 000 in 2013/14.

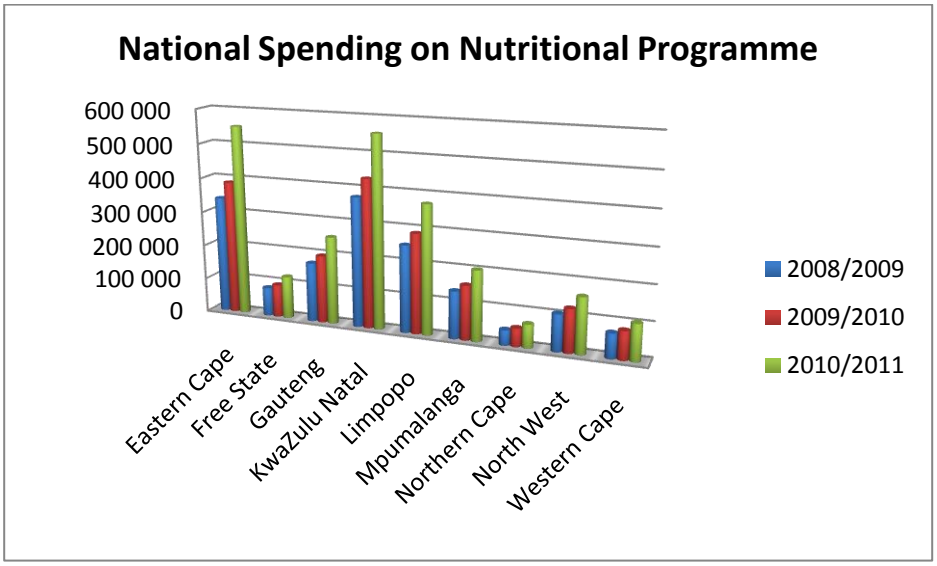
- *National School Nutrition:* Nutritional meals are provided daily to learners at 3 760 primary schools who received meals for at least 162 days of the school calendar year reaching 1.47

million (or 55%) of the learners that are attending school. Learners benefiting are to increase from 1 984 704 in 2010/11 to 2 107 871 by 2013/14. The Minister of Education approved the implementation of the scheme based on a minimum norm concept with effect from 1 April 2008. The *minimum norm* is:

- All learners in Quintiles 1, 2 and 3 primary schools to receive feeding;
- For these learners, feeding must take place on every school day; and that an
- Average meal cost should be approximately R1,50.

Provinces are also encouraged to find economic means to feed learners that are above minimum norm within the allocation or through supplementing the grant (Wilderman & Mbebetho, 2006:4). In 2007/08 provinces managed to spend 97% of their original allocations. KwaZulu-Natal, however, under-spent the allocated budget by 7%. This implies that either not all the targeted beneficiaries received funding and benefits (according to budget), or that the budgetary process was not followed correctly. Figure 2.3 shows the actual spending on nutritional grants up to 2007/08.

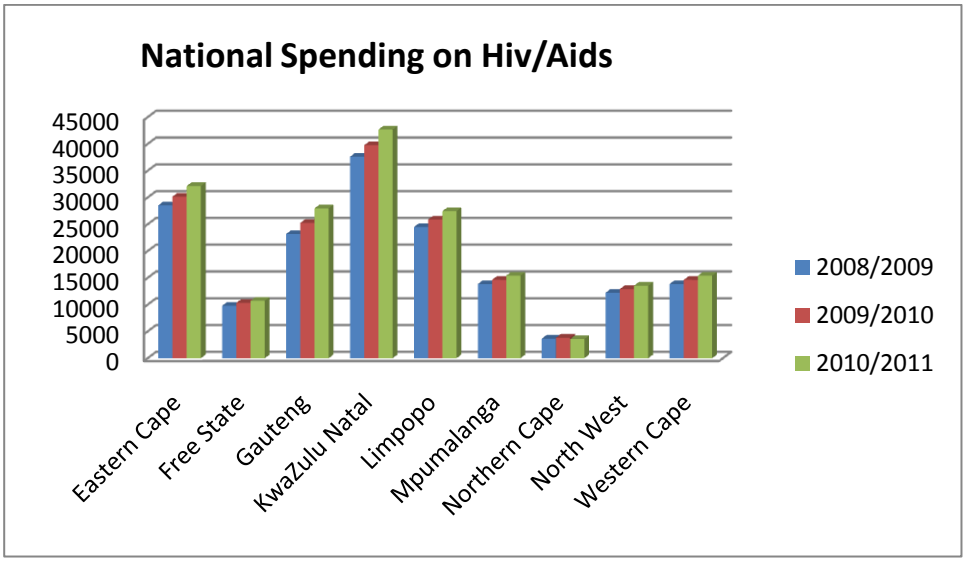
FIGURE 2.3: ACTUAL SPENDING ON THE NATIONAL SCHOOL NUTRITION GRANT, 2005/06-2007/08



Source: DOE (2009)

- *HIV & Aids:* The DOE also has life-skills and HIV & Aids grant social projects at schools level. The budgets and actual spending appears in Figure 2.4 below.

FIGURE 2.4: ALLOCATION OF FUNDS FOR HIV/AIDS IN SOUTH AFRICA



Source: DOE (2010)

From figure 2.4 above, it is clear that HIV and Aids spending (2008/2011) were below budget. The provinces managed to spend only 83% of their original R166 million granted. KwaZulu-Natal largely under-spent its budget allocation by 32% (only R24 million of the awarded budget of R35 million were actually spent). The projects that received funding are:

- *AIDS* – the aim of this programme was to equip educators on how to integrate the prevention strategy into the life orientation learning area. As much as 2 784 learners were trained as peer educators and 1 451 educators were trained as counsellors to manage, care and support the programme. Presently, KwaZulu-Natal has 890 Soul Buddyz clubs[1] (Soul Beat Africa, 2011).

1 The concept of the Soul Buddyz Clubs was inspired by the Soul Buddyz (formerly called "Soul Buddies") children's television programme, aimed at children between the ages of 8 – 12 years. The Soul Buddyz Clubs, initiated in 2002 by Soul City, aimed to enable children to take action in their communities. It has been found that children often lack the infrastructure and resources needed to take positive action in their own lives and communities. The purpose of the Soul Buddyz Club project was therefore to create a platform where all South Africa children between the ages of 8 – 12 years could learn and develop skills that would facilitate mobilisation around issues affecting them and their surrounding schools and community. Furthermore, Soul Buddyz Clubs were envisaged as the hub of all activity that would be interesting, exciting and fun for children or Buddyz as they have become known.

- *Bridging the Digital Divide* – historically, the department had no budget for the date delivery of Information Communication Technology (ICT). To date 4220 of the 6000 schools have received at least one computer and printer for administrative purposes. As many as 2400 educators received training in basic computer skills.

- *Strengthening School Management* – The KwaZulu-Natal department in conjunction with the National Education Department started an Advanced Certificate in Education (ACE) school leadership programme last year (DOE, 2010). A total of 100 principals were on the programme. Continuous Education Management Development and Training was offered to senior management team members as well as school governing body members (CELEMUS, 2011).

- *Safe Schools* – the introduction of the concept to all schools to have active safety committees which consisted of principals, school governing body members and local councillors. Appointment of security guards became mandatory for all schools. Schools were advised to link up with local police stations. Fencing of schools was prioritised. Several meetings were held in communities to discuss ways on what measures to take in order to improve security.

Finally, regarding the KZN DOE, it must be mentioned that the provincial government fully recognises the importance of quality education. In this regard, the provincial minister Angie Motshekga, (2010) stated that:

"*We cannot afford to fail our people. Whatever it costs, the price of failure will be greater than the price of education. Our people in the province are worth it. Our country is worth it. Our continent is worth it and so is our planet.*"

2.3.2 Public policy

This refers to the collection of laws and rules that govern the operation of the education system. Education occurs in many forms for many purposes through many institutions. Examples include early childhood through to 12th grade. There are many subjects of debate which is applicable to the public policy with regard to basic education and these include:

- School size;
- Class size;
- School choice;
- School privatisation;
- Tracking;
- Educator certification;
- Educator remuneration;
- Curricular content; and
- School infrastructure and investments.

This policy serves to address the societal and personal issues of public education. The policy aims to focus on the human development and uphold the model of education (Wilderman & Lefko-Everette, 2008:10).

Competing demands that result from rapidly changing environments place huge challenges on the education system. This is generally true irrespective of whether the school is in an urban or rural environment. Consideration should be given to the following factors:

2.3.3 Political environment

According to Thompson (2007:49), a large degree of modern politics in South Africa continues to revolve around the questions of identity, cultural, linguistic, racial and ethnic divisions which predate colonialism which still dictates to society. The post 1994 era has resulted in the democratisation of the schooling system whereby the powers were given to parents and learners. This has resulted in the formation of the SGB and the introduction of the Representative Council of Learners (RCL). This has

resulted in a significant milestone in the process of advancing participation of stakeholders and role-players in education. The South African Schools Act of 1996 (Act no 84 of 1996), the need to uphold the rights of all learners, parents and educators, and promote their acceptance of responsibility for the institution, governance and funding of schools with the state, while, enshrined in section 23 of the aforementioned South African Schools Act, all role-players are mandated into participation towards delivering quality education (Mchunu, 2009:2; Republic of South Africa, 1996a).

2.3.4 Social influence

Education and schools have the propensity for re-defining and maintaining social change. It is clear that schools need to re-socialise children into new roles so that they can play a part in the changed conditions. The societal imbalances of the country have resulted in inequality of education which is impacting on the role these learners play in society (Rose & Tumner, 2006:32).

Society and education are tightly bound entities and hence cannot be separated from each other. Society plays an important role in education and influences it, both positively and negatively. Social inequalities and unhealthy educational practices and are some of the negative influences of society on our lives. In this regard, Ferreira and Ono (2010:65) point out that customs and traditions in certain societies prevent children from exercising their fundamental educational rights and as a result negatively impact on the well-being of the society, quality education and social awareness. Examples in this regard are that some social groups deny women's right to education, while others force children to work, depriving them from a healthy environment, conducive to their growth and development. Such social constraints act negatively upon education and social well-being (Welhua, 2011:160). Beckmann (2009:130) further adds that the social status of a person may also dictate the kind of education people can obtain, and that the cost of education is positively correlated to the social system. This means that, as one progresses through the social classes, so does one’s capability to obtain a better education increases.

2.3.5 Technological influences

The changing education environment has brought to the fore the need to incorporate technology in the teaching and learning process. This intervention is a vital means of improving the quality of education

(Rowe, 2007:60). It has been the intention of the DOE to bridge the digital divide since 2003. The challenge is to have all learners in the GET and FET bands computer literate. Although the process has started and budgets have been allocated for the provision of hardware, software and connectivity, the support to schools and this continues to be unabated (Mchunu, 2008:11).

The use of technology has become the norm in most learning institutions and the starting point will be at primary school level. New innovations such as digital technology, smart boards, internet and computer teaching aids have been seen as the way to go. The direct impact of the use of technology will be up skilling the learners and ensuring that educators are adequately trained to incorporate this with the new curricula (DOE, 2009).

2.3.6 The DOE

2.3.6.1 Historical overview of education

Since the advent of democracy in 1994, educational law and policy have been steered by the national Department of Education. The Constitution provides that the national government has exclusive responsibility for tertiary education, whereas responsibility for other education is a concurrent responsibility of the national government and nine provincial governments. Following the general elections in April 2009 the organisation and administration of the education system is undergoing its first major alteration since 1994 (OECD, 2008).

Schools emerge from and are shaped by their social and historical contexts. The education of children stretches even further back beyond colonial influence and reflects in aspects of education today. In South Africa, formal education through institutions over the years has resulted in two great forces of colonialism and apartheid (Badat, 2009:12).

The institutionalised racism of apartheid continues to have profound effects on all levels of educational provision and experience in South Africa. Apartheid was structured to reproduce, maintain and perpetuate inequity based on legally-enforced racial and ethnic segregation of educational access. This was ensured and reinforced by white minority control of the legislature and state apparatus and the geo-

political segregation of races through ‘group areas’ and ‘homelands’ which were central to the architecture and design of apartheid (Badat, 2009:15).

Due to the unequal character of schools that persist which include unequal funding of schools, socio-economic conditions, inequality of facilities and locations of schools, there have been drawbacks (Ferreira & Ono, 2010:62). Despite the drawbacks that have been encountered since 1994 several attempts have been made to redress the imbalances of the past. The resilience of these inequalities underlines the long shadow of history on schools. There have been comprehensive reforms in the pursuit of equal education for all. The reality is that it will take several years to address the imbalances and achieve some level of equity within the schooling system (Lewin, 2007:8).

With the adoption of the Interim Constitution in 1993, equal education became for the first time a fundamental human right for all South Africans. The Bill of Rights of the final Constitution of the Republic of South Africa (Republic of South Africa, 1996b) provides that:

(1) Everyone has the right:
   (a) to a basic education, including adult basic education; and
   (b) to further education, which the state, through reasonable measures, must make progressively available and accessible.

(2) Everyone has the right to receive education in the official language or languages of their choice in public educational institutions where that education is reasonably practicable. In order to ensure the effective access to, and implementation of this right, the state must consider all reasonable educational alternatives, including single medium institutions taking into account:
   (a) equity;
   (b) practicability; and
   (c) the need to redress the results of past racially discriminatory laws and practices.

Unlike other socio-economic rights, such as access to housing and health care, the right to basic education is unqualified and may be interpreted as enjoying ‘a higher normative status as an immediately enforceable right’ (Veriava, 2005:3). The State has a positive duty to provide basic

education, but in order to assess whether the State has met its obligation it is necessary to 'define the content of the right to basic education and to measure the actual level of achievement against the standard set by the right' (Veriava, 2005:3). Access to school education was given legal form in the South African Schools Act (Act no. 84 of 1996) (Republic of South Africa, 1996a). Regulations and policy in accordance with the National Education Policy Act (Act no. 27 of 1996) govern admission to public and independent schools (Republic of South Africa, 1996c). Enrolment is compulsory for all learners from the beginning of the year in which they turn six to the end of the year in which they turn 15, or the end of Grade 9, whichever comes sooner (Shindler & Fleisch, 2007:35). Parents are legally liable to ensure that their children are enrolled during the compulsory period. Compulsory education (also known as basic education) therefore extends from Grade 1 to 9, comprising seven years of primary school and the first two of the five years of secondary school (Lewin, 2007:9).

Decentralising authority to School Governing Bodies (SGBs) is, in part, justified as a strategy to democratise schools by encouraging stakeholder participation in decision-making. SGBs comprise the school principal and representatives of educators, parents and non-teaching staff (and, in secondary schools, learners), with parent representatives holding the majority. However, the inherited geographic apartheid that still defines the make-up of many school communities often results in governance structures that reflect particular cultural, class or racial characteristics. These factors generally do not dissipate with the installation of a new government or new policies (Clase et al., 2007:244).

2.3.6.2 The modern educational environment in South Africa

The new Department of Education post apartheid (1994) prioritised legislative and policy reforms to overhaul the fragmented and discriminatory nature of education provision, and to establish a unified, non-racial system of education and training. Since then significant changes have been introduced at every level of the education system from curriculum and assessment, to professional growth and development, to teaching and learning, backlogs and the management and administration of schools (DBE, 2010:5).

Much progress has been made in moving the system away from the precepts of apartheid education. These include the introduction of an expanded curriculum, more educators and principals are being

exposed to in-service development than ever before. Provision is being made to improve the infrastructure of schooling, especially in rural areas. A greater number of children participate in the school nutrition programmes. Much of the transformation of the school system was made possible through the intense participation by stakeholders in matters of the education policy (Beckmann, 2009:128).

Recently, the government has subdivided education, and established two new ministries to govern the education and training sector, namely (National Treasury, 2009):

- The *Ministry of Basic Education* (DBE) is responsible for the school system and adult literacy, formerly managed by the Department of Education.
- The *Department of Higher Education* (DHET) which is responsible for higher education training.

2.3.6.2.1 Department of Education interventions

The Ministry of Basic Education aims at focusing on quality basic education. This was highlighted during the launch of the Quality Learning and Teaching Campaign. The aim was to achieve certain outputs by 2014. This has resulted in emphasis being placed on the improvement of the infrastructure of schools, develop the capacity of educators and management of the system more efficiently. In order to achieve this, the following areas are being focused on:

- **Teacher development**: Developing content knowledge of educators is identified as a critical ingredient for systematic improvement of quality education. The National Curriculum Statement puts major emphasis on curriculum development, lesson and assessment planning, and classroom management strategies.

- **Teacher supply and demand**: The department is experiencing a critical shortage of educators, especially in gateway subjects such as science, mathematics and accounting. Educators are lost annually through attrition due to deaths, retirement and resignations. The supply of educators does not meet the demand. The Department of Basic Education is creating branches which will

focus mainly on teacher development and meet the requirements of educator demands (Badcock-Walters & Wilson, 2006: 24).

- **National Curriculum**: A nation's national curriculum is at the heart of its education system. It is the primary source of support and direction for learning and teaching in the education system, and plays the role of equaliser in terms of educational standards. Post-apartheid resulted in a new concept that coincided with the birth of the new democracy. Curriculum 2005 was introduced and the aim was to re-build the divided nation, to promote the new constitution, establish and promote a sense of national identity in general but particularly for a troubled education sector (17 largely race-based, education departments with several different curricula). This curriculum was seen as an outcomes-based approach of teaching and learning. By the early 2000s it was discovered this curriculum had inherent flaws which highlighted children's inability to read, write and count at appropriate grade levels. Educators were uncertain as to what they are actually required to teach because there was a misalignment between formulation of strategy (Curriculum 2005) and the implementation of strategy. Resultantly, educators and learners did not know how to interpret and apply the volumes of information that were disseminated by the DOE (DOE, 2009).

- **Outcomes Based Education (OBE)**: As a result of these findings on Curriculum 2005 the shift was to the introduction of the OBE which was implemented internationally in countries such as Canada, United States and New Zealand. These countries did indicate that the OBE was majorly flawed. The South Africa Department of Education did not really investigate this thoroughly nor think the process through before implementing it. The reality is that we are known to be a third world country which is trying to implement first world standards and schooling interventions. Although the aim of this approach was to allow learners to become future-orientated it was far from what was happening in the schooling system. Teaching is no longer aimed at covering the curriculum. Instead, teaching is now content driven, and learners progress according to their own ability (Phurutse, 2005:32). This approach was also seen to have flaws which impacted on learner performance and final results. The most recent intervention has been the announcement of Schooling 2025 which will be implemented in 2012. The roll-out plan and implementation of this curriculum will be to improve turnaround time, focus on learning in the mother tongue, improve literacy and focus on assessments (Ferreira & Ono, 2010:60).

- **School Safety:** Safety has come under the spotlight. Is has become essential that schools be safe and secure, and caring positive attitudes and values such as integrity are respected. The Department has indicated that crime is among the top five issues that must be addressed in the next five years. Discipline in schools is critical to creating a conducive teaching learning environment. Crime in schools is symptomatic of the level of criminality in the community and until this societal issue is addressed collectively South African schools will still be plagued by criminal activities. The Department urges communities to take ownerships of schools (Prinsloo, 2005:5).

- **No-fee Schools**: This policy of the government is aimed at the distribution of financial resources for the operational expenditure has been skewed in favour of schools from poor communities. The national norms and standards for school funding (NNSSF) require that funds are allocated to schools according to their poverty score. The poverty score of each school assigns it to a quintile ranking. The department will extend the "no-fee school" policy to cover quintiles 3 to 5 that enrol learners from poor backgrounds. This intervention is aimed at addressing the injustices of the past (Motala & Syed, 2009:21).

- **HIV/Aids**: The rapid rise in the number of people infected with the HIV virus has a direct impact on education. Education is the government service that has the most sustained contact with learners of a school-going age and of children over the age of 12 years. The prevalence of HIV infection among learners, educators and officials is therefore of great importance (Louw et al., 2009:205). The challenge is to ensure that the school system is a vehicle for information, communication, prevention, care and counselling especially for children and educators who are particularly at risk by virtue of their age, gender, home and social circumstances. The impact of HIV and AIDS is manifested in high levels of anxiety and stress, exhaustion, lack of motivation and illness, increased absenteeism among learners or educators. The department has also integrated HIV and Aids into life skills programmes (Rehle et al., 2007:195).

- **School governing body (SGB)**: The first SGB elections took place in May 1997 and elections continue to take place triennially. The aim is to allow parents, educators, learners and non-

educators to have an opportunity of participating in decision-making processes in school. This is seen as a significant milestone in the process of advancing participation of stakeholders and role-players in education (Van Wyk, 2007:14).

- **Teaching and Learning:** A social contract has been reached with teacher unions to ensure that educators are in the classroom on time and teaching, and that the requisite support is provided by the department particularly at district level and at schools. The fundamental standpoint to this approach is that teachers must come to school self-motivated and prepared to teach, learners must come ready to learn, and parents are to take an interest in the education of their children. Teaching, learning, time on task and testing must be pervasive in all schools. In order to further improve performance in the process of teaching and learning the following areas need to be focused on:
    - *Infrastructure:* that will enable the educators and learners to inherently perform well. It includes having the building structurally sound, reasonable class sizes, sufficient desks and chairs, electricity and water supply and proper sanitation. The department recognises that a massive injection of capital over a sustained period of time is a reasonable expectation if the infrastructural backlogs are reversed. It has been reported that an amount of R2 031 billion has been set aside for infrastructural developments. This type of intervention can be seen as a positive step towards addressing the infrastructural needs.
    - *Programme*: the infrastructure should effectively support the activities. This will include the current curriculum and preferred modes of teaching and learning. Despite the introduction of different curricula all problems regarding teaching and learning have not been fully resolved yet.
    - *People*: infrastructure should allow individuals to be comfortable, healthy and productive and should meet their basic needs. There should be a guarantee that human rights are respected.

By improving performance in these identified areas, learners will benefit from a higher quality education. The nation as a whole should also benefit as school graduates with better skills and knowledge levels enter further and higher education, and the workplace (Clase et al., 2007:245).

2.3.7 Learner profile

It is also important to have a proper learner profile because it enables the educator to better plan and present his/her learning session. Different learner profiles learn in different ways, and different methods are better suited for specific profile learners. A proper learner profile, therefore, assists in the delivery of better quality education and the transfer on knowledge from educator to learner (Alberta education, 2010:22-23). A learner profile is a continuous record of information that gives a holistic impression of a learner and a learner's progress and performance. It assists the teacher in the next grade or school to understand the learner better and therefore to respond appropriately to the learner (DOE, 2008). The compilation of learner profiles should be started at Grade R and should continue until the learner completes Grade12. A learner profile includes the following information (Alberta education, 2010:22-27):

- personal information;
- medical history;
- schools attended and record of attendance;
- participation and achievements in extra-curricular activities;
- areas needing additional support;
- areas on interest; and
- learner performance.

2.3.8 Educator profile

Educators play a significant role in the upliftment and transformation of society. They bear the weight and responsibility of teaching, and, apart from parents, are the main source of knowledge and values for children (DOE, 2010). The educator profile was determined by means of empirical research. Since this study focuses specifically on educator stress in the KwaZulu-Natal province, the educator profile was limited to this region.

2.3.8.1 Research methodology

The research methodology in this study, the population, sample, and statistical techniques employed, have been discussed in detail in Chapter 1; Section 1.4. As mentioned above, the biographical profile pertains to educators in KwaZulu-Natal. The sample of 1 500 educators have been identified randomly from the population of 2 123 from the four selected districts: Ilembe, Pinetown, Port Shepstone and Empangeni (as shown in Chapter 1: Tables 1.1 and 1.2). The response rate was 23.9% (358 completed questionnaires). However, 8 questionnaires was discarded which resulted in an effective response rate of 23.3% (or 350 usable questionnaires).

2.3.8.2 Biographic profile

A biographic questionnaire was developed to obtain data about the demographic characteristics of educators in Kwazulu-Natal. The biographic section was added to Cartwright and Cooper's (2002) ASSET questionnaire (An Organisational Stress Screening Tool). The respondents completed both questionnaires simultaneously. The study of educator profiles also identified additional areas other than pure demographic information (such as age, gender, marital status) that could be helpful to compile a better biographical profile of the educators. These areas are: job level, considerations to quit, access to or the right equipment to teach effectively, productivity (on a self-assessment basis), health issues, stressful events, and work performance.

Table 2.8 presents the summarised results from the biographical profile from the 350 completed questionnaires (a total of eight biographical questionnaires were not processed due to no or poor completion of the biographical section). The results are shown in percentage format to increase readability.

.

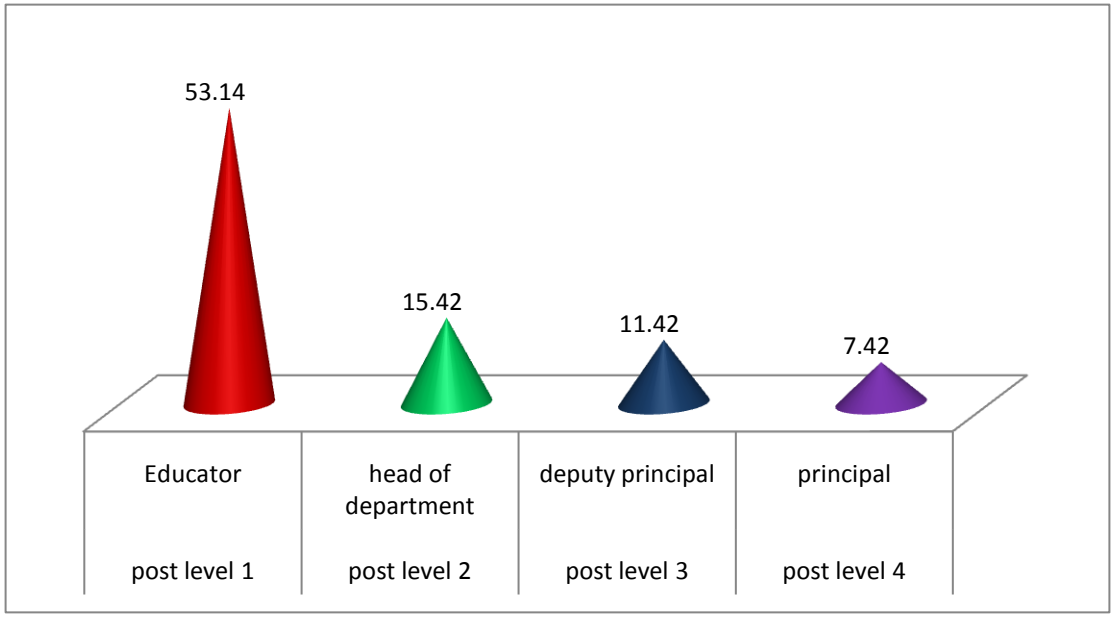
TABLE 2.8: BIOGRAPHICAL PROFILE OF RESPONDENTS

Variable	Category	Frequency	Percentage*
Gender	Male	155	44.28
	Female	195	55.72
Position			
	Post level 1 - Educator	186	53.14
	Post level 2 - Head of Department	54	15.42
	Post level 3 - Deputy Principal	40	11.42
	Post level - Principal	26	7.42
Language			
	English	167	47.71
	isiZulu	101	28.85
	Afrikaans	39	11.14
	Other	09	2.57
Qualifications			
	Grade 12 + Education Diploma	26	7.42
	Grade 12 + Higher Diploma + Degree	130	37.14
	Grade 12 + Higher Diploma + Honours Degree	146	41.71
	Grade 12 + Higher Diploma + Degree Masters +PhD	10 06	2.85 1.71
Marital Status			
	Single	41	11.71
	Engaged in a relationship	30	8.57
	Married	200	57.14
	Divorced	30	8.57
	Separated	13	3.71
	Remarried	08	2.28
	Widowed	06	1.71
Illness in last six months			
	Yes	114	32.6
	No	231	66.0
Any stressful events in last six months			
	Yes	165	47.1
	No	171	51.1
I consider quitting the profession			
	1 - Strongly agree	178	23.1
	2	123	36.4
	3	44	13.0
	4	36	10.7
	5 - Strongly disagree	57	16.9
Overall health			
	Good	120	34.3
	Satisfactory	202	57.7
	Poor	18	5.1
* Where 3 totals are not equal to 100, this is due to missing values			

(n= 350)

Table 2.8 shows that there are more women (55%) employed as educators than men (44%). This resulted in a ratio of 1:1.25, meaning that for every man there are 1.25 women employed as educators. Complementary to Table 2.4, the results are further analysed and shown in the figures to follow. Figure 2.5 shows the four basic post levels (from the lower post levels where Post level 1 = educator, to Post level 4 = principal) of the educators graphically.

FIGURE 2.5: POST LEVELS OF EDUCATORS



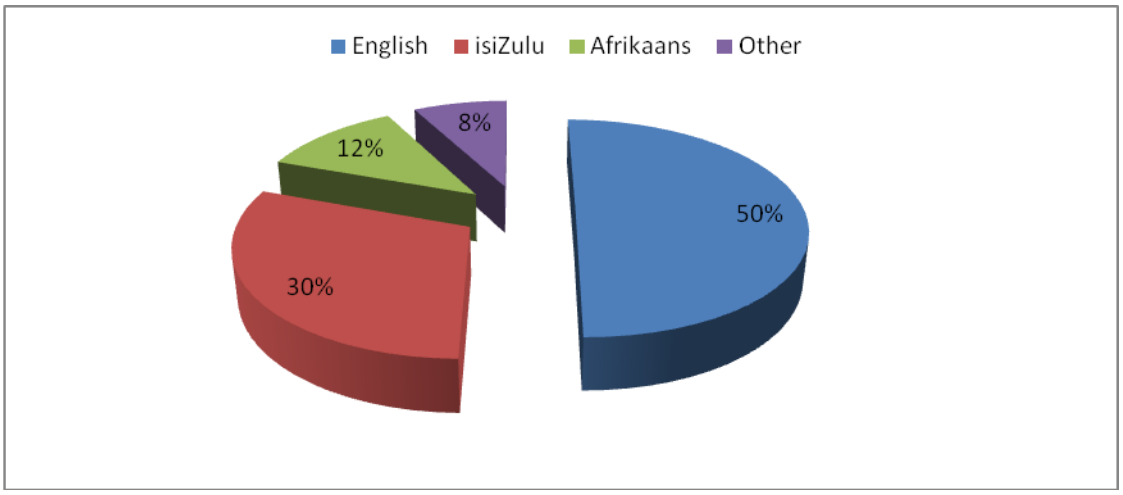
n=350

Figure 2.5 represents the levels of the respondents and the post levels which are held by them. The principal is generally at the highest level (level 4) with a response rate of (7.42%). The next level represented by level 3 which is the post held by the deputy principal (11.42%). The head of department is represented by 15.42% of the respondents while level 1 is represented by educators (53.14%) which is the level at which the educators enters the schooling environment.

From Table 2.7 and Figure 2.5, it is clear that more than half (57%) of the participants were married at the time. Most respondents' (47.7%) home language was English, whilst only 28.9% of the participants' home language was isiZulu, 11.4% was Afrikaans and 2.5% other languages.

Figure 2.6 graphically presents the home language of educators in the selected regions of KwaZulu-Natal.

FIGURE 2.6: HOME LANGUAGE



n=350

The majority (41.7%) of the respondents had an M+5 qualification. (This means a Grade 12 + higher diploma or first post graduate degree, such as an Honours degree or a *Baccalareus Educationis* degree). This is followed by 37.1% of the educators who are in possession of an M+4 qualification (Grade 12 + degree + higher diploma). A small number of educators have an education diploma only (7.4%) while it seems that very few educators study past a honours degree towards a masters degree or higher (4.6%).

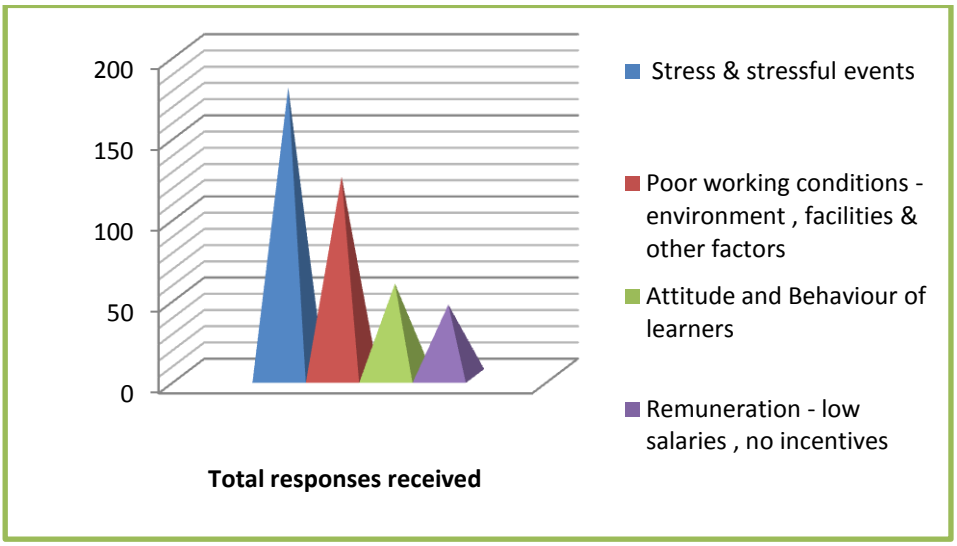
Regarding marital status, more than half the respondents are married (57.1%), while the next group of significance are the unmarried ones at 11.7%. The status of both of the groups, being divorced and to be engaged in a relationship, accounts for 8.6% of respondents while the rest of the groups are all low in representation. From this information it is clear that the majority of educators continue their career in education after being married, and that women are not lost for the workforce after getting married (55% of educators are women). In this regard, it is interesting to note that the mean age of the participants is 42.6 years, while the mean work experience was 14.1 years.

With regards to the experience of any stressful events in the preceding six months, 47.1% of the participants indicated that they had experienced such an event, whilst the remaining participants did not

have such an experience. With regard to illness, a total of 32.6% of the educators had been ill during the same period. (Since it falls outside the scope of this study, no attempt was made to draw direct correlations between the stressful events and resulting illness.)

Regarding quitting the profession, 27.6% of the study sample indicated that they were not considering leaving the profession of which 16.9% of the sample "strongly disagree" to "I consider quitting the profession". The majority (59.5%) did, however, consider it when 23.1% "strongly agreed" and 36.4% "agreed" with the statement that they consider leaving education as a career. A total of 13% are indifferent or do not know. The reasons cited by the educators who consider quitting are shown in Figure 2.7.

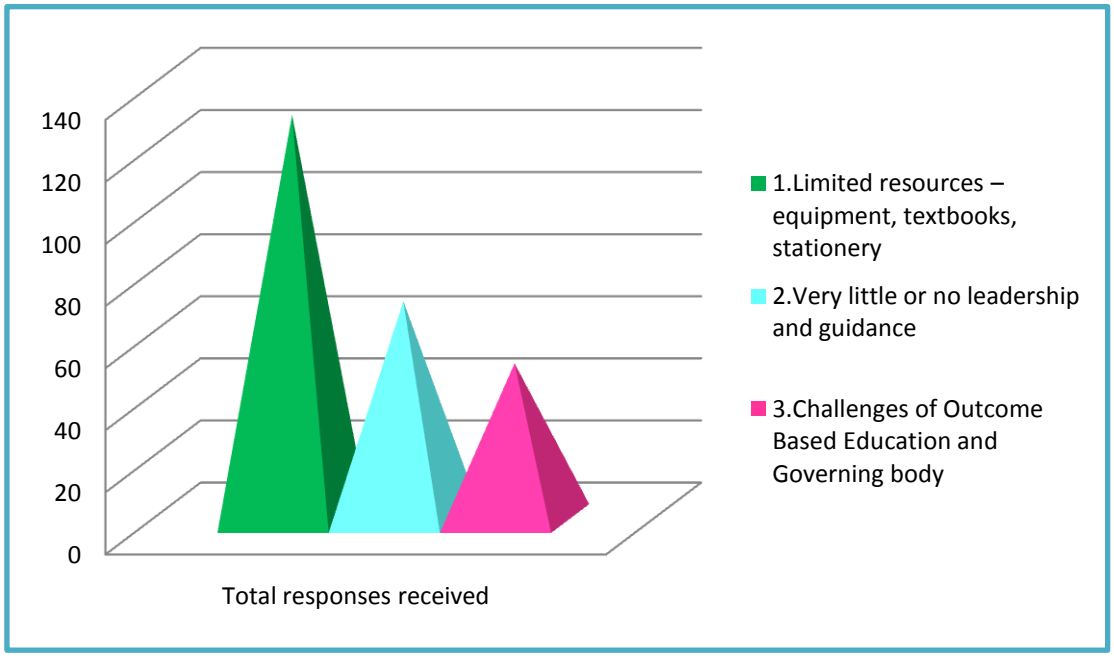
FIGURE 2.7: REASONS WHY YOU WANT TO QUIT



n=350

The respondents cited four major reasons for either wanting to or actually quitting their jobs in education. From Figure 2.7 it is clear that stress is the most important consideration for quitting education as a career. This is followed by working conditions and learner behaviour. Remuneration is also mentioned by a few educators as a possible reason. In addition to the second reason cited above, the educators identified reasons for not doing their job effectively in Figure 2.8 below.

FIGURE 2.8: THREE MAIN REASONS PREVENTING JOB EFFECTIVENESS



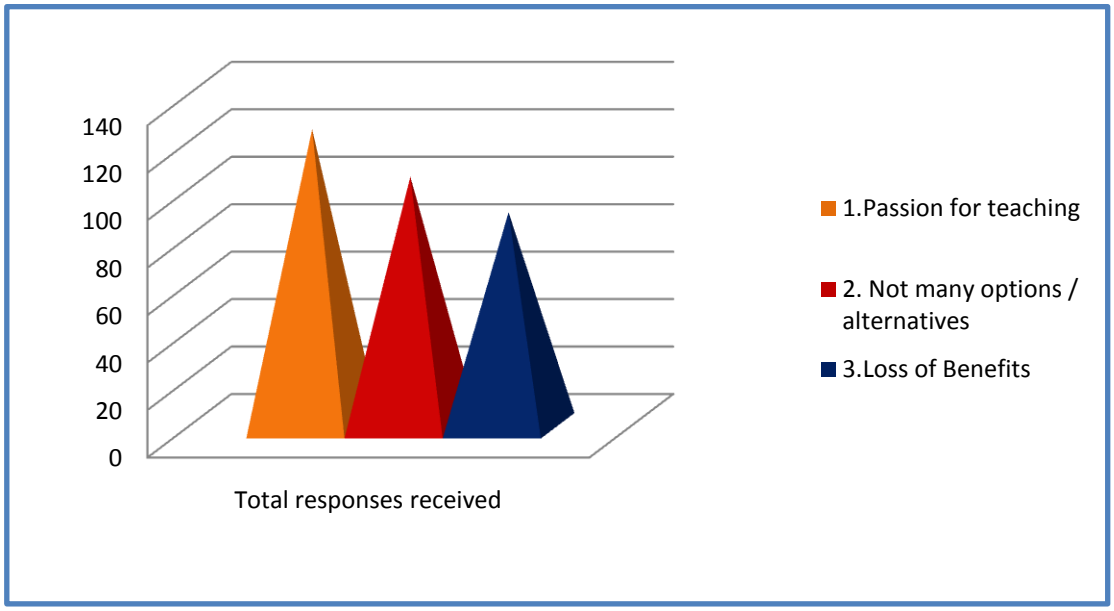
n=350

In Figure 2.8, special attention needs to be given to this response because previously 53.6% of educators indicated that they have the basic equipment to perform their jobs effectively. Now, a total of 47.6% of the educators state that they are not able to perform their tasks successfully because of other shortages – such as textbooks and stationery. They also cite "very little" or "no proper guidance" from the institutions as well as from the Departmental of Education itself as reasons for poor performance.

Finally, the educators have been requested to indicate their association with labour unions. A total of 77.1% indicated that they do belong to a union.

Figure 2.9 shows the results of the three positive factors rated most highly by the educators that helps them to perform their task amicably.

FIGURE 2.9: THE POSITIVE FACTORS THAT HELP YOU TO DO YOUR BEST



n=350

From the above figure it is clear that a passion for education, schooling the mind of the young, is required. The other two aids are limited to the alternatives and the loss of benefits earned associated with teaching.

2.4 MANAGERIAL CHALLENGES IN EDUCATION

It is widely recognised that the country's schooling system performs well below its potential and that improving basic education outcomes is a prerequisite for the country's long-range development goals (Motshekga, 2011).

As the President of South Africa, President Jacob Zuma, has stated that "*our education targets are simple but critical*", the focus of the DOE should be firstly, on the basic education sector, and then secondly, on tertiary education. The children and youths need to be better prepared by their schools to read, write, think critically and solve numerical problems. These skills are the foundations on which further studies, job satisfaction, productivity and meaningful citizenship are based (DBE, 2010). More specifically, the DBE (2010) identifies the following key challenges faced by the Basic Education sector:

- Improving quality learning outcomes in schools in terms of improved learner performance;
- Strengthened monitoring of learner performance across the basic education system;
- Improved quality of teaching;
- Improved access to and use of quality textbooks;
- Improved attendance of learners and retention of learners in grades 9-12;
- Improved use of learning and teaching time;
- Improved early childhood development (ECD);
- Strengthened management at school and district levels; and
- Strengthened 'social contract' between government, teacher unions, teacher training institutions, parent and SGB organisations, business and civil society organisations.

These challenges have been formalised and signed. The signatories to this agreement are the National Minister of Basic Education, the national Deputy Minister of Basic Education, the nine provincial Members of the Executive Council for Education (education MECs) and an additional 17 Ministers whose departments have a direct or indirect role to play in the improvement of basic education. These signatories form the core team of delivery partners. However, their work is dependent on good relations and ongoing collaboration with many organisations (DBE, 2010).

2.5 SUMMARY

This article provides an overview of the educational environment and identifies the role-players in education in South Africa. The three major role-players are the Department of Basic Education as government agent and formulator of strategy, the educators who perform the task of education on ground level as executors, and then the learners as receivers of education. A common goal is the deliverance of quality education to all. However, not all learners are equal in opportunity, finance or facilities (to name but a few). Therefore, the Department of Basic Education, in conjunction with the government, initiated social projects to assist the poor, in addition to other regulations to assist the governing bodies of schools that are able to govern themselves to a large extent. Resultantly, the task of delivering quality education requires a diverse and taxing approach to the Department of Basic Education. To complicate the education environment further, the macro environment also influences the deliverance of education by means of new technologies, social realities (such as poorness and

HIV/Aids) politics and the government in power (who also has to deal with past government's decisions of education) as well as the economic well-being of South Africa (which is influenced by world economic trends).

Central to the formulation of strategy, implementation of strategy and executing the task by teaching and educating learners are management. Management by the Department of Basic Education and the role these managers play in the deliverance of assistance to educators (salaries, appointments, guardians of finances, providers of facilities, textbooks and many more managerial inputs) and then management by the school's governing body and the principal who manages his/her school so that education are well executed on ground level.

The next article focuses on the educator at ground level, and aims to determine his/her stressors and stress levels, as this is an impairing phenomenon in service delivery.

REFERENCES

AFRICAN NATIONAL CONGRESS. 1994. A Policy Framework for Education and Training: African National Congress. Pretoria: Government Printers.

ALBERTA EDUCATION. 2010. Developing learner profiles. [Web:] http://education.alberta.ca/media/1233960/6_ch3%20learner.pdf Date of access: 2 Apr. 2011.

ANC ***See*** AFRICAN NATIONAL CONGRESS.

ANON. 2010. South Africa's education system: no one gets prizes. *The Economist*, January 14: 5.

BADAT, S. 2009. The challenges of Education and Development in Twenty-first Century South Africa, Keynote address at the 15th annual conference of headmasters of the traditional state boy's school of South Africa.

BADCOCK-WALTERS, P. & WILSON, D. 2006. Education attrition and mortality. A study of gross attrition rates and trends in the public school system. Pretoria.

BECKMANN, J. 2009. Recent legislation regarding the appointment of public school educators: the end of decentralisation debate in education? *Acta Academica*, 41(3), 128-141.

BUTLER, A. 2009. A contemporary South Africa, Hampshire: Pelgrave Macmillan.

CARTWRIGHT, S. & COOPER, C.L. 2002. ASSET: An Organisational Stress Screening Tool – The Management guide. Manchester: RCL.

CELEMUS ***See*** CENTRE FOR EDUCATION LEADERSHIP AND MANAGEMENT AT THE UNIVERSITY OF STELLENBOSCH.

CENTRE FOR EDUCATION LEADERSHIP AND MANAGEMENT AT THE UNIVERSITY OF STELLENBOSCH. 2011. Advanced Certificate in Education: School Leadership. [Web:] http://www0.sun.ac.za/celemus/index.php Date of access: 2 Apr. 2011.

CLASE, P., KOK, J. & VAN DER MERWE, M. 2007. Tension between school governing bodies and education authorities in South Africa and proposed resolution thereof. *South African Journal of Education*, 27(2):243 -263.

COSTA, A. 2010. Educational quotes. [Web:] www.oregonparentsunited.com/educational_quotes.htm Date of access: 12 Jan. 2011.

DBE ***See*** DEPARTMENT OF BASIC EDUCATION

DEPARTMENT OF BASIC EDUCATION. 2010. Quality improvement, development, support and upliftment programme (QIDS UP). Handover Report: 2009/2010.

DEPARTMENT OF EDUCATION. 2008. National policy regarding further education and training programmes: approval of the policy document: an addendum to the policy document, the national senior certificate: a qualification at level 4 on the national qualifications framework (NQF), regarding the national protocol for assessment (grades r – 12). [Web:] http:www.polity.org.za Date of access: 20 Mar. 2011.

DEPARTMENT OF EDUCATION. 2009. Education for All (EFA) Country Report. Pretoria: Government printers.

DOE ***See*** DEPARTMENT OF EDUCATION

FERREIRA, Y & ONO, J. 2010. A case study of continuing teacher professional development through lesson study in South Africa. *South African Journal of Education*, 30, 59-74.

GIBBERD, J. 2007. South Africa's school infrastructure Performance Indicator. ISSN 1609-7548. South African Law Press Umaluzi Seminar on Further Education & Training. Pretoria: CSIR.

LEWIN, K. 2007. Improving access, equity and transitions in education: creating a research agenda research. [Web:] www.create-rpc.org/pdf_documents/PTA1.pdf Date of access: 12 Jan. 2011.

LOUW. J, SHISANA, O., PELTZER, K. & ZUNGU-DIRWAYI, N. 2009. Examining the impact of HIV/Aids on South African educators. *South African Journal of Education,* 29:205-217.

LUBISI, R.C. 2008. The Quest for Free Education in South Africa: How Close is the Dream to the Reality? Solomon Mahlangu Memorial Lecture 2008. Johannesburg: Centre for Education Policy Development. [Web:] http://www.cepd.org.za. Date of access: 6 Feb. 2011

MOTALA, S. & SYED, Y. 2009. "No fee" schools in South Africa. Policy Brief No.7. Flamer, Brighton: Consortium for research into educational access, transitions and equity.

MOTSHEKGA, A. 2010. National Council of Provinces Budget Vote. Speech by Mrs Angie Motshekga (MP), Minister of Basic Education. 21 April 2010.

MOTSHEKGA, A. 2011. The Delivery for Basic Education Sector. [Web:] http://www.education.gov.za. Date 23 March 2011

NATIONAL TREASURY. 2009. Provincial budgets and expenditure reviews: 2005/06-2011/12. Pretoria: Government printers.

NATIONAL TREASURY. 2010. Provincial budgets and expenditure reviews: 2005/06-2012/13. Pretoria: Government printers

NENGWEKHULU, R.H. 2008. Reflections on improving teacher performance. *African Education Review,* 5(2):338-350.

OECD ***See*** Organisation for Economic Co-operation and Development

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. 2008. Reviews of National Policies. Pretoria: OECD. [Web:] http://www.oecd.org/document/ 58/0,3343,en_33873108_39418625 _41422650_1_1_1_1,00.html Date of access: 12 Jan. 2011.

PERTL, G. 2006. Arion Conference on Quality Assurance . [Web:] http://www.oki.hu Date of access: 16 Mar. 2011.

PHURUTSE, M.C. 2005. Factors affecting teaching and learning in South African schools. Cape Town: HSRC Press.

PRINSLOO, I. 2005. How safer are South African Schools? *South African Journal of Education,* 25(1):5-10.

PROVINCIAL TREASURY. 2011. An overview of the 2011/2012 MTEF. [Web:] http://www.Kzntreasury.gov.za/business unit. Date of access: 15 March 2011.

REHLE. T., SHISANA. O., PILLAY, V., ZUMA, K., PUREN, A. & PARKER, W. 2007. National HIV incidence measures – new insights into the South African epidemic. *South African Medical Journal*, 97:194-199.

REPUBLIC OF SOUTH AFRICA. 1996a. South African Schools Act no. 84 of 1996. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996b. The Bill of Rights of the final Constitution of the Republic of South Africa. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996c. South African Schools Act no. 27 of 1996. Pretoria: Government Printers.

ROSE, B. & TUMNER, R. 2006. Documents of South African Education. Johannesburg: AD Donkers.

ROWE ,K.J. 2007. Educational Effectiveness: The importance of Evidence-based Teaching Practices for the Provision of quality teaching and learning standards'.In McInernery,D.M., Van Etten,S. And Dawson,M.(Eds). Research on Socio-cultural influences on motivation and learning, 7: 59-92. Greenwich: Information Age Publishing.

SHINDLER, J & FLEISCH, B. 2007. Schooling for all in South Africa: closing the gap. *International Review of Education*, 53:135-157.

SOUL BEAT AFRICA. 2011. Soul Buddyz Clubs - South Africa. [Web:] http://comminit.com/en/node/133345/38 Date of access: 2 Apr. 2011.

SOUTH AFRICAN GOVERNMENT ONLINE. 2010. Draft integrated strategy on HIV and Aids: 2012-2016. [Web:] http://www.gov.za/ Date of access: 2 Apr. 2011.

THOMPSON, A.R. 2007. Education and Development in Africa. London: Mcmillan

THUTONG. 2010. Resources and National Certificate guidelines. [Web:] http://www.thutong.doe.gov.za Date of access: 1 Apr. 2011.

UNICEF. 2008. National integrated plan for early childhood development in South Africa. Pretoria.

VAN WYK, N. 2007. The rights and roles of parents on school governing bodies in South Africa. South Africa.

VERIAVA, F. & COOMANS, F. 2005. The right to education. In Brand, D. and Heyns, C.H. (Eds.). Socio-economic rights in South Africa. Pretoria: University of Pretoria.

WELHUA, F.2011. Social influences, school motivation and gender differences: an application of the expectancy. *International Journal of Experimental Educational Psychology*, 31(2):157 - 175

WEST-BURNHAM, J. 1997. Leadership for learning: reengineering mind sets. School *Leadership and Management*, 17(2):231-244

YOUNG, M. & GAMBLE, J. 2006. Knowledge, curriculum and qualifications for further education in South Africa. Pretoria: HSRC.

CHAPTER 3

ARTICLE 2:

CAUSES OF STRESS IN PUBLIC SCHOOLS AND ITS IMPACT ON WORK PERFORMANCE OF EDUCATORS IN KWAZULU-NATAL

ABSTRACT

This article focuses on the causes of stress in public schools. More specifically, the article sets the objectives of identifying the causes of stress in public schools and to determine how it impacts on the work performance of educators in KwaZulu-Natal. A cross-sectional survey design was used for this study. Stratified random sampling (*N* = 1500*)* was applied to four districts in KwaZulu-Natal in South Africa. A total of 368 questionnaires (of which 350 were usable) were received. Other aspects to consider are the differences between occupational stress, organisational commitment and ill-health of educators in different types of schools, educator age, and qualification groups.

A theoretical model on education in South Africa, specifically relating to the causes of stress in educators, is developed and empirically tested. The theoretical study examined the concept of work stress, and then applied it to the educational environment. Next the causes of stress was identified and categorised into environmental factors, organisational uncertainty and individual factors. The study also analysed the consequences of stress in educators, and the psychological, physiological and behavioural symptoms of stress were included in the study. The empirical research identified seven factors by means of an exploratory factor analysis (Varimax rotation) which explain a cumulative variance of 69%. These factors are (in declining order of importance) Organisational support; Overload; Remuneration; Control; Job insecurity; Relationship opportunities and Growth opportunities. The article also compares favourably with the results obtained by Jackson (2004).

Keywords: public educators, school, stress, work performance, stressors, school environment

3.1 INTRODUCTION

Sixteen years into democracy, questions are being asked about what substantive changes have been achieved in the educational context where the intentions and effects of apartheid were most insidious and overt and the efforts to change are most visible and dramatic (DOE, 2003). Compared with most other countries, education in South Africa gets a really big slice of the annual budget pie – on average around 20% of total government expenditure. In the Budget speech of 2008-2009 presented by the MEC for Education in KwaZulu-Natal, Ms Cronje indicated that a budget of R24.4 billion was set aside for education in the province received which, amounted to 18.5% of total spending (Wilderman & Lefko-Everett, 2008:22).

Since 1994, there has been a significant refashioning of the education and training landscape in South Africa. This commenced when the 18 racially-divided departments were restructured into nine provincial education departments resulting in education becoming a provincial phenomenon. The question then arises as to whether there has been adequate preparedness to embrace this change in order to prevent stress and allow for smooth transition. However, the DOE did not retain intellectual property in the transition process, and as a result, the intellectual capital of educators who left education, were lost. The years after 1994 saw thousands of educators leaving education as a job, and consequently, the dream of a smooth transformation was severely pressurised (DOE, 2001:6). This was aggravated by the fact that nine provincial DOE's had to be merged into one centrally operated DOE (DOE, 2001:6-7).

Teachers enter the profession with high expectations, a vision for the future and a mission to educate children. The demands, pressures and conditions they work under can stifle the zeal of present educators. According to Taylor et al. (2008:66), it is a well known fact that changeover to the new education system had a direct impact on the schooling system, the educators and learners' performance. Stressful situations, a lack of organisational support, poor leadership, poor remuneration, a lack of growth opportunities, and work overload had arisen which snowballed over decades and suddenly exploded into the new millennium with ever increasing demands on all stakeholders involved in the education of children.

As the demands on education and schools increase, so does the incidence of stress in the profession of teaching. There are numerous factors that contribute to the stress, demoralisation and drop-out of educators. These factors include a lack of student discipline and apathy, education policies, a failing schooling system, an increased number of learners per class, specialisation, rationalisation of personnel and diversity in the school population (Gold & Roth, 1993:15). The focus of this study is on KwaZulu-Natal educators' perceptions of what causes stress in their professional lives and how it impacts on work performance.

In South Africa, previous studies (such as Jeena (1998), Saptoe (2000), Olivier and Venter (2003) and Jackson (2004)) have linked educator stress as, among others, the lack of discipline, unmotivated learners, redeployment and retrenchment of educators, large learner : educator ratios and new and ever changing curriculum approaches (Armstrong, 2004:46). Rapid changes in the world and technology have exacerbated teachers' perceived professional incompetence (Palmer, Dunford & Akin,2006:35); educators experience stress due to the lack of occupational confidence as a result of the difficulty that they experience to keep up to date in their areas of expertise (Philip, 2004:7). In addition, it has been found that job satisfaction and teacher stress are strongly correlated, as the amount of stress and degree of satisfaction experienced by educators influences the quality of life of teachers. Events such as marriage, divorce, pregnancy, death of a loved one and change of residence are related to stressors in educators' lives which impacts on performance at work (Schultz & Steyn, 2007:693).

Apart from the limitations of the abovementioned studies, the teaching context in post-apartheid South Africa is continuously transforming. Educator stress and the impact on work performance are therefore ongoing important issues. Transformation included a change to the outcomes-based education (OBE) curriculum, and new rules and policies enforce different structures of governing bodies for schools and ways of dealing with discipline. Each new Ministry of Education has effectively brought with him/her yet more changes, but no real effort was made to educate and train the educators for their new role as managers and implementers of strategy and change (Maday & Waite, 2009: 4). Due to this lack of expertise in implementation and executing of strategy, teachers and administrators on the ground could not roll out new policy as envisaged by the ministry, effectively causing much of the stress as a result of poor management of the educators (Maday & Waite, 2009:5-6). In this regard, Thorburn (2004) highlights the implementation of technology in schools as an example of such strategy failure on

ground level. In addition, inclusive education requires educators to deal with children with learning difficulties in their classroom (Robinson, 2003:225).

3.2 BACKGROUND TO THE STUDY

After the democratic elections in 1994, the government inherited a fragmented education and training system with embedded inequality, which reflected serious underinvestment. The new regime placed a priority on the transformation of the education system. This priority led to the restructuring of the entire education and training system to overcome the racial, gender and anti-poor bias to ensure alignment with the new constitution.

Historically, due to the injustices of the education system certain problems with educators still continue which include racism, violence, other anti-social values and behaviours such as learner boycotts, teacher strikes, shortage of skilled personnel, poor pass rates and pupil violence (DOE, 2003). As a result, educators have been feeling the effects of these overwhelming demands that are placed on them (Otto, 2005:89). A study conducted by the Human Sciences Research Council (HSRC) on behalf of the Education Labour Relations Council (ELRC) titled "Educator Supply and Demand" indicated a worrying trajectory in regard to the health of South African educators, clearly revealing the effects of these demands, resulting in increased absenteeism and more retirements due to ill-health.

Otto (2005:78) states that schools are expected to remedy the society's problems. Educators are, therefore, constantly called upon to incorporate new content and approaches into the curriculum, and to develop new educational programmes and tutorial practices without much training and development, a factor that may contribute to educator stress and poor work performance. A case in point is outcomes-based education (OBE) which was tried and tested in countries such as Canada, Australia and the United Kingdom with dismal results before being implemented in South Africa (Taylor et al., 2008:345). The Minister of Education has announced that a new system called *Education 2025* will be implemented in 2012. This announcement has once again come as a shock to educators (Marneweck, 2010:1).

While there has been considerable research in the general area of educator stress, little attention has been given to studying how teachers actually cope with work stress and improve their work performance. Previous research projects (as mentioned in the above) were limited by the fact that these were carried out in relatively small geographical areas. Motseke (1998:45) investigated stress among educators in township secondary schools in the Free State to identify organisational, personal, interpersonal and environmental stressors. Jeena's (1998) study in Pietermaritzburg indicated high levels of stress for all respondents irrespective of age, gender and post level. Olivier and Venter (2003:186) investigated educator stressors in five secondary schools in the George region (Southern Cape) to reveal that educators experienced moderate to high stress levels and that low salaries were a significant stressor. Saptoe (2000:22) used 66 white secondary school educators in two predominantly white schools and found that the educators' high stress levels were related to changes in the structure of teaching, retrenchments, syllabi changes and the language of teaching and learning. Chetty (2004) investigated the effect of stress on educator efficacy. Varghese (2010:90) identified occupational stressors in the Eastern Cape. Recent surveys have also shown that 20% to 40% of teachers experience considerable stress in a school environment (HSRC, 2009:66).

However, even in countries which are regarded to be politically more stable than South Africa, with established departments of education, the International Labour Organisation (ILO) found that stress is also prevalent and that it seems to be a growing problem for educators (as quoted in Cox and Brockley, 1994:139). South Africa is being rated as one of the poorest educators in Africa, let alone the world, yet with the highest budgets. Some of the reasons are the major attitude problems among learners, teachers and administrators, while the role management and the poor implementation of strategies also play a role in getting quality education delivered on ground level (Mediaclub SA, 2010).

This view is supported by Galloway and his associates, claiming from a study of educators in New Zealand that one in eight educators are suffering from stress (Galloway et al., 2005:359). Other studies by the researchers Wilson (2002) on Scottish education and by Michael, Marsh, and Johnson (2007:840) in the United States of America found that stress in education is a perennial condition, and that stress is prevalent in most countries. These studies, in addition to frequent reports from scientific and more popular press, suggest that stress in educators is also prevalent in the South African education system. Anecdotal media reports suggest that there are low levels of job satisfaction, high stress levels and low morale amongst educators (Sunday Tribune, Mercury and Daily News) all of which are

associated with low salaries, lack of recognition of experience, lack of training and resources, and increased bureaucracy in the Department of Education (DOE) (Dorasamy, 2008:4; Maluleka, 2010; Mbanjwa, 2010:3; Umar, 2010:10).

It is worth mentioning that none of the above-mentioned articles made reference to any interventions by the Department of Education to resolve these problems that cause stress to educators, nor to apply interventions that should improve educator work performance. Pillay (2009:11) notes a comment that was made on *World Teacher's Day* in October 2007: "An education system that attracts and retains a well-trained, motivated, effective teaching staff will meet the objectives of teaching and learning. This can only be achieved if professional development of educators is supported". This comment clearly reveals the need for government to support the plight of educators for change and improvement in both educators and pupils. However, according to Chapman (2003:36), the changes in the South African educational environment could also lead to increased stress as stress is seldom the result of a single cause. Education would, in this regard, not differ from other stressful environments and stress would be the result of a number of stressors.

3.2.1 Budget allocation

The funding of education services at national and provincial levels remains a controversial issue. The fact that the education sector receives the largest budget allocation, as well as recurring evidence of poor academic outcomes, reinforces the view that quantitative resource distribution has outlived its usefulness and application (Wilderman, 2008:7).

The overall budget for Public Ordinary Schools (POS) has increased consistently. Comparative analysis of the proposed budgets shows a notable difference across the nine provinces. Table 3.1 depicts the POS budgets by provincial education department for the period 2007/08 to 2010/11. KwaZulu-Natal receives an average of 4.8% of the National budget. One cannot deny that a fair amount of the budget is being allocated to the province. The concern is whether it is being channelled correctly in order to ensure that the problems of stress, environmental and educator attrition are being alleviated.

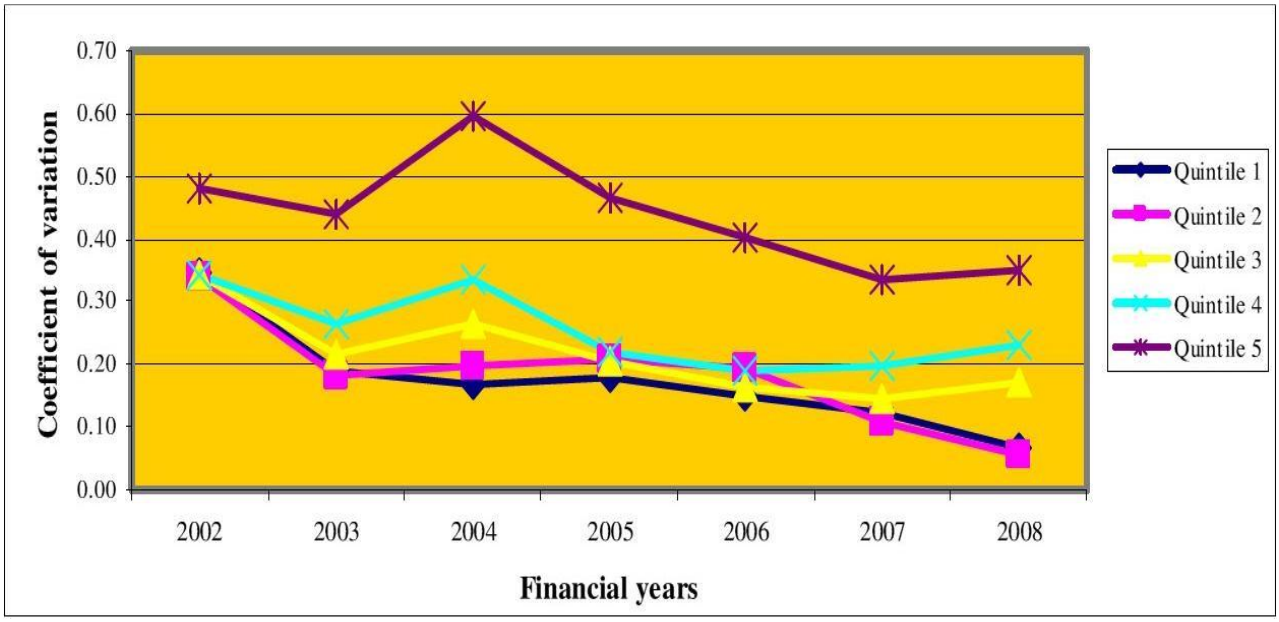
TABLE 3.1: PUBLIC ORDINARY SCHOOLS BUDGETS BY PROVINCE

Province	2007/08	2008/09	2009/10	2010/11	Real change between 2007/08-2008/09 (%)	Real av. Ann. Change between 2007/08-2010/11 (%)	Real av. Ann. Change between 2004/05-2010/11 (%)
Eastern Cape	12,417,313	15,021,023	15,909,377	16,967,525	13.9	5.6	5.0
Free State	4,302,731	4,864,844	5,417,083	5,862,783	6.5	5.4	3.5
Gauteng	11,530,931	13,185,378	14,655,426	15,486,815	7.7	4.9	6.8
KwaZulu-Natal	16,344,330	18,184,148	20,631,781	22,557,139	4.8	5.8	6.2
Limpopo	10,233,641	12,090,967	13,624,891	14,695,569	11.3	7.3	5.2
Mpumalanga	6,714,194	7,227,282	7,909,874	8,616,060	1.4	3.3	7.5
Northern Cape	1,805,774	2,058,858	2,292,881	2,462,210	7.4	5.4	9.0
North West	5,033,520	5,854,226	6,735,431	7,367,956	9.5	7.9	3.7
Western Cape	6,281,203	7,267,732	8,095,465	8,788,102	9.0	6.3	5.2
Total	**74,663,637**	**85,754,458**	**95,272,209**	**102,804,159**	**8.1**	**5.7**	**5.5**

Source: DOE (2008)

The introduction of the new financing policy in 2007 meant that more resources for the poorest quintiles would ensue. Figure 3.1 below shows that the allocation of school funding still has inequalities due to the introduction of quintile ranking of schools across the provinces. Schools have been ranked according to their locations with quintile 1 being the poorest and quintile 5 was the least poor quintile.

FIGURE 3.1: INEQUALITIES IN THE PER LEARNER ALLOCATIONS OF SCHOOL FUNDING AMONG PROVINCIAL EDUCATION DEPARTMENTS FOR ALL THE POVERTY QUINTILES (2002 - 2008)



Source: Wilderman & Lefko-Everett (2008:35)

Note: Seven provincial education departments were used to calculate inequality measures for each of the years between 2002 and 2008. The contributions of North West and Mpumalanga were excluded because these allocations were not comparable to that of the other provinces.

The KwaZulu-Natal Department of Education has allocated a budget of R29 043 billion which aims at improving educational outcomes. The following has been highlighted as the budget areas to which the budget will be spent. Table 3.2 below gives a detailed breakdown of the planned expenditure for 2010/2011 by the KwaZulu-Natal Education Department.

TABLE 3.2: BREAKDOWN OF THE EXPECTED EXPENDITURE FOR 2010/2011 BY THE KWAZULU-NATAL EDUCATION DEPARTMENT

DESCRIPTION	BREAKDOWN	AMOUNT TO BE SPENT
Infrastructure	• 20 new schools, 9 new not constructed last year • 2000 ordinary classrooms and 60 multi-purpose structures • 60 laboratories, libraries, computer centres and nutrition centres • 300 administration centres with offices, storerooms and staffrooms • 200 bathrooms with additional toilets and electrified	R2 031 billion
Teacher Training & Development	Used to develop content-knowledge of educators with focus being on curriculum development, lesson and assessment planning, classroom management strategies	R3 million
Improvement of Education Information systems	• South African Schools Administration and Management System (SA SAMS) • Learner unit record information and tracking system (LURITS) • Education Management Information System (EMIS)	R38,6 million
Nutrition Programme	Unused land at schools will be used for gardening	R855 285 million
HIV and Aids	To provide additional material support to orphans, teaching and learning material to be provided to school with the aim of awareness and prevention	R42,6 million
Education Library Information Technology Services	Establish media centres in rural and under-resourced areas	R12 million
Quality Improvement Development Support Upliftment programme (QIDS-UP)	National initiative aimed at improving access to quality teaching and learning	R154,7 million
Management Development	Aimed at ensuring that there is effective leadership and management at schools	R5 million
Systematic Evaluation	Aimed at improving performance, particularly in primary schools	R23,8 million

Source: DOE (2008)

Despite the allocation of the funds the situation is appalling. A recent report citing NEIMS figures (National Education Infrastructure Management System) shows that:

- 42% of schools are over-crowded;
- 3 152 schools are without water;
- 4 297 schools are without electricity;
- 60% without laboratories;
- 68% without computers; and
- 79% (about 24 000) are without libraries.

The effect of this is staggering. Addressing these issues cannot be done just by adjusting the budgets or by diverting money from other projects. Quality education can take place in a learning environment where children are free to learn, where children are treated equally, where they have the tools and resources to learn, in addition to dedicated, well-trained and motivated educators (Burrows, 2009:19).

The way stress is handled by the older and younger educators may differ, as stated by Chetty (2004:5). The younger educators are concerned with learners, the middle-aged with their career, and the older ones in general about teaching and retirement. The implications of this are that educators are faced with stressful situations throughout their career by both external and internal demands thus resulting in their coping skills being inadequate. These stressful situations and changes include increasing changes in the population, diversity in school populations, an increase in the cost of living, crime and its effect on learner behaviour, conditions of service, new rules and regulations of the Department of Education, curriculum changes, performance appraisal systems and demands of unions (Robinson, 2003:98). These changes have exacerbated the stress situations in both the personal and professional lives of educators resulting in a constant re-evaluation and re-modification of the teaching and learning environments in the attempt to improve work performance.

3.2.2 Curriculums

The nation's curriculum is at the heart of the education system. This generally plays a role of being the equaliser in terms of educational standards. There has been a curriculum reform since the transition to democracy in 1994. In the case of the post-apartheid South Africa, the notion of a national curriculum was a new concept that coincided with the birth of a new democracy. These curriculum changes started with the introduction to Curriculum 2005, thereafter a change-over to Outcomes Based Education and to changeover to curriculum 2025 which will be implemented in 2012. Change is seen as being a positive aspect in education but the educators and learners also need to understand this phenomenon and be able to cope with these changes. The table below highlights the characteristics and disadvantages of the new curriculum with the drawbacks of them as well.

Table 3.3 follows on next page

TABLE 3.3: CHARACTERISTICS AND DISADVANTAGES OF THE NEW CURRICULUM

TITLE OF CURRICULUM	CHARACTERISTICS	DISADVANTAGES
Curriculum 2005	• Promote the new constitution • Rebuild the divided nation • Offer equal opportunity for all • Establish and promote a sense of national identity in the education sector (race-based, education departments with several curricula) • Establish the socially valued knowledge to be transmitted to following generations	• The design of the curriculum too complex • Curriculum overload – too many learning areas • Terminology of the curriculum too complex • No proper plan on the implementation of the new curriculum • Limited use of textbooks resulted in incomplete assessments
Outcomes Based Education	• Allows for expanding learning opportunities • Learners are future-orientated • Geared towards integrating concepts across the curriculum learning areas • Flexible timeframes given to master these skills • A variety of instructional activities to facilitate learning • Formative evaluations	• Conflicts with admission requirements and greater learning for all students, practices of most colleges and universities, which rely on credit hours and standardised scores • Some outcomes focus too much on feelings, in the 21st century. Values, attitudes and beliefs are not enough on attainment of factual knowledge • Relies on subjective evaluation, rather than show they know how to use language objective tests and measurements • Undermines local control
Schooling 2025	• Improve turnaround time • Focus on learning in mother tongue • Assist educators • Improve literacy • Focus heavily on assessments • Develop workbooks and distribute to learners	The disadvantages have not been highlighted at this stage due to the Curriculum not being implemented already.

All of the curriculum changes in a short space of time have resulted in stressful situations for both educators and learners. The quick changeover and the different aims of each curriculum can result in much confusion. These curriculums have no similarities and each time requires both learners and educators to adjust accordingly. As also reported by the Star Newspaper of 13 September 2008, many good educators quit in despair because of the Outcomes Based System (OBE). This has also been highlighted as being a factor of educator attrition (ELRC, 2009:4).

Hall et al. (2005:25) identified factors that determine supply and demand of educators in South African schools. The same researcher also identified that the main causes of dissatisfaction were:

- Remuneration;
- Challenging working conditions;
- Poor relationships with education department;
- Lack of respect for the profession; and
- Stress due to transformation in education.

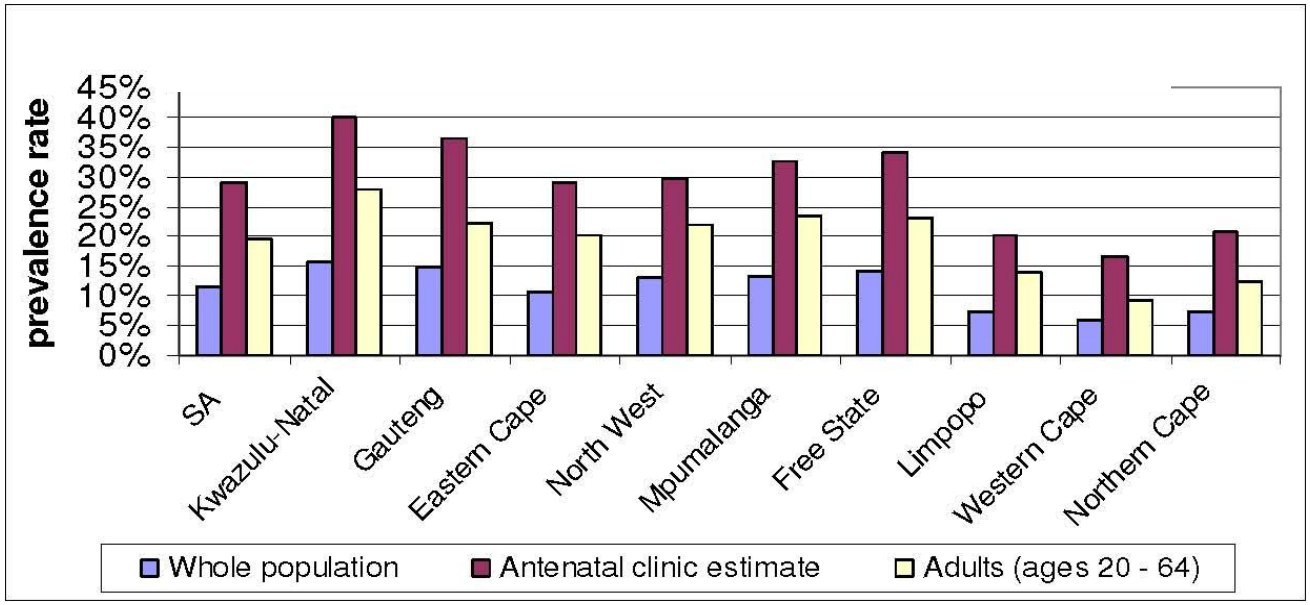
These factors could be perceived as 'pushing' ones as they are regarded to push educators out of education. These findings support results from previous studies by Crouch and Perry (2003:496), Moleke (2005:35) and Ramrathan (2002:59).

The KwaZulu-Natal Department of Education: Arts and Culture (DOE, 2006:2) draft policy on retention of educators, states that the rate of natural attrition from teaching is between 5% and 6% per annum and this is seen as the biggest challenge that the department is facing. The rate of teacher resignation is stable at slightly more than half of all departures, but the rate of departures through retirement, medical incapacity, dismissal and mortality is increasing. Besides the usual attrition that occurs in any organisation, HIV/Aids might lead to additional attrition among educator morbidity and mortality contribute to stressful working conditions.

3.2.3 HIV Prevalence Rate

South Africa is experiencing the largest HIV and AIDS epidemic in the world. An estimated 5.6 million South Africans are HIV positive in 2008, the largest number of any country in the world. Different provinces in South Africa, however, experience different levels of HIV infections and AIDS related deaths. This illustrates the fact that the epidemic is in different stages of development in each province and that a different approach to addressing the epidemic in each province is necessary to stem the course of new infections and deaths. The total HIV prevalence rate in South Africa is 12% whereas 20% of adults between the ages of 20 and 64 are estimated to be HIV positive. The adult HIV prevalence rate for the provinces ranges from 28% in Kwazulu-Natal to 9% in the Western Cape (See the figure below).

FIGURE 3.2: PREVALENCE OF HIV IN SOUTH AFRICAN POPULATION (2008)



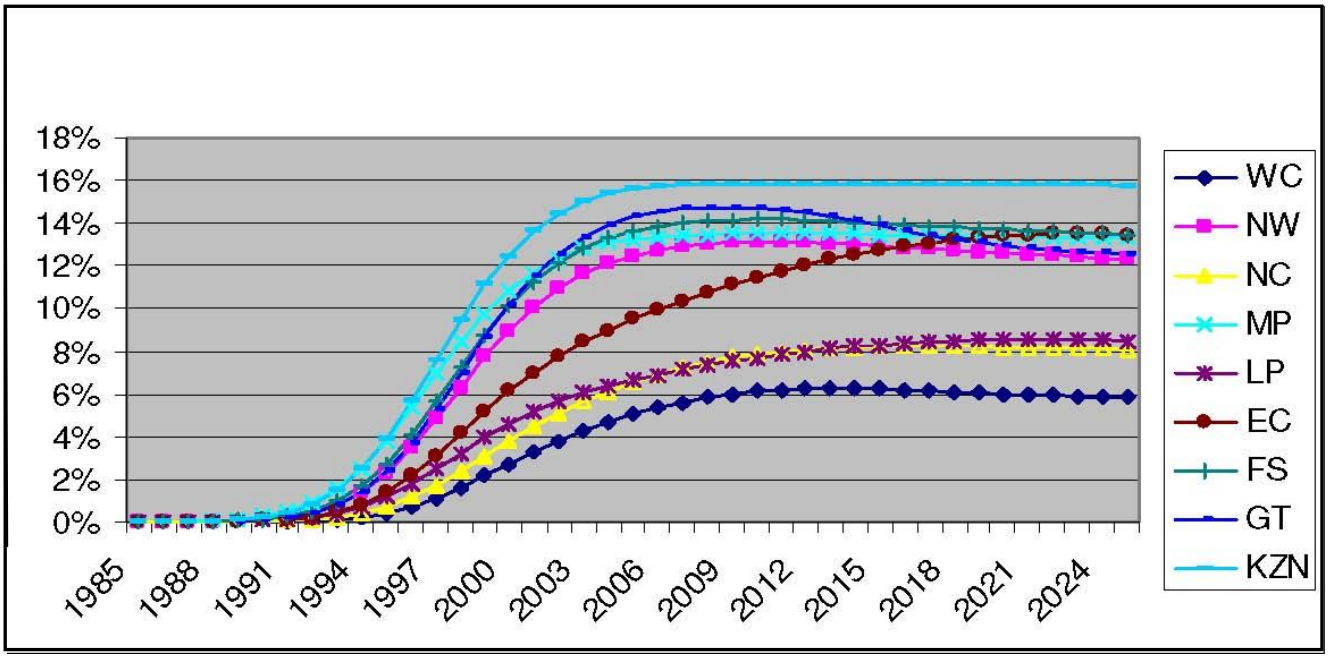
Source: Nicolay (2008:2)

The adult HIV prevalence rate for the provinces ranges from 28% in Kwazulu-Natal. The HIV prevalence is the highest in the age group 25-34 (21.4%), followed by the age group 35-44 (12.8%). Educators who are 55 years and older have the lowest HIV prevalence (3.1%) of all the age groups. In assessing the different types of institutions, the last-mentioned study finds that HIV prevalence is

highest in combined schools (16.5%). The primary and secondary schools also have a high prevalence rate (slightly more than 12% each).

Figure 3.3 depicts the progress of the HIV epidemic over time in each of the nine provinces. From the graph it is clear that the pandemic is still growing rapidly in the Eastern Cape and to a lesser extent in the Western Cape, Northern Cape and Limpopo, whereas it has matured in the other provinces. A mature epidemic means that new infections and deaths are more or less at the same level so that total numbers of infected people remain constant. Where HIV prevalence declines, it can often be attributed to the number of AIDS deaths being higher than the new infections and does not necessarily imply that new infections are declining.

FIGURE 3.3: HIV PREVALENCE RATE FOR EACH PROVINCE PROJECTED TO 2025



Source: Nicolay (2008:2)

Other challenges that have been identified which result in the shortage of educators within the department, includes emigration of highly trained professionals for greener pastures, a non-conducive working environment, restrictions related to self-development and lack of recognition of good performance (DOE, 2006:2). Manik (2010:5), a lecturer at University of KwaZulu-Natal, highlights that reasons identified for the high exodus of educators in the province are due to the lack of career growth opportunities, poor salaries and governance issues. The findings of this study indicate that the

organisational support in the workplace is a problem of considerable significance. The career growth opportunities which relate to job security, promotions, transfers and developmental opportunities are also seen by Manik (2010:5) as a trigger of negativity for the educator. Remuneration has also featured as a major concern for the respondents. The governance issues have not come across as a concern from the respondents.

The National Policy Framework for Teacher Education and Development in South Africa (NPF) highlights that an impending shortage of educators exists in South Africa. These shortages are being experienced in scarce skill areas (DOE, 2006:6).

The implications for educators that are currently in the system mean that fewer educators with increased workloads are now responsible for the education of the child. It becomes evident that this is one of the most serious causes of stress and results in poor work performance (Buthelezi, 2003:41).

3.3 CONCEPTUALISATION OF STRESS

Moorhead and Griffin (2004:266) define stress as being a person's adaptive response to a stimulus that places excessive psychological or physical demands on the individual. This stimulus generally is called a stressor, which is any factor that causes stress. Robbins (2003:362) summarises stress as being a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important.

Jon et al. (2009:262) define stress as the general term applied to the pressures people feel in life. According to Moss (2008:4), stress is defined as any objective condition or any change in the work environment that is perceived as potentially harmful, threatening, challenging, or frustrating, or any set of circumstances related to work that requires change in the individual's ongoing life pattern (Miller & Khoza, 2008:155). On the other hand, Chung (2001:54) argues that stress is a mental and physical strain that people experience when they pursue a goal. Baron and Greenberg (2003:121) define stress as the pattern of emotional state, cognitions, and physiological reactions occurring in response to stressors.

The presence of stress at work is almost inevitable in many jobs. Stress is becoming a major problem in workplaces around the world. When stress becomes excessive, educators develop various symptoms of stress that can harm their work performance and health and even threaten their ability to cope in the environment (Newstroom & Davies, 2002:365). Stress is also felt in the school environment. Over the past decade (as previously indicated in this article) a general recognition by Deventer and Kruger (2009:109) that many educators in the teaching profession are working under considerable stress. This is perceived to be mainly a result of the pressures caused by the rapid rate of change and increased responsibilities at school level.

Teaching and learning (the largest job category in the education sector) experience work related stress. These include the intensive interpersonal relations, conditions of work, deep-seated changes in the content and modes of delivery, services which lack of autonomy, demands for accountability about academic performance from educational users such as students, parents and political leaders (ILO, 2010).

All these definitions emphasise that stress is a mental or physical stimuli to which the response can be positive or negative thus impacting on personal lives, work performance, productivity and organisational goals. Some of the stressors in schools can include task demand, physical demand, role demand and interpersonal demand (Moorhead & Griffin, 2004:230).

3.4 CAUSES OF STRESS

As mentioned in Chapter 1, the forerunners in identifying the causes of stress are presented by the studies of Gold and Roth (1993). Causes of stress are organised into three categories, namely:

- **Professional stressors** such as disruptive learners, excessive paperwork, complex scheduling, burdensome workload, lack of mobility, environmental pressures, and administrative entanglement.

- **Situational stressors** such as role conflict and role ambiguity have been reported to effect significant job engagement for many educators. Difficulty in carefully defining the duties of educators can also be stressful and this can lead to a lack of personal achievement which diminishes their sense of accomplishment.

- **Personal stressors** include reasons that cause educators to be stressed such as their health, relationships, financial, recreational and living conditions, and add to the many sources of stress with which educators are constantly having to contend with (Saiyadain, 2003:34).

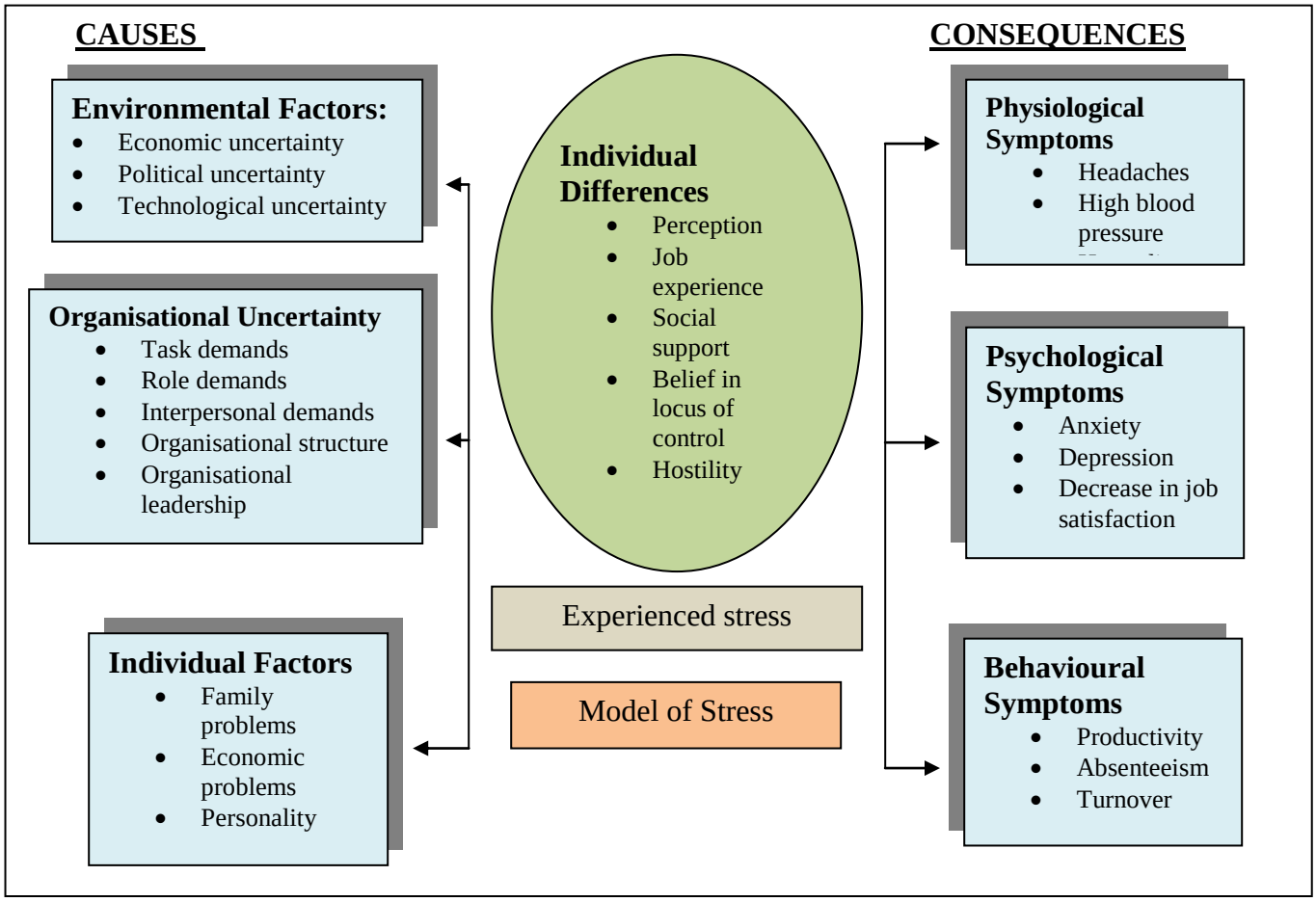
Another cause of stress is role conflict. Role conflict, as Galloway et al. (2005:359) state, occurs when an individual receives competing and conflicting expectations from others while role ambiguity (Daft, 2002:492) results from having unclear expectations resulting in many complications and stress in the workplace. Moorhead and Griffin (2004:463) state that role overloads occur when there are too many expectations that one has to fulfil. Both role conflict and role ambiguity are prevalent in schools as a result of excessive paper work, large classrooms, and abnormal Teacher:Pupil ratio.

This is currently the case with the implementation of OBE, the expectation that educators must engage in fundraising for the school, become involved in extra-curricular activities after schooling hours, collection and record-keeping of school fees, discipline of learners with lack of parental involvement, drug and alcohol abuse of learners, handling of vandalism in schools which inevitably results in added stressors.

The physical demands are stressors which are associated with job setting. Working outdoors in extremely hot or cold temperatures, or classroom conditions not being conducive to teaching and learning and can lead to stress, lack of basic resources such as textbooks and teaching aids can lead to stress and ultimately impact negatively on work performance (Newstroom & Davies, 2002:369).

Luthans (1995:297) and Robbins (2003:564) probably developed on the studies of both Gold and Roth (1993:18) to develop a model showing the causes and consequences of stress as indicated in Figure 3.4.

FIGURE 3.4: MODEL OF CAUSES AND CONSEQUENCES OF STRESS



Source: Robbins (2003:565)

Robbins (2003:564) have identified three sets of factors responsible for the causes of stress as represented in the model of stress, depicted in figure 3.4. These factors are environmental, organisational and individual, and act as potential sources of stress.

3.4.1 Environmental factors

The environmental factors causing stress are:

- ***Economic uncertainty***

  In the rapidly changing world, education has become more important than ever before. Faced with the increasing effects of globalisation, the rapid spread of democracy, emergence of new market economies and the changing of public/private roles, countries need highly educated and

skilled populations while individuals need more specialised information to compete and survive (ILO, 2010). Educators are therefore seen as a crucial element in the achievement of these goals.

- ***Political uncertainty***

  Changes in the political and South African system create a sense of insecurity amongst educators, thus resulting in stressful situations. The labour issues such as poor salaries, unqualified educators, docking of pay, strikes and more have contributed to higher stress levels (Rout & Rout, 2002a:27). Factors such as theft and vandalism by learners also contribute largely to the stressors of educators.

- ***Technological uncertainty***

  New innovations such as digital technology, smart boards, internet, and computer teaching aids can make the educators' skills obsolete in a very short period of time. The older and seasoned educators are not too comfortable and do not have the know-how to embrace technology and will result in stressful situations for the educators and the learners (Hellriegel & Slocum, 2004:175).

3.4.2 Organisational factors

- ***Task demands***

  These are factors that are related directly to the educator's job. These include the design of the educator's job which involves the working conditions and the physical work layout. The school environment includes the physical setting as well as the policy, administrative and psychological environment. Physical conditions that play a role in stress and the overall learning process include school size, lighting, and temperature. The cut-backs on subsidies and re-grouping of schools have had a direct impact on the work environment resulting in deteriorating working conditions and teacher performance (Hunsanker & Jamal, 2001:89). The cut-backs have also resulted in a scarcity of physical resources such as textbooks, teaching aids and equipment, and the lack of furniture which is thus hindering the progress of learners but have concomitantly exacerbated the performance of the educator (Matheny et al., 2000:74).

- ***Role and interpersonal demands***

  This relates to the pressure placed on educators as they function in a particular role in the school environment. A heavy workload with little time generally features as a stressor. Most often educators are not able to achieve the standards of teaching and learning they would like due to there being large student numbers and the unfavourable post provisioning norms (PPN). The PPN refers to the total number of state paid educator posts allocated to an institution regardless of their post level. It includes classroom-based educators (level 1) and management staff (Education Specialists, Deputy Principal/s and Principal). A PPN report is given annually to all public schools which stipulate the number of state paid level 1 and management posts the school is entitled to. Educators who are deemed 'surplus' are redeployed through compulsory temporary transfers (CTTs) to schools where vacancies exist. On the other hand, if a school's staff establishment is below the declared PPN for the year, then the school has vacant posts. These posts may initially be filled by educators who are 'surplus' in other schools through a compulsory temporary transfer or through the appointment of a temporary educator.

  The direct impact of this is that educators are redeployed or become in excess if the total school population is not reached. This has resulted in high teacher pupil ratios, which is currently 1:36 and is seen as a contributing factor to poor academic performance, the pass rates, poor discipline and increased drop-out rates at schools, and not forgetting the job dissatisfaction and high educator turnover (Jackson, 2004).

  Poor discipline includes disruptive behaviour, negative attitudes toward work, aggression and violence towards the educator. The lack of student motivation may lead to a failure which impacts negatively on educators thus resulting in stress and the decline in work performance. To add to this, a lack of parental support is also identified as possible stressors. The apathy of parents and the distinct absence of parent commitment and involvement in education have resulted in poor performance of learners and increased frustration, and poor performance of educators. The South African Schools Act (Act no. 84 of 1996) (South Africa, 1996) stipulates that there is usually some correlation between class size and fees. The average teacher-to-pupil ratio in state schools is 1:36, as compared with 1:18 in private schools. At those state-aided schools where parents pay for extra teachers by way of school fees, and at the more expensive

private schools, the maximum number of pupils is usually about 30. At poorer schools this is often higher, with as many as 40 to 50 children in a classroom.

- ***Interpersonal demands***

  The most frequent interpersonal demand causing stress is dealing with the negative aspects of interpersonal relationships. These include interpersonal conflicts, political manoeuvring and dishonesty. Educators are expected to overcome job-related constraints to maintain interpersonal relationships. Other aspects of interpersonal demands include meetings, workloads and personal insecurity (Michael et al., 2007:840).

- ***Organisational structure***

  The structure of an organisation will determine the manner in which it operates and its performance. Structure allows for the responsibilities from different functions and processes to be clearly allocated to different departments and educators. An institution with no proper structure can hinder the success of pass rates and the efficiency of the educators. An effective institution will facilitate good working relationships between staff and management (Hiellier et al., 2005:419). A strong organisational structure should also incorporate the inputs from the school management and parents and department officials. A strong support structure can alleviate stressful situations for educators.

- ***Organisational leadership***

  A leader creates the environment that determines the educator's behaviour which affects their productivity and level of engagement. This is supported by research which indicates that the most significant determinant of continued job satisfaction is positive relationships with their immediate supervisors (Watson, 2009:297). Leadership has varying degrees of success in different situations. Shultz and Steyn (2007:691) affirm that incompetent leadership results in poor educator performance, high stress, low job commitment, low job satisfaction and poor results.

3.4.3 Individual factors

According to Robbins (2003:565), the following individual factors are causes of stress:

- ***Family problems and economic problems***

  Educators who are undergoing excessive stress can display aggressive behaviour, which results in discipline and behavioural problems with children. These educators may also experience marital difficulties or perhaps even breaking-off of relationships. They have difficulty balancing their career with family life and the end result is both relationships and performance suffers (Chetty, 2004:22).

- ***Economic problems***

  Another factor that is a stressor is the economic situation of the family (Robbins, 2003:565). Due to the salary grading system, salary scales have been adjusted with major gaps between different educators. Many educators try to live within their means, but unfortunately with the recent economic downturn, many have to succumb to bank loans. This additional burden creates disharmony both at home and manifests itself in poor performance in the school situation (Jackson & Rothman, 2006:22).

- ***Personality***

  Some individuals appear more likely than others to interpret events and situations in a more stress-provoking way. These are generally categorised as personality Type A and Type B and it also helps in determining the educators' perceptions and reaction to stress (Michael et al., 2007:844).

  - *Type A personalities:*

    Leigh (2004:34) states that this type of educator is extremely competitive, strives for achievement and may be aggressive, hasty, impatient, restless, very alert, with explosive speech. This individual may feel under pressure most of the time and feel the challenges of responsibilities. Studies conducted by Schultz and Steyn (2007:694) have shown that coronary risk factors were associated with patterns of behaviour of traits in type A

personalities. Type A personality could in the long run have an impact on work performance resulting in absenteeism. This type A personalities generally get the work done at schools.

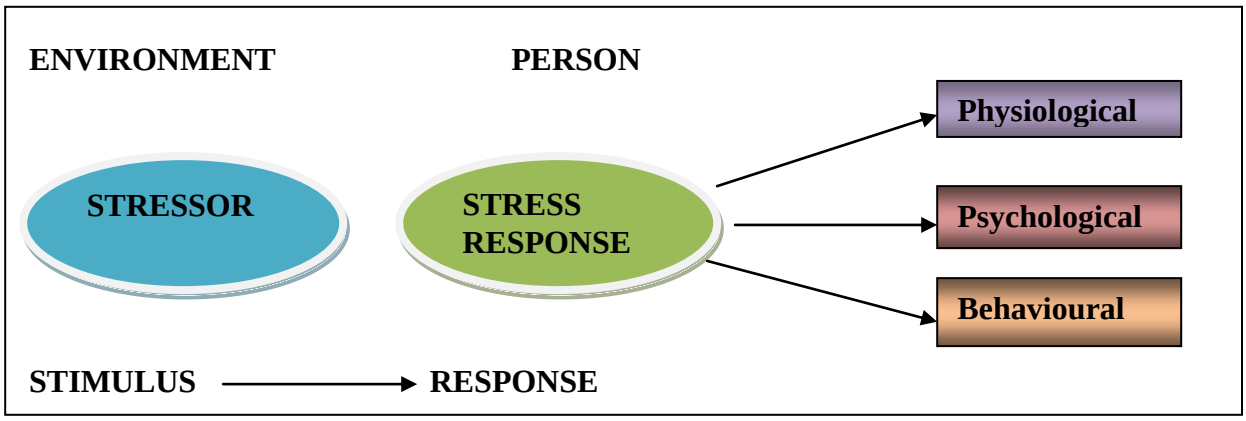
- *Type B personalities:*

  This personality type, on the other hand, tend to be more easy going, take difficulties in their stride, spend time on what they do and maintain a careful balance between events and actions demanding their energy (Charles, 2008:16). It is ascertained that some degree of stress is mandatory in order to be productive. If the individual does not have sufficient coping mechanisms, this may result in poor performance, undisciplined learners and low pass rates (Jackson & Rothman, 2006:23).

3.5 CONSEQUENCES OF STRESS

According to Moolla (2005:54), there are three main consequences of work related stress. These are physiological, psychological and behavioural consequences. These consequences of stress are represented in the response-based model of stress: The response-based model emerges from Cooper et al. (2001:4; Rout & Rout (2002b:18). It describes stress in terms of the individual's response to a threatening or disturbing stimulus (Bemansour 1998:15; Rout & Rout, 2002b:18). Figure 3.5 below represents this model which focuses on the physiological, psychological and behavioural consequences.

FIGURE 3.5: MODEL ON PHYSIOLOGICAL, PSYCHOLOGICAL AND BEHAVIOURAL CONSEQUENCES



Source: Rout and Rout (2002a:21); Cooper et al. (2001:4)

- ***Physiological consequences***

  Physiological consequences of stress affect the educator's physical well-being. The most common physiological symptoms resulting from stress are headaches, high blood pressure and heart disease (Moolla, 2005:54). Other symptoms include immune system problems, musculosketal system problems like backaches, and gastrointestinal problems (Peltzer et al; 2008:247).

- ***Psychological consequences***

  Psychological consequences of stress, according to Newstroom and Davies (2004:123), can result in emotional instability and moodiness which can impact on reaction to learners and colleagues. Nervousness and tension can eventually result in the lack of concentration and will impact on work performance. Other symptoms can result in chronic illness, depression and burnout.

- ***Behavioural consequences***

  The behavioural consequences of stress may harm the individual under stress or others. One such behaviour is the consumption of alcohol or smoking. Research has indicated that people who smoke tend to smoke more when under stress. Consumption of alcohol and drug abuse may also increase (Palmer et al., 2006:144). Other possible behavioural consequences are

accident proneness, violence and appetite disorders (Moorhead & Griffin, 2004:237). Organisational stressors frequently create job dissatisfaction. The consequences of job satisfaction, for Baron and Greenberg (2003:176) are absenteeism and attrition of educators.

According to Phillip (2004:5), the reasons for absenteeism from the school environment in South Africa are primarily ascribed to HIV/Aids, work related depression and work stress. The effects of stress create physical and psychological harm to an individual. This, along with a lack of job satisfaction, force educators to take time off to recover which inevitably increases the rate of absenteeism. Absenteeism from work is attributed to chronic conditions such TB, high-risk drinking, lung or breathing problems, heart disease, diabetes, cancer and anaemia. The burden of absenteeism on the education labour force was highest due to high blood pressure, followed by smoking, being HIV positive, stomach ulcers, arthritis or rheumatism, and high-risk drinking. Low morale at the educational institution, intention to quit teaching, low job satisfaction and high job stress are strongly associated with a higher number of self-rated absenteeism and 'presenteeism' (unhealthy days, or unproductive/unwell at work) (HSRC, 2010). The implication of this is that work performance declines thus impacting on learner performance, poor pass rates, resulting in schools categorised as being an underperforming school.

3.6 STRESS IN THE SCHOOL ENVIRONMENT

The costs of stress at schools in most developed countries and the developing world have risen, according to recent statistics which have revealed an increase in the number of sick days taken, the decline in work performance, the negative attitudes of educators and premature death (Hillier et al., 2005:419). All chronic conditions, including being HIV positive, smoking, and high-risk drinking, are associated with higher rates of self-rated absenteeism. The HSRC (2010) states that the proportion of educators who were absent for more than ten days during the last year ranked highest among those who had been diagnosed with TB in the past five years (30.2%), high-risk drinking (25.6%), lung or breathing problem (23.6%), heart disease (22.5%), diabetes (20.2%), cancer (19.6%), and anaemia (19.3%). Among HIV-positive educators, 17.1% were absent for a period of over ten days during the last year, compared to 13.8% of educators who were HIV negative (HSRC, 2010).

Also strongly associated with a higher number of self-rated absenteeism and 'presenteeism' (unhealthy days), are low morale at school, an intention to quit teaching, low job satisfaction and high job stress. Educators who felt that they had some support in their role as educator and for AIDS work from the DOE, School Governing Body (SGB) learners, parents, unions and religious groups in the community reported considerably less days of absenteeism, and less unhealthy days.

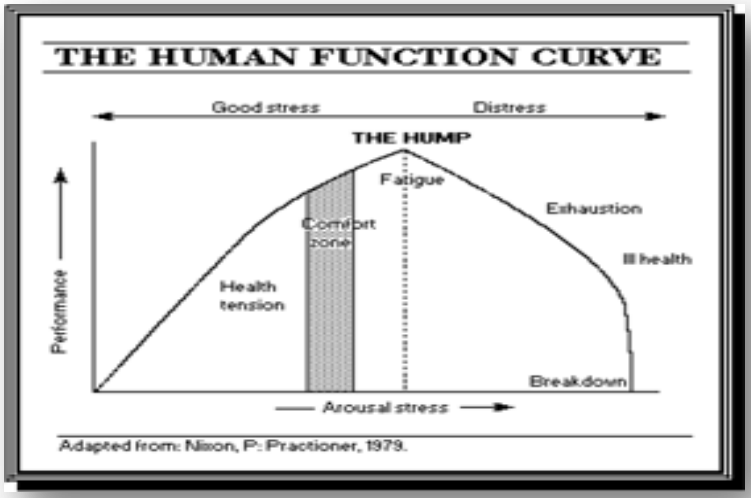
TABLE 3.4: EDUCATOR SUPPORT AND ABSENTEEISM AND PRESENTEEISM (UNHEALTHY DAYS IN PAST MONTH)

CHARACTERISTIC	INCIDENCE	COUNT	% >10DAYS	95% CI	% >5	95% CI
Educator support	Low	2359	18.4	16-21	17.3	16-19
	Medium	7011	14.6	13-16	15.0	14-16
	High	10334	12.2	11-13	10.0	10-11

Source: HSRC (2010)

In a question about support that could be provided by DOE in the care of ill teachers and learners, the most frequent responses were: treatment and medication (55.6%); financial support, such as grants and medical aid (54.3%); emotional support, such as home visits; and moral support (36.4%). Examples of material support from DOE included food (27.1%); assistance and support at work, such as substitute teachers; assistance and support for AIDS work, such as workshops (25.1%); the eradication of stigma and discrimination (17.9%), and the introduction of home schooling and care centres (17.3%). Stress is a highly personalised phenomenon and can vary widely even in identical situations for different reasons. The severity of job stress depends on the magnitude of the demands that are being made and the individual's sense of control or decision-making latitude he or she has in dealing with them.

FIGURE 3.6: THE HUMAN FUNCTION CURVE



Source: Nixon (1978:935)

The relationship between stress and work performance resembles the human curve of educators illustrated in Figure 3.6. Nixon (1978:935) states that there are two approaches to stress: good stress and distress. The left, increased stress results in increased work performance up to a point, after which things go rapidly downhill for educators. Some educators settle into a comfort zone and become oblivious of the events around them which can include learner behaviour, poor work performance, lack of commitment and more. However, peak point differs from each educator, and the early warning symptoms and signs that suggest a stress overload is starting to push a person over the hump causing them to experience excessive fatigue. This situation creates anxiety, and depletes one's energy resulting in a decrease in one's ability to perform effectively (Varghese, 2010:44). These stressor signals also differ from educator to educator. In some instances the indicators or symptoms can be so subtle that they are often unnoticed or ignored until it is too late. The direct consequence is exhaustion, and ill-health ultimately leads to a breakdown of the educators.

3.7 RESULTS

3.7.1 Research methodology

The research methodology pertaining to the population, sample and statistical techniques employed (including the choice criteria for this study) have been discussed in Chapter 1; Section 1.4). In addition, the biographical profile of the respondents has been discussed in Chapter 2 (Research Article 1 of this study). Please refer to these sections if required.

3.7.2 Statistical analysis

The aim of the analysis is to identify underlying constructs (or factors as commonly known) in the data set. To do so, the statistical technique "exploratory factors analysis" was used. However, to scientifically subject data to factor analysis requires that the Bartlett test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy be performed to ensure that factor analysis is the appropriate statistical tool. Once factors have been identified from the data, it is also customary to determine the reliability of the factors by calculating the Cronbach alpha coefficient (Field, 2007:666-668). The software program SPSS 17.0 (SPSS Inc., 2009) for Windows was used for the statistical analysis.

3.7.2.1 Bartlett test of sphericity and the KMO measure of sample adequacy

The analysis was initiated by calculating the suitability to proceed with factor analysis by means of both the Bartlett test of sphericity and the KMO measure of sample adequacy. The results of these tests appear in the table below.

TABLE 3.5: KAISER-MEYER-OLKIN (KMO) MEASURE OF SAMPLE ADWQUACY AND BARTLETT'S TEST OF SPHERICITY

Kaiser-Meyer-Olkin measure of sampling adequacy		.896
Bartlett's Test of sphericity		8136.717
Approx. Chi-Square	df	.595
	Sig	.000

The KMO measure returns a satisfactory value of 0.896. From the same table, the Bartlett's test of sphericity also returns a favourable value of zero (which is less than the required value of 0.05). As a result, it can be concluded that the strength of the relationship among variables is strong and that the data are suitable to be subjected to analysis.

3.7.2.2 Exploratory factor analysis

The results from the factor analysis appear in Table 3.6. In total, seven factors were identified after rotating the component matrix with a Normalised Varimax rotation (orthogonal rotation). The factor labels are also shown in the table.

Table 3.6 follows on next page

TABLE 3.6: FACTOR LOADINGS: CAUSES OF STRESS

Items	Organisational Support F_1	Overload F_2	Remuneration F_3	Control F4	Job Insecurity F_5	Job opportunities F_6	Growth Opportunities F_7
I am clear on whom I should address with the education department for specific problems	**.891**	.023	.089	.077	.061	.163	.054
The education department's decision-making process is clear to me	**.875**	.016	.107	.060	.012	.115	.058
I am kept up to date about impromptu issues within the education dept.	**.754**	.045	.002	.078	.014	.066	.131
I am able to discuss work-related problems with my direct supervisor	**.746**	.088	.022	.161	.060	.165	.058
I participate in decisions about the nature of my work	**.728**	.104	.026	.221	.009	.103	.011
I receive adequate information about the purpose of my work	**.647**	.058	.051	.022	.069	.153	.323
I am aware of my supervisors' appraisal of my performance at work	**.635**	.040	.115	.025	.095	.179	.227
At work I feel appreciated by my supervisor	**.544**	.087	.013	.075	.075	.109	.373
I am expected to remember too many aspects in my work	.084	**.836**	.007	.075	.067	.041	.060
I am confronted with things that affect me personally	.057	**.813**	.040	.153	.017	.109	.028
My job requires multi-tasking	.071	**.715**	.030	.183	.053	.227	.139
My work puts me in emotionally upsetting situations	.098	**.707**	.114	.052	.023	.044	.247
I constantly make contact with difficult children at work	.062	**.655**	.109	.134	.104	.075	.331
I am paid adequately for the work I do	.009	.018	**.921**	.042	.015	.015	.009
I am able to live comfortably on my salary	.025	.044	**.909**	.107	.022	.022	.083
My job offers me the possibility to progress financially	.035	.059	**.849**	.131	.004	.113	.022
The education department pays good salaries	.017	.018	**.833**	.096	.086	.086	.046

Items	Organisational Support F_1	Overload F_2	Remuneration F_3	Control F4	Job Insecurity F_5	Job opportunities F_6	Growth Opportunities F_7
There is constant monitoring of my work	.055	.052	.042	**.847**	.096	.103	.097
I am given tasks with unreasonable or impossible targets or deadlines	.116	.018	.101	**.821**	.090	.096	.060
I have too much work to complete	.060	.103	.180	**.743**	.021	.209	.074
I find that my work contributes to my stress levels	.326	.311	.148	**.456**	-.023	.439	.103
I need to be more secure that next year I will retain the same function level as currently	.032	.082	.001	.047	**.962**	.087	.052
I need to be reassured that I will still be employed in one year's time	.000	.048	.005	.092	**.953**	.089	.031
My organisation gives me the opportunity to attend training	.136	.033	.271	.117	.319	**.548**	.011
I am able to work under pressure	.074	.228	-.080	.114	.194	**.540**	.008
My job gives me the opportunity to be promoted	.097	.160	.400	.211	.050	**.522**	.012
I have the freedom to carry out my work activities	.036	.057	.063	.010	.043	.024	**.827**
I am independent in thought and action	.069	.168	.075	.051	.007	.035	**.805**
My work gives me a feeling that I can achieve	.031	.176	.124	.022	.017	.117	**.804**
I can count on my colleagues when I encounter difficulties at work	.181	.128	.069	.013	.066	.003	**.719**
My work makes sufficient demand on all my skills and capabilities	.108	.354	.041	.001	.004	.015	**.692**
I get on well with my colleagues	.183	.069	.091	.055	.109	.112	**.666**
I participate in the decision-making of the due dates of tasks	.328	.013	.049	.007	.035	.162	**.550**
I have a professional relationship with my supervisor	.429	.094	.079	.031	.092	.141	**.526**

F_1 - Organisational support; F_2 – Overload; F_3 – Remuneration; F_4 – Control; F_5 – Job insecurity; F_6 – Job opportunities; F_7 – Growth opportunities

Table 3.6 indicates that 35 of the 39 items loaded onto seven factors. Resultantly, only four statements have been discarded since these did not load onto a specific factor with a factor loading of 0.40 or higher (Only factor loadings of ≥ 0.4 were considered, as explained in section 1.4.). The factors are discussed and labelled below.

Factor 1 Organisational support

All the items loading onto factor 1 deal with the individual and the support the teacher receives from the organisation. In total, eight items loaded onto this factor. Two items loaded in excess of 0.80 to the factor. These two items loading heavily are: "I am clear on whom I should address with the Department of Education for specific problems" (.891) which means that there are some support mechanisms in place to support the educator; and "the department's decision-making process is clear to me" loaded as (.875) which also indicates that the educator is aware of these processes to assist him/her. All the other items also loaded very well (in excess of 0.60) except the item relating to feeling appreciated where a factor loading of 0.544 presented itself. All the items share a common trend, namely the organisational support. The factor is thus labelled as "*Organisational support*". This factor is the most important factor to be extracted from the analysis because it explains the most variance of all factors. This factor explains almost a third of the variance, namely 30.8%.

Factor 2: Overload

Five items loaded onto factor 2. All five had high factor loadings exceeding 0.60 as factor loading. The items are all related to the central concept of workload, and more specifically, excessive workloads. Once again two items loaded heavily (above 0.80) on the factor. The first item is: "I am expected to remember too many aspects of my work" (.836), which clearly indicates that the educator is being put under pressure which ultimately will increase levels of stress and impact on work performance. The second item is: "I am confronted with things that affect me personally" (.813). This can result in personal stress for the educator which has been identified as a stressor in the literature (see Figure 3.1). The item "My job requires multi-tasking" with a factor loading of .715, at first glance, seems to be unexpected within the concept of work overload. Almost any job requires multi-tasking and is regarded to be an asset for the educator in the workplace. However, when considered within the educational environment, multi-tasking can be seen as a distraction from the core task of education. In addition, multi-tasking becomes increasingly taxing as workload increases since it requires

advanced organising skills. The item is thus acceptable in the work overload situation. After consideration of the five items, the factor is labelled as "*Overload*". The factor is the second most important factor as it explains a variance of 13.5%. Although this is significantly lower than the fist factor's variance (30.8%), the factor is also regarded to be an important factor.

Factor 3: Remuneration

A total of four items loaded onto factor 3. All four these items have heavy factor loadings which are higher than 0.80. These items all have a clear communality, namely their direct involvement with remuneration. As such the factor is labelled "*Remuneration".* The factor explains a variance of 8.8% and is the third most important factor. In considering the satisfaction with remuneration, the mean value in Table 3.8 shows a value of 3.02 (on a 5-point scale) with a standard deviation lower than 1, implying that the educators are overall satisfied with their salaries received. This means that although remuneration is identified as a stress factor, the educators are not stressed because they are underpaid or because they perceive their salaries to be not befitting the tasks they perform.

Factor 4: Control

Once again four items loaded onto the factor. Two of the items have loaded heavily (exceeding the factor loading of 0.80). They are: "There is constant monitoring of my work" (.847) which can result in the individual doubting of their capabilities thus resulting in a stressful situation, and "I am given tasks with unreasonable or impossible targets or deadlines" (.821) which will result in work pressure impacting on performance. Both these items directly point to the function of control in management. The other two items are less clear in their communality to managerial control. These items are: "I find that my work contributes to my stress levels" (.743) and "I have too much work to complete" (.456). These items can be justified by the fact that poor managerial control can lead to subordinate stress while a work overload clearly points to poor management (control) of subordinates. Although one would have expected the last item to load onto factor 2 (Overload), closer inspection reveals that the respondents are actually quite certain that the concept of too much work are a result of managerial control. This is substantiated by the high factor loading of .743. Regarding the item that work contributes to stress, the respondents are not certain how this actually manifests (as can be seen from the low factor loading of .456). As a result the items actually load onto three other factors, namely factors 1 (.326), 2 (.311) and 6 (.439). This means that the stress levels at work is a complex matter and that no single aspect can be

blamed for it. In labelling the factor, the two dominant items leads to conclude that this factor is labelled as "*Control*". The factor explains a variance of 7.2% and is the fourth most important factor of stress in educators.

Factor 5: Job insecurity

Only two items loaded onto this factor. However, these two items have exceptional factor loading which is larger than 0.90. The items are: "I need to be more secure that next year I will retain the same function level as currently" (.962), "I need to be re-assured that I will still be employed in one year's time" (.953) indicates that the educator is insecure in terms of his job for the future. It is clear that both these items deal directly with job security, or rather insecurity. Resultantly, the factor is labelled as "*Job insecurity*". A variance of 4.2% is explained by the factor. It is also important to understand if educators perceive their job security to be uncertain. From table 3.8, the mean value (2.55 on a 5-point scale) and a standard deviation lower than 1 suggests that educators do not require constant reassurance of job security. This means that although job insecurity has been identified as stressor, educators do not experience job insecurity per se.

Factor 6: Job opportunities

Only three items loaded onto this factor. All three items had factor loadings which are between 0.50 and 0.55. Two of the items are directly related to job opportunities, while the third item relates to work under pressure. Working under pressure is regarded to be a derivative of job opportunities because the ability to perform under pressure opens doors to promotion and other opportunities in the workplace. As a lower order factor (falling below the point of inflection – see Figure 3.3 below), the factor explains only 3.8% of the variance. The factor is labelled "*Job opportunities*". However, when considering Table 3.8, the mean value of 2.46 on the 5-point scale (and a standard deviation below 1) suggests that almost a half of the educators do not perceive their jobs to give them promotion opportunities nor do it provide for training opportunities. Surely, this could lead to increased stress on the educator per se.

Factor 7: Growth opportunities

Three of the eight items that loaded on the seventh factor, loaded heavily with factor loading larger than 0.80. The central theme in items that loaded onto this factor is growth opportunities. Consider the three items that loaded heavily in this regard: Item 1, "I have the

freedom to carry out my work activities" (.827) indicates that the educator is concerned with undertaking the activities with much freedom. Item 2, "I am independent in thought and action" (.805) also refers to the ability to grow with the institution. Item 3, "my work gives me a feeling that I can achieve" (.804); this reassures the educator of growth opportunities. The other items (with factor loading ranging between 0.52 and 0.72) are all related to scenarios that either create or assist the possibilities for opportunities. As such, the final factor is labelled "*Growth opportunities*". The factor explains a variance of 3.3%.

These factors have been identified, labelled and contextualised in Table 3.7.

TABLE 3.7: FACTOR LABELS AND CONTEXTUALISATION

FACTOR	FACTOR LABEL	FACTOR REFERS TO:
F_1	Organisational support	The relationship with the supervisor, ambiguities regarding work.
F_2	Overload	The pace and amount of work
F_3	Remuneration	Whether the participant can live comfortably on his or her pay;
F_4	Control	Communication, participation and contact possibilities;
F_5	Job insecurity	The uncertainty of the future;
F_6	Job opportunities	The availability of colleagues and job opportunity to progress through training interventions;
F_7	Growth opportunities	The variety in work, opportunities to learn and there is independence of work.

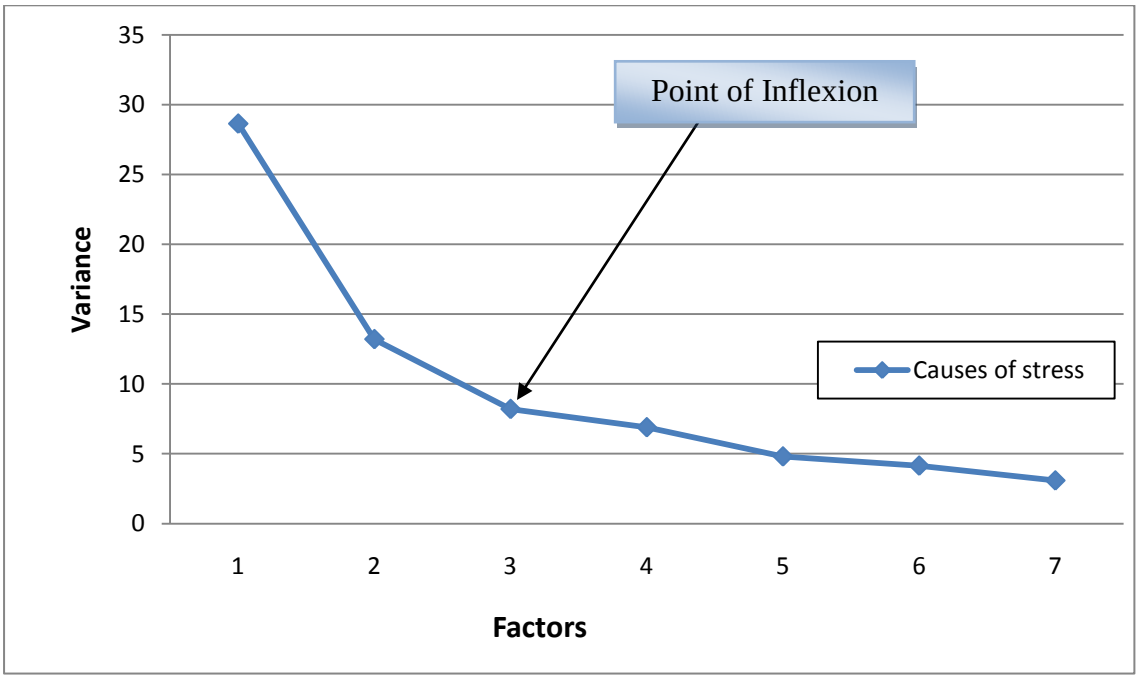
The factors explain a cumulative variance of 71.6%. Individual variance explained by the factors is shown in Table 3.8.

TABLE 3.8: DESCRIPTIVE STATISTICS: RELIABILITY AND VARIANCE EXPLAINED

Test factors	Items	Mean	SD	Cronbach Alpha	Variance explained
1. Organisational support	8	3.84	1.03	.938	30.8
2. Overload	5	3.42	1.24	.881	13.5
3. Remuneration	4	3.02	0.96	.925	8.8
4. Control	4	2.74	0.81	.745	7.2
5. Job insecurity	2	2.55	0.98	.910	4.2
6. Job opportunities	4	2.46	0.97	.603	3.8
7. Growth opportunities	8	2.26	0.89	.915	3.3

Figure 3.7 presents the factor extraction associated with a variance which indicates the substantive importance of a factor. It is important to note that when analysing a graph of this type which represents the factors of the study, the larger variance explained are considered for discussion. Generally by graphing these values, the relative importance of each factor becomes apparent. In this instance, factor one which represents *Organisational support* under the causes of stress has a high explained variance while the next factor decreases significantly in its variance explained. The point of inflection thus graphically represents the point of additional marginal variance explained by the next factor declines and the curves flatten. The factors that follow are regarded to be less significant than the factors before the point of inflexion because of their lower marginal and absolute contribution to the variance explained (Field, 2007:633). This means that management should devote more attention to those factors explaining higher variance and also those before the point of inflexion as such managerial inputs should yield better returns. Once these factors have been attended to, the focus could move to the remaining factors.

FIGURE 3.7: POINT OF INFLEXION



3.7.2.3 Reliability analysis

Table 3.8 highlights the descriptive statistics as well as the Cronbach alpha coefficients for the factors. Factors 1, 2, 3, 4, 5 and 7 are all above the 0.70 reliability level. On closer scrutiny, it is evident that the majority of the Cronbach alpha coefficients are greater than 0.90, which is regarded to be an excellent level of reliability and internal consistency (Field, 2007:667). These high reliability coefficients concur with the literature on the causes of stress of the educators (Rothman 2006; Jackson, 2004). Factor 3 has a reliability coefficient of 0.75 which is also regarded to be very satisfactory as it exceeds the 0.70 margin with ease (Nunnally & Bernstein, 1994:76). However, Factor 6 (Relationship & Job opportunities) requires closer scrutiny as it has an Alpha coefficient below 0.70 ($\alpha = 0.60$). In this regard, Kline (in Field, 2005:666) reports that an Alpha value of 0.58 is acceptable when ratio scales (such as the Likert scale used in this research) are used. A lower Alpha coefficient also does not disqualify a factor from the set of identified factors. It merely means that once the study is repeated under similar conditions, the factors with lower reliability coefficients are less likely to reappear than those factors with higher reliability coefficients (Pietersen, 1994:385). Based on Field's (2007:666) research, the reliability of Factor 6 is thus acceptable ($\alpha \geq 0.58$) bearing in mind the constraints mentioned. The high Alpha coefficients are not unexpected since the questionnaire employed (ASSET) is a tried and tested data collection tool that has

been developed by specifically to measure stress in the workplace and verified by numerous studies by Rothman (2006) and Jackson (2004).

3.7.2.4 Inter-factor correlations

Table 3.9 shows the correlations between the different factors as calculated by the Pearson Correlation Coefficient.

TABLE 3.9: PEARSON CORRELATION COEFFICIENTS

		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Factor 1	Pearson Correlation	1	.227**	.287**	-.148**	.167**	**.458****	**.668****
	Sig. (2-tailed)		.000	.000	.006	.002	.000	.000
	n	340	340	340	340	338	340	340
Factor 2	Pearson Correlation	.227**	1	-.061	.236**	.192**	.138*	**.524****
	Sig. (2-tailed)	.000		.265	.000	.000	.011	.000
	n	340	340	340	340	338	340	340
Factor 3	Pearson Correlation	.287**	-.061	1	-.048	.284**	**.429****	.145**
	Sig. (2-tailed)	.000	.265		.379	.000	.000	.007
	n	340	340	341	340	339	341	340
Factor 4	Pearson Correlation	-.148**	.236**	-.048	1	-.051	-.230**	-.091
	Sig. (2-tailed)	.006	.000	.379		.349	.000	.092
	n	340	340	340	342	338	341	340
Factor 5	Pearson Correlation	.167**	.192**	.284**	-.051	1	**.360****	.216**
	Sig. (2-tailed)	.002	.000	.000	.349		.000	.000
	n	338	338	339	338	339	339	338
Factor 6	Pearson Correlation	**.458****	.138*	**.429****	-.230**	**.360****	1	**.389****
	Sig. (2-tailed)	.000	.011	.000	.000	.000		.000
	n	340	340	341	341	339	342	340
Factor 7	Pearson Correlation	**.668****	**.524****	.145**	-.091	.216**	**.389****	1
	Sig. (2-tailed)	.000	.000	.007	.092	.000	.000	
	n	340	340	340	340	338	340	340

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

* Practically significant correlation (medium effect): $r > 0.30$

The Pearson correlations return a value between -1 and 1, signifying perfectly uncorrelated to perfectly correlated (StatSoft, 2010). In addition, the statistical significance is shown in the table. Evident from the table is the fact that all factors are significantly correlated with factor 1 at the 0.01 level. Correlations in excess of the 0.30 correlation coefficient is bold printed in the table (see Factor 6 and Factor 7 which correlates with factor 1 with correlation coefficients of 0.458 and 0.668 respectively). Factor 2 correlates on this level with Factors 4, 5 and 7. The remainder of the table is interpreted in similar fashion. From the table it is clear that the a number of factors do correlate with the other factors on 0.30 level or higher.

3.8 DISCUSSION

The aim of this article was to establish the causes of stress and its impact on work performance of educators in the KwaZulu-Natal Province. The results showed that job demands (overload), a lack of growth opportunities, job insecurity and a lack of control were the best predictors of stress in educators in the province. The study was intended to test the ASSET (which refers to an Organisational Stress Screening Tool, see also chapter one), the Model of Causes and Consequences of Stress (Robbins, 2003:560) and the Job Demand Resources model.

In the month of June 2010, the Provincial Department of Education has come under fire for not dealing with the "educator crisis" (Mbanjwa, 2010:3). The recent issues highlighted in the media focused primarily on schools with much emphasis being placed on the school environment, educator commitment, learner attitude and performance. It is also reported that more educators are seeking medical boarding, absenteeism has increased, educators are seeking greener pastures and are leaving the country in large numbers. It was reported by Minister Angie Motshekga that 24 750 educators left the profession between 2005 and 2008 (Mbanjwa, 2010:3). Some of the reasons highlighted for this situation in schools are violence, low salaries and strenuous working conditions which are all prevalent in the findings thus far. Statistics also indicate that more than 4 500 educators resigned during the 2007-2008 financial year. An average of 2 000 educators retired each year, while 1 800 died and more than 500 were discharged because of ill-health. The largest number of educators which are quitting the profession is in Gauteng (5 614), followed by KwaZulu-Natal (5 005).

The results confirmed that strenuous working conditions had a direct impact on educator stress resulting in poor performance. The findings of the seven factors which were organisational support, overload, remuneration, control, job insecurity, relationship & opportunities and growth opportunities also highlight the reasons why educators are considering quitting the profession. These findings are very much in line with Jackson (2004), Van Wyk (2006:32) and even older studies such as the one by Gold and Roth (1993). As referred to throughout in this article, various studies have also reported that educators experience high levels of occupational stress from learner recalcitrance, excessive demands on educators, lack of educational equipment, low salaries and high class numbers.

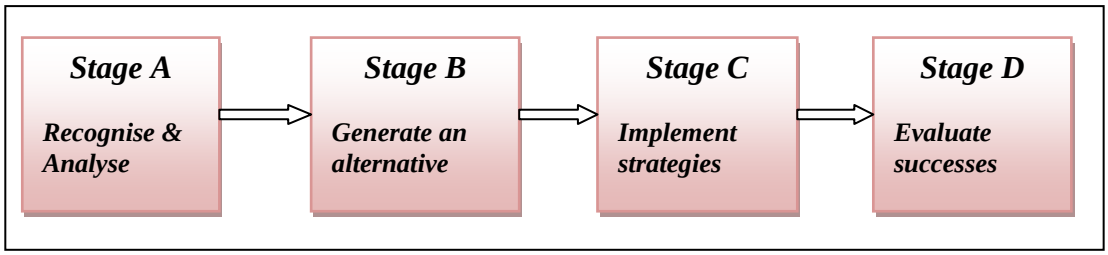
3.9 RECOMMENDATIONS

Stress management refers to the process of harnessing the energy of healthy stress while simultaneously minimising unhealthy outcomes (Peltzer et al., 2008:247). Primary and secondary education institutions need to reduce the stressors of educators which result in organisational and personal effectiveness. It is not possible to avoid stressful conditions completely; however, it is essential to learn to cope with or tolerate stress reaction.

Thus far the action and experiences of educators have resulted in stressful situations. The aim of implementing the programme is to encourage educators to take control of the situation. Most of the factors have been external up to this point of the study.

It is therefore recommended that a stress management plan which can be work-shopped strategically would serve as an intervention programme for educators. Each of these stages will assist in coping with high stress levels and improve work performance depending on the levels of the educator stress. Figure 3.8 listed below illustrates how this can be achieved.

FIGURE 3.8: STEPS FOR THE STRESS INTERVENTION PROGRAMME



Source: Peltzer et al. (2008:247)

Stage A is at the individual level, which allows for the possibility to recognize the signs and causes of stress and then manage these stressors. The individual should be encouraged to discuss their issues revolving around stress. This stage begins with the admission of encountering stressful situations and this should not be seen as weakness by all those that are involved in the process. An individual educator should try and classify what he sees as intolerable behaviour on the part of learners, colleagues and parents. There is considerable value in this "self-help" approach to understanding stress; the role of management is to develop a proactive strategy for stress reduction for the entire school.

Stage B is to generate alternative solutions which should take the form of some sort of open forum/discussion/brainstorming session preferably led by an outsider such as a counsellor or educational psychologist. This approach will assist in the depersonalisation of the more contentious issues and providing a less preconceived view of things. The coping mechanisms taking into consideration of factor two established where demands of the job is lessened and individual educators being assisted to plan their work and priorities so that the most important tasks are not overlooked.

Educators can counteract the effects of stress and achieve a fairly relaxed state of mind which includes the use of electronic devices and employ physical and mental techniques. The improvement of stress management skills is necessary and the following needs to be considered:

- Allow more time for tasks;
- Adopt practical coping skills;
- Practise compartmentalisation by shutting off one aspect of life;
- Set your own standards;

- Use friends and family as support network;
- Reduce levels of somatic complaints;
- Decrease work pressure and role ambiguity; and
- Improve job satisfaction.

Stage C involves the implementation of the above plans and also by adopting various strategies which address the other issues such as better salaries, retention programmes to keep educators in the classroom, improving safety and security at schools, and curbing school violence. Strategies to be adopted should include workshops, forum discussions and peer support. There must be no follow-up sessions, updates and evaluation which results in reviewing the activities that can result in increased work performance. The outcome of a successful stress management programme should be that all the problems are seen in a better perspective and that reasonable solutions are found to assist with the problems.

Stage D is the final stage which will require evaluating and feedback. The successes need to be highlighted, which is generally not done in most instances. As a result, this type of stress management intervention fails.

Longititudinal research regarding causal relationships between job demands and job resources at schools in other provinces should be undertaken.

3.10 CONCLUSION

Stress can either be helpful or harmful to job performance, depending on its level. When there is no stress, job challenges are absent and performance tends to be low. As stress increases, performance tends to increase, because stress helps educators to call up resources to meet the situation. Eventually, stress reaches a plateau that corresponds to the educator's day-to-day performance and capability.

The issue of stress has been prevalent from the 1970s and research has been done extensively in the various sectors. Stress in the education sector has become a dilemma for the authorities and if proper interventions are not in place we are going to see this sector in much difficulty.

The findings of this study points clearly that there are various stressors for both educators and learners. Historically, apartheid has divided the education system and this has impacted directly on South Africa and filtered down into the provinces. The major problems are attributed to various factors which have compounded over the years. Although there has been concerted efforts by the Provincial government to alleviate these problems, the high levels of educator stress still prevails with it impacting directly on performance of both educators and learners.

REFERENCES

ARMSTRONG, M. 2004. Human resource management theory and practice, London: Bath.

BARON, T. & GREENBERG, P. 2003. Organisational behaviour: causes of stress, 3rd ed. London: Prentice Hall.

BENMANSOUR, N. 1998. Job satisfaction, stress and coping strategies among Moroccan high school teachers. *Mediterranean Journal of Educational Studies,* 3(1):13-33.

BURROWS, R. 2009. Apartheid's costly burden. *Daily News:* 19. May 21, 2009

BUTHELEZI, Z. 2003. Researchers, beware of your assumptions! The unique case of South African Education. *Reading Online,* 41-50.

CHAPMAN, A. 2003. Stress at work, stress management techniques, stress reduction and relief and workplace stress, Retrieved from: http://www.businessballs.com, self/personal development. on 31 August 2008.

CHARLES, D. 2008. Report on the update on sectoral aspects: education & health. [Web:] http://www.ilo.org/global/themes/individual/index.html Date of access: 20 Feb 2009.

CHETTY, U.P. 2004**.** The effect of stress on educator efficacy. Durban**:** University of Zululand, (D. Ed-thesis).

CHUNG, E. 2001. Pocket guide to stress testing. USA: Blackwell Science.

COOPER, C. L., DEWE, P.J. & O'DRISCOLL, M.P. 2001. Organisational stress: A review and critique of theory, research, and applications. Thousand Oaks, CA.: Sage.

COX, T. & BROCKLEY, T. 1994. The experience and effects of stress in teachers. *British Educational Research Journal*, 77(2):139-145.

CROUCH, L. & PERRY, H. 2003. Educators in A. Kraak & H Perold (eds). Human resources Development Review. Cape Town: HSRC and, Michigan, MI.: East Lansing University Branch.

DAFT, R.L. 2002. Management. 5th ed. Singapore: Thomson.

DEPARTMENT OF EDUCATION. 2001. Education in South Africa: Achievements since 1994. ISDN: 0-970-3911-2. Pretoria: Department of Education. [Web]: www.info.gov.za/view/DownloadFileAction?id=70282 Date of access: 20 Jan. 2011.

DEPARTMENT OF EDUCATION. 2003. Education in South Africa since 1994. Pretoria, Department of Education, [Web:] http:// www.education.kzn.gov.za Date of access: 25 Jun. 2009.

DEPARTMENT OF EDUCATION. 2008. Provincial budget statements. Pretoria, Published by the Department of Basic Education. [Web:] http://www.education.gov.za Date of access: 27 Dec. 2009.

DEPARTMENT OF EDUCATION: ARTS AND CULTURE. 2006. The national policy framework for teacher education and development in South Africa: "more teachers ; better teachers" - G 68 E.EDUC.07.NATI. [Web:] http://www.lib.uct.ac.za/govpubs/education.htm Date of access:16 Sep. 2009.

DEVENTER, J. & KRUGER, P. 2009. Primary teacher stress. *Psychological Bulletin*, 78:109-132.

DOE ***See*** DEPARTMENT OF EDUCATION.

DORASAMY, A. 2008. Schools face drug test challenges. *Sunday Tribune*, July 20, p4.

EDUCATION LABOUR RELATIONS COUNCIL ***See*** ELRC .

ELRC. 2009. Study of demand and supply of educators in South African public schools. [Web:] http.//www.mrc.ac.za/researchreports.htm Date of access: 4 Jan. 2011.

FIELD, A. 2007. Discovering statistics using SPSS. 2nd ed. London: Sage.

GALLOWAY, D., PANCKHURST, F., BOSWELL, K., BOSWELL, C. & GREEN,K. 2005. Mental health, absences from work, stress and satisfaction in a sample of New Zealand primary school teachers. *Aust. NZJ Psychiatry,* 18(4):359-363.

GOLD, Y. & ROTH, R.A. 1993. Teachers managing stress and preventing burnout. The professional health solution. London: Falmer. [Web:] eprints.utm.my/5912/1/Aziziyahtechnical.pdf Date of access: 10 Feb. 2009.

HELLRIEGEL, D., & SLOCUM, J.W. 2004. Organisational behaviour. 10th ed. London: McGraw Hill.

HILLIER, D., FEWELL, F., CANN, W. & SHEPHARD, V. 2005. Wellness at work: enhancing the quality of our working lives. *International Review of Psychiatry* 2(17):419-431.

HSRC. 2009. Review of education, skills, development and Innovation, RESDI newsletter, November. [Web:] http:\\www.hsrc.ac.za/essd.html Date of access: 30 Jun. 2009.

HUMAN SCIENCES RESEARCH COUNCIL ***See*** HSRC.

HUNSANKER, A.P. & JAMAL, C.M. 1985. Individual differences, work stress and health. Handbook of work and health psychology. India: Wiley.

ILO ***See*** INTERNATIONAL LABOUR ORGANIZATION

ILO. 2010. Skills, knowledge and employability. [Web:] http:// www.ilo.org/global/ Themes/Skills_Knowledge and Employability/lang-en/index.htm Date of access: 20 May 2010.

JACKSON, L. & ROTHMAN, S. 2006. Work-related well-being of educators in district of North-West Province. *Perspectives in Education*, 23(3):107-122, September.

JACKSON, L.T.B. 2004. An adapted model of burnout for teachers in South Africa. Unpublished doctoral thesis. Potchefstroom, Potchefstroom University for Christian Higher Education.

JEENA, M. 1998. Teachers' mental health status, stress levels and incident of burnout during a period of change and reorganisation within the South African education system. MA dissertation. Durban: University of Natal.

JON, M.W., RANDY, L. & DE SIMONE, L. 2009. Human resource development, 5th ed. New York, NY.: Cengage Learning.

LEIGH, N. 2004. Critical psychology and problems on mental health. *Psychology in Society*, 22:34-42.

LUTHANS, F. 1995. Organisational behavior. 7th ed. New York, NY.: McGraw-Hill.

MADAY, T & WAITE, W. 2009. Painless improvement strategies within reach. the center for comprehensive school reform and improvement. [Web:] www.centerforcsri.org/files/presentations/PainlessImprovementStrategies.ppt Date of access: 20 Jan. 2011.

MALULEKA, S. 2010. Several ways to boost teacher numbers in KZN, say unions. *Daily News*, 13 May.

MANIK, S. 2010. Teachers leave for foreign work "poor conditions contribute to exodus". *Daily News*, 5 April: 5p.

MARNEWECK, L. 2010. From Curriculum 2005 to Curriculum 2025. Class Act Educational Services. [Web:] http://www.classact.org.za/lorraine.report.aspx Date of access: 10 Dec. 2010.

MATHENY, K.B., GFROERER, C.A. & HARRIS, K. 2000. Work stress, burnout, and coping at the turn of the century: An individual psychology perspective. *Journal of Individual Psychology*, 56(1):74-87.

MBANJWA, X. 2010. Educators leave the profession. *Mercury*, 7 June: 3p.

MEDIACLUB SA. 2010. Education in South Africa [Web:] http://www.mediaclubsouthafrica.com/index.php?option=com_content&view=article&id=84:education-in-south-africa&catid=34:developmentbg Date of access: 2 Feb. 2011.

MICHAEL, J.H., MARSH. K. & JOHNSON.L. 2007. Interpersonal relationships. *Journal of Experimental Psychology Human Perception and Performance*, 35:840-865.

MILLER, K, KHOZA, H. 2008. A comparison of teacher stress and school climate across schools with different Matric success rates, *South African Journal of Education*, 28(2):155-173.

MOLEKE. P. 2005. Inequalities in higher education and the structure of the labour market. Cape Town: HSRC.

MOOLLA, A.I.M. 2005. The causes and consequences of stress. *Journal of Management & Administration,* 3(2):45-60.

MOORHEAD, G. & GRIFFIN, R.W. 2004. Organisational behaviour, managing people and organisations. New Delhi: Jaico.

MOSS, C.A. 2008. Power of the five elements: path to healthy aging and stress resistance. [Web:] hhtp://northatindiabooks, wordpress.com Date of access: 20 Apr. 2010.

MOTSEKE, M.J. 1998. Factors contributing to teachers' stress in township secondary schools. Pretoria: University of South Africa.

NEWSTROOM, J.W. & DAVIES, K. 2002. Human behaviour at work: organisational behaviour. London: McGraw-Hill.

NICOLAY, N. 2008. Summary of provincial HIV/AIDS stats for South Africa. [Web:] http//www.actuarial society org.za Date of access: 3 Jan. 2011.

NIXON, P.G.F. 1978. The human function curve. *Practitioner*, 217:765-769 & 935-944.

NUNNALLY, J.C., & BERNSTEIN, I.H. 1994. Psychometric theory. 3rd ed. New York, NY.: McGraw-Hill.

OLIVIER, M.A.J, & VENTER, D.J.L. 2003. The extent and causes of stress in teachers in the George region. *South African Journal of Education*, 23:186-192.

OTTO, R. 2005. Education and stress. Report on the survey conducted by the Victorian Independent education Union on workloads and perceptions of occupational stress among union members. [Web:] www.ieu.asn.au Date of access: 5 March 2009.

PALMER, I. DUNFORD, R. & AKIN, G. 2006. Managing organisational change - a multiple perspectives approach. New York, NY.: McGraw Hill.

PELTZER, K., SHISANA, O., ZUMA, K., VAN WYK, B. & ZUNGU-DIRWAYI, N. 2008. Job stress, job satisfaction and stress-related illnesses among South African educators. *Stress and Health*, 25:247-257.

PHILIP, J. 2004. The impacts of globalization on the development of occupational stress. *African newsletter*, 8:5.

PIETERSEN, R.A. 1994. A meta-analysis of Cronbach's co-efficient Alpha. *Journal of Consumer Research*, 21(2):381-391.

PILLAY, G. 2009. Plight of educators. *Weekly*, 23 March: 11p.

RAMRATHAN, P. 2002. Ways of knowing: teacher attrition and demand in KZN in context of an HIV/AIDS pandemic. D.Ed thesis. University of Durban Westville.

REPORTER, 2008. Teachers rush for the door. *Daily News*, March 19, 1p.

ROBBINS, S.P. 2001. Introduction to management: a contingency approach. New York, NY.: McGraw-Hill.

ROBBINS, T. 2003. Developing effective school management. London: Routledge.

ROBINSON, G. 2003. Work well-being: the positive impact of health psychology. *Educational Psychology***,** 14:225-235.

ROUT, P & ROUT, D. 2002a. Foundations of behavioural research – stress results. 3rd ed. London: Harcourt College.

ROUT, U.R. & ROUT, J.K. 2002b. Stress management for primary health professionals. New York, NY.: Kluwer Academic/Plenum.

SAPTOE, C.W.2000. Factors which causes stress in teachers in Southern Cape. M.Ed dissertation, Port Elizabeth: University of Port Elizabeth.

SASA. 1996. SOUTH AFRICAN SCHOOLS ACT No. 84 of 1996. Parents guide to schooling. [Web:] http://www.southafrica.info/services/education/edufacts.htm Date of access: Jan. 2011.

SCHULTZ, S. & STEYN, T. 2007. Stressors in the professional lives in South African secondary school teachers. *South African Journal of Education*, 27(4): 691 -701.

SPSS INC. 2009. SPSS 17.0 for Windows. Chicago, IL. [Web:] http://spss.com/software /statistics. Date of access: 10 Apr. 2010.

STATSOFT. 2010. The electronic statistics textbook. Basic statistics. [Web:] http://www.statsoft.com/textbook/basic/statistics Date of access: 3 Aug. 2010.

TAYLOR, N., FLEISCH. B., & SCHINDLER, J. 2008. Changes in education. [Web:] htpp:// www.jet.org.za Date of access: 15 May 2010.

THORBURN, D. 2004. Technology integration and educational change: is it possible? [Web:] www.usask.ca/education/coursework/thorburn/index.htm Date of access: 10 Feb. 2011.

UMAR, R. 2010. Teachers leave for foreign work - poor conditions contributing to exodus, *Daily News*, 5 May. [Web:] http://www.iol.co.za/news/south-africa/kzn-teachers-leave-for-foreign-work-1.479516 Date of access: 20 Jun. 2010.

VAN WYK, D. 2006. Work wellness among secondary school teachers in the Goldfields Region of the Free State Province. Unpublished Doctoral thesis, Potchefstroom: Potchefstroom University for Christian Higher Education.

VARGHESE, B. 2010. The impact of occupational stressors in the Eastern Cape region. Durban: Management College of Southern Africa.

WATSON, M.W. 2009. Leadership influence on job satisfaction. *Radiologic Technology*, 80(4):297-308.

WILDERMAN R.A. & MBEBETHO, M. 2006. School feeding programmes and products. The JAM Report. [Web:] http://vut.netd.ac.za/bitstream/10352/90/6/06% 20Kearney%20J%20%20Chapter%202.pdf Date of access: 20 Jun. 2010.

WILDERMAN, R. & LEFKO-EVERETTE, K. 2008. Reviewing provincial education budgets, 2004 -2010. [Web:] http;//idasa.org.za Date of access: 5 Dec. 2010.

WILDERMAN, R.A. 2008. Reviewing eight years of the implementation of the school funding norms, 2002-2008. Cape Town: Idasa.

WILSON, V. 2002. Feeling the strain: An overview of literature on teacher stress. The Scottish Council for Research in Education: [Web:] http://dspace.gla.ac.uk/bitstream/ 1905/213/1/109.pdf Date of access: 12 Mar. 2009.

CHAPTER 4

ARTICLE 3:

AN INVESTIGATION OF HOW TRADITIONAL MANAGEMENT AND LEADERSHIP CAN BE GUIDED TOWARDS TRANSFORMATIONAL LEADERSHIP IN EDUCATION

ABSTRACT

This article reports on leadership and management in a school, and how guidance can assist in the transformation process. The study further examines the effects of a principal's leadership behaviour on the school's learning culture in KwaZulu-Natal. Leadership is a critical component and needs to be responsive to the period of rapid socio-economic change and technological development. Significant restructuring of the fundamentals of the South African education and training system have been underway.

The direct impact of this restructuring process was that emphasis was on behavioural change focused on intervention, restructuring and major re-organisation. These principals or education leaders will also need to utilise other skills, such as encouraging risk-taking, following as well as leading, using information and fostering far-sighted vision. Leadership and management are seen as a relational process which is always exercised in an interpersonal context and the challenge is therefore to create conditions for understanding the mission and goals. This results in the overall task of education reform in South Africa which involves transformation of leaders and managers which represents critical challenges for them.

The survey were carried out in three districts involving (n =1500) educators of which 350 of the original 358 responses was used for this study. The data were analysed by performing an exploratory factor analysis, using Varimax orthogonal rotation. Seven factors have been identified which deals with the transformation of traditional managers and leaders to become transformation agents in schools. These factors are management and leadership styles,

financial security, management and leadership fairness, stressors, empowerment, job security and a sense of control over work environment. These factors explain a cumulative variance of 78.60%. Suitability tests to perform factor analysis were also favourable with the KMO and Bartlett's tests returning acceptable values.

Keywords: leadership, leadership styles, transformational leadership, organisational effectiveness, principal, transactional leadership, school culture and vision.

4.1 BACKGROUND OF THE STUDY

The changing education environment in democratic South Africa has brought to the fore the need for management and leadership development in directing the complex new policy environment and realise transformational goals. With the introduction of democracy in South Africa it has become essential for school principals to change their management and leadership style in keeping with the Constitution and the South African Schools Act (Act 84 of 1996) (Republic of South Africa, 1996a). The crisis in schools can be attributed to a lack of legitimacy of the education system and as a whole is characterised due to poor management. The challenge is for education leaders to recreate schools as a learning organisation. Leadership for change must integrate the drive of moral purpose with the creation of social capital (Calitz et al., 2007:114).

Leadership in educational settings is a crowded and busy terrain both in terms of policy text that seek to redefine roles and tasks in schools as leadership and the growing amount of literature concerned with effective transformational leadership functions and behaviours (Lapierre, 2007:272). Schools continue to be challenged, in the name of restructuring, to change governance structures, to open themselves up to community influence, become more accountable, clarify standards for content and performance and to introduce related changes in their approaches to teaching and learning (Naidu et al., 2008:12). Naidu et al. mention in this regard that many school principals are beginning to achieve transformation despite difficult circumstances.

Leadership research created a vast body of literature classified using various approaches. Traditional theories comprise early seminal studies on specific types of determinants for effective leadership while contemporary ones integrate many categories of determinants from early research (Sing, 2009:1). The terms leadership and management are distinguishable, but more often than not they are used interchangeably. A school principal has to be both the leader and the manager. The focus in this chapter is on the dualist role of both the management (principal) and educator in the school environment.

South Africa has, since the inception of the democratic government, focused on addressing the country's educational legacy. School principals have to understand the South African

education arena and its historical context so that they are able to embrace issues of change and transformation and give effective direction to their institutions. School principals are faced with the challenges of transforming schools to comply with the rapidly changing policies as well as ensuring that the full potential of every learner is unlocked to meet the needs of a changing society (Naidu et al., *2*008:2).

The challenges brought to schools by restructuring have been cited as reasons for advocating transformational leadership in schools. It is argued that transformational leadership is well suited to the challenges of current school restructuring. It has the potential for building high levels of commitment (in educators) to the complex and uncertain nature of the school reform agenda and for fostering growth in the capacities teachers must develop to respond positively to this agenda (Leithwood et al., 2006:322).

Hence, transformational leadership is seen to be sensitive to organisation building, developing a shared vision, distributing leadership and building school culture necessary to current restructuring efforts in schools (Leithwood & Jantzi, 2004:49). According to these authors, transformational leaders often attract strong feelings of identity and intense emotions. They also challenge the process of change. These dynamic leaders/managers display characteristics of being visionary and empowering with these specific actions:

- Provide clarity of focus so that everyone involved understands the intent and outcomes of curriculum reform;
- Understand group and change dynamics as a natural phenomena;
- Initiating and sustaining productive group dynamics within the context of situational leadership and relevant change management models;
- Leading and development of clear outcomes, facilitating individual accountability and constantly monitoring progress;
- Ensuring the formation of effective networking to share ideas, best practices and to nurture emotional support; and
- Facilitating the creation of clear priorities and ensuring its systematic implementation.

As indicated by Du Plessis et al. (2007:44), leadership is an elusive concept that has been tackled by many educational theorists with varying degrees of success over the years. In the

new millennium educational institutions are transforming and in this process of transformation there has been a paradigm shift which encourages principals/managers to adapt their managerial behaviour. Table 4.1 shows the shifts in managerial behaviour.

TABLE 4.1: SHIFTS IN MANAGERIAL BEHAVIOUR

TRADITIONAL BEHAVIOUR	MODERN BEHAVIOUR
Management	Leadership
Vertical	Sideways
Fixed roles	Flexible roles
Individual responsibility	Share responsibility
Autocratic	Collaborative
Delivering expertise	Developing expertise
Status	Stature
Efficiency	Effectiveness
Control	Release
Power	Empowerment

Source: Du Plessis et al. (2007:44)

It can be deduced from the above that there is a growing need to recognise the experience and expertise that are involved in being an effective leader/manager. As such, transformational leadership has focused on being people and skill centred which echoes the demands of the information age.

4.2 CONCEPTUALISATION OF LEADERSHIP

One way of motivating people is to provide leadership. The central concept of leadership is the power to influence others and get them to do things they otherwise would not do. The best formal definition is "a social influence process that involves determining a group's objectives motivating behaviour in aid of these objectives and influencing group maintenance and culture" (Smith, 2007:116).

Leadership is one of the most controversial and researched subjects in management. Leadership has many definitions but no real consensus; essentially, it is a relationship through which one person influences the behaviour or actions of other people. In every day speech,

the terms leader and manager are often used interchangeably. This is so because the process of leading is one of the four fundamental management functions (Nel et al., 2006:143).

Bycio (2009:237) points out that leadership is the power to influence the thinking and behaviour of others to achieve mutually desired objectives. The process of leadership is the use of non-coercive influence to direct and co-ordinated activities of the members of an organised group toward the accomplishment of the organisations goals.

Swanepoel et al. (2003:385) state that leadership is an, "influence relationship among leaders and followers who intend real changes". However, leadership has different meanings for various authors. Johnson and Scholes (2006:549) describe leadership as a process of influencing an organisation.

According to early studies undertaken by Foti (2009:237), leadership exists where "an organisation has common goals. There are different roles within the organisation, one role being that of a leader in the systems and structures in place to allow for the co-ordination of efforts to achieve common goals." This is true because the school as an organisation is characterised by the existence of common goals, which require every member of the staff to put his/her effort towards the attainment of these goals.

The principal as the manager and leader of the institution should always act as a facilitator and co-ordinate the educators' efforts to realise the goals of the school. Judge and Piccolo (2004:755), suggest that leadership for quality should involve vision, a value-driven strategic view of nature, creativity, problem solving, clear decision-making, sensitivity, interpersonal and communication skills, and delegation and improvement. They put emphasis on management and leadership for empowerment to make things happen and future oriented leadership that is characterised by vision, planning, strategising and improvement.

From the foregoing exposition it can be seen that leadership is wide-ranging and as far-reaching consequences in addition to being a dynamic activity which is not only dependent on management and leadership criteria but also on group dynamics, personality of leaders and the environment in which it occurs. Leadership and management cannot be separated, and as such one could adopt the stance that, in order to lead, one must be able to manage (Nguni et al., 2006:145). Management and leadership are thus inextricably linked. Although leadership

are said to be linked, Table 4.2 highlights the differences between management and leadership which, if implemented correctly by the principals of school, could result in improved work performance.

TABLE 4.2: LEADERSHIP VERSUS MANAGEMENT

LEADERS	MANAGERS
Initiate change	Implement change
Develop	Maintain
Inspire people	Monitor people
Do the right things	Do things right
Assume the long - term perspective	Act reactively
Connect with followers	Preserve authority

Source: Northouse (2007:32)

The effective leader seeks out situations that require change, "does the right thing" and operates by using personal influence. The effective leader is stronger on "vision" and often on aspiration. The effective manager implements change, creates momentum, rather than "inspiration" and relies on positional influence (Landsberg, 2007:186). The strategic management and leadership needed in schools in the 21st century involve using productive educators and effective management and leadership to achieve the expected outcomes in that of the educator and the child. Hence emphasis will be on a transformational leader. Transformational leadership is related to long-term development and change. It produces higher levels of effort and satisfaction in followers, which translates to greater productivity and quality outcomes of the institution (Loock & Grobler, 2009:83).

4.3 LEADERSHIP THEORIES

Research has been conducted in the last twenty years into similar leadership theories variously referred to as charismatic, transformational, or visionary (Conger & Kanungo, 1994; Kouzes & Posner, 2003). All of these theories focus on exceptional leaders who have extra-ordinary effects on their followers. Transformational leadership is one management practice that has increasingly become dominant in both public and private sectors (Bono &

Judge, 2003:73; Lowe & Gardner, 2000:459; Walumba, Wang & Lawler, 2005:235). These, however, work in theory, but for principals to implement, is a real challenge and educators have indicated this in the findings of this study which states that there is a lack of proper leadership and guidance which results in stressful situations.

Initial studies on the effects of transformational leadership (Leithwood et al., 2006:849) suggest it contributes to restructuring initiatives and 'teacher perceived' learner outcomes. Coetzee and White (2004:127-128) state that the transformational leadership style is an attempt to explain how facilitators develop and enhance the commitment of followers.

As stated by Rowe (2007:13) transformational leadership focuses on developing the organisation's capacity to innovate. Rather than focusing specifically on direct coordination, control, and supervision of the curriculum and instruction, transformational leadership seeks to build the organisation's capacity to select its purposes and to support the development of changes to practices of teaching and learning. Transformational leadership may be viewed as distributed in that it focuses on developing a shared vision and shared commitment to school change.

However, this contribution is mediated by other people, events and organisational factors, such as teacher commitment, teacher job satisfaction, instructional practices or school culture (Cropanzano & Mitchell, 2005:55). It is important to note that the previous mentioned studies have been undertaken in the 1990s but the problems of how to manage and lead have not been fully implemented in schools.

At the same time, the following researchers have undertaken studies on school leadership and culture dating back to the 1990s and have developed impressive empirical evidence to suggest that the mediating variable, school culture, can make a school a place in which teachers feel positive about their work and learners are motivated to learn (Ivancevich et al., 2007:145). A positive school culture is associated with higher learner motivation and achievement, improved teacher collaboration and improved attitudes of teachers toward their job (Rowe, 2007:45).

Research initially done by Leithwood and Riehl (2003:93), Marks and Printy (2003:432), and also by Foster and Young (2004:67) point out that school culture does not operate in a vacuum, and that the school principal is crucial to create and maintain a positive school

culture through sound management and leadership practices. Furthermore, evidence from the study by Leithwood and Jantzi (2004:345) provides strong support that specifically transformational leadership is a key factor in facilitating a positive school culture.

4.4 POLICIES IN EDUCATION IN RELATION TO LEADERSHIP AND MANAGEMENT STYLES

There are several policies which attempt to provide guidelines between principals and educators. As stated by Pandor (2009:60), "leadership is critical at provincial and school level to make the best out of the complexity of evaluation and school development efforts". Reference is also being made to the Policy Handbook for Educators (ELRC, 2003) which was commissioned by the Education Labour Relations Council (ELRC) contains various acts which define the foundation for the management style to be adopted at South African schools. The major policy documents are the National Education Policy Act (Act 27 of 1996) (Republic of South Africa, 1996c), the South African Schools (Act 84 of 1996) (Republic of South Africa, 1996b), the Employment of Educators Act (Act 76 of 1998), the Further Education and Training Act (Act 98 of 1998), the South African Council of Educators Act (Act 31 of 2000), and the Constitution of the Education Labour Relations Council (ELRC, 2003).

The abovementioned acts functions under the umbrella of the Constitution of the Republic of South Africa (Act 108 of 1996). The specific sections of the abovementioned acts that have direct bearing on the leadership style to be adopted by South African schools are Norms and Standards for Educators in the National Education Policy Act (Act 27 of 1996) are the:

- Personnel Administrative Measures (PAM) in the Employment of Educators Act (Act 76 of 1998) (C-58 to C-72) (Republic of South Africa, 1996d); and the
- Code of Professional Ethics in the South African Council of Educators Act (Act 31 of 2000) (E-17 to E-18) (Republic of South Africa, 1996e).

Although the management and leadership style is not prescribed by the abovementioned policy documents these contain numerous phrases which indicate democratic, consultative,

participatory, interactive and transformational management and leadership styles. These policy documents are abundantly clear with respect to the leadership styles to be practised in South African schools: a democratic, gender conscious, participatory, interactive decision-making and transformational leadership style.

4.5 MANAGEMENT AND LEADERSHIP STYLES IN SCHOOLS

Yukhl (2009:363) argues that a facilitator's typical way or behaviour towards group members can be classified as a leadership style. Caldwell and Spinks (2006:25) state that leadership styles can be identified by two dimensions: concern for accomplishing the tasks of the organisation, and concern for relationships within and the members of the organisation. Principals of schools usually employ one of the following leadership styles or a combination thereof (see Table 4.3).

TABLE 4.3: LEADERSHIP STYLES

LEADERSHIP STYLE	CHARACTERISTICS
AUTOCRATIC	• Centre of decision-making and focus on power. • There is limited employee participation in the decision-making process, which is unilateral (without much involvement of others). • The autocratic leader prefers to make all the decisions. • The leader usually directs the work methods and there isn't much delegation. • The flow of communication is usually one-way. • Only mention mistakes without any emphasis on employee development. A typical expression in this type of work environment is, "no news is good news."

Table 4.3 continues on next page

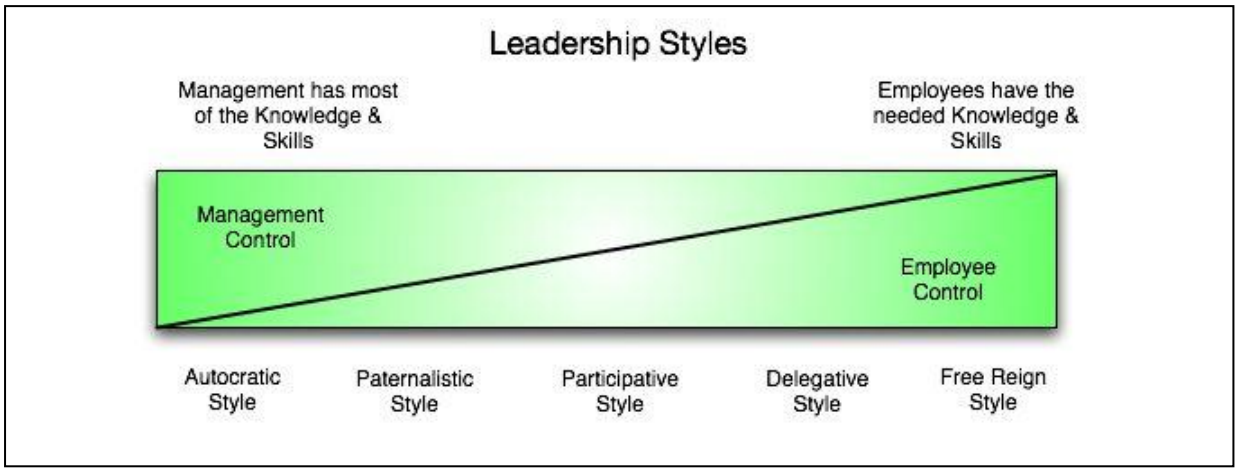
TABLE 4.3: LEADERSHIP STYLES (Continued)

LEADERSHIP STYLE	CHARACTERISTICS
PRESCRIPTIVE (BUREAUCRATIC) LEADER	• Leaders impose strict and systematic discipline on the followers and demand business-like conduct in the workplace. • Leaders are empowered via the office they hold - position power. • Followers are promoted based on their ability to conform to the rules of the office. • Followers should obey leaders because authority is bestowed upon the leader as part of their position in the company. • The primary behaviour of these leaders is to forge consensus through collaboration.
PARTICIPATIVE (DEMOCRATIC) LEADER	• The key to this style is communication - seeking the opinions of others, and letting your opinion be known. • The style produces a work environment that employees can feel good about. • Workers feel that their opinion counts, and because of that feeling they are more committed to achieving the goals and objectives of the organisation.
COLLEGIALITY (ABDICATIVE OR LAISSEZ-FAIRE) LEADERSHIP	• Facilitators deliberate abstention from directing and planning. • Little or no influence on individual members or the group. • Attitude leads to role overload and other conflicts. • Neither authoritarian nor permissive. • Encourages team effort.
ANARCHY LEADERSHIP	• Leads to narcissistic, pre-occupation, excessive expression of emotion. • Craving for activity and excitement. • Exploitation of others. • Unclear organisational structures or processes. • Climate for ambiguity. • High risk taker.

Source: Ivancevich and Matteson (2007:322)

At the first sight leadership might appear as a simple and unitary topic, "People are born to leadership and when the situation is in need leaders are able to emerge, take charge and lead people". Many researchers have tried to identify the different characteristics. Leaders tend to show a consistent set of traits (Lussier & Achua, 2007:35).

FIGURE 4.1: LEADERSHIP STYLE – HIGHLIGHTING CONTROL OF LEADERS



Source: Rowe (2007:55)

Figure 4.1 highlights the aspect of control between Management and the employee. The situation in which the principal is placed indicates that being autocrat and participative somewhat allows for management control. When the approach of being delegative and free-reign this results in a lack of control and the employer takes control which could be disastrous in the school environment.

Reynolds (2010:78) has highlighted the successes of the autocratic styles amongst educators in Thailand. His findings have indicated that this is seen as a support mechanism from management. Fotio and Havenstein (2007:347) have also highlighted that the autocratic style of leadership on educators has resulted in the emergence of effective educators. Bass (2008:789) has developed a handbook of effective autocratic leadership. The focus area in this study was on the effectiveness of the managerial styles, with emphasis on the autocratic styles. This leadership style is particularly appropriate when staff consists of new, or inexperienced and even under-qualified educators. This type of leadership will not be effective considering the circumstances in the school environment. Educators need to be guided and be given the freedom to participate in decision-making which will assist in the smooth running of the institution.

Grant (2006:199) maintains that the prescriptive leadership style is likely to be found where there is a need for a lot of control mechanisms for managing the conflict within the school

environment. It imposes order, allows for a lot of co-ordination, with little duplication of effort, and with resources allocated on a rational basis. It is appropriate to deal with matters that are routine and predictable. Lappierre (2007:24) states that, "The difficulty is to find a way of moving to some other approach to ensure the school is flexible enough to cope with the changing demands".

Kark and Van Dijk (2007:500) perceive the democratic facilitator as a person who delegates authority to subordinates, allowing discretion for making certain decisions in the school. Bycio (2009:238) maintains that this type of facilitator takes an active part in directing work or in setting values. The style promotes independence, initiative and self-development. MacDonald (2007:40) views this style as one that promotes or encourages individual staff members to participate in decision-making. Nconco (2006:361) points out that the democratic way of doing things is a reasonable alternative to present-day practices in schools.

The decisions are made by the facilitator only after discussions with and participation by members of staff whose feelings and reactions are given full weight. The facilitator (principal) shares his knowledge and encourages initiative on the part of his subordinates. He tries to keep as many members as possible personally involved in problem-solving and aware of goal progress (Mujis & Harris, 2006:25).

The flexible collegiality leadership style allows staff a high degree of autonomy in completing assigned duties. This style is preferred for managing and organising in novel situations where no-one is quite sure what the required performance actually is, for example, when teachers have to introduce a new syllabus or a national curriculum (Mujis & Harris, 2006:34). Torrington and Weightman (2007:519) state that the collegial style has such an appeal that it is tempting to regard it as the "best way" to run a school. However, there is such a shortage of competent staff, a high percentage of temporary staff, and a high staff turnover rate, that the school will be poorly served by collegial managing or organising. It is a flexible way of organising where there is sufficient stability of personnel for continuity (Lloyd, 2008:635).

The principal who employs the anarchy leadership style, looks after people and values, and friendly relations more than productivity. The disadvantage of this style is that the principal

in this situation is seen to sacrifice the institution's objectives in pursuit of interpersonal harmony (MacDonald, 2007:40).

Recently, attention has been focused on different types of leaders which are most likely to gravitate to a more meaningful leadership role (see Table 4.4).

TABLE 4.5: LEADERSHIP STYLES AND CHARACTERISTICS

LEADERSHIP STYLES	CHARACTERISTICS
Charismatic leaders	• People who have an ability to inspire by their words • Attractive personality – inspire people • Good-looking and well-built • Big, exciting visions
Transactional leader	• Practical and realistic vision for change and improvement • Inspiring communications, integrity and competence to lead • *Sometimes lacking*: Caring
Transformational leader	• Caring via a commitment to meeting people's self-interest and needs • Integrity and competence • *Lacking*: Leadership competence

Source: MacDonald (2007:40)

From the table above it is clear that although the charismatic leader and the transformational leader may have many similarities, their main difference is in their basic focus. Whereas the transformational leader has a basic focus of transforming the organisation and, quite possibly, their followers, the charismatic leader may not want to change anything.

4.6 EDUCATIONAL LEADERSHIP

The changing education environment in democratic South Africa has brought to the fore the need for education management and leadership development in directing a complex new policy environment and realising transformational goals, and despite the complexity and difficult circumstances, many school principals are beginning to achieve transformation in their schools (Naidu et al., 2008:3).

The concept of school leadership developed in the late 20th century for several reasons. Demands were made on schools for higher levels of pupil achievement, and schools were expected to improve and reform.

These expectations were accompanied by calls for accountability at the school level. Maintenance of the status quo was no longer considered acceptable. Administration and management are terms that connote stability through the exercise of control and supervision. The concept of leadership was favoured because it conveys dynamism and pro-activity. The principal or school head is commonly thought to be the school leader; however, school leadership may include other persons, such as members of a formal leadership team and other persons who contribute toward the aims of the school (Lussier & Achua, 2007:88).

4.7 LEADERSHIP STYLE

Transformational leadership represents a new paradigm in leadership. It demonstrates the crucial role that dynamic leaders play in creating an adaptive institution. An adaptive institution anticipates changes in its environment and responds pro-actively. A transformational leader/manger is a futurist who creates a compelling vision that inspires total commitment to, and acceptance of, change by followers (Macdonald, 2007:42). Already in 1978, Burns (1978:15) contended that "transformational leadership" does not stand alone in the leadership lexicon. He also coined another term as being "transactional leadership", which involves dealing with others by delegating power, and actively communicate the school's vision and beliefs.

Vecchio et al. (2008:71) state that the idea of transformational leadership was first developed by James McGregor Burns in 1978 and later extended by Bernard Bass as well as others. Lim and Polyhart (2004:610) say that a transformational leader, "recognises and exploits an existing need or demands of a potential follower and looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. "He insists that for leaders to have the greatest impact on the 'led', they must motivate followers to action by appealing to shared values and by satisfying the higher order needs of the led, such as their aspirations and expectations. For Huen Yu (2004:5), "transformational leadership contains interrelated components of charisma or idealised influence (attributed or behavioural), inspirational motivation, intellectual stimulation and individualised consideration."

Although there have been studies undertaken on leadership in schools and the definition of transformational leadership is still vague, evidence shows that there are similarities in transformational leadership whether it is in a school setting or a business environment (Leithwood et al., 2006). In this regard, Sagor (2004:13-18) adds that the responsibility of transformation resides not only with the leader, and states that:

> *"The issue is more than who makes which decisions. Rather it is finding a way to be successful in collaboratively defining the essential purpose of teaching and learning and then empowering the entire school community to become energised and focused. In schools where such a focus has been achieved teaching and learning became transformative for everyone."*

The development of transformational leadership has also resulted in the fact that it cannot be regarded to be the sole concept. In this regard, Burns (1978:15) contended in the seventies already that "transformational" leadership does not stand alone in the leadership lexicon (Gkolia et al., 2006:25). Transactional leadership is often viewed as being complementary to transformational leadership (Balster, 2002:2). Leithwood et al. (2006:8) contends that transactional leadership does not stimulate improvement. Mitchell and Tucker (2004:35) add that transactional leadership works only when both leaders and followers understand and are in agreement about which tasks are important. Balster (2002:2) refers to top-down leadership and hierarchies as "instructional" leadership, where the leader is supposed to know the best form of instruction and closely monitors educators' and learners' work.

One of the problems with this approach, as argued by Poplin (2003:10-11), is that great administrators are not always great classroom leaders and vice versa. Another difficulty is that this form of leadership concentrates on growth of learners but rarely looks at the growth of educators. Education now calls on administrators to be "servants of collective vision", as well as "editors, cheerleaders, problem solvers, and resource finders". Mitchell and Tucker (2004:30-35) explain that the problem is that there is a tendency to think of leadership as the capacity to take charge and get things done.

The same authors' view constitute that the leadership does not focus on the importance of teamwork and comprehensive school improvement. It is time to stop thinking of leadership as aggressive action and more as a way of thinking about ourselves, our jobs, and the nature of the educational process. As remarked by Mitchell and Tucker (2004:30-35): "*Instructional Leadership is out and Transformational Leadership is in*." Leithwood and Jantzi (2004:49-53) point out that transformational leaders pursue three fundamental goals. This line of reasoning is still pursued by modern management thinkers (David & Ganage, 2007:15). The role of a transformational leader is to "transform" people and institutions in a literate sense and the following styles are highlighted in the table below:

Table 4.5 follows on next page

TABLE 4.5: TRANSFORMATIONAL LEADERSHIP STYLES AND BEHAVIOURS

TRANSFORMATIONAL STYLE	LEADER BEHAVIOUR
IDEALISED BEHAVIOURS	• Talk about their most important values and beliefs. • Specify the importance of having a strong sense of purpose. • Consider the moral and ethical consequences of decisions. • Champion exciting new possibilities. • Talk about the importance of trusting each other.
INSPIRATIONAL MOTIVATION	• Talk optimistically. • Talk enthusiastically. • Articulate a compelling vision of the future. • Express confidence that goals will be achieved. • Provide an exciting image of what is essential to consider. • Take a stand on controversial issues.
INTELLECTUAL STIMULATION	• Re-examine critical assumptions to question whether these are appropriate. • Seek differing perspectives when solving problems. • Get others to look at the problems from many different angles. • Suggest new ways of looking at how to complete assignments. • Encourage non-traditional thinking to deal with traditional problems. • Encourage rethinking those ideas which have never been questioned before.
INDIVIDUALISED CONSIDERATION	• Spend time teaching and coaching. • Treat others as individuals rather than just as members of the group. • Consider individuals as having different needs, abilities and aspirations and aspirations from others. • Help others to develop their strengths. • Listen attentively to others' concerns. • Promote self development.
IDEALISED ATTRIBUTES	• Instil pride in others for being associated with them. • Go beyond their self-interests for the good of the group. • Act in ways that build others' respect. • Display a sense of power and competence. • Make personal sacrifices for others' benefit. • Reassure others that obstacles will be overcome.

Source: David and Ganage (2007:18)

4.8 THE NEW ROLE OF THE PRINCIPAL

There is a strong link between transformational leadership and school effectiveness. Factors that contribute to the effectiveness of schools include: professional leadership, shared vision and goals, a conducive learning environment, concentrating on teaching and learning, high expectations, monitoring of progress and purposeful teaching.

Principals as transformational managers and leaders have taken on new exciting roles as they continue to deal with the ever-changing face of education. These principals use their knowledge and skills to work both internally and externally to the school organisation to map new directions, to secure and mobilise old and new resources, and to respond to present challenges and perceived future challenges. Effective principals in today's school system assume that change is inevitable, necessary and indeed strive to embrace this type of change (Armstrong, 2004:55). Kyeyune (2008:134) states that these changes will need to incorporate interventions on how to alleviate stress and to focus on improving work performance amongst educators. Some of the important traits and values that today's principals must possess in order to lead transformationally, principals should:

- Act as agents of change;
- Act as managers, and principals should; and
- Ensure that there is inclusive education for a diverse school community.

Other factors that also need to be considered should be to:

- **Helping staff develop and maintain a collaborative, professional school culture**
  This means that educators often talk, observe, critique and plan together. Norms of collective responsibility and continuous improvement encourage them to teach each other how to teach better. Transformational leaders involve staff in the collaborative goal-setting, reduce educator isolation, use bureaucratic mechanisms to support cultural changes, share leadership with others by delegating power, and actively communicate the school's norms and beliefs. This could be seen as a very effective way of fostering staff development and encouraging them to be a team. It will ultimately allow for a sense of security as well as motivate them to perform better.

- **Fostering educator development**

  This factor suggests that the educators' motivation for development are enhanced when they internalise goals for professional growth. This process is generally committed to the school's mission. When leaders give educators a role in solving non-routine school improvement problems they should make sure goals are explicit and ambitious but not unrealistic.

- **Helping educators solve problems more effectively**

  Transformational leadership is valued by some, argues Leithwood at al. (2006:155) because it stimulates educators to engage in new activities and put forth that "extra effort". Transformational leadership uses practises primarily to help staff members work smarter, not harder. These leaders share a genuine belief that educators as a group could develop better solutions than the principal could alone.

The abovementioned interventions focus on helping educators develop and maintain a collaborative professional culture. The principal as a transformational leader will involve educators in collaborative goal-setting, reduce educator isolation, utilise bureaucratic mechanisms to support change and share leadership with others by delegating power, and actively communicate the school's norms and beliefs.

The principal, as suggested by Leithwood et al. (2006:156) should foster educator development. This will result in internalising goals for professional growth. The process involves the helping of staff to develop and maintain a collaborative, professional school culture. Finally, the principal should be available to assist and help educators to solve their problems more effectively. The link between transformational leadership and school improvement is seen to be a collaborative school culture, where a common understanding is shared which ultimately results in improvement of work.

4.9 RESULTS

4.9.1 Research methodology

The research methodology pertaining to the population, sample and statistical techniques employed (including the choice criteria for this study) have been discussed in Chapter 1; Section 1.4). In addition, the biographical profile of the respondents has been discussed in Chapter 2 (Research Article 1 of this study). Please refer to these sections if required.

4.9.2 Statistical analysis

An exploratory factor analysis was conducted to identify seven unique factors present in the data and, of such, assess the discriminant validity of the measuring instrument. The principal component matrix was rotated by means of an orthogonal Varimax rotation. In determining the factors (constructs), Eigenvalues greater than 1, the percentage of variance explained and the individual factor loading was considered. The software programme SPSS 17.0 for Windows (SPSS Inc., 2009)was used for this purpose of statistical analysis. Cronbach alpha coefficients were calculated to assess the reliability of the identified factors (Field, 2007:666-668). Descriptive statistics and correlation coefficients were also used for calculations. The suitability of subjecting the data to a factor analysis was confirmed by the Kaiser, Meyer and Olkin measure for sampling adequacy and the Bartlett's test of sphericity.

4.9.2.1 The KMO test of sample adequacy and Bartlett's test of sphericity

The results of the KMO test of sample adequacy and the Bartlett's test of sphericity appears in the table below.

TABLE 4.6: KAISER MEYER OLKIN (KMO) MEASURE OF SAMPLING ADEQUACY AND BARTLETT'S TEST OF SPHERICITY

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.948
Bartlett's Test of Sphericity:	Approx. Chi-Square	12633.150
	df	.903
	Sig.	.000

Interpreting the table above, a very high KMO measure is 0.948. This means that the sample used is adequate and that the data can be used in further analysis. From the same table, it is also evident that the Bartlett's test of sphericity is satisfactory. This test returned a value of .000 which is less than the minimum required value of .005. This means that the data is suitable to be subjected to further analysis by means of multivariate statistical methods. From table 4.7, it is evident that the data can be subjected to a factor analysis. Resultantly, the factor table and the factor loadings appear below.

4.9.2.2 Exploratory factor analysis

The results from the rotated factor matrix appear in Table 4.8 below. A total of seven factors have been identified from the analysis.

TABLE 4.7: FACTOR TABLE – MANAGEMENT AND LEADERSHIP STYLE

Items	Management & leadership styles F_1	Financial security F_2	Management and leadership fairness F_3	Stressors F_4	Empowerment F_5	Job security F_6	Sense of control over work environment F_7
Management creates opportunities for staff and school environment	**.925**						
Management develops good relationships between all role-players in the school	**.907**						
Management fosters education development	**.922**						
Management encourages employees to be" team players"	**.907**						
Management empowers its employees	**.873**						
Management encourages staff to take responsibility for things they are in charge of, such as academic issues, cultural or extra-curricular activities	**.876**						
This institution is considered to be progressive in the years to come	**.808**						
The management team puts school matters first	**.778**						
The management team ensures that there is a strong link between transformational	**.771**						

Items	Management & leadership styles F_1	Financial security F_2	Management and leadership fairness F_3	Stressors F_4	Empowerment F_5	Job security F_6	Sense of control over work environment F_7
leadership and school effectiveness							
The management team is seen as innovative	**.773**						
Effective leadership is seen as a stepping stone in the progression of the institution	**.767**						
Meetings are carried out in a democratic way	**.797**						
Good financial management is seen as priority for the school	**.874**						
Management is inspirational	**.715**						
Dissemination of departmental information, policies and procedures are forthcoming	**.851**						
Management fosters collaboration among group members	**.741**						
Transformational leadership is seen as a priority in the institution	**.811**						
I have contact with my colleagues as part of my work	**.607**						
I am able to interact informally with colleagues during work hours	**.660**						

Items	Management & leadership styles F_1	Financial security F_2	Management and leadership fairness F_3	Stressors F_4	Empowerment F_5	Job security F_6	Sense of control over work environment F_7
Management comes across as having a laissez-faire approach	**.613**						
I am paid adequately for the work I do		**-.914**					
I am able to live comfortably on my salary		**-.874**					
My job offers me the possibility to progress financially		**-.800**					
The education department pays good salaries		**-.843**					
The management team is seen as being visionary			**.847**				
The management develops and maintains transparency, accessibility and representativity in terms of democracy			**.844**				
Management develops and supplies strategies to manage contingencies			**.819**				
Management ensures that tasks are done properly and does not use its authority to obtain results			**.808**				
Lead by “doing” rather than simply by			**.759**				

Items	Management & leadership styles F_1	Financial security F_2	Management and leadership fairness F_3	Stressors F_4	Empowerment F_5	Job security F_6	Sense of control over work environment F_7
telling							
Management leads by example			**.753**				
Management delegates duties equitably			**.743**				
The principal acts as an arbitrator, negotiator and conflict resolution officer			**.725**				
The teaching and learning process is becoming stressful				**.917**			
The behaviour and attitudes of the learners are making my job stressful				**.917**			
My job is considered very stressful				**.873**			
The conditions at work are a contributing factor to my stressors				**.776**			
I am able to discuss work-related problems with my direct supervisor					**.875**		
I participate in decisions about the nature of my work					**.864**		
I am clear on whom I should address within the education department for specific problems					**.847**		
I need to be re-assured that I will still be						**-.963**	

Items	Management & leadership styles F_1	Financial security F_2	Management and leadership fairness F_3	Stressors F_4	Empowerment F_5	Job security F_6	Sense of control over work environment F_7
employed in one year's time							
I need to be more secure that next year I will retain the same function level as currently						**-.942**	
My job gives me the opportunity to be promoted							**-.668**
I have direct influence on the school's decision.							**-.618**

None of the statements in Table 4.8 were discarded due to low factor loadings (below 0.40). The factors are identified, discussed and labelled as follows:

Factor 1 – Management and leadership styles

A total of 20 items loaded onto Factor 1, signifying that this factor is by far the most important factor. All of the items that loaded onto Factor 1 relate to management and leadership in one or more ways. A total of 17 of the 20 items loaded very heavily with factor loadings exceeding 0.70, while the majority ranges between 0.80 and 0.93. The factor is clear in its interpretation as management and leadership styles are prevalent in all the items, and the factor is thus labelled as *Managerial and leadership styles*. The variance explained by the factor is 47.04%. This high variance clearly shows that the respondents in the study regard management and leadership styles to be the core of the solution to improve the efficiency at schools in KwaZulu-Natal.

Factor 2 – Financial security

A total of four items loaded onto Factor 2, all with high factor loadings that exceed 0.80. All these items focus strongly on financial security of the educator. Closer inspection of these items show that these are all related directly to the remuneration of educators, meaning that the factor identifies financial aspects to be a part of the educators' stress profile. Worrisome is the fact that all these items portray negative factor loadings, which means that the respondents feel *that they do not receive adequate salaries, they do not live comfortably on their salaries, they do not progress financially in their jobs* and *they do not think the DOE pays good salaries*. As such, the factor is a negative one, and thus a contributor to stress in educators. The factor is labelled Financial security (albeit the lack thereof) and explains a variance of 8.93%.

Factor 3 – Management and leadership fairness

A total of eight items loaded onto Factor 3. All of the items have factor loadings that are higher than 0.70, while half of these exceeds 0.80. High factor loadings are thus recorded on this factor. The items relate to aspects such as *vision, contingencies, leading by action rather than words* and *example,* shows competence and fairness as concepts. However, the items related to *democracy, arbitration, transparency,* swings the label in favour of its current

label, namely Management and leadership fairness. A variance of 6.84 % is explained by this factor.

Factor 4 – Stressors

There are four items loaded onto this factor. Two items exceed the high factor loadings of 0.90. These items deal with *stressful teaching and learning processes* and the *attitudes of learners* that contribute to the overall job being stressful. The other two items also have high factor loadings (exceeding 0.70 and 0.80 respectively) and deal with *overall job stress being regarded as very high* and *stressful working conditions*. All of these stressors have been rated very high by the respondents and this re-affirms the findings of previous studies by Jackson and Rothman (2006) and Jackson (2004). The factor is labelled *Stressors* and explains a variance of 5.89%.

Factor 5 – Empowerment

The three scenarios that loaded onto Factor 5 all revolve around the issues of educators being able to make decisions about the nature of their work, and to be able to discuss it with supervisors if needed. The respondents are also empowered by knowing who to address when higher authority is required. This inevitably results in accountability on the part of educators. The items loaded heavily onto the factor with factor loadings between 0.84 and 0.90. The factor is labelled as *Empowerment* and explains a variance of 3.89%.

Factor 6 – Job security

Only two items loaded very high onto this factor. Both items have factor loadings above 0.90. Both items feature aspects of job security and highlight the findings that educators need to feel secure in their jobs and require re-assurance with regard to employment and this is seen as a concern and a stressor for respondents. The items are non-financial (see Factor 2) and clearly separated from the previous factors. A variance of 3.41% is explained in this factor which is labelled as *Job security*.

Factor 7 – Sense of control over the work environment

The last factor in the analysis is identified by two items with factor loadings of 0.61 and 0.68. Both these items relate to a sense of control over the work environment and, therefore, should not be viewed as a concern by educators. However, closer inspection reveals that the factor loadings are negative, indicating that the respondents feel *they do not have a sense of control*,

and as such, the factor is clarified as a cause of educator stress. The factor is labelled as *Sense of control over work conditions*. A relative small variance of 2.57% is explained.

These factors have been labelled and contextualised in Table 4.9.

TABLE 4.9: FACTOR LABELS AND CONTEXTUALISATION

FACTOR	FACTOR LABEL	FACTOR REFERS TO:
F_1	Management and leadership styles	The styles of management and leadership and their ability to improve efficiency at schools
F_2	Financial security	The ability to prosper and be financially cared for by the job
F_3	Management and leadership fairness	Fairness and competent decisions in the work environment
F_4	Stressors	Situations that create a stressful work environment
F_5	Empowerment	Ability to make decisions and refer to authority
F_6	Job security	Reassurance that employment is lasting and certain.
F_7	Sense of control over the work environment	The variety in work, opportunities to learn and there is independence of work.

The cumulative variance explained for all seven factors is very favourable (78.6%). Individual variance of the factors as well as the descriptive statistics of items is shown in Table 4.9.

TABLE 4.9: DESCRIPTIVE STATISTICS: RELIABILITY AND VARIANCE EXPLAINED

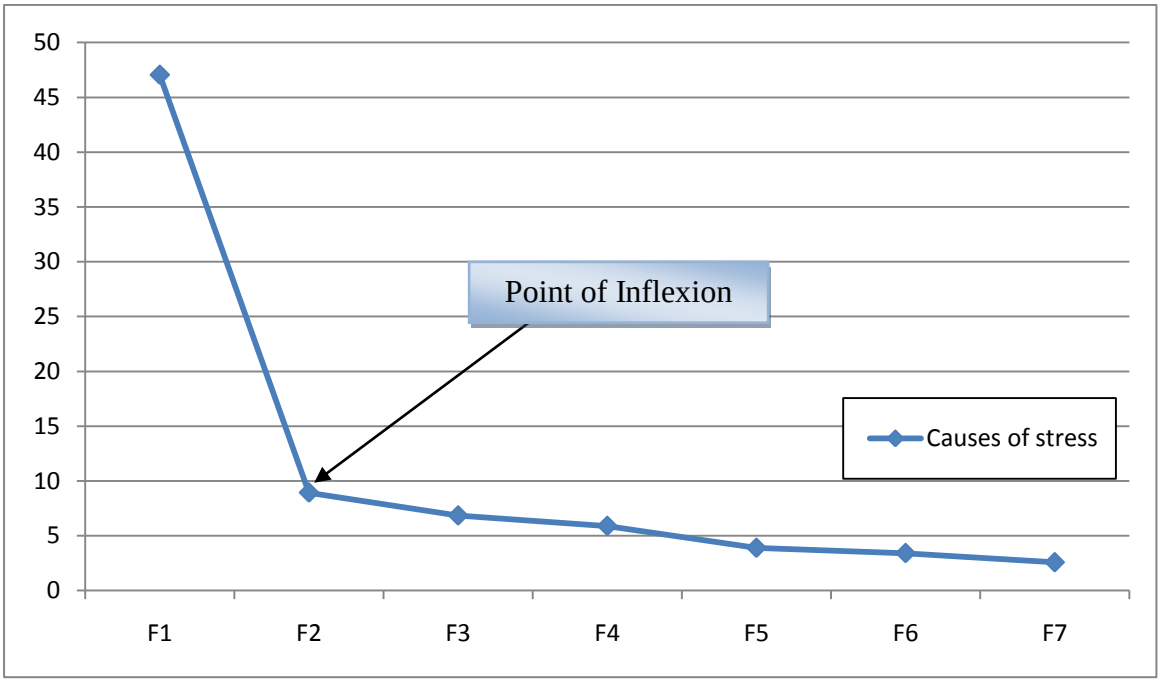
Factors	Items	Mean	SD	Cronbach Alpha	Variance explained
Management and leadership styles	344	3.05	1.14	.982	47.04
Financial security	341	3.84	1.02	.925	8.93
Management and leadership fairness	342	2.83	1.08	.949	6.84
Stressors	342	1.87	0.96	.903	5.89
Empowerment	340	2.62	1.08	.860	3.89
Job security	339	3.42	1.23	.910	3.41
Sense of control over the work environment	342	3.25	1.02	**.525**	2.57

The reliability coefficients of the factors, as depicted in Table 4.10, are discussed in section 4.6.2.3.

The *Point of Inflection* is shown in Figure 4.2 below. This figure presents the factor extraction associated with a variance which indicates the substantive importance of a factor. It is important to note that when analysing a graph of this type which represents the factors of the study, the larger variance explained is considered for discussion. Generally, by graphing these values, the relative importance of each factor becomes apparent. In this instance, the factor one which represents *Management and leadership styles* under the causes of stress has a high explained variance (47%) while the next factor decreases significantly in its variance explained. The point of inflexion thus graphically represents the point of additional marginal variance explained by the next factor declines and the curves flatten. The factors that follow are regarded to be less significant than the factors before the point of inflexion because of their lower marginal and absolute contribution to the variance explained (Field, 2007:633). This means that management should devote more attention to those factors explaining higher variance and also those before the point of inflexion as such managerial inputs should yield

better returns. Once these factors have been tended to, the focus could move to the remaining factors.

FIGURE 4.2: POINT OF INFLEXION



4.9.2.3 Reliability analysis

Refer back to Table 4.10 where the descriptive statistics as well as the Cronbach Alpha coefficients for the factors are shown. Factors 1, 2, 3, 4, 5 and 6 all have Alpha coefficients of well above the minimum required reliability level set for this study, namely an Alpha coefficient of 0.70. (Actually, these factors are all returning excellent reliability coefficients in excess of 0.90). This means that these factors have an excellent level of reliability and internal consistency. These high reliability coefficients concur with the literature on the causes of stress of the educators (Jackson & Rothman 2006; Jackson, 2004). The high Alpha coefficients are not unexpected since the questionnaire employed (ASSET) is a tried and tested data collection tool that has been developed specifically to measure stress in the workplace and verified by numerous studies by Jackson and Rothman (2006) and Jackson (2004).

However, Factor 7 (*Sense of control over the work environment*) requires closer scrutiny as it has an Alpha coefficient below 0.70 ($\alpha = 0.53$). Another reliability level is presented by Kline

(in Field, 2005:666), who states that that an Alpha value of 0.58 is acceptable when ratio scales (such as the Likert-scale used in this research) are used. However, even this lower margin of reliability is not met by the factor, and as such this factor has a lower than desired reliability coefficient. Field (2007:666-667) states a lower Alpha coefficient also does not disqualify a factor from the set of identified factors. It merely means that once the study is repeated under similar conditions, the factors with lower reliability coefficients are less likely to reappear than those factors with a higher reliability coefficient. This factor should, therefore, be interpreted with this limitation in mind.

4.9.2.4 Inter-factor correlations

Table 4.12 shows the correlations between the different factors as calculated by the Pearson Correlation Coefficient. Evident from Table 4.11 below is the fact that all factors (except factors and 6) are significantly correlated with one another on the significance level 0.01. A strong correlation in excess of 0.50 exists between Factors 1 and 3 (0.642). No other correlations exceed the 0.50 coefficient between two factors. Regarding practical significance, only two practically significant correlations exist, namely between Factors 3 and 6 (0.114) and Factors 4 and 5 (-0.121). Both these correlation coefficients are very low. The remainder of the table is interpreted in similar fashion. As suggested in paragraph 1.5.5, Pearson correlations of 0.30 and higher is accepted in this study. These correlations are printed in bold in table 4.10.

Table 4.10 follows on next page

TABLE 4.10: INTER-FACTOR CORRELATIONS

		F1	F2	F3	F4	F5	F6	F7
Factor 1	Pearson Correlation	1	.252**	**.642****	**-.333****	**.384****	**.300****	**.405****
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	n	344	341	342	342	340	339	342
Factor 2	Pearson Correlation	**.252****	1	.186**	-.240**	.291**	.284**	**.485****
	Sig. (2-tailed)	.000		.001	.000	.000	.000	.000
	n	341	341	341	341	340	339	341
Factor 3	Pearson Correlation	**.642****	.186**	1	-.165**	**.401****	*.114**	**.300****
	Sig. (2-tailed)	.000	.001		.002	.000	.036	.000
	n	342	341	342	342	340	339	342
Factor 4	Pearson Correlation	**-.333****	-.240**	-.165**	1	*-.121**	-.044	-.159**
	Sig. (2-tailed)	.000	.000	.002		.025	.421	.003
	n	342	341	342	342	340	339	342
Factor 5	Pearson Correlation	**.384****	.291**	**.401****	*-.121**	1	.148**	**.345****
	Sig. (2-tailed)	.000	.000	.000	.025		.006	.000
	n	340	340	340	340	340	338	340
Factor 6	Pearson Correlation	**.300****	.284**	*.114**	-.044	.148**	1	**.315****
	Sig. (2-tailed)	.000	.000	.036	.421	.006		.000
	n	339	339	339	339	338	339	339
Factor 7	Pearson Correlation	**.405****	**.485****	**.300****	-.159**	**.345****	**.315****	1
	Sig. (2-tailed)	.000	.000	.000	.003	.000	.000	
	n	342	341	342	342	340	339	342

** Correlation is statistically significant 0.01

* Correlation is practically significant *r ≥ 03.0 (medium effect)*

* Correlation is practically significant *r ≥ 05.0 (large effect)*

4.10 DISCUSSION

The aim of this study was to investigate how traditional school leadership/management can be guided towards transformational leadership. Focus has been placed on the dualist role of the principal and the educator. The results from the respondents have indicated that there is a lack of proper leadership and guidance from the principal who plays a pivotal role in the schooling system.

The nature of leadership has evolved from the traditional autocratic and bureaucratic styles. There is a strong link between transformational leadership and school effectiveness and the following factors are connected to effective schools, professional leadership, shared vision and goals, a good learning environment, concentration on teaching and learning, having high expectations, monitoring progress and purposeful teaching.

Schools are seen as the building blocks for transforming the education system and leadership/management will play a vital role in this process. Based on personal qualities from traditional leadership research, transformational leadership grooms followers into future leaders. This form of leadership focuses on inspiring subordinates to consider group rather than self interest, concerns from physical to psychological needs and embrace worthwhile change. This type of change fosters empowerment of educators and encourages teamwork which will ultimately contribute towards the school's improvement and the school's community will develop a sense of ownership (Du Plessis et al., 2007:23). In addition, transformational leadership positively contributes to lower stress levels in educators.

4.11 RECOMMENDATIONS

The following strategies can be adopted in order to alleviate stress and improve work performance in relation to transformational leadership. From the literature review, a number of recommendations have been formulated on educational transformation leadership for the educators in the KwaZulu-Natal province. These recommendations focus primarily on the role of the principal (Nconco, 2006: 45; Kark & Van Dijk, 2007:500; Landsberg; 2007:56; Montana & Charnoy, 2008:98):

- Visit each classroom every day, assist in classrooms and encourage educators to visit each other's classes.
- Involve the whole staff in deliberating on school goals, beliefs and visions at the beginning of the year.
- Action research teams or school improvement teams as a way of sharing power.
- Survey the staff often about their wants and needs. Be receptive to educators' attitudes and philosophies. Use active listening and show people that you really care about them.
- When hiring new staff, let them know you want them actively involved in school decision-making. Hire educators with a commitment to collaboration.
- Use bureaucratic mechanisms to support educators, such as funding money for a project or providing time for collaborative planning during the work day.
- Protect the educators from the problems of limited time, excessive paperwork, demands and guide them on how to work around these problems.
- Let educators know they are responsible for learners, not just their own classes.
- Transformational leadership practices have a sizeable influence on educator collaboration. Transformational leadership should be seen as only one part of a balanced approach to creating high performance in schools.

Transformational leaders have the ability to lead changes in the organisation's vision, strategy and culture as well as promote innovation in products and technologies. Thus, the goal of transformational leaders is to inspire followers to share the leader's values and connect with the leader's vision. This connection is manifested through the genuine concern leaders have for their followers and the followers giving their trust in return.

4.12 CONCLUSION

The literature review has revealed in no uncertain terms that the nature of leadership evolved from the traditional, autocratic and bureaucratic styles to the contemporary styles. The ideals contained in the policy that was mentioned earlier and the realities faced by school principals are difficult to reconcile. There are too many variables involved. The future is uncertain, but it is certain to pose a variety of

challenges in terms of the institution. The principal as an effective leader needs to have an extensive set of skills which needs to artfully integrate into the specific situation, but that may be beyond the abilities of a neophyte manager or inept leader (Smith, 2007:123).

Transformational leadership has been observed to be correlated with affective and normative commitment when practised. Transformational leadership will likely continue to evolve in the years to come and this will likely see even greater uncertainty and ambiguity. In the forthcoming years, we are likely to see even greater diversity and eclecticism both in philosophical beliefs and practical approaches to leadership. It is imperative that educational leaders support their theories with empirical evidence that supports educator achievements. The ultimate aim should be to ensure that effective leadership/management makes a positive impact in the schooling system that will improve the performance of all stakeholders.

Transformational leadership is definitely a complex issue in South African schools. Issues such as racial tension, cultural differences, differing attitudes and systems, different norms and values, apathy towards change, poverty, corruption, nepotism, effects on apartheid, lack of resources and poorly trained educators all contribute to the complexity. A shift towards transformational leadership is required for schools to succeed and produce the kind of changes envisaged in the Constitution (Act 108 of 1996) and the Schools Act (Act 84 of 1996) and other related documents (Republic of South Africa, 1996a; Republic of South Africa, 1996f). A probable approach could be to enhance efforts to link theory with practice. This approach should begin with developing leaders, empowering individuals, developing schools as a learning environment, managing through participation, collaboration and joint decision-making.

REFERENCES

ARMSTRONG, M. 2004. Human resource management theory and practice. London: Bath.

BALSTER, C.R. 2002. Transformational leadership, ERIC Digest Clearinghouse [Web:] http://www.vtaide.com/png/ERIC Date of access: 17 Nov. 2009.

BASS, B.M. 2008. Classical models of leadership traits and behaviour. [Web:] www.htpp:// infed.org/leadership/traditional_leadership.htm Date of access: 12 Jul. 2009.

BONO, J.E. & JUDGE, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5):554-571.

BURNS, J.M. 1978. Transforming leaders: A new pursuit to happiness. New York, NY.: Atlantic.

BYCIO, P. 2009. Are the best leaders both transformational and transactional? A pattern-oriented analysis. *Leadership,* 5(2):237-259.

CALDWELL, B.J. & SPINKS, J.M. 2006. Principal matters. Excellence in leadership: demands on professional school principal. [Web:] http://www.vassp.org.au/webpages/Principal-Matters/Principal-Matters-Winter-2009.pdf Date of access: 10 May 2010.

CALITZ, L., FUGLESTAD, O. & LILLEJORD, S. 2007. Leadership in education. Sandown: Heinemann.

COETZEE, I.E.M. & WHITE, C.J. (editors). 2004. Human resource management for Masters degree students in education. Pretoria: Ithuthuko Investments.

CONGER, J.A. & KANUNGO, R.N. 1994. Charismatic leadership in organisation: Perceived behavioural attributes and their measurement. *Journal of Organisational Behaviour*, 15(5):149-452.

CROPANZANO, R. & MITCHELL, M.S. 2005. Social exchange theory: the art of leadership. An interdisciplinary review. *Journal of Management*, 31:874-900.

DAVID, T. & GANAGE, P. 2007. Building trust amongst educational stakeholders through participatory school administration through transformation. *Management in Education*, 21(1):15-22.

DU PLESSIS, P., CONLEY, L. & DU PLESSIS, E. 2007. Teaching and learning in South African schools. Pretoria: Van Schaik.

EDUCATION LABOUR RELATIONS COUNCIL. 2003. Policy handbook for educators. Pretoria: Universal Print Group.

ELRC ***See*** EDUCATION LABOUR RELATIONS COUNCIL

FIELD, A. 2007. Discovering statistics using SPSS. 2nd ed. London: Sage.

FOSTER, R. & YOUNG, J. 2004. Leadership: current themes from educational literature, *The CAP Journal*, 12:29-30.

FOTI, R.J. 2009. Are the best leaders both transformational and transactional? A pattern-oriented analysis. *Leadership,* 5:237-259, May.

FOTIO, R.J. & HAVENSTEIN, N.M.A. 2007. Pattern and variable approaches in leadership emergence and effectiveness. *Journal of Applied Psychology*, 92:347-355

GKOLIA, C., SWITZER, J. & BRUNDETTE, M. 2006. Creative learning/collaborative transformational leadership. *Management Education*, 20(4):25-29.

GRANT, C. 2006. Emerging voices on teacher leadership: some South African views. Pretoria: Educational Management Administration.

HUEN, YU. 2004. Leadership and management in education: developing essential skills

IVANCEVICH, J., KONOPASKE, R. & MATTESON, M. 2007. Organisational behavior and management. New York, NY.: McGraw-Hill Irwin.

JACKSON, L. & ROTHMAN, S. 2006. Work-related well-being of educators in district of North-West Province. *Perspectives in Education*, 23(3): 107–122, September.

JACKSON, L.T.B. 2004. An adapted model of burnout for teachers in South Africa. Unpublished doctoral thesis. Potchefstroom, Potchefstroom University for Christian Higher Education.

JOHNSON G. & SCHOLES, K. 2002. Exploring corporate strategy. London: Prentice Hall.

JOHNSON, G. & SCHOLES, K. 2006. Exploring corporate strategy – text & cases. 6th ed. London: Prentice Hall.

JUDGE, T.A. & PICCOLO, R.F. 2004. Transformational and transactional leadership. *Journal of Applied Psychology*, 89(5):755-768.

KARK, R. & VAN DIJK, D. 2007. Motivation to lead, to follow: the role of the self-regulatory focus on leadership processes. *Academy of Management Review*. 32(2):500-528.

KOUZES, J. & POSNER, B. 2003. Leadership practices inventory. 3rd ed. San Francisco, CA.: Wiley.

KYEYUNE, R. 2008. Strategy for school leadership development in Africa learning for collaborative experience and research. A paper presented at the 5th ACP Conference. Kampala, Uganda

LANDSBERG, M. 2007. The tools of Leadership. London: Harper Collins.

LAPPIERRE, L.L. 2007. Supervisor trustworthiness and subordinates' willingness to provide extra-role efforts. *Journal of Applied Social Psychology*, 37(2):272-297.

LEITHWOOD, K. & RIEHL, C. 2003. What we know about successful school leadership. Philadelphia, PA: Laboratory for Student Success, Temple University. Longman.

LEITHWOOD, K., JANTZI, D. & STEINBECH, R. 2006. Making schools smarter - leading with evidence. 3rd ed. Los Angeles, CA.: Corwin Press.

LEITHWOOD. K. & JANTZI, D. 2004. Transformational leadership: how principals can help school cultures. Paper presented at annual meeting of the Canadian Association for Curriculum Studies. Victoria, British Columbia, June 1990. p49-67.

LIM, B.C. & POLYHART, R.E. 2004. Transformational leadership: relations to the five factor model and team performance in typical and maximum context. *Journal of Applied Psychology* 89(4):610-621.

LLOYD, C. A. 2008. The impact of leadership on student outcomes: an analysis of the differential effects of leadership types. *Educational Administration Quarterly,* 44:635-674 Dec.

LOOCK, J.C. & GROBLER, W. 2009. Decision-making and accountability on leadership. Cape Town: Sodium Group.

LOWE, K.B. & GARDNER, W.L. 2000. Ten years of the leadership quarterly: Contributions and challenges for the future. *Leadership Quarterly*, 11(4):459-514.

LUSSIER, R.W. & ACHUA, C.P. 2007. Leadership theory, application and skill development. Mason: Thomson Higher Education.

MACDONALD, N. 2007. Educational Management. *Institute of Archaeological research*, 56(2):234-245.

MARKS, M. & PRINTY, S. 2003. Principal leadership and school performance: An investigation of transformational & instructional leadership. *Educational Administration Quarterly*, 39(3):370-397.

MITCHELL, R. & TUCKER, S. 1992. Leadership as a way of thinking. *Educational Leadership*, 49(5):30-35.

MONTANA, P.J. & CHARNOY, B.H. 2008. Leadership: theory and practice. Cape Town: Cengage Learning.

MUJIS, D. & HARRIS, A. 2006. Improving Schools to through Teacher leadership, New York, NY.: McGraw Hill.

NAIDU. A., JOUBERT, R., MESTRY, R., MOSOGE, J. & NGCOBO, T. 2008. Education management and leadership – a South African perspective. Cape Town: Oxford University Southern.

NCONCO, F. 2006. A comparative study of leadership and management approaches. A dissertation submitted in fulfilment for degree of doctor of education, Nelson Mandela Metropolitan University.

NEL, P.S., VAN DYK, P.S., HAASBROEK, G.D., SCHULTZ,H.B., SONO, T. & WERNER, A. 2006. Human Resource Management. 6th ed. Cape Town: Oxford University.

NGUNI, S., SLEEGERS, P. & DENESSEN, E. 2006. Transformational and transactional leadership effects on teachers' job satisfaction, organisational commitment, and organisational citizenship behaviour in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17(2):145-177.

NORTHOUSE, G. 2007. Leadership theory and practice. 3rd ed. London: Sage.

PANDOR, N. 2009. Parliamentary address. *Government Gazette*, 526(32133). Pretoria. 17 Apr.

POPLIN, M. S. 2003. The leader's new role: looking to the growth of teachers. *Educational Leadership*, 49(5):10-11, February.

REPUBLIC OF SOUTH AFRICA. 1996a. South African Schools Act no. 84 of 1996. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996b. The Bill of Rights of the final Constitution of the Republic of South Africa. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996c. South African Schools Act no. 27 of 1996. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996d. South African Council of Educators Act no 31 of 2000. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996e. Employment of Educators Act no 76 of 1998. Pretoria: Government Printers.

REPUBLIC OF SOUTH AFRICA. 1996f. Constitution of South Africa Act 108 of 1996. Pretoria: Government Printers.

REYNOLDS, R. 2010. Abhisit on sufficiency and corruption [Web:] http://asiapacific.anu.edu.au/newmandala/2010/11/12/abhisit-on-sufficiency-and-corruption/ Date of access: 20 Feb. 2011.

ROWE, S. 2007. Leadership characteristics of an excellent principal in Malaysia. [Web:] www.ccsenet.org/journal/index.php/ies/article/download/2958/3545 Date of access: 12 Jan 2011.

SAGOR, R.D. 1992. Three principals who make a difference. *EJ,* 439(277):13-18. Feb.

SING, J. 2009. Two faces of leadership. [Web:] effective-training-development.co.uk/the-two-faces-of-leadership. Date of access: 12 Feb. 2011.

SMITH, M. 2007. Fundamentals of Management. London: McGraw Hill.

SPSS INC. 2009. SPSS 17.0 for Windows. Chicago, IL. [Web:] http://spss.com/software /statistics. Date of access: 10 Apr. 2010.

SWANEPOEL, B., ERASMUS, B., VAN WYK, M. & SCHENK, H. 2003. South African human resource management: theory and practice. 3rd ed. Cape Town: Juta.

TORRINGTON, D. & WEIGHTMAN, H. 2007. The management of secondary schools. New York, NY.: Prentice hall.

VECCHIO, R.P, JUSTIN J.E. & PEARCE C.L. 2008. The utility of transactional and transformational leadership for prediction and performance. *Journal of Organisational Psychology*, 81(3):71-82.

WALUMBWA, F.O, ORWA, B, WANG, P., & LAWLER, J.J. 2005. Transformational leadership, organisational commitment, and job satisfaction: A comparative study of Kenyan and U.S. financial firms. Human Resource Development Quarterly, 16(2):235-256.

YUKL, G. 2009. Using coaching to enhance the effects of behavioral feedback to managers. *Journal of Leadership and Organisational Studies*, 17:363-369. Nov.

CHAPTER 5

ARTICLE 4:

COMPARATIVE ANALYSIS OF THE CAUSES OF EDUCATOR STRESS BETWEEN THE PROVINCES OF NORTH WEST, FREE STATE AND KWAZULU-NATAL

ABSTRACT

This article provides an overview of the studies of Jackson (2004), Jackson and Rothman (2006) and Van Wyk (2006) which identifies the causes of stress among educators. These studies reveal that stress among educators has been researched for a number of years. This is as a result of the drastically changing work environment in the teaching profession in South Africa. The keystone in the educational edifice is doubtless the educator. Schools are the nurseries of the nation and teachers are the architects of the future. A comparative study has been undertaken on the causes of stress of educators in the North West, Free State and KwaZulu-Natal. A similar questionnaire was used for all three studies that were conducted in the three provinces. In this article, a cross-sectional study was undertaken in the Free State (n = 469), North West (n = 266) and KwaZulu-Natal (n = 350). Perceptions and behaviour regarding the causes of stress within the education sector was investigated. The impact on educators was also highlighted. A comparative factor analysis was utilised in all three studies. Although seven factors have been identified in North West province and KwaZulu-Natal, the Free State identified only five factors with the items tested as being similar. The factors were classified as pure and non-pure factors. The results indicated substantial variations on the causes of stress across the individual difference variables (for example, gender, age, education, marital status and job levels).

The article offers conclusions and recommendations which are based on the findings of the three studies with the aim to highlight the discrepancies.

Key terms: educators stress, causes of stress, comparative analysis, pure factors.

5.1 INTRODUCTION

This article deals with research conducted on the causes of educator stress in North West province (Jackson, 2004), the Free State (Van Wyk, 2006) and this research study in KwaZulu-Natal (Naidoo, 2011). A comparative analysis was done on the findings of all three of these studies. All of these studies have focused on the causes of stress to the educators. Both Jackson (2004) and Van Wyk (2006) focused on burnout, whilst this study investigated the impact of stress on work performance. These studies encompass aspects such as work stress, burnout, engagement, work performance and individual level variables, such as optimism, which may act as moderators in the stress process.

Education is a building block for a prosperous society. Generally, the country's performance focuses on three main areas namely: access to education, quality of education and human capital. Research on economic growth has found human capital to be the engine for growth, making a case for the non-diminishing effect of education on the rising Gross Domestic Product (GDP) levels (CEPD, 2010:5).

Using the GDP as a measure, education in South Africa gets a proportionally big slice of the budget (5.3%) when compared to the BRIC countries (Brazil 4.2%, Russia 3.8%, India, 4.1% and China 3.4%) (Nationmaster, 2011). This is approximately 20% of the total government expenditure. In 2008/2009 the National budget awarded education R140.4 billion, which accounts for 18.5% of total spending. More money is always needed to address the huge backlog left by the years of apartheid education. Although today's government is working to rectify the imbalances in education, the apartheid legacy remains. The greatest challenge is the poorer rural provinces like the Eastern Cape and KwaZulu-Natal (Budlender & Proudlock, 2009:54).

According to Small (2009:1), the reality of every educator trying to make even a modest attempt at this profession, is subjected to a life of almost constant stress, overwork and, at times, emotional exhaustion. This is attributed to the storm of new and increasingly unrealistic demands. This, coupled with a noticeable decline in support from many principals and parents, is contributing to a growing incidence of illness among teachers, including mental illness due to work-related stress. Educators are dealing with more high-need students, with more multicultural issues and with no-fail policies.

The continuous exposure to events such as high job demands, lack of job resources, change, competitiveness and rivalry, can result in stress, burnout and poor work performance. The workplace today is undergoing immense changes. Among the changes and demands educators have to cope with are rationalisation of personnel, specialisation which is increasing, the growing scope of syllabi and an increasing number of learners per class. This article draws a comparison between the causes of stress in the three provinces mentioned earlier.

5.2 AIM OF THE ARTICLE

The aim of this article is to compare the results obtained in this study to the results obtained in similar studies in other provinces of South Africa, namely the North West and Free State. By performing a comparative analysis, it would be possible to determine if the results obtained in KwaZulu-Natal province (as well as the other two provinces) are isolated or localised to specific provinces or not. If the results are localised within provinces, a provincial corrective strategy is required to rectify the educator stress phenomenon. If not, educator stress is a national problem that requires a national strategy by the DOE. This article, in essence, thus researches educator stress to determine if provincial or national interventions by the DOE would be required to alleviate educator stress.

5.3 STRESS AS A PHENOMENON

As discussed by Van Wyk (2006:43), stress is a part of life that is generated by continuous changes in one's life. Stress in the workplace is associated with a number of health problems in employees such as hypertension, type II diabetes, migraines and other headaches and a lower immunity system (Vézina, Bourbonnais et al., 2004:32). In addition, stress is also linked to low job satisfaction, reduced productivity and an increase in occupational accidents (Cooper et al., 2008:45). These negative consequences for employees affect the success of organisations and their competitive edge in the marketplace. Even if the employer cannot protect employees from the sources of stress arising in their private lives and personal problems, it can protect them from sources of stress emerging in the workplace.

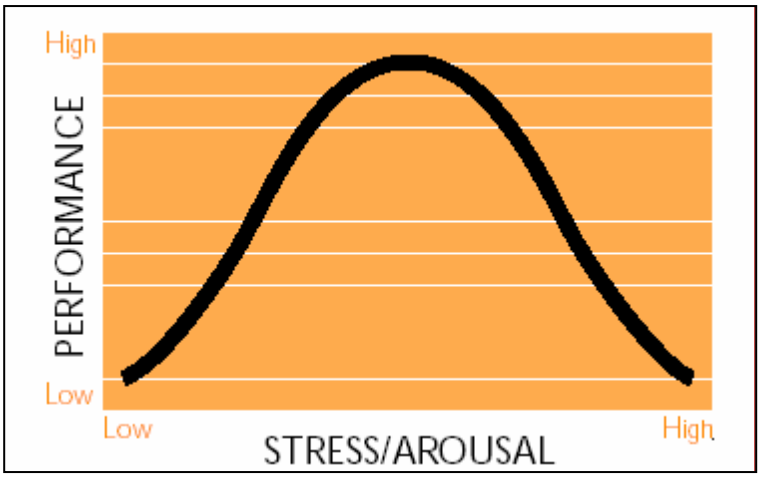
Given the scale of the stress-related problems in the workplace, and the costs associated with stress in the workplace, organisations see the implementation of corrective measures as a priority. Such measures include the training of individuals to better cope with stress and the sources thereof in the work environment. Despite a considerable increase in research focused on stress in the workplace between 2000 and 2007 (Lamontagne et al., 2007:268), a number of the following authors emphasise the need to intensify research into organisational-level work stress interventions (Cooper et al., 2008; Cox et al., 2007). Evaluating the organisational-level work stress interventions which are beyond traditional methods is necessary. Scientific texts on organisational-level work stress interventions are indeed quite rare, and much scarcer than individual-level interventions. As a result, it is difficult to ascertain which measures are likely to lead to an effective reduction in stress in the workplace and how these measures need to be implemented in order to achieve the anticipated results.

Skaalvik (2007:611) associates occupational stress with an increase in negative work-related outcomes, such as job dissatisfaction, ill health, absenteeism, higher turnover and lowered productivity. Zurloet et al. (2007:231), Perrewe (2006:68) and Jackson and Rothman (2006:76) indicate that impaired performance, or reduction in productivity, diminishing levels of customer service, health problems, absenteeism, higher turnover, industrial accidents, alcohol and drug usage and purposefully destructive behaviours at work are just some of the negative effects of occupational stress. Furthermore, stress seems to strike those in the service professions, such as teaching, disproportionately much compared to other workers (Biron et al., 2008:88).

A considerable amount of research has gone into stress, but a general working definition on the meaning of the concept stress is still not operationalised (Cox et al., 2007:79). As defined by Cox et al. stress from an organisational-psychological point of view, is described as: *the product of an imbalance between environmental demands and individual capabilities*. Stress is an adaptive response when a person's body prepares for or adjusts to a threatening situation. Stress is also defined as a non-specific response of the human body to any demand that is forced on it (Bond et al., 2006:54). Stress was first conceptualised by Selye (1985). Yoon (2002:485) took the concept further and defined stress as an energy-demanding negative emotional experience that usually follows a stimulus that is cognitively evaluated and interpreted as a threat. According to Selye (1985), the concept of stress was initially conceptualised in the early 1970s and 1980s. Stress then already began surfacing as a workplace problem.

Biron et al. (2008:443) provide a modernised definition of stress as the physical, mental or emotional reaction resulting from an individual's response to environmental tensions, conflicts and pressure.

FIGURE 5.1: RELATIONSHIP BETWEEN STRESS AND PERFORMANCE



Source: Nagel et al. (2004:255)

Nagel et al. (2004:255) note that it is important to understand that although stress may be necessary and positive and it can also be negative and harmful. Figure 5.1 shows the general relationship between the level of stress and the level of performance. Whether positive or negative, physical or mental, the body's reaction to stress can be described by three stages:

1. **Alarm Reaction Stage** - the body identifies and first reacts to the stress. In this stage, the body first releases hormones that help in the defence against the stressor.
2. **Resistance Stage** - the body continues to resist the stressors as they persist. If the stressors continue and there is a consistent state of resistance, there is potential to move into the third and final stage.
3. **Exhaustion Stage** - the body and mind are no longer able to make the necessary adjustments to resist the stressors and there is physical and/or mental exhaustion. The focus for the remainder of this study is on negative physical and mental stress and specifically reviewing the persistent stressors that push teachers into the third stage and ultimately to exhaustion.

Research by Forrest J. Troy (in Noll, 2006) has shown that along with service men, social workers and linguists, teachers have surfaced at the start of the new millennium as the most afflicted with rising stress. A shortage of teachers and increasing student enrolment is enough to create a highly stressful profession, but research shows that there are many other stressors unique to the teaching profession. In fact, Troy (in Noll, 2006:78) wrote: *Every possible societal malfunction affects the classroom – drugs, alcohol, divorce, gangs and poverty*. (Note that not all these stressors are prevalent in every classroom.)

As described by Gold and Roth (1993:177) in their study, stress refers to a condition of disequilibrium with the intellectual, emotional and physical state of the individual. It is generated by one's perceptions of the situation, which can result in physical and emotional reactions. It can be either positive or negative, depending upon one's interpretation. Stress could thus be defined as a reaction, be it mental, emotional or physical, to various perceived situations that could have an impact or influence, be it physical or psychological, on an individual. In this study, stress will be studied as a work-related phenomenon. Therefore, occupational stress is defined as a person's reaction to various external influences, such as the characteristics of the job. Stress among educators has been receiving an immense amount of international attention for quite some time (Stoeber & Rennert, 2008:37). These authors also indicated that educator stress could be associated with a range of causal factors, including those intrinsic to teaching, individual vulnerability and systemic influences. More than twenty years ago it was noted that educators' work was becoming more complex and more demanding. They also mentioned that the role of educators was becoming less easily defined and that variables intrinsic to the job were becoming more complex (Greenberg & Baron, 2008:212).

In terms of specific stressors that educators experience, Richardson and Rothstein (2008:70) indicated that workload and long working hours have emerged as prominent stressors for educators in Britain and France. Furthermore, workload, or rather overload, has also been identified as a stressor among educators in Australia and Scotland. It comes as no surprise then that the stress phenomenon is also prevalent in the South African education sector. Increasing changes in education, like the new curriculum and outcomes-based education (OBE), where the educator should work as fast or slow as the learners, changes in the broader society, such as population increases, diversity in school populations, increases in cost of living and crime and its effect on learner behaviour, and changing conditions of service, including new rules and regulations from the Department of Education,

performance appraisal systems and demands of unions, are just some of the changes in the South African education environment that contribute to the stress that educators experience. Stoeber and Rennert (2008:37) further found that an increase in workload and the restructuring of the education system are adding to the enormous stress burden that educators are bearing.

Hill (2008:12) indicated that educators need to cope with an increased demand for specialisation, the growing scope of syllabuses and an increased number of learners per class. In a similar study done by Jackson (2004) in the North West province, various significant job characteristics were found that could contribute to educator stress. Increased working hours, improper equipment, redundant skills and constant changes are just some of the job characteristics that were identified as factors that could lead to stress.

Some of the studies undertaken by Van der Colff and Rothman (2009:6) focused on occupational stress of registered nurses. In addition, Viljoen and Rothman (2009) have also studied the occupational stress and ill health amongst university students, while Buys and Rothman (2009) also found that the job demands in the ministry needs to addressed. More recently, Malan and Rothman (2010) also undertook a study of occupational stress of hospital pharmacists. In the preliminary findings of a study on stress levels of educators, Malan (2011) found that the core causes of educator occupational stress are related to crime, workload, school environment and scholars' behaviour.

In the Free State province various studies such as Milner and Khoza (2008), Smith and Hoy (2007) and Khoza (2004) have been undertaken with the focus being on stress and performance. Milner and Khoza (2008:123) did a comparative study of teacher stress and school climate across schools with different matric success rates and the findings highlighted the educator stress and its impact on the results of the learners. Another study undertaken by Smith and Hoy (2007:556) reviewed the optimism of student achievement in urban elementary schools. Here too the educators played a pivotal role. Khoza (2004:133) also did a comparison of teacher stress, commitment and school climate in schools with different success rates. Van Dick and Wagner (2003:243) found high levels of stress among educators. They noted the presence of a variety of stressors that lead to educator burnout, including work pressure and poor remuneration. Educators also enter the education profession with high expectations, a vision for the future and a mission to help students learn.

An additional study was conducted in the Free State province (Van Zyl & Pietersen, 2004:77), where some biographical characteristics were found that could be used to determine stress among educators. Gender and marital status made significant contributions to educators' levels of stress, with females and married educators being the worst off. In another study in the Free State province, Motseke (2005:234) found that educators' gender, age and marital status could be used to determine stress among educators.

Educators, however, soon experienced a lack of discipline, a shortage of professional help, insufficient financial support, pressure from unions, education departments and school governing bodies, lack of community support, the poor image of the profession and role ambiguity (Gold & Roth, 1993). Van Zyl and Pietersen (2004:76) continued and identified various factors that can cause excessive stress among educators in the Vaal Triangle of South Africa. This includes factors like large numbers of learners per class, unsatisfactory evaluations by supervisors, time pressures due to workload, lack of learner discipline, poor salaries, conflict with regard to personal beliefs and expectations of the job, role ambiguity, overload and insufficiency, redundancy, retrenchments and cutbacks.

The popular press emphasises the stress problem to a degree where one cannot ignore the fact that a lot more research should be done on stress in the workplace, and specifically in the teaching profession. Even more importantly, the research should focus on formulating solutions for workplace stress. Newspaper headings such as: *R6m to help teachers fight stress* (Naidoo, 2005:7); *Profoundly sad, so many teachers are quitting* (Hill, 2008:6), *Campus violence makes many teachers leave* (Keating, 2005:10) which clearly indicates that South African educators are battling with stress. In the Free State province, stress contributes to 200 000 school days being missed by educators annually (Small, 2009:3).

5.4 STRESS AND BIOGRAPHICAL DIFFERENCES

Various studies, for example Corbin (2010:32), Small (2009) and Nelson et al. (2003), indicated that various biographical differences exist regarding the levels of stress among educators. International studies done in the United Kingdom and the United States found that gender could be used to determine stress. It was found that female educators were more prone to suffer from stress than their male counterparts (Corbin, 2010:33). Small (2009:3) also found that age could be used to determine

stress, with younger educators scoring higher on perceived levels of stress than their older counterparts. Nelson et al. (2003:123) found that educators with less experience are more prone to suffer from stress than those with more years of experience.

In productivity, diminishing levels of customer service, health problems, absenteeism, turnover, industrial accidents, alcohol and drug use and purposefully destructive behaviours (Leithwood, 2006:126) confirmed that those reporting high occupational stress and depression had health costs that were 2.5 times higher than those who were not. With such evidence mounting it is not surprising that civil law suits and workers' compensation claims for work stress-related disabilities are increasing.

According to Greenberg and Baron (2008:335), educators' work are becoming more complex and demanding. The roles of educators are not easily defined and the variables that come into play are growing more complex. Educators have to cope with demands such as the rationalisation of personnel, increased specialisation, the growing scope of syllabuses and a higher number of learners per class. Factors in the South African environment that contribute to the experience of stress of educators include increasing changes in education and society, and educators burdened with having to make a variety of modifications in their personal and professional lives. The aforementioned changes include, among others, population increases, diversity of school populations, increases in cost of living, crime and its effects on learner behaviour, conditions of service, new rules and regulations of the education department, curriculum changes, performance appraisal systems and demands of unions (Waldner, 2010:12).

Teachers in urban areas might have greater access to alternative work opportunities. Educators living in metropolitan areas are exposed to a variety of career opportunities and lifestyles, which could raise their aspirations in terms of careers and economic well-being, and encourage them to consider alternative options in terms of profession. Indeed, it was found that the proportion of educators who considered leaving their profession was higher in the Western Cape (73%) and Gauteng (68%) than in the other seven provinces (refer back to Table 3.2). The proportion of educators who were dissatisfied with their salaries and considered leaving was greater in the Western Cape (75%) and Gauteng (70%) than in the Eastern Cape (43%) and Limpopo (50%).

Challenging working conditions, such as heavy workload, could play a part in pushing educators from these provinces out of education. Of the educators who indicated that their workload was too high, more from the Western Cape (79%) and Gauteng (74%) than from provinces such as the Eastern Cape (49%) and Limpopo (55%) indicated that they thought about leaving the education profession. Also, more educators from the Western Cape (77%) and Gauteng (74%) than from KwaZulu-Natal (56%) and the Eastern Cape (46%), who felt that they had to perform tasks not in their job descriptions, had intentions to leave. Only educators who indicated that they had encountered increases in workload had to explain why their workload had increased. Increases in the number of learners per class (74%), the lack of parental involvement in aspects of their children's education (75%) and teacher shortages (68%) were reported as being responsible for heavier workload among educators in general. Interestingly, the results show that only 16% of educators related higher workload to absenteeism among colleagues (ELRC, 2009:15).

Educators are exposed to high workloads, with a resultant increase in stress and strain. At least one third of the educators seen as suffering from educator shortages are a direct or indirect result of stress-related issues in the educational environment (Johnson et al., 2009:15).

On 19th August 2010 a national indefinite strike was announced which was seen as a major blow to public education, and the efforts of the government to improve the quality of education was futile (Mokgatihe, 2010:2). Despite the fact that the strike took place 67 days prior to the commencement of the Grade 12 examinations, the Minister Angie Motseke announced a 67.8% Grade 12 pass rate for 2010. KwaZulu-Natal and the Free State each had a pass rate of 70.7% and North West was 70.5% (Mokgatihe, 2010:2).

Meanwhile, the strike threat comes against the background of a job market that continues to be under severe pressure. The economy, still struggling to recover from the 2008/09 recession, continues to shed jobs, albeit at a slower rate. Official figures recently released showed a loss of 61 000 jobs in the second quarter of 2010 compared to 171 000 jobs lost in the first quarter (IRLC, 2009:15-16). Whether this haemorrhage can be arrested any time soon remains to be seen, as South Africa continues to be affected by the ongoing economic turmoil in Europe, its biggest export market.

However, chief economist Mark Zandi at Moody's Analytics (Zandi, 2010) says local companies are unlikely to employ more workers in significant numbers until economic recovery seems more certain here and abroad. Job creation will depend heavily on particularly recovery in the local manufacturing sector, which in turn is dependent on the health of global demand. For the local components of this scenario, any paralysing strike in the public sector could have a negative knock-on effect. Another factor militating strongly against the current season of labour turmoil linked to the annual wage negotiations period is a warning just issued by the World Bank that South Africa's high labour costs are the major obstacle standing in the way of attracting the foreign investment required for job creation and fighting poverty.

The quality of South African education is ranked to be 78th in the world (according to the *World Index* as quoted by the LPI, 2010). The net primary enrolment standing at only 87% of the respective demographic, South Africa performs very poorly on this variable, placing the country 89th in the world. Similarly, there is just one teacher for every 31 primary school pupils, the 86th worst showing on this variable. Gross secondary enrolment is higher at 95%, which is in the top half of the Index, but enrolment falls to a low 15% at the tertiary level. Near gender equality in primary and secondary school has been achieved. Only two-thirds of South African citizens are satisfied with the quality of the local education, 77% believe children have the opportunity to learn and grow every day. South African workers have, on average, just 1.7 years of secondary education and six months of tertiary education, placing the country 65th and 78th, respectively on these measures in the Index (LPI, 2010).

Whether or not there are enough teachers to meet demand is a good measure of the health of the teacher education system. Badcock-Walters and Wilson (2006:22) report that attrition from the system as a result of teachers retiring, dying or leaving for jobs in other sectors, amount to approximately 5% per year. This means that South Africa needs between 20 000 and 30 000 new teachers every year over the next decade.

The Department of Education reports that in 2006 new teacher graduates provided less than 10% of the number of teachers required to teach in African languages in the Foundation Phase (DOE, 2006). However, shortages in student enrolments are not uniform across the country. A recent report by Patterson and Arends (2006:12) is titled: *Who Are We Missing? Teacher Graduate Production in South Africa, 1995–2006.* It appears that three central challenges must be addressed when considering the

issues affecting the supply and demand of teachers if government is to fulfil its constitutional mandate concerning the right to basic education. The **first** is to stabilise the teacher education system so that it recovers from the disruptive changes it went through and develops the capacity to provide quality teacher education for all new student teachers and practising teachers. The **second** is to make sure that school graduates from all corners of South Africa are equally able to enter teacher education programmes by putting strategies in place that improve access to youths living in rural communities. The **third** is to improve the status of teachers and conditions of service so that we rekindle the youths' interest in becoming teachers and remaining in the profession. Even though teacher education is now a national competence, changes in institutional forms may be needed that allow for a spread of providers, possibly linked through common administrative and governance systems, and making creative use of a range of teaching models suited to varied contexts (MacGregor, 2008:22).

In a media release, the MEC, Mchunu (2010), highlighted concerns regarding violent learners attacking educators, stabbings, shootings and abuse which are taking place in schools. The sad reality is that crime and violence are social evils that cannot be addressed by the Department of Education alone. The KwaZulu-Natal Education Department started an initiative during 2010, called the *Torch of peace* which urges parents, the community, educators and learners to speak and act against violence and abuse in schools (DOE, 2010). The concern also raised is that schools are becoming soft targets for criminals. He added that schools are there to provide a safe environment for teaching and learning to take place (DOE, 2010).

Furthermore, an investigation by Jackson (2006) into the number of days taken by educators in terms of leave in the North West province has revealed that the use of such leave increased between 339.27% (or 57 666 days), the number of educators using such leave by 170.88% (or 3 686 educators) and the number of resignations by 82.74% (or 139 resignations). In the North West province, a number of factors have been identified and the above research results indicate that stress plays a significant role in the resignations and absenteeism of educators. Therefore, it seems important to investigate the antecedents and consequences of stress of educators in the North West province (Jackson, 2004).

Educator stress is seen mainly as a negative effect with diverse psychological (for example, job dissatisfaction), physiological (for example, high blood pressure) and behavioural (for example, absenteeism) correlates. In the long run these negative stress effects could lead to physiological and

biochemical changes accompanied by stress, commitment and health of educators. Other levels of stress include:

- cognitive stress such as poorer quality decision-making, lower levels of creativity and impaired memory; and
- interpersonal stress, such as reduced levels of sensitivity, warmth, and study strain was divided into physical and psychological ill-health.

Seven stressors were identified through the use a questionnaire (Jackson, 2004; Van Wyk, 2006), namely:

- work relationships (poor or unsupportive relationships with colleagues and/or superiors, isolation and unfair treatment);
- work-life imbalance (for example: when work interferes with the personal and home life of individuals);
- overload (unmanageable workloads and time pressures);
- job security (fear of job loss or obsolescence), control (lack of influence in the way work is organised and performed);
- resources and communication (having the appropriate training, equipment and resources);
- pay and benefits (the financial rewards that work brings); and
- aspects of the job (sources of stress related to the fundamental nature of the job itself).

Commitment (including the individual's commitment to the organisation and the organisation's commitment to the individual) refers to an effect of stress. Poor health is an outcome of stress, which can be used to ascertain if workplace pressures have positive and motivating or negative and damaging effects. However, poor health may not necessarily be indicative of workplace stress. Individuals may, for example, be unwell because they choose not to lead a healthy lifestyle or may be unaware of how to do so (Small, 2009). In a study done by Perrewe (2006:55) it was found that work relationships, job security, resources and communication caused the highest levels of strain.

As indicated throughout this article it is noted that the presence of stress is also felt in the school environment. Over the past decade there has been a general recognition that many in the teaching profession are working under considerable stress. This is perceived to be mainly a result of the pressures caused by the rapid rate of change and increased responsibilities at school level (Saunderson & Oswald, 2009:50).

Stress affecting education staff arises from many of the same work environment sources (ILO, 2009):

- the intensive interpersonal relations which condition educational work;
- deep-seated changes in the content and modes of delivery of educational services;
- lack of autonomy; and
- demands for accountability about academic performance from educational users – learners, parents and political leaders.

Times have changed and the societies and cultures have drastically diversified, but the tasks of an educator are primarily the same, which is the transfer of knowledge to the next generation. Expectations from educators have, to a certain, extent become unreasonable. Teaching and learning are presently a demanding occupation with a lot of stress which includes meeting of deadlines and additional responsibilities (Burrows, 2009:19). Primarily, the role and responsibility of educators are multi-tasking in the present day school system. Changes such as new curriculums, challenges in class management and educator behaviour (to name but a few) in the schooling system have resulted in added managerial responsibilities for educators which include planning, executing instructional lessons incorporating outcomes-based education, assessing of learners and communicating with parents (Burrows, 2009:20-23).

Teaching has been identified as a highly stressful profession in the modern day by a number of studies (Rothman, 2006; Jackson, 2004; Viljoen & Rothman, 2009; Malan, 2011). The reasons for that are quite similar to other stressful occupations in the world. Research highlights that teachers' experience with respect to inclusive education is very limited, and that they do not have the skill and disposition to handle diversity (Biron et al., 2008:441).

The role of teachers in schools has become more varied and challenging. Research by Viljoen and Rothmann (2009:67) has shown that factors for stress include role overload, poor learner behaviour, lack of resources, the number of individuals for whom teachers are responsible, diversity in individuals with whom they have to work, resistance and lack of motivation of co-workers (Hill, 2008:3). Educators in South Africa are also faced with a workplace that is inundated by a myriad of factors which impinge on their effectiveness within the classroom. The reality of the education system has led to the attrition of educators due to resignations and premature retirement due to stress (Burrow, 2009:19).

For instance, teachers have to contend with taking responsibility for the high drop-out rate in high schools, poor results, high work load, poor status and poor salaries (Kuppan, 2009:1), role overload maintaining discipline, lack of resources, lack of time, excessive meetings, large class sizes, lack of assistance, lack of support, and hostile parents, inadequate teachers' training and resource allocation, lack of career development, lack of recognition, dissatisfaction with work policies or job insecurities, health issues, in particular high blood pressure, diabetes, alcoholism and HIV (Skaalvik, 2007:611).

The following problems face teachers as a consequence of recent government policies involving: rightsizing or downsizing of teachers, the banning of corporal punishment, redeployment of teachers, voluntary severance packages, early retirement and retrenchment. Radical changes in the education system are apt to take their toll on the well-being of the teacher corps as changes in social life and school practice brings about serious psychological adjustment problems (Milner & Khoza, 2008:126).

Some of the major problems facing teachers are due to the fact that the increases in responsibility have not been accompanied by appropriate changes in facilities and training in order to equip teachers with these new demands. Consequently, teachers may feel threatened by these new demands, thus becoming stressed. Various studies have highlighted that time pressure with regard to administrative demands and excessive paper work are major sources of stress for teachers, as there is inadequate time for preparation and unrealistic deadlines imposed, and issues concerning the workload of teachers (Hakanen et al., 2007:274).

Role overload, referring to the number of different roles an individual has to fulfil, can lead to excessive demands on the individual's time and may create uncertainty about the ability to perform

these roles adequately (Zurlo et al., 2007:231). They posit the view that being responsible for the work and performance of others, demands more interaction with others, and is thus more stressful than being responsible for equipment, budgets and other issues.

Role ambiguity refers to the extent to which employees lack clarity about their role or the task demands at work (Jon et al., 2009:89). It occurs when an employee does not understand or realise the expectations and demands of the job, or the scope of the role. Research evidence has shown that role ambiguity has been associated with tension and fatigue, intention to quit or actually leaving the job, and high levels of anxiety, physical and psychological strain, and absenteeism (Cooper et al., 2008:68). The stress arising from unclear objectives or goals can lead to job dissatisfaction, a lack of self confidence, a lowered sense of self-esteem, depression and low work motivation, increased blood pressure and pulse rate, and intentions to leave a job (Moore et al., 2006:309). According to Cooper et al. (2008:69), research has demonstrated a consistent link between role ambiguity in a job and high levels of psychological strain.

Previous research by Crossman and Harris (2006:78) indicates that inclusive education makes additional demands on teachers, and that teachers' sense of efficacy in including learners with disabilities in their mainstream classes, plays a defining role in the successful implementation of inclusive education. Inclusive education, as indicated by Arikewuyo (2004:195), changes the fundamental responsibilities of teachers in mainstream classes, and the need to cope with the change is listed as a major source of stress for teachers. According to Zurlo et al. (2007:235), role conflict arises when an employee experiences incompatible demands or incompatible goals surrounding tasks connected with their job which can induce negative emotional reaction due to perceived inability. This negative affectivity reflects a stable tendency to experience low self-esteem and negative emotional states; individuals have a gloomy view of the world, and may be more sensitive to stressful conditions (Johnson et al., 2008:178). In addition, the concept of self-efficacy, as indicated by Yoon (2002:489), states that individuals with low self-efficacy tend to react more to external events because they experience more uncertainty about the correctness of their perceptions and emotional reactions. These individuals often seek social approval by conformity with others' expectations, and tend to allow negative feedback on one area of their behaviour to generalise to other dimensions of their self-concept.

There is consistent evidence, as shown by Crossman and Harris (2006:80), that employees with more support from organisations and colleagues experience lower strain and burnout, and where an employee is faced with potentially stressful demands, conflicts and problems in the workplace, having support from others may reduce the impact of the pressures on the individual's well-being (Cooper *et al.*, 2002:70). Although research (Perrewe, 2006:55) found no evidence of buffering or found reverse buffering; where the presence of social support exacerbated the amount of stress experienced, Skaalvik (2007:618) indicates that support from colleagues and supervisors had a significant buffering influence on educator burnout, and feelings of isolation exacerbated the stress experienced.

Despite an increase in the number of learners per class in South Africa (Paulse, 2005:60) and the number of learners needing special education has increased, schools have not been successful in retaining teachers, specifically where teachers are faced with learners with emotional and behavioural disorders. Research by Cooper et al. (2008:70) reveal that excessive administration, lack of support, isolation from colleagues and dissatisfaction with parental support, are consistently cited as sources of stress among educators in these environments. These situations also lead to educator dissatisfaction.

Environmental factors causing stress are those systemic factors that are not intrinsic to teaching but depend on the climate of the educational institution or wider context of education including the political domain. Educators often cite the lack of government support, lack of information regarding changes, constant changes and the demands of the National Curriculum as amongst their greatest source of stress (Carlyle & Woods, 2005:86).

The abovementioned systemic factors play a role in addition to and the dynamics of the individual organisation. In addition to the changes, educators are also faced with having to deal with negative publicity, poor or low status, lack of reward or recognition, and social problems of pupils in the area in which the school is located. Gangsterism, as one of the key problem areas, has been the most widely publicised by the media (Medved, 2007:1).

Johnson et al. (2009:409) indicate that one of the major contributing factors to teacher stress is those arising from lack of rewards and recognition. Resultantly, the levels of dissatisfaction of South African teachers with regard to the reward system of the DOE, has been an ongoing battle for years. In 2004, South Africa witnessed its biggest strike in a single sector in history; in which the majority of the

800 000 unionised government employees (Cape Town: 50 000; Durban: 45 000 and Pretoria: 90 000) took mass action to protest against the derisory 6% wage offer increase. In 2007, another major strike was undertaken by educators who demanded a 12% increase whilst the government offered only 6%. However, government retaliated by making the assertion that workers did not understand the State's offer. The Chairman (Willy Madisha) of the South Africa Democratic Teacher's Union (SADTU), which has 230 000 members and represents almost two-thirds of the country's teachers, strongly condemned this response by government (SADTU, 2011). In 2010, another educators strike was inevitable when educators demanded an increase of 8.5%, together with a decent housing allowance. Once again, the DOE offered a lower percentage, namely that of only a 7% increase.

Remuneration, as one of the stressors in education, plays a role in educators leaving the job. In their research, Olivier and Venter (2003:186) found that respondents indicated that salaries cause a great deal of stress, especially taking into account the after-hours input their jobs demand from them and how negatively their salaries compare with those of people in the private sector and other government departments. That is perhaps the reason why some teachers embark on second jobs, mostly to the detriment of the school and the learners. In addition, the deterioration of conditions of service as well as the decline in infrastructure and the quality of service delivery in health and education have contributed in the exodus of teachers, to work overseas (Samodien, 2008:1). Other factors that also contribute to educators leaving the job, according to Duran et al. (2004:185), are:

- ongoing public criticism;
- the lack of respect for teachers as professionals by pupils, parents and society;
- the ongoing public scrutiny; and
- underscoring teacher burnout and stress.

The media is often critical of the shortcomings in the education system. The commentaries often imply that teachers' work is not complex, and that educators could expend more effort. These reports often exacerbate the stress experienced by teachers (Bond et al., 2006:88). All of these issues are not purposefully intended to paint a gloomy picture of the profession. It is a pity that the dedicated and committed educators are prevented from giving off their best due to all the negative issues. There are

also educators who are very passionate about what they do whilst some are forced to stay in the profession with the fear of losing their benefits as highlighted in the questionnaire.

5.5 RESEARCH OBJECTIVES

In order to formulate the objectives of this article, the general objectives of the previous studies are shown below:

- The general objective of the study undertaken by Van Wyk (2006) was to establish the relationship between burnout, engagement, job stress and the physical and psychological health of educators in the Goldfield region of the Northern Free State province.
- The general objective of the research undertaken by Jackson (2004) was to standardise the Maslach Burnout Inventory - General Survey (MBI-GS) and the Utrecht Work Engagement (UWES) for teachers in the North West province and to determine the levels of occupational stress, organisational commitment and ill-health**.**
- The general objective of the study undertaken by Naidoo (2011) was to investigate the causes of stress of educators in public schools in KwaZulu-Natal and how it impacts on work performance. Workplace stress results in poor performance which ultimately impacts on learners and the education system as a whole.

In relation to the general objectives of the studies, this article sets as primary objective the comparative analyses of the three studies:

This is reached by the secondary objectives, namely to compare the:

- Demographic profiles of the respondents pertaining to the studies;
- Factors identified by all three studies;
- Factors identified by two of the three studies;
- Factors identified by only one of the studies;
- Reliability of the factors within the studies; and to
- Determine the goodness of fit of the respective studies.

5.6 RESEARCH METHODOLOGY

Measures of occupational stress and biographical information, which were developed by the researchers, were administered to the target population. The proven educator stress questionnaire (Jackson, 2004) was administered in which certain items were generated by the researchers and others were taken over from previous research that describes educator stress (Jackson, 2004, Van Zyl & Pietersen, 2004). The items were placed on a five point Likert-scale (Field, 2007:618), ranging from 1 (strongly agree) to 5 (strongly disagree). A list of 48 items was generated to which educators were asked to respond. The dimensions include pace and amount of work, mental load, emotional load, work variety, opportunities to learn, work independence, relationship with colleagues, relationship with immediate supervisor, ambiguities at work, information, communication, contact possibilities, uncertainty about the future, remuneration and career possibilities. The biographical questionnaire was also administered in which participants were requested to give their age, years of experience, gender, marital status and home language.

The process of obtaining the information of all three instances permission was requested from the Director-General of each province to conduct the study. In the instance of the study in North West province and KwaZulu-Natal, assistance was requested from the district offices for the handing over of the questionnaires to the principals of schools and for the collection thereof. In the case of the Free State province arrangements were made for the questionnaires to be given directly to the principals of those schools that were randomly selected.

5.6.1 The sample

The sample for all three studies included the respondents from the various provinces. The responses differed slightly with the Free State province having the highest number of respondents Free State (*n = 469*), KwaZulu-Natal (*n = 350*) and North West (*n = 266*).

In the North West province most respondents were teaching in primary schools (63.4%) and secondary schools (29.18%). A total of 51.4% of the sample indicated Afrikaans as home language, while English and Setswana represented 23.1% and 11.0% of the sample respectively. The mean age and experience

(in years) of participants was 41.2 and 8.4 respectively. The mean score for intention to quit was 3.36, while frequency of thinking about quitting was 3.5.

In KwaZulu-Natal the participants were teaching in secondary schools (56.5%) and in primary schools (31.4%). Most participants' (47.71%) home language was English, whilst only 28.9% of the participants was isiZulu, 11.4% was Afrikaans and 2.5% other languages. The mean age of the participants was 42.6 years, while the mean length of work experience was 14.1 years. The mean score for intention to quit was 4.6, while frequency of thinking about quitting was 3.9%.

In the Free State a total of 43% of the sample indicated was an African language while English was represented 17.0% of the sample. The mean age (37.6) and experience (in years) of participants was 13.0 respectively.

All three of these studies have utilized the above measuring instrument to test the causes of stress and differentiation in the provinces KwaZulu-Natal, North West and Free State, respectively. The methodology used was factor analysis, where seven factors loaded in the study of KwaZulu-Natal and North West, whilst five factors loaded in the Free State study. The items that loaded per factor indicated a high correlation between the values.

5.7 RESULTS

Comparative analysis of the results of the two studies (Jackson, 2004; Van Wyk, 2006) to this study consists of:

- A demographic profile comparison; and
- Comparative analysis of the identified factors by means of:
    - The different factors that were identified in each study;
    - Their individual variance explained;
    - Identification of pure factors (identified by all three studies);
    - The correlation coefficients prevalent (where possible) between pure and non-pure factors where possible;

- Identification of non-pure factors (identified by two of the three studies);
- Identification of study-specific factors (factors identified by only one of the studies);
- Comparisons of the reliability coefficients (Cronbach Alpha's) of the identified factors; and the
- The cumulative variance explained by each study.

5.7.1 Demographic profiles

The demographic profile of the respondents of the three studies are summarised in Table 5.1 below.

Table 5.1 follows on next page

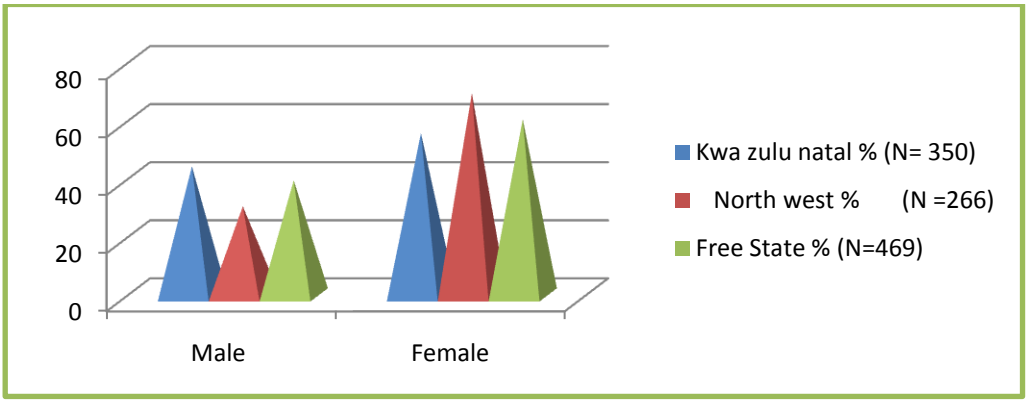
TABLE 5.1: DEMOGRAPHIC PROFILES OF PARTICIPANTS OF THE THREE STUDIES

Classification	KwaZulu-Natal % *(n= 350)*	North West % *(n=266)*	Free State % *(n=469)*
Sex			
Male	44.28	30,52	39.48
Female	55.71	69.48	60.52
Home Language			
English	47.71	1.58	17.02
Afrikaans	11.14	30.47	39.36
isiZulu	28.85	1.31	1.06
Other	2.57	51.48	42.54
Education level	7.42	33.16	16.52
Grade 12 + diploma	37.14	45.68	47.80
Diploma + Degree	41.71	18.51	31.06
Degree + Hons Degree	4.57	2.64	4.63
Post graduate Degree			
Job Level			
Post level 1 – educator	53.14	76.28	***
Post level 2 – Head of Dept	15.42	15.06	***
Post level 3 – Deputy Principal	11.42	6.66	***
Post level 4 - Principal	7.42	1.64	***
Illness – last 6 months			
Yes	47.1	22.66	19.19
No	51.1	77.34	80.81
Consider quitting profession	23.1	***	14.25
1 – Strongly Agree	36.4	***	9.07
2	13.0	***	13.39
3	10.7	***	41.47
4	16.9		21.81
5 – Strongly disagree			
Overall Health			
Good	34.3	***	61.71
Satisfactory	57.7	***	33.26
Poor	5.1	***	4.81
Any major stressful events in the last 6 months	47.1	***	19.19
Yes	51.1	***	80.81
No			

*** data not available

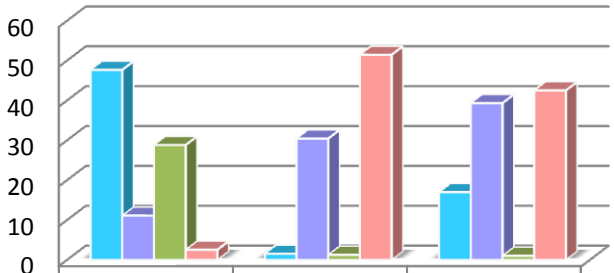
The comparison of all three samples, with regard to categories sex, home language, educational level and illness in the past six months which are all indicated in the table 5.1. All three studies indicate that there were more female respondents than male respondents. KwaZulu-Natal female respondents were (55.7%1), Free State (60.52%) and North West (60.52%). The gender profile appears in Figure 5.2.

FIGURE 5.2: GENDER PROFILE



The home language of the respondents is shown in Figure 5.3.

FIGURE 5.3: HOME LANGUAGE OF RESPONDENTS

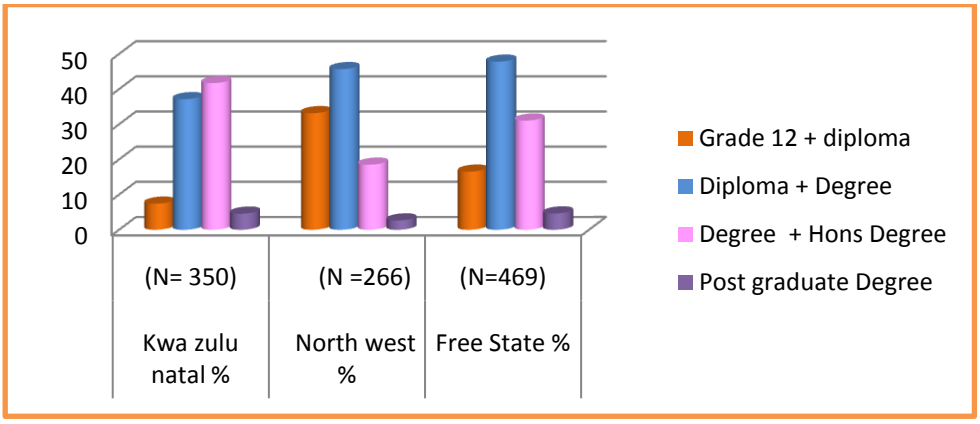


	(N= 350) Kwa zulu natal %	(N =266) North west %	(N=469) Free State %
English	47.71	1.58	17.02
Afrikaans	11.14	30.47	39.36
isiZulu	28.85	1.31	1.06
Other	2.57	51.48	42.54

The response to the home language of all three studies indicates that in KwaZulu-Natal the language was English speaking (47.7%), followed by isiZulu (28.9%), in the Free State Afrikaans (39.4%), Sesotho (27.9%) while the North West province had Setswana (45.9%), followed by Afrikaans (30.5%).

The levels of education are shown in Figure 5.4.

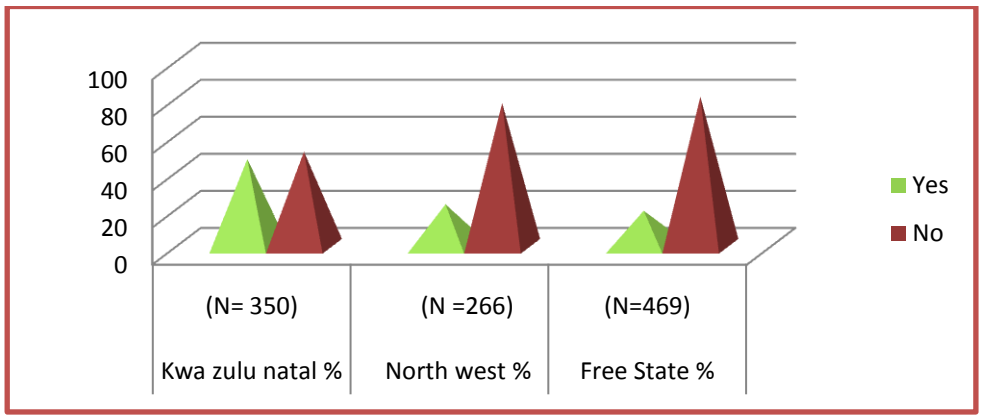
FIGURE 5.4: EDUCATIONAL LEVELS



The educational qualifications were grouped and in all three studies the educators who were the respondents featured highly with diplomas and a degree: KwaZulu-Natal (37.1%), North West province (45.7%) and in the Free State (47.8%). The educators with degrees and honours qualifications feature fairly high in KwaZulu-Natal (41.71%), Free State (31.1%), while North West is slightly lower with (18.5%). These responses highlight the fact that the educators are fairly well qualified to undertake the task of teaching and learning.

Figure 5.5 shows the illness rate of the respondents in the past six months.

FIGURE 5.5: ILLNESS IN LAST SIX MONTHS DEPICTED



The response as to whether these respondents have experienced illnesses in the last six months was: KwaZulu-Natal (51.1%), North West (77.3%) and Free State (80.8%). This gives a clear indication of the educator illnesses in the three provinces and this will not be seen as a real concern for future studies.

5.7.2 Factor comparison

The factor comparison is set in motion by the identified factors in each study in Table 5.2. This summary table shows a bird's eye view of the factors identified within the three studies. Closer comparative analyses of the factors aim to identify (Haasbroek, 2008:37):

- *Pure factors*: these are factors that have been identified by all three studies and also have a large similarity on the statements loading onto the factors;
- *Common factors*: These factors are classified as such if they load onto two of the three studies, and not all three as pure factors do; and the
- *Study specific factors* are factors that are unique to a specific study and could not be identified by any of the other two factors.

In addition to the communalities of the factors within the studies, the following comparisons are also made:

- Variance explained by each factor;
- The cumulative variance explained by each study (*Goodness of fit*);
- Reliability of the factors by means of Cronbach Alpha coefficients; as well as the
- Correlations that exist between the different factors of the studies are also examined. The Pearson correlation coefficient is used to this effect.

From the following Table 5.2, it is evident that this study in KwaZulu-Natal (KZN)) explains the most variance (almost 69%), while the North West (NW) study explained 51% and the Free State (FS) only 42%. This is important to note as it implies that KZN are able to declare almost 69% of why the respondents in this research behave or feel as they do in this specific education application setting. Resultantly, only 31% of their behaviour is unexplained. Now, extending this reasoning to the NW and FS, it is evident that they are able to explain only 50% and 42% respectively, showing that in the case of the FS, the majority of educational behaviour (58%) is not accounted for. This comparison refers to the goodness of fit of the study and the data where a cumulative variance of 60% is regarded to be satisfactory (Hair et al. in Haasbroek, 2008:53; Field, 2007:634). Therefore, in this regard, the *goodness of fit* of the factor analysis of this KZN study is regarded to be good (69%), while the other two studies are below the 60% margin.

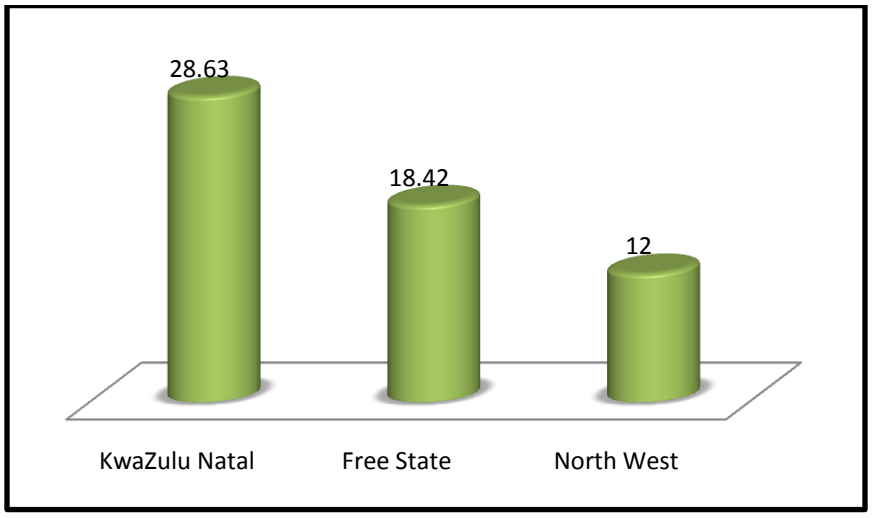
TABLE 5.2: FACTORS IDENTIFIED BY EACH STUDY

FACTOR NO.	KWAZULU-NATAL		NORTH WEST		FREE STATE	
	FACTOR LABEL	% VAR. EXPL.	FACTOR LABEL	% VAR. EXPL.	FACTOR LABEL	% VAR. EXPL.
1	Organisational Support	28.63	Organisational Support	12.00	Support and Communication	18.42
2	Overload	13.20	Growth Opportunities	8.00	Rewards and Participation	11.09
3	Remuneration	8.20	Overload	7.00	Job Insecurity	4.93
4	Control and Stressors	6.89	Job Insecurity	6.00	Role Overload	4.31
5	Job Insecurity	4.80	Relationship with Colleagues	6.00	Task Characteristics	3.47
6	Relationship and Opportunities	4.14	Control	6.00	***	***
7	Growth Opportunities	3.08	Rewards	6.00	***	***
Cumulative variance explained (%)		**68.94**		**51.00**		**42.22**

*** Not identified

Figure 5.6 shows the variance explained by the factor Organisational support.

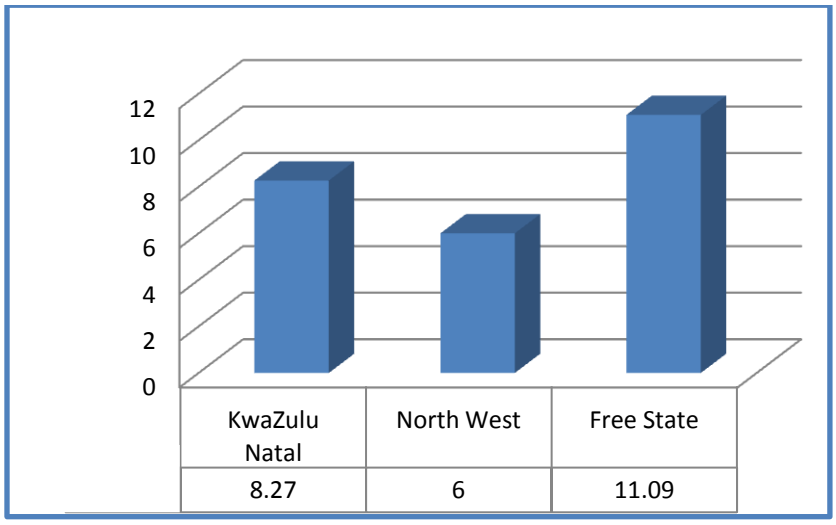
FIGURE 5.6: ORGANISATIONAL SUPPORT



The factor *Organisational support* loaded in all three studies and explained the following variances: KwaZulu-Natal (28.6%), Free State (18.4%) and North West having the lowest variance of 12%. It is thus evident that organisational support is a common factor that needs to be addressed by management in the education sector.

Figure 5.7 shows the variance explained by the factor Remuneration, rewards and participation.

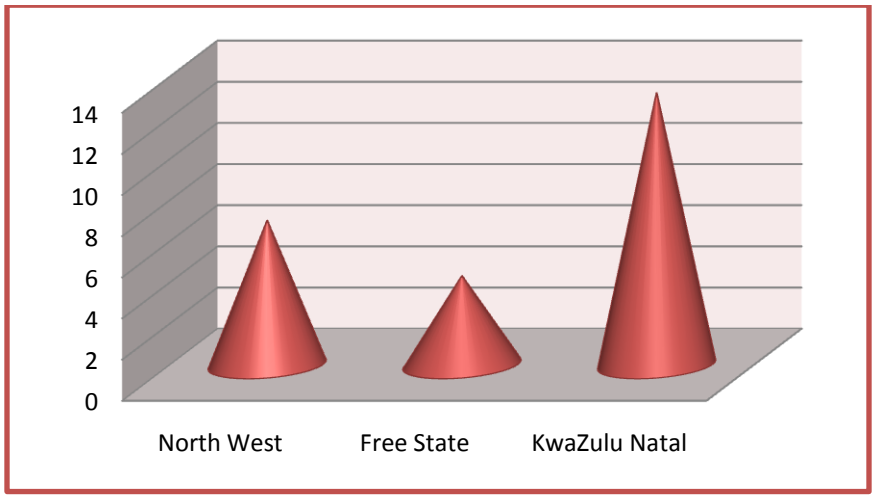
FIGURE 5.7: REMUNERATION, REWARDS AND PARTICIPATION



The response for the factor on *rewards and remuneration* has also indicated that the variance is higher in Free State (11.1%), and KwaZulu-Natal (8.27%) and North West province as being 6%.

Figure 5.8 shows the variance explained by the factor Overload.

FIGURE 5.8: OVERLOAD

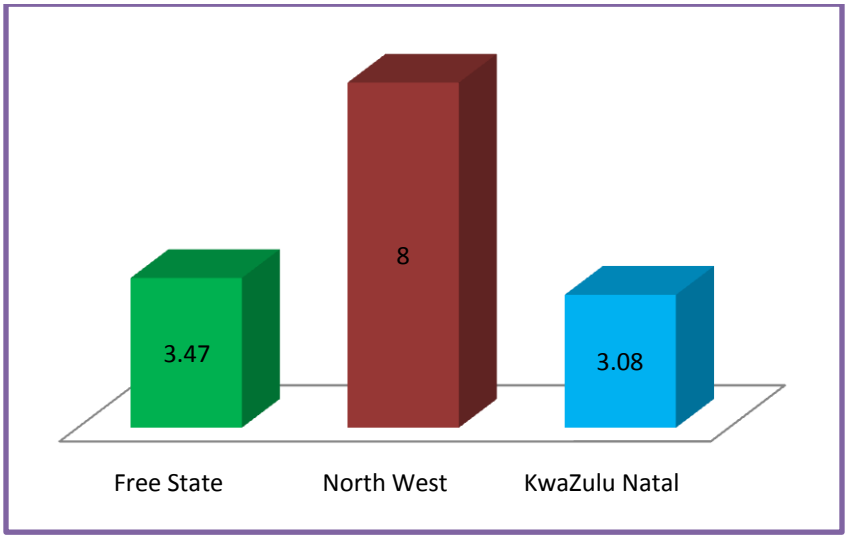


The results with regard to the variance in the instance of the factor *overload* has indicated that KwaZulu-Natal has the highest variance (13.20%), followed by North West (7%) and Free State

(4.31%). In the KwaZulu-Natal province *overload* is highlighted as being a cause of stress for the educators.

Figure 5.9 shows the variance explained by the factor Growth opportunities.

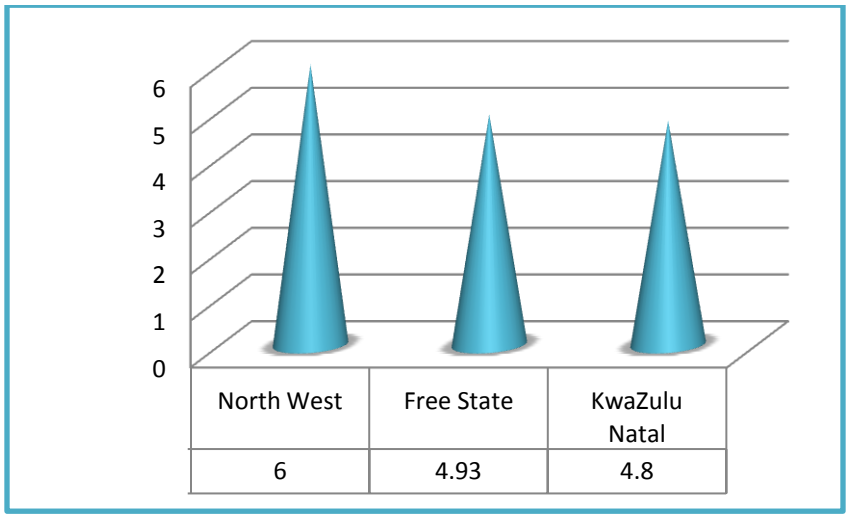
FIGURE 5.9: GROWTH OPPORTUNITIES



The result indicates that *growth opportunities* are not very prevalent in the case of KwaZulu-Natal. North West and the Free State province educators seem to be given more opportunities for upward mobility in the profession.

Figure 5.10 shows the variance explained by the factor Job insecurity.

FIGURE 5.10: JOB INSECURITY



The above figure highlights that North West province has a variance of 6%, compared to KwaZulu-Natal with a variance of 4.80% and Free State 4.93% respectively. It is evident that *Job insecurity* is a stressor for educators in North West province.

Table 5.3 shows the different factors as identified by each of the studies. This study, as well as the one by Jackson (2004), has identified seven factors, whilst Van Wyk (2006) has identified five factors. These factors are titled differently but the items within the factor's match. These factors also differ in numbers. Secondly, Jackson's (2004) study has loaded 43 of the 48 items on the seven factors. Naidoo (2011) loaded 35 of the 39 items on seven factors and Van Wyk (2006) loaded 36 of the 39 items on five factors.

The variance explained by the three studies is shown in Figure 5.11.

FIGURE 5.11: VARIANCE EXPLAINED BY THE FACTORS IN THE STUDIES

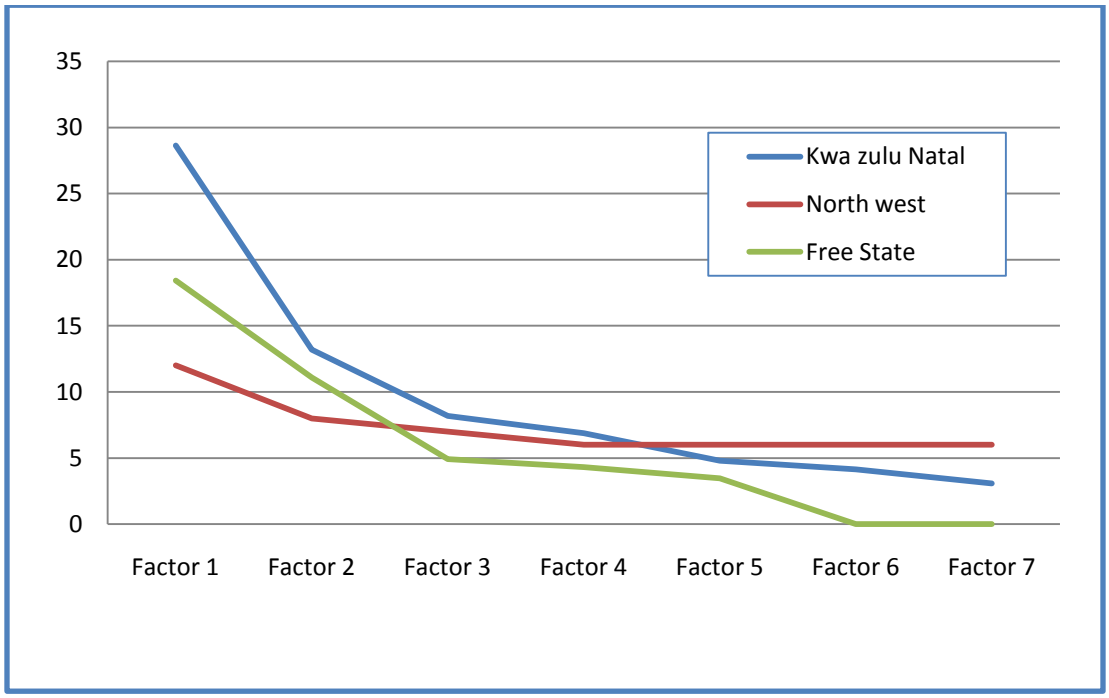


Figure 5.12 highlights the variance of each study and the factors that have loaded for each study. KwaZulu-Natal has the highest variances followed by the Free State. The North West Province indicates the lowest values. These results can be attributed to the demographic profiles of the respondents and the different experiences of each of the provinces. On closer examination of the factors it is evident that five pure factors have loaded onto all three studies with the items being common. Factor 1 has the highest variance in all three studies and it represents organisational support. The other factors are also moderately high.

When reviewing the factors in Table 5.3 below, it has been established that different factors loaded on the three studies. These factors are not in the exact order (for example: in one study identified as the first factor, and in another as the third factor). In addition, due to subjectivity in the labelling of factors, it is also possible that factors could be labelled differently by different researchers although the exact same statement share loading within that factor. These factors are also considered to be similar. Hence, the comparison weights more heavily on the actual statements that are loading on a factor than the label that was given. Factors thatare present within all three the studies are referred to as pure factors.

From the following Table 5.3 it is evident that five pure factors exist. These factors are:

- Organisational support;
- Overload;
- Rewards/Remuneration;
- Growth opportunities/ Task characteristics; and
- Job insecurity.

Further, the review of Table 5.3 indicates that of these five pure factors, the following four factors showed the biggest resemblance with regard to the common statements that load on these factors:

- Organisational support;
- Rewards/remuneration;
- Growth/Task opportunities; and
- Job insecurity.

The other factor (Overload) has three statements that did not load in the results of the mentioned Free State study, although the underlying common dimension was identified within the factor. Hence, this factor is considered to be a pure factor, albeit the fact that some of the statements loading on it, did not do so in any of the other studies.

TABLE 5.3: IDENTIFICATION OF PURE FACTORS

FACTOR /ITEM	KZN	NW	FS
Organisational Support			
Do you receive sufficient information on the purpose of your work?	0.64	0.72	0.61
Do you know exactly what your direct supervisor thinks of your work?	0.63	0.64	0.61
Are you kept adequately up-to-date about issues in the department?	0.75	0.57	0.68
In your work, do you feel appreciated by your supervisor?	0.54	0,56	0.66
Do you get on well with your supervisor?	0.76	0.48	0.57
Can you participate in decisions about the nature of my work?	0.72	0.42	0.61
Overload			
Do you have to be attentive to many things at the same time?	0.71	0.60	***
Are you confronted in your work with things that affect you personally?	0.81	0.48	***
Does your work put you in emotionally upsetting situations?	0.70	0.47	***
Do you have contact with difficult children in your work?	0.65	0.39	0.55
Do you have to remember many things in your work?	0.83	0.54	0.55
Rewards/Remuneration			
Can you live comfortably on your pay?	0.90	0.78	0.76
Do you think that you are paid enough for the work you do?	0.92	0.69	0.80
Does your job offer you the possibility to progress financially?	0.84	0.64	0.74
Do you think that the department pays good salaries?	0.83	0.52	0.76

Growth Opportunities/ Task Characteristics			
Does your job offer you the responsibility of independent thought?	0.80	0.66	0.62
Do you have freedom in carrying out your work activities?	0.82	0.60	0.64
Does your work give you the feeling that you can achieve something?	0.80	0.60	0.71
Does your work make sufficient demands on all your skills?	0.69	0.45	0.49
Do you have enough variety in your work?	0.55	0.42	0.54
Job Insecurity			
Do you need to be more secure that you will keep your job next year?	0.96	0.91	0.81
Do you need to be more secure that next year you will keep the same function level as currently?	0.95	0.81	0.75

*** Statement did not load onto factor

TABLE 5.4: PEARSON CORRELATION COEFFICIENTS BETWEEN PURE FACTORS

	FACTORS & CORRELATIONS				
STUDIES	**ORGANISA-TIONAL SUPPORT**	**OVERLOAD**	**REWARDS / REMUNERATION**	**GROWTH OPPORTUNITIES/ TASK CHARACTERISTICS**	**JOB INSECURITY**
KZN AND NW	-0.460	***	**0.763**	**0.903**	1
NW AND FS	0.163	0.424	**0.786**	**0.709**	1
KZN AND FS	-0.255	***	0.201	**0.787**	1

Since the same statements loaded onto these factors, it is possible to calculate the Pearson correlation coefficients between these pure factors. These correlations are shown in Table 5.4 above. From the table it is clear that a negative correlation of 0.46 exists between North West (NW) and KwaZulu-Natal (KZN) with regard to *organisational support* as factor, while with regard to correlations between the other two studies, either a negative or low correlation exist. Only one positive correlation exists with regard to the factor *overload*, and that is between the FS and NW studies. The reason for this is that the correlations between the other factors could not be calculated since only limited statements loaded on all three the studies (refer back to Table 5.4). The factor *growth opportunities / task characteristics* is highly correlated between all three studies and shows Pearson correlation coefficients in excess of 0.70 and even 0.90. The factor identified as *rewards and remuneration* shows strong correlations between KZN and NW (0.76) and also NW and FS (0.78). However, there is a low correlation (0.2) present between FS and KZN. *Job insecurity* as factor is represented by two statements only, as such the correlation coefficients is perfect (1). If more statements would load onto this factor in similar studies, a better correlation coefficient could be calculated. In this study, this correlation is academic (because correlations between two values mathematically always return a perfect correlation) and its interpretation in practice should be heeded with caution. These correlation coefficients are shown in Table 5.5 for the sake of completeness only.

TABLE 5.5: IDENTIFICATION OF NON-PURE FACTORS

FACTOR /ITEM	KZN	NW	FS
Relationship with Colleagues /Opportunities			
If necessary I can ask colleagues for help	0.54	0.68	***
I can count on my colleagues when I come across difficulties	0.56	0.61	***
I get on well with my colleagues	0.37	0.48	***
Control			
Does your job give you the opportunity to be promoted?	0.52	0.55	***
It is clear whom I should address in the Department	0.68	0.55	***
I have direct influence on my schools decisions	0.62	0.51	***
The departments decision-making process is clear to me	0.87	0.47	***
I have contact with colleagues as part of my work	0.37	0.42	***

Two factors load onto two of the studies, but not all three. These are identified as the so-called *non-pure* factors. These factors are: *Relationship with Colleagues / Opportunities and Control* which are both identified by the studies in KZN and NW.

With regard to study specific factors, none was identified. The factors were either *pure* or *non-pure* factors. It is also noteworthy that the FS identified only five factors while the other two studies identified seven factors. In addition, the FS study not only explained a low cumulative variance (42%) but also extracted fewer factors. It is speculated that by extracting more factors from the FS data, that study could have increased the cumulative variance explained and more factors could probably have lead to more pure factors identified in this study.

TABLE 5.6: RELIABILITY OF FACTORS IN EACH STUDY

FACTOR NO.	CRONBACH ALPHA COEFFICIENTS		
	KWAZULU-NATAL	NORTH WEST	FREE STATE
1	.93	.88	.78
2	.88	.80	.82
3	.92	.75	.84
4	.74	.90	.68
5	.91	.76	.75
6	.60	.71	****
7	.91	.78	****

Table 5.6 indicates the reliability of the factors for all three the studies. The Cronbach Alpha coefficients of all these items are acceptable and all the factors identified (except one with an alpha coefficient of 0.68) have returned reliability coefficients in excess of the minimum of 0.70 (Nunally & Bernstein, 1994:345; Field, 2007:668). The factor returning a reliability coefficient of 0.68 (which is marginally lower than the suggested coefficient) is also acceptable as Field further suggests that extensive research on exploratory studies have shown that alpha coefficients as low as 0.58 are acceptable for exploratory research such as the one performed by the FS (Cortina, 1993 in Field,

2007:666). Factor 6 of the KZN study (with an alpha of 0.60) is interpreted in similar fashion.

5.8 CONCLUSION

It can be concluded that all three studies explain a favourable variance as depicted in Table 5.3. It is has been found that *organisational support, rewards and remuneration* and *job insecurity* have featured with high values and these are seen as the main three causes of stress across all three studies. These factors dealt predominantly with perceived social support for individual educators from management, colleagues, governing bodies and the education department both provincially and nationally. This type of support defines clearly the roles and responsibilities of educators. International research done by Paulse (2005:60) found that the lack of institutional support could contribute to educator stress. It can be concluded that this factor needs to be given high priority in order to alleviate educator stress.

The factor which has included items mainly focusing on remuneration and rewards which is seen as intrinsic reward has resulted as being a contributor to educator stress (Zurlo et al., 2007:231). The issue of remuneration has come to the fore once again during the month of August 2010 as educators across the country engaged in strike action. This can validate and re-affirm the findings of all three studies.

The other factor is the issue of job security which is related to actually working on the same job level. Jackson's study (2004) also found that job insecurity is a contributor of stress. Educators are constantly looking for re-assurance.

Other factors such as work overload and growth opportunities also featured in these three studies. Issues such as doing repetitive and pressured work were also emphasised. Educators are also expected to deal with difficult learners, and emotionally upsetting and personally affecting situations. Crossman and Harris (2006:78) as well as Jackson (2004:78) found that educators who experience role overload, had higher stress levels.

Various relationships were also found between different stress factors. Educators who experience stress due to lack of rewards, be it financial, promotional, and participation,

would be less likely able to deal with stress; they perceive themselves as not having the necessary support.

5.9 RECOMMENDATIONS

Based on the findings of all three studies five pure factors loaded onto each study. It is recommended that biographical variables that can contribute to stress should be managed to promote psychological well-being amongst educators. The issue of language barriers should also be considered when promoting understanding of the policies among educators with diverse backgrounds.

It is also recommended that further studies with regard to stress be considered among other educators in all the provinces. The aim of such studies will be to profile educators at risk of ill-health. This will allow for proper mechanisms to be put in place to assist with alleviating educator stress.

5.10 SUMMARY

This article compared the results found in this study (being educator stress in KwaZulu-Natal) to that of similar studies performed in two other provinces in South Africa. Two directly comparable studies were used to benchmark the results, namely the one by Jackson (2004) in the North West Province, and another by Van Wyk (2006) in the Free State.

The study used the results by a comparison of the *pure factors* (factors that have been identified by all three studies), *non-pure factors* (factors that are present in two of the three studies) and then the *study specific factors* which are unique to a study (Haasbroek, 2008:53). In addition to the factor comparison, variance explained by each factor and the *goodness of fit* measures were also used in the comparative analysis.

The comparative analysis found that five pure factors exist between the three studies, while two common factors were identified. Regarding the variance explained and the

goodness of fit, this study had the best fit, explaining a cumulative variance of 69% while the other two studies explained cumulative variances below the 50% margin.

In essence, the comparative analysis showed that the causes of stress in South African education do not seem to be region-bounded, and that there are strong indications that all educators throughout the country have similar stressors. However, although the fact that similar stressors were identified in three studies in three provinces does not emphatically prove that these stressors are common throughout all the provinces, it does provide a strong signal that the stressors experienced by educators could be a national phenomenon. The value of this final observation (that three studies have been performed and all three studies concluded similar stressors are present in educators.) resides with the fact that the DOE should determine scientifically if the postulation that a national educator stress situation is correct. If so, it would be wise for the DOE to address the causes of stress on a national level with one strategy (addressing all pure factors nationally), while provinces address the other stressors on provincial levels with a complementary stress reduction strategy. These provincial strategies would be provincially diversified strategies.

REFERENCES

ARIKEWUYO, M.O. 2004. Stress management strategies of secondary school teachers in Nigeria. *Educational research*, 46(2):195-207.

BADCOCK-WALTERS, P. & WILSON, D. 2006. Educator attrition and mortality. A study of gross attrition rates and trends in the public school system. Pretoria.

BAKKER, A.B., HAKANEN, J.J., DEMEROUTI, E. & XANTHOPOULOU, D. 2007. Job resources boost work engagement, particularly when job demands are high. Journal of *Educational Psychology*, 99(2):274-284.

BIRON, C., BRUN, J.P. & IVERS, H. 2008. Extent and sources of occupational stress in university staff. *Work: A Journal of Prevention, Assessment & Rehabilitation*, 30(4):5-13.

BIRON, C., COOPER, C.L., & BOND, F.W. 2008. Mediators and moderators of organisational interventions to prevent occupational stress. In S. Cartwright & C. L. Cooper (Eds.). *Oxford Handbook of Organisational Wellbeing* (pp. 441-465). Oxford: Oxford University.

BOND, F. W., FLAXMAN, P. E. & LOIVETTE, S. 2006. A business case for the Management standards for stress (No. RR 431). Norwich, UK: Health & Safety Executive.

BUDLENDER, D. & PROUDLOCK, P. 2009. Analysis of the 2009/10 Provincial budgets of the nine provincial Departments of Social Development: Are the budgets adequate to implement the Children's Act? Cape Town: Children's Institute. [Web:] http://www.ci.org.za Date of access: 6 May 2010

BURROWS, R. 2009. Apartheid's costly burden. Daily News. May, p19.

BUYS, C. & ROTHMANN. 2009. Job demands and job resources in the ministry. [Web:] http:// sajhrm.co.za/index.php/sajhrm/article/download/202/194 Date of access: 9 Sep. 2010.

CARLYLE, D. & WOODS, P. 2005. Emotions of teacher stress. Wiltshire: Cromwell.

CENTRE FOR EDUCATION POLICY DEVELOPMENT. [Web:] http://www.cepd.org.za Date of access: 6 May 2010.

CEPD ***See*** CENTRE FOR EDUCATION POLICY DEVELOPMENT

COOPER, C.L., DEWE, P.J. & O'DRISCOLL, M.P. 2008. Organisational stress: A review and critique of theory, research, and applications. London: Sage.

CORBIN, C.B. 2010. Definition of wellness. Arizona State University. [Web:] A http://www.definition of wellness.com Date of access: 10 Dec. 2010.

COX, T., KARANIKA, M., GRIFFITHS, A. & HOUDMONT, J. 2007. Evaluating organisational-level work stress interventions: beyond traditional methods. *Work and Stress*, 21(4), 348-362.

CROSSMAN, A. & HARRIS, P. 2006. Job satisfaction of secondary school teachers. *Journal of Educational Administration,* 36(4):362-378.

DEPARTMENT OF EDUCATION (KZN). 2010. Towards the creation of safe and caring school. [Web:] http://www.kzn.gov.za Date of access: 7 Feb. 2011.

DURAN, A., EXTREMERA, N. & REY, L. 2009. Engagement and burnout: Analysing their association patterns. [Web:] http://www.ncbi.nlm.nih.gov/entrez/query.fcgi Date of access: 10 Mar. 2010.

ELRC. 2009. Teacher development summit declaration. [Web:] http://www.tdsummit.co.za/ Date of access: 17 Nov. 2010.

FIELD, A. 2007. Discovering statistics using SPSS. London: Sage.

GOLD, Y. & ROTH, R.A. 1993. Teachers managing stress and preventing burnout: The professional health solution. London: Falmer HIV/AIDS. *South African Journal of Higher Education,* 17(2):177-186.

GREENBERG, J. & BARON, R.A. 2008. Behaviour in organisations. 9th ed. London: Pearson Education.

HAASBROEK. A. 2008. Brand positioning in the remarket automotive industry. MBA Dissertation. Potchefstroom: North-West University.

HILL, A. 2008. Depressed, stressed: teachers in crisis. The Guardian. [Web:] http://www.guardian.co.uk/education/2008/aug/teaching.teachers workload Date of access: 18 Aug. 2009.

ILO ***See*** INTERNATIONAL LABOUR ORGANIZATION

INTERNATIONAL LABOUR ORGANIZATION. 2009. [Web:] http://www.ilo.org/global/lang --en/index.html Date of access: 20 February.

IRLC. 2009. Teacher development summit declaration. [Web:] http://www.tdsummit.co.za Date of access: 17 Nov. 2010

JACKSON, L.T.B. 2004. An adapted model of burnout for teachers in South Africa. Unpublished doctoral thesis. Potchefstroom: Potchefstroom University for Christian Higher Education.

JACKSON, L.T.B. & ROTHMANN, S. 2006. Occupational stress, organisational commitment and ill-health of educators in the North West Province. *South African Journal of Education*, 26**(**1):75-95.

JOHNSON, S J., COOPER, C., CARTWRIGHT, S., DONALDSON, I. & TAYLOR, P. 2009. The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2):178-187.

JOHNSON, S., COOPER, C., CARTWRIGHT, S., DONALD, I., TAYLOR, P. & MILLET, C. 2009. The experience of work-related stress across occupations. in stress and quality of working life, ed. Rossi, A. M. Quick, J. C. Perrewe, P. L. New York, NY.: Information Age.

JON. M.W., RANDY, L. & DE SIMONE, L. 2009. Human resource development. 5th ed. New York, NY.: Cengage Learning.

KEATING, C. 2005. Campus violence makes many teachers leave. Cape Times. p17. Nov.

KHOZA, H.R. 2004. A comparison of teacher stress, commitment and school climate in schools with different success rates. [Web:] http://www.wiredspace.wits.ac.za/ bitstream/handle/10539/1792/01Contents.pdf? Date of access: 12 Feb. 2011.

KUPPAN, I. 2009. . Our failing schools: Teachers drown in paperwork, kids suffer. Daily News. p1. May.

LAMONTAGNE, A. D., KEEGEL, T., LOUIE, A. M., OSTRY, A. & LANDBERGIS, P.A. 2007. A systematic review of the job-stress intervention evaluation literature, 1990-2005. *International Journal of Occupational and Environmental Health*, 13:268-280.

LEITHWOOD, K. 2006. Teacher working conditions that matter: evidence of change. Elementary Teacher's Federation of Ontario. [Web:] http://www.etfo.ca/resourcesforteachers Date of access: 26 Mar. 2009.

LPI ***See*** THE 2010 LEGATUM PROSPERITY INDEX

MACGREGOR, K. 2008. Discussion on the re-opening of colleges. [Web:] http://www.universityworldnews.com/article.php?story=20080427091640134. Date of access: 28 Apr. 2009.

MALAN, L. 2011. Onderwysers kwesbaar vir siekte. [Web:] http://www.nwu.ac.za/p-news/pm_1058_a.html Datum van gebruik: 10 Mrt. 2011.

MALAN, M. & ROTHMANN. S. 2010. Occupational stress of hospital pharmacists in South Africa. *International Journal of Pharmacy Practice*, 15:235-242.

MCHUNU, W. 2010. KwaZulu-Natal MEC for Transport, Community Safety and Liaison. [Web:]

http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=16502&tid=28817 Date of access: 2 Mar. 2011.

MEDVED, M. 2007. Cops to fight gangsterism in schools. Cape Argus. May 2007. p1

MILNER, K. & KHOZA. H. 2008. A comparison of teacher stress and school climate across schools with different Matric success rates. *South African Journal of Education,* 28(2) 155-l73.

MOKGATIHE, H. 2010. Minister's announcement of the teachers' strike. [Web:] http://www.ecdoe.gov.za/news_article/207/Ministers-announcement-on-teachers-strike. Date of access: 31 Jan. 2011.

MOORE, S., GRUNBERG, L. & GREENBERG, S. 2006. Work stress and alcohol use: examining the tension-reduction model as a function of worker's parent's alcohol use. [Web:] http://www.colorado.edu/ibs/pec/pubs/wp.html Date of access: 10 Des. 2010.

MOTSEKE, M. J. 2005. OBE-related stress among township school teachers in the Free State Province. Unpublished doctoral dissertation. Welkom: Vista University.

NAGEL, J., LIZA, S. & SHERI BROWN, T.E. 2004. The ABC's of managing teacher stress. *Clearing House*, 76:255-258. May/Jun.

NAIDOO, B. 2005. R6m to help teachers fight stress. Sunday Times. p.07, Jul.

NATIONMASTER. 2010. Education spending of nations. [Web:] http://www.nationmaster.com/graph/edu_edu_spe-education-spending-of-gdp Date of access: 3 Mar. 2011.

NOLL, J. 2006. Taking sides, clashing views on controversial educational issues. 12th ed. Cape Town: Guilford.

NUNNALLY, J.C. & BERNSTEIN, I.H. 1994. Psychometric theory. 3rd ed. New York, NY.: McGraw-Hill.

PATTERSON. A. & ARENDS, F. 2006. Who are we missing? Teacher graduate production in South Africa, *Southern African Review of Education*, 14(1-2):95-118.

PAULSE, J. 2005. Occupational stress. Teacher attrition. [Web:] etd.uwc.ac.za/usrfiles/modules/etd/etd_init_9096_1180439697.pdf Date of access: 5 Sep. 2010.

PERREWE, P.L. 2006. Handbook on job stress. Corte Madera, CA.: Select.

RICHARDSON, K.M. & ROTHSTEIN, H.R. 2008. Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1):69-93.

SADTU. 2011. SADTU Documents. [Web:] www.sadtu.org.za Date of access: 10 Jan.

SAMODIEN, L. 2008. Teacher exodus. Cape Argus, 8, p1.

SAUNDERSON, C., & OSWALD, M. 2009. How high school teachers perceive challenging learner behaviour. *Acta Academica*, 41(3):142-147.

SELYE, H. 1985. History and present status of the concept of stress. In Monat, R. & Lazarus, R.S. (Eds.). Stress & coping. 2nd ed. New York, NY.: Columbia University.

SKAALVIK, E.M. 2007. Dimensions of teacher self-efficacy and relations with strain factors. *Journal of Educational Psychology*, 99:611-625.

SMALL, R. 2009. Teacher stress is killing my profession. CBS News. [Web:] http://www.cbc.ca/canada/story/2009/09/04/f-vp-smol.html Date of access: 14 Jan. 2011.

SMITH, P.A. & HOY, J. 2007. Academic optimism and student achievement in urban elementary schools. *Journal of Educational Administration*, 45:556-568.

SOUTH AFRICAN DEMOCRATIC TEACHERS' UNION ***See*** SADTU

STOEBER, J. & RENNERT, D. 2008. Perfectionism in school teachers: relations with stress appraisals, coping styles, and burnout. *Anxiety, Stress and Coping*, 21:37-53.

THE 2010 LEGATUM PROSPERITY INDEX. 2010. Education Sub-Index. [Web:] http://www.prosperity.com/countries.aspx. Date of access: 5 Feb. 2011.

VAN DER COLFF, J.J. & ROTHMAN. S. 2009. Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *SA Journal of Industrial Psychology*, 35(1):423-433.

VAN DICK, R., & WAGNER, U. 2003. Stress and strain in teachers: A structural approach. *British Journal of Educational Psychology*, 7(2):243-259, June.

VAN WYK, D. 2006. Work wellness among secondary school teachers in the Goldfields region of the Free State Province. Doctoral Thesis. Potchefstroom: Potchefstroom University.

VAN ZYL, E. & PETERSEN, C. 2004. An investigation into work stress experienced by a group of secondary school teachers. *South African Journal of Education*, 19(1):74-78.

VÉZINA, M., BOURBONNAIS, R., BRISSON, C. & TRUDEL, L. 2004. Workplace prevention and promotion strategies. *Healthcare Papers*, 5(2):32-44.

VILJOEN, J. P. & ROTHMANN, S. 2009. Occupational stress, ill health and organisational commitment at the university of technology. *South African Journal of Industrial Psychology*, 35: 67-77.

WALDNER, M. 2010. SADTU, COSAS chalk new education demands. [Web:] http://www.citypress.co.za/SouthAfrica/News/Sadtu-Cosas-chalk-new-education-demands-20100919 Date of access: 20 Jan. 2011.

YOON, J.S. 2002. Teacher characteristics as predictors of teacher-student relationship: Stress the negative effect, and self-efficacy. *Social Behaviour and Personality*, 30(5):485-493.

ZANDI, M. 2010. Moody's analytics. [Web:] http://www.moodys.com/ Date of access: 2 Mar. 2011.

ZURLO, M.C., PES, D. & COOPER, C.L. 2007. Stress in teaching: A study of occupational stress and its determinants among Italian schoolteachers. *Stress & Health*, 23(4):231-241.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter contains the overarching conclusions and recommendations of the study. In addition, the limitations of the research and recommendations regarding future research are also posed. The focus of this study was largely to determine the factors that cause educator stress and its impact on work performance. As a means of addressing the causes of stress, a multitude of factors have been examined during this study. Finally, the study offered propositions on how to alleviate educator stress and provide conceptual framework to assist in the better understanding of the educator stress phenomenon. The research was conducted using a combination of a literature study and an empirical study.

In relation to the primary goal of this study, namely to explore the reasons for the increasing educator stress and its impact on work performance and engagement in KwaZulu-Natal, the research objectives of the review were to:

- Determine the factors causing educator stress which impacts on work performance and engagement in the KwaZulu-Natal province;
- Investigate how traditional management and leadership styles of leaders can be guided towards transformational leadership;
- Make a comparative study of research completed in North West province and Free State province on the causes of stress in the respective regions; and to
- Develop a conceptual framework in order to suggest coping styles for work wellness of educators in KwaZulu-Natal that could be extrapolated to other provinces in South Africa.

Addressing these objectives via a series of articles have led to the formulation of a conceptual framework that will lead to a better understanding of stress and leadership

styles of educators in KwaZulu-Natal. The integrated results are discussed below and based on the conceptual framework as shown in figure 6.1.

6.2 CONCEPTUAL FRAMEWORK FOR EDUCATORS IN KWAZULU-NATAL

Figure 6.1 provides a comprehensive view of factors that contribute to the causes of the educator stress debate. These factors were explored in detail in chapters 2 to 5 in the various articles. These articles also dealt with the specific sections as have been identified by the literature review and applied in the empirical research. Figure 6.1 combines the results of the empirical research to provide a conceptual framework for the causes of educator stress in KwaZulu-Natal. Better understanding and the significance of the stressors leads to better understanding of the stressors as shown in figure 6.1. The figure also depicts the different sections in the questionnaire and corresponds to the empirical analyses of this study.

6.2.1 Article 1

The first article investigated the educational environment in South Africa. The article analysed the education policy, the environment wherein educators are engaging in their work, as well as providing a synopsis of the budgetary backup of the policies and facilities in education. The biographic profile of the educators relevant to this study is also provided as this profile would assist in better understanding the causes of stress in the South African educator's landscape.

6.2.2 Article 2

This article analysed the causes of stress amongst educators and a total of seven factors were identified by means of exploratory factor analysis. These factors are:

- Organisational support;
- Overload;

- Remuneration;
- Control;
- Job insecurity;
- Relationships and job opportunities; and
- Growth opportunities.

It became evident from the explained variance of each factor that educator stress is abundantly prevalent and has an impact on the work performance and engagement of educators across at least three provinces in South Africa (as compared in the fourth article in this study). This is largely due to the following realities: **firstly**, there are numerous factors that are seen to contribute to educator stress with a lack of organisational support featuring quite high. In any organisation or institution this is a crucial support mechanism for employees. **Secondly**, the issue of work overload which is linked to remuneration is also seen as a contributing factor to educator stress. This is currently a burning issue in the teaching profession and amicable, let alone any workable solutions, have still not been determined. The high factor loadings (which ranges from .891 to .526) and the goodness of fit as depicted by the cumulative variance of the above factors (in excess of 60%) confirm the preceding findings. It therefore indicates clearly that educator stress in KwaZulu-Natal is prevalent.

6.2.3 Article 3

This article dealt with management and leadership styles and seven factors were identified by exploratory factor analysis. These factors are:

- Management and leadership styles;
- Financial security;
- Management and leadership fairness;
- Stressors;
- Empowerment;
- Job security; and
- Sense of control over the work environment.

It is evident from the explained variance of each factor that effective leadership and management styles are imperative in order to alleviate educator stress in provinces. The following realities exist which highlights the aspects of management fairness, and the leadership and management styles which are adopted. Other aspects which educators see as stressors are the lack of empowerment, job and financial security and the lack of control over the work environment. The high factor loadings (which range from .618 to .925) and the goodness of fit as depicted by the cumulative variance of the above factors (in excess of 60%) confirm the preceding findings. All of these factors indicate that the management and leadership styles in the school environment need to be transformed radically in order to embrace the dynamic and turbulent environment of the education sector.

6.2.4 Article 4

This is the final article of the study. The article focuses on the comparative study undertaken in other provinces in respect of the causes of stress, and benchmarks the findings in this study to similar studies performed in two other provinces of South Africa. The comparative analysis found that there are five pure factors namely:

- Organisational support;
- Work overload;
- Rewards/remuneration;
- Growth opportunities/task characteristics; and
- Job insecurity.

The results of this empirical study with regard to causes of stress among educators have resulted in high variances for these factors. This comparative study between the North West, Free State and KwaZulu-Natal provinces showed that three of the nine provinces indicate that educator stress is prevalent at various levels. The cumulative variances explained range between 42% and 69%, of which this particular study reported the highest variance explained. The above pure factors that have been identified are seen as the main causes of educator stress across all three studies. Various relationships were also found with these variables. It can therefore be concluded that educator stress is a distinct

problem in the education sector and that functional and innovative plans need to be in place to manage stress for better educator performance. The communalities of stress leads to work wellness as probable solution to lower stress of educators while also improving their performance.

6.2.5 Work Wellness Model

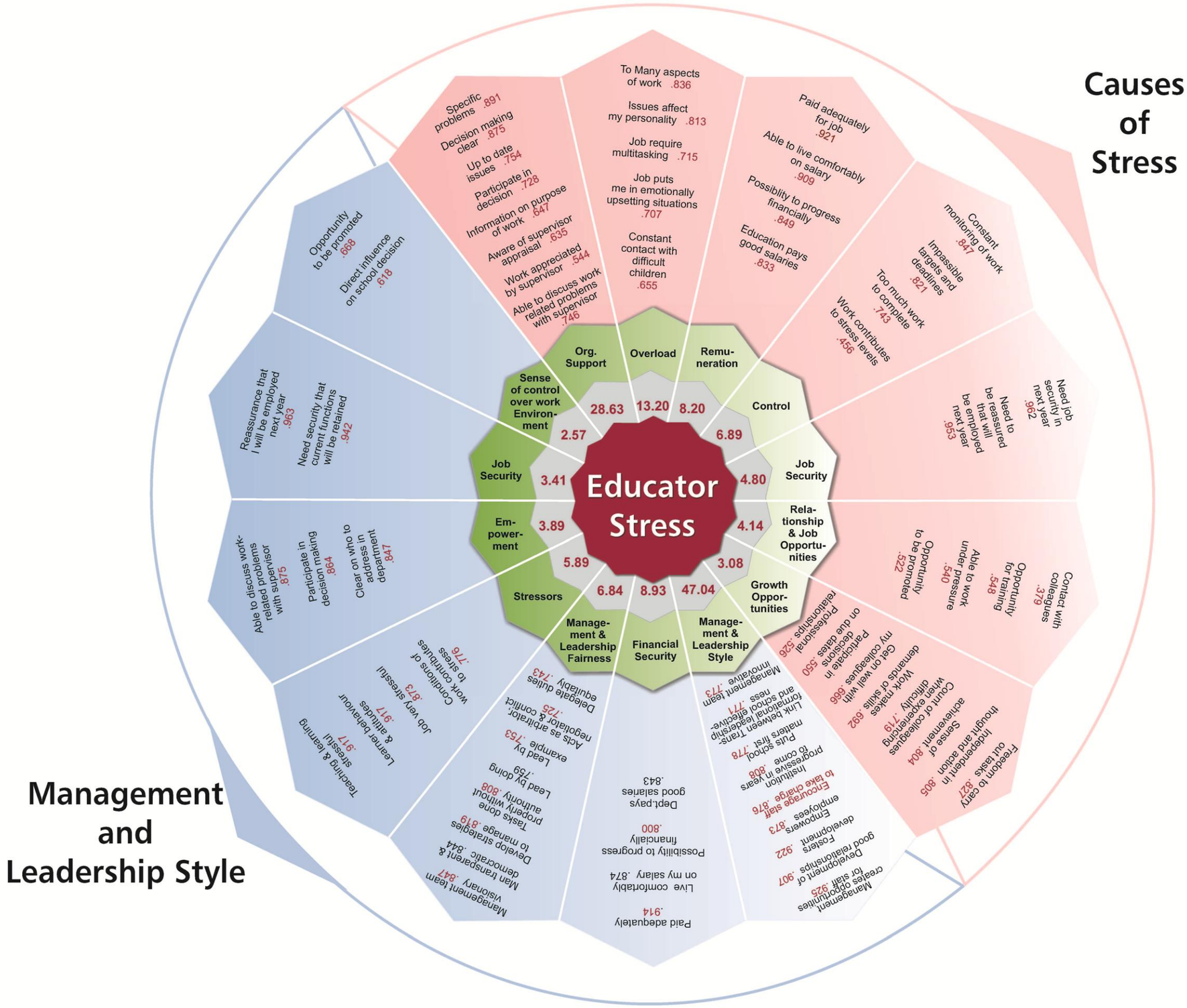
Due to the rapid changes on various levels in the field of education in South Africa this has placed many demands on educators, which have had a profound effect on their job satisfaction and working lives. Job stressors that have also been identified in the theory are low socio-economic status, followed by problems with teaching methods and administration, and a lack of support from the educational department and its systems. These direct factors have led to educators wanting to leave the profession and high numbers of attrition on educators. It has been found that 55% of male educators between the ages of 25-49 leave the profession. This exodus can be attributed, as have been indicated by the research, to the long hours, lack of career advancement, recognition and policies adopted. The results of this empirical study have highlighted the dissatisfaction and intentions of these educators.

The summary result that realised from the research in the four articles is an integrated framework that highlights the causes of educator stress and the effect of a lack of proper management intervention on educators' stress predicament. The conceptual framework constructed in this research provides a point of departure to address educator stress in KwaZulu-Natal and possibly in other provinces in South Africa. However, as concluded in Article 4, the comparative analysis showed that the causes of stress in education are universal in all three the researched provinces (KwaZulu-Natal, Free State and North West), and it is a fair extrapolation to reason that these common stressors are also existence in the rest of South Africa's provinces. Resultantly, a national stress alleviation strategy could be formulated in addition to provincial tailor-made stress relieving strategies to address stress in South African education. Such a suggested strategy could also improve educator performance, well-being and productivity whilst positively addressing the attrition of educators to the private sector.

Figure 6.1 is also serves as a summary figure because it contextualises all the causes and the various factors that revolve around the causes of educator stress. It also adds considerable value to the study by not only showing the identified and confirmed factors, but it also adds the relative importance to each of the factors and its sub factors to stress and management. Figure 6.1, therefore, shows all these factors and sub factors as an integrated map of educator stress.

Unfold next page to view Figure 6.1

Figure 6.1


Causes of Stress
Specific problems .891
Decision making clear .875
Up to date issues .754
Participate in decision .728
Information on purpose of work .647
Aware of supervisor appraisal .635
Work appreciated by supervisor .544
Able to discuss work related problems with supervisor .746
To Many aspects of work .836
Issues affect my personality .813
Job require multitasking .715
Job puts me in emotionally upsetting situations .707
Constant contact with difficult children .655
Paid adequately for job .921
Able to live comfortably on salary .909
Possiblity to progress financially .849
Education pays good salaries .833
Constant monitoring of work .847
Impassible targets and deadlines .821
Too much work to complete .743
Work contributes to stress levels .456
Need job security in next year .962
Need to be reassured that will be employed next year .953
Opportunity to be promoted .668
Direct influence on school decision .618
Reassurance that I will be employed next year .963
Need security that current functions will be retained .942
Org. Support
Overload
Remu-neration
Control
Job Security
Em-power-ment
Stressors
Manage-ment & Leadership Fairness
Financial Security
Manage-ment & Leadership Style
Rela-tionship & Job Opportu-nities
Growth Oppor-tunities
28.63
13.20
8.20
6.89
4.80
4.14
3.08
47.04
8.93
6.84
5.89
3.89
3.41
2.57
Educator Stress
Able to discuss work-related problems with supervisor .875
Participate in decision making .864
Clear on who to address in department .847
Teaching & learning stressful .917
Learner behaviour & attitudes .917
Conditions of work contributes to stress .776
Job very stressful .873
Delegate duties equitably .743
Acts as arbitrator & conflict negotiator .725
Lead by example .753
Lead by doing .759
Tasks done properly without authority .808
Develop strategies to manage .819
Man transparent & democratic .844
Management team visionary .847
Dept.pays good salaries .843
Possibility to progress financially .800
Live comfortably on my salary .874
Paid adequately .914
Management innovative .773
Link between Trans-formational leadership and school effective-ness .771
Puts school matters first .778
Institution progressive in years to come .808
Encourage staff to take charge .876
Empowers employees .873
Fosters development .922
Develop-ment of good relation-ships .907
Manage-ment creates opportu-nities for staff .925
Professional relationships .526
Participate in decisions .550
Get on well with my colleagues .666
Work makes demands of skills .692
Count of colleagues where experiencing difficulty .719
Sense of achievement .804
Independent in thought and action .805
Freedom to carry out tasks .827
Opportunity to be promoted .522
Able to work under pressure .540
Opportunity for training .548
Contact with colleagues .379
Management and Leadership Style

6.3 CONCLUSIONS

The conclusions and recommendations are formulated in numerical order. This means that Recommendation 1 follows the conclusion drawn in Conclusion 1.

6.3.1 Research methodology

The research methods and statistical analysis utilised in all four articles of this study were appropriate and the results yielded were tested for validity by the Statistical Consultation Services at the North-West University. The discussion that follows substantiates why the research methodology was effective.

CONCLUSION 1:

Firstly, the use of a good literature review sets the scene and provides a good base for the development and execution of the rest of the study (as in the case of the four articles). It provides an in-depth understanding of the research problem. It also provides a theoretical framework for the causes of educator stress and its impact on work performance and engagement.

CONCLUSION 2:

The use of the theory is to aid in the construction of the measuring instrument. Although this study used the ASSET (an already approved and validated questionnaire), the literature review proved invaluable to assist in the scientific use and analysis of the data. The literature study provided good guidance towards better understanding the structure of the questionnaire, and it also identified or highlighted various items which needed to be measured. It is concluded that the use of theory is imperative in scientific application of a questionnaire for the empirical research.

CONCLUSION 3:

The statistical analysis revealed that the identified constructs such as organisational support, work overload, leadership and management styles and others (see Figure 6.1) could be validated. The factor analysis either confirmed the construct and its measuring items, or identified sub-factors within the construct. In all cases relative importance was calculated (variance explained and factor loadings), while reliability (Cronbach Alpha),

suitability for multivariate analysis (Bartlett) and sample adequacy (Kaiser, Meyer and Olkin) added to conclude that the research instrument compiled from the literature provided a valid questionnaire. Specifically, the empirical validation of the data consisted of:

1. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy proved that the variables in this study were strong enough to proceed with a factor analysis. The large KMO values in this study indicated that the sample size was appropriate hense the factor analysis for this particular sample size was reliable. Hence, the KMO test confirmed the adequacy of the sample, ratifying the validity of the results.

2. The Bartlett's test of sphericity was also appropriate for this study as it yielded p-values smaller than 0.0001. This test concludes that the strength of the relationship among variables is strong. It also indicated that the correlation between the variables was sufficient for factor analysis.

3. Cronbach Alpha coefficients were calculated for each factor. The results indicated a moderate to high degree of reliability and internal consistency amongst the items. The implication of this is that the results were not only reliable but appropriate to use this test in similar studies undertaken.

It can be then concluded that the questionnaire and the data are reliable and valid.

CONCLUSION 4:

The sample that was selected and the eventual gathering of the data for the study which was in the form of a questionnaire proved effective (see Chapter 1: Research methodology). The data collection allowed for the collection of data from the provincial population. Although sampling made it cost effective the process was time consuming as the educators did not respond quickly and took their time to complete the questionnaires. In addition, the sample was also statistically proven to be adequate by the KMO analysis. It is thus concluded that this method of data gathering methodology is successful within the mentioned constraints.

CONCLUSION 5:

The use of a statistical analysis programme (SPSS Version 17) and consultation with a statistical specialist ensured that no statistical flaws exist in the empirical results. Apart from invaluable advice throughout the study (from design to final results), the use of an expert from the Statistical Consultation Services at the North-West University, the confidence and security that advanced statistical calculations and the interpretation thereof ensured that the analyses are correct. It can also be concluded that the use an expert and the specialised statistical software add value to the research process, and also ensured that the researcher was guided in the right direction which ultimately re-assured the researcher and her promoter.

6.3.2 Results

With regard to the results the following conclusions can be made:

CONCLUSION 6:

It is confirmed from the results that stress in the education sector in South Africa consists of seven constructs (see figure 6.1). All seven of these constructs are important since these all have proportional values which indicate the causes of educator stress in the province investigated. None of the constructs has low values. It is thus concluded that all these constructs are important in understanding the causes of stress and its impact on work performance and engagement.

CONCLUSION 7:

Within these seven constructs, there are sub-factors to deal with. The values relative to these sub-factors as contributors to the factors (or constructs) are also important as it also indicates their relative value to the causes of stress (albeit through the construct it resides within). It is thus concluded that these sub-factors are also important indicators of educator stress in KwaZulu-Natal.

CONCLUSION 8:

Almost all the constructs and the sub-factors (where present) are reliable and should represent itself in similar studies on the causes of stress. It is thus concluded that, apart from the two factors (*Job opportunities* as stressor in article 2 and *Sense of control* as leadership factor in article 3), the results obtained from the analysis could be regarded as reliable.

CONCLUSION 9:

The core of the research, as summarised by figure 6.1, provides a perceptual map by means of the newly created conceptual framework on stress in education. It is thus finally concluded that the conceptual framework is a valuable tool in understanding and conceptualising the concept of stress in education in South Africa, and that the framework is a point of departure to implement solutions to alleviate educators stress.

6.4 RECOMMENDATIONS

The recommendations follow the numerical indicators as per the conclusions. They should be interpreted with the matching conclusion in mind.

6.4.1 Research methodology

RECOMMENDATION 1:

The solid theoretical base that results from an extensive literature study in the thesis is invaluable. It is recommended that this methodology be adopted by future researchers because it sets the scene for scientific founded research to follow (such as the articles). This recommendation is especially noteworthy in the case of an article-format research document (such as a doctoral or master's thesis or dissertation).

RECOMMENDATION 2:

The success of the questionnaire (see conclusion 3) that was employed and researched by means of a literature study is evident from the statistical analysis thereof. As such, the use of theory to analyse a measuring instrument is highly recommended. This approach

assisted greatly in better understanding and analysing the ASSET questionnaire that was employed in this study.

RECOMMENDATION 3:

The fact that the statistical analysis empirically tested and confirmed the ASSET questionnaire to be a scientific data-gathering tool, leads to the following recommendations:

1. Questionnaires should be strongly based on theory, as it provides both structure and content;
2. The 5-point Likert-scale once again proved to be a valuable rating scale; and
3. The statistical techniques employed are a scientific method to determine the reliability of the data and validity of the sample.

RECOMMENDATION 4:

Stemming from Conclusion 4 (and strongly supported by Conclusion 3 and its matching recommendation), it is evident that it could be a recommendation that:

1. Stratified random sampling as data collection methodology (as employed in this research) can be used to collect data within the financial and time constraints researchers are subjected to; and
2. Sample adequacy should be statistically confirmed by means of the Kaiser, Meyer and Olkin test for sample adequacy.

RECOMMENDATION 5:

It is highly recommended that future researchers make use of an expert in both statistical analysis and also a specialised statistical software package. Apart from the obvious reasons stated above, adhering to this recommendation will also provide a built-in safeguard against flaws that may slip into the empirical research.

6.4.2 Results

RECOMMENDATION 6:

In dealing with the constructs it is important to take note of each one's significance. As such, it is recommended that:

1. Those construct with the highest relative importance (values) should enjoy the most managerial efforts; and
2. Having made this recommendation, it should be done within the framework of knowing that all of the constructs are important; some are just more important than others. As such, the recommendation extends to care being taken that none of the constructs should be neglected in managerial intervention.

RECOMMENDATION 7:

The managerial interventions should also consider the seven constructs that pose sub-factors. It is recommended that:

1. These sub-factors should receive specific managerial intervention as these are the building blocks of the construct. By correcting them, the construct itself will be corrected.
2. The relative importance of these sub-factors should also be considered when addressing them. Some are less important than others. Managerial energy should be employed in the areas where the most return can be expected, thus the more important sub-factors.
3. The five pure factors or constructs identified between the three different provinces should be tended to firstly as these factors are the more important generic stressors.

RECOMMENDATION 8:

Although most constructs and sub-factors have high reliability coefficients, two of them do not have satisfactory reliability. It is recommended that these two sub-factors be the last to enjoy managerial intervention as these are less likely to represent itselves as constructs in future analysis.

RECOMMENDATION 9:

The final recommendation is that the conceptual framework be:

1. employed as a tool to understand the causes of stress in KwaZulu-Natal;
2. put to practical use in addressing the issues of both psychological and physical health of educators in the province;

3. used as a guide to assist in the allocation of stress reducing resources and also to assist in the designing and introduction of interventions in the fight against educator stress. In essence, the framework can assist scientifically, in addressing the issues of educator stress; and
4. the focus of further research.

6.4.3 General observations and recommendations

Given the inability of role-players in the education sector to implement proper coping mechanisms for educators, both short term and long term, it is important that the existing policies be reviewed. The training interventions also need to be scrutinized in consultation with all those that are being affected by the problems. This would, in reality, signal a paradigm shift in addressing educator stress which has already taken place in a number of countries.

Hence, the following general recommendations are made:

1. Emphasis should be placed on improving the psychological health of educators;
2. Coping mechanisms should be work-shopped at all levels irrespective of levels of stress;
3. The implementation of a national awareness campaign to highlight the benefits of identifying the causes of stress and being positive about adopting the coping mechanisms;
4. A research desk should be set up by the Department of Education to undertake and monitor the situation on educator stress, review other intervention programmes from other countries with a view to adopt coping mechanisms and offer support to educators;
5. Allow for educators to be part of the programmes adopted, and ensure that they are also part of the decision-making processes;
6. There should be a review of the existing training interventions and policies on stress alleviation which are expected to be effective;

Finally, the Department of Education should support the efforts of all role-players involved in the education sector. This should result in emphasis being on improving educator performance and learner results. The work environment needs to become more conducive to teaching and learning and for the allowance of educators to become involved in decision-making of the institution. Emphasis should also be on examining the psychological health of educators which if not in a good state has a direct impact on work performance and engagement. In addition, give these educators the recognition they deserve as the "future of our children's lives are in their hands".

6.5 AREAS FOR FUTURE RESEARCH

The following areas have been identified for future research:

- An in-depth analysis of any one of the constructs in the conceptual framework (see figure 6.1) to further analyse and study the constructs identified within it;
- Stratified random sample design should be adopted in order to ensure sufficient representation of the different groups in the total population;
- Future studies should focus on longitudinal designs where interferences in terms of cause and effect could be made;
- Avoid sole reliance of self-reporting measures;
- Engage in further studies focusing on biographical differences of educators;
- A study with specific international comparative focus that aims to compare South Africa specifically to countries with similar problematic conditions.

Although various other areas of research are probable, the hope is expressed that this study (in addition to the studies by Jackson (2004) and Van Wyk (2006)) serves as a point of departure in educator stress research and that it allows for future studies in the other provinces eventually leading to interventions for the country as the whole.

6.6 SUMMARY

This study analysed stress in the workplace pertaining to the education environment in South Africa. The study was performed in article format, thus dealing with the sub-topics as scientific articles ready for publication in scientific journals and introduction to the educational scientific community thus contributing to the body of knowledge in this sector. The study consists of four articles.

- **Chapter 2: Article 1**

  The objective of the first article was to analyse the educational environment in South Africa and to better understand the Department of Education as the organising body in education. In addition, the article also attempted to better understand the educator as role-player within the Department Of Education. Resultantly, the article compiled a biographical profile of the educators that participated in this study, and set the scene for better analysis and interpretation of the other articles that followed.

- **Chapter 3: Article 2**

  The objective of the second article was to identify the causes of educator stress. A biographical questionnaire consisting of 48 items was adapted based on the existing literature by Jackson (2004) and Van Wyk (2006). This was developed and administered in a cross-sectional survey. During the analysis eight items were discarded due to non-loading, and a further six items were discarded due to significant secondary loadings. Seven factors extracted, explaining 68.94% of the total variance in the data. The seven factors showed acceptable alpha coefficients. These factors were labelled Organisational support, Work Overload, Remuneration, Control, Job insecurity, Relationships and opportunities, and Growth opportunities.

  The first factor that was extracted was Organisational support. This factor dealt primarily with support from colleagues, management, governing bodies and the Department of Education. This type of support will clearly define the roles and responsibilities of the educators. The second factor extracted was Work overload

and the loaded items dealt with doing repetitive work and being pressurized to meet deadlines. The factor that dealt with educator remuneration is still a current issue. This factor focuses on intrinsic and extrinsic rewards that are due to educators. The fourth factor focuses on Control which is seen as a stressor for educators. This factor highlights the insecurity of not being in control of learner behaviour and accountability to management. Job insecurity is the fifth factor related to actually working, having the same role functions and being in employment at the same level in the next year. The sixth factor focuses on the Relationships and Job opportunities. These educators need variety in their jobs which allows them to use their personal skills and abilities. Currently, there are educators who have been in the profession for more than 15-20 years but have not been promoted. These educators need to be given fair and reasonable opportunities for growth and learning. Individuals need their independence and want to have a sense of achievement.

- **Chapter 4: Article 3**

  The objective of the third article was to investigate how traditional management and leadership can be guided towards transformational leadership. Seven factors were extracted, explaining 78.57% of the total variance in the data. These seven factors also showed an acceptable coefficient. The seven factors extracted were Management and leadership styles, Financial security, Management and leadership fairness, Stressors, Empowerment, Job security, and Sense of control over the work environment. The management and leadership styles in a school environment play a pivotal role in the type of guidance that an educator receives in the challenging school environment. This factor can also be linked to the fairness of the leaders and management. Fair managers and leaders should empower these educators to take charge and be in control of their environment. This will then lead to accountability. Educators nowadays are also striving for job and financial security which will ultimately result in the alleviation of stress in the environment. The literature highlights the traditional leadership styles which are prevalent in the school environment even in present day. Management and leaders need to therefore embrace change, consider the stress that educators are undergoing due to poor management and leadership. This type of intervention will allow for improvement in work performance and reduction of educator stress.

- **Chapter 5: Article 4**

  The objective of the final article was to make a comparative study of research already completed by Jackson (2004) and Van Wyk (2006) in other provinces with that in KwaZulu-Natal focusing on the causes of stress in educators. All three studies utilised the same instrument to test the causes of stress. Seven factors loaded in the study of North West province and KwaZulu-Natal. In the Free State province there were five factors. This resulted in five pure factors across all three studies. The items that loaded per factor indicated a high correlation per value. Factors such as Organisational support, Remuneration/rewards and Job insecurity loaded heavily. These are seen as the primary causes of stress in all three provinces.

  The biographical data results indicated variations of the different variables which included gender, home language and educational levels. The language of respondents differed for all the studies. This type of variation can only be attributed to the demographics of the province. The conclusion drawn from this comparison indicates that organisational support is seen as stressors for Free State and KwaZulu-Natal. The North West province lacks growth opportunities. The research also showed that the Free State province regards rewards or remuneration as a priority. KwaZulu-Natal province identifies work overload as needing attention. All three studies have indicated also that job insecurity is a common factor which causes stress.

  These findings, in combination with those of Jackson (2004) and Van Wyk (2006), came to similar conclusions about educators in the Free State, North West and KwaZulu-Natal provinces of South Africa. A new dimension has been included into the conceptual framework which addresses the management and leadership styles. The previous studies focused on educator stress, but also strongly on the aspects of burnout. The study in KwaZulu-Natal also highlights the impacts on work performance.

In conclusion, this study has successfully identified the causes of educator stress with emphasis being on how it impacts on work performance and engagement. The other

aspect that has also emerged is the issue of management and leadership style within the school environment. The study presents a conceptual framework to the body of knowledge which could handsomely assist in the interventions and strategies to counter educator stress in South Africa.

ANNEXURE 1: QUESTIONNAIRE

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Potchefstroom Business School

Dr CJ Botha
Tel (018) 299 1672
Fax (018) 299 1416
Email christoff.botha@nwu.ac.za

Dear respondent,

WORKPLACE FEATURES

The questionnaire in your hand focus on different workplace features such as stress, leadership, culture, conflict and managerial styles. The findings will form part of a doctoral study of **Mrs Kiveshni Naidoo**, an enrolled PhD student of the North West University.

Please assist us by completing the questionnaire as honestly and accurately as possible and help us to understand the workplace better for generations to come.

Thank you

Mrs K Naidoo

Work Wellness Researchprogram
Faculty ; Economic and Business Sciences
Tel:+27(18)2991672
Fax/Faks: +27(18)2991416
E-mail: Christoff.Botha@NWU.ac.za
Web: www.workwell.co.za

Work Wellness Researchprogram
Faculty ; Economic and Business Sciences
Tel:+27(18)2991521
Fax/Faks: +27(18)2991416
E-mail: Leon.Jackson@NWU.ac.za
Web: www.workwell.co.za.

BIOGRAPHICAL INFORMATION

- Please write your answers in the appropriate space or mark your answer with an "**X**" (where applicable).
- Please complete all questions.
- All information provided in this questionnaire will remain completely confidential.
- Please be as honest and accurate as possible.

1. Gender	
2. Age in years	
3. Job level	

4a Qualifications (Mark highest)	M + 3 (e.g. Matric + Diploma)	M + 4 (e.g. Matric + Higher Diploma or degree – BA)	M + 5 (e.g. Matric + Higher Diploma + Degree – Hons BA, B.Ed)	M + 6 (e.g. Matric + Higher Diploma + Degree MA, M. Ed) + Phd
	☐	☐	☐	☐

4b Current Job	

5.Are you?

Single	Engaged/ in a relationship	Married	Divorced	Separated	Remarried	Widowed

6. Home Language

Afrikaans ☐	English ☐	Sepedi ☐
Sesotho ☐	Setswana ☐	isiSwati ☐
Tshivenda ☐	IsiNdebele ☐	isiXhosa ☐
isiZulu ☐	isiTsonga ☐	Other ☐

7. Over the last 3 months, roughly how productive have you felt in your job?

100 % productive		90 – 99% productive		80 – 89% productive		70 – 79% productive		Less than 70% productive	

8. Have you encountered any major stressful events over the last 6 months that have had a significant effect on you?

Yes	No

9. Have you had any illnesses in the last 6 months?

Yes	No

10. Over the last 3 months, how would you rate your overall health?

Good	Satisfactory	Poor

11. How many days of leave or sick leave per year do you take leave?

12. When was the last time you took sick leave (to the nearest in months)

13. To what degree do you agree with the statement: "I have considered quitting the profession".

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	2	3	4	5

14. How frequently do you consider quitting your job?

Always	Often	Sometimes	Rarely	Never
1	2	3	4	5

15. If you consider quitting the profession, what are the three main reasons for this imminent decision?

1. _____

2. _____

3. _____

16. What are the three main factors that prevent you from doing "your best" in your current

1.

2.

3.

17. What are the most positive factors that help you in doing "you're best" in your current job?

1.

2.

3.

18. To what degree do you agree with the following statement: "I have the basic equipment (e.g. chalk board, overhead projectors, data projectors, laptops etc) to do my job effectively?

Completely disagree	Disagree	Neutral	Agree	Completely agree
1	2	3	4	5

19. To what degree do you agree with the following statement: "I have the right skills, knowledge and abilities to do my job effectively?

Completely disagree	Disagree	Neutral	Agree	Completely agree

Yes No

20. Are you a member of a Trade Union/ Federation?

21. If not, please state why.

_____

_____

_____

_____

_____

WORKPLACE FEATURES INFORMATION

Please mark the number that clearly indicates your attitude

1= Strongly Agree	2= Agree	3= Neutral	4= Disagree	5= Strongly Disagree

Item nr.	STATEMENT	SCALE				
		Strongly Agree	*Agree*	*Neutral*	*Disagree*	*Strongly Disagree*
1.	I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5
2.	It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5
3.	I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5
4.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5
5.	I can solve most problems if I invest the necessary effort.	1	2	3	4	5
6.	I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5
7.	When I am confronted with a problem, I generally find several solutions.	1	2	3	4	5
8.	If I am in trouble, I can generally think of a solution.	1	2	3	4	5
9.	I generally can handle what comes my way.	1	2	3	4	5
10.	A job is what you make of it.	1	2	3	4	5

11.	In most jobs, people can accomplish whatever they set out to accomplish.	1	2	3	4	5
12.	If you know what you want out of a job, you can find a job that gives it to you.	1	2	3	4	5
13.	If employees are unhappy with decisions made by their supervisor, they should do something about it.	1	2	3	4	5
14.	Getting the job you want is mostly a matter of luck.	1	2	3	4	5
15.	Making money is primarily a matter of good fortune.	1	2	3	4	5
16.	Most people are capable of doing their jobs well if they make the effort.	1	2	3	4	5
17.	In order to get a really good job you need to have family members or friends in high places.	1	2	3	4	5
18.	Promotions are usually a matter of good fortune.	1	2	3	4	5
19.	When it comes to getting a really good job, who you know is more important than what you know.	1	2	3	4	5
20.	Promotions are given to employees who perform well on the job.	1	2	3	4	5
21.	To make a lot of money you have to know the right people.	1	2	3	4	5
22.	It takes a lot of luck to be an outstanding employee in most jobs.	1	2	3	4	5
23.	People who perform their jobs well generally get rewarded for it.	1	2	3	4	5
24.	Most employees have more influence on their supervisors than they think they do.	1	2	3	4	5
25.	I am always on time for work.	1	2	3	4	5
26.	I always meet deadlines in my work.	1	2	3	4	5
27.	I do my work well enough to be complimented for it by my supervisor.	1	2	3	4	5
28.	I do my work well enough to be complimented for it by my work team members.	1	2	3	4	5
29.	I never pretend to be sick to be given leave to stay at home.	1	2	3	4	5

30.	I have a good reputation among my co-workers.	1	2	3	4	5
31.	My co-workers respect me for the value I add to our organisation.	1	2	3	4	5
32.	I experience personal development in our organisation.	1	2	3	4	5
33.	I experience professional development in our organisation.	1	2	3	4	5
34.	The productivity of my department has increased substantially since I have joined it.	1	2	3	4	5
35.	I deal effectively with the demands that I am faced with in our organisation.	1	2	3	4	5
36.	I am successful in dealing with problems that arise at work.	1	2	3	4	5
37.	I pride myself in the high standards of work that I deliver in our organisation.	1	2	3	4	5
38.	I would be very happy to spend the rest of my career in this organisation.	1	2	3	4	5
39.	It would be very hard for me to leave my organisation right now, even if I wanted to.	1	2	3	4	5
40.	I do not feel any obligation to remain with my current employer.	1	2	3	4	5
41.	I really feel as if the problems of this organisation are my own.	1	2	3	4	5
42.	Too much of my life would be disrupted if I decided I wanted to leave my organisation right now.	1	2	3	4	5
43.	Even if it were to my advantage, I do not feel it would be right to leave my organisation now.	1	2	3	4	5
44.	I do not feel like “part of the family” at my organisation.	1	2	3	4	5
45.	Right now, staying with my organisation is a matter of necessity as much as desire.	1	2	3	4	5
46.	I would feel guilty if I leave my organisation now.	1	2	3	4	5
47.	I do not feel “emotionally attached” to this organisation.	1	2	3	4	5
48.	One of the few negative consequences of leaving this organisation would be the scarcity of available alternatives.	1	2	3	4	5

49.	My organisation deserves my loyalty.	1	2	3	4	5
50.	This organisation has a great deal of personal meaning for me.	1	2	3	4	5
51.	I feel that I have too few options to consider leaving this organisation.	1	2	3	4	5
52.	I would not leave my organisation right now because I have a sense of obligation to the people in it.	1	2	3	4	5
53.	I do not feel a strong sense of belonging to my organisation.	1	2	3	4	5
54.	If I had not already put so much of myself into this organisation, I might have considered working elsewhere.	1	2	3	4	5
55.	I owe a great deal to my organisation.	1	2	3	4	5
56.	I am able to keep busy all the time.	1	2	3	4	5
57.	I am given a chance to work alone on a job.	1	2	3	4	5
58.	I am able to perform different tasks from time to time.	1	2	3	4	5
59.	I am given the opportunity to be “somebody” in the community.	1	2	3	4	5
60.	I agree on the way my supervisor handles his/her workers.	1	2	3	4	5
61.	I agree with the competence of my supervisor in making decisions.	1	2	3	4	5
62.	I am able to do things that are not against my conscience.	1	2	3	4	5
63.	My job provides for steady employment.	1	2	3	4	5
64.	I am given a chance to perform tasks which make use of my abilities.	1	2	3	4	5
65.	I agree on the way the company policies are put into practice.	1	2	3	4	5
66.	My remuneration and the amount of work I do is acceptable	1	2	3	4	5
67.	There are chances for advancement in the job.	1	2	3	4	5
68.	I am given the freedom to exercise my own judgement.	1	2	3	4	
69.	I am able to implement my own methods of doing the job.	1	2	3	4	5
70.	The working conditions are acceptable.	1	2	3	4	5
71.	It is admirable the way my co-workers get along with each other.	1	2	3	4	5

72.	I get praised for doing a job well done.	1	2	3	4	5
73.	In most ways my life is close to my ideal.	1	2	3	4	5
74.	I am not happy when someone withholds information which affects my performance.	1	2	3	4	5
75.	Very often key areas of responsibility are removed or replaced with more trivial or unpleasant tasks.	1	2	3	4	5
76.	I am reminded repeatedly of my errors or mistakes.	1	2	3	4	5
77.	There is persistent criticism of your work and effort.	1	2	3	4	5
78.	My views and opinions are ignored.	1	2	3	4	5
79.	I am given tasks with unreasonable or impossible targets or deadlines.	1	2	3	4	5
80.	There is constant monitoring of my work.	1	2	3	4	5
81.	There is pressure not to claim something which by right you are entitled to (e.g. sick leave, holiday entitlement, travel expenses).	1	2	3	4	5
82.	I am exposed to an unmanageable workload.	1	2	3	4	5
83.	I have too much work to complete.	1	2	3	4	5
84.	I am able to work under pressure.	1	2	3	4	5
85.	My job requires multi-tasking.	1	2	3	4	5
86.	I am expected to remember too many aspects in my work?	1	2	3	4	5
87.	I am confronted to work with things that affect me personally?	1	2	3	4	5
88.	I constantly make contact with difficult children at work?	1	2	3	4	5
89.	My work puts me in emotionally upsetting situations.	1	2	3	4	5
90.	I am expected to do the same work repeatedly.	1	2	3	4	5
91.	My work makes sufficient demands on all my skills and capacities.	1	2	3	4	5
92.	My work gives me a feeling that I can achieve.	1	2	3	4	5
93.	I am independent in thought and action?	1	2	3	4	5
94.	I have the freedom to carry out my work activities?	1	2	3	4	5
95.	I do not have any influence in the planning of my work activities?	1	2	3	4	5
96.	I participate in the decision-making of due dates of tasks?	1	2	3	4	5

97.	I can count on my colleagues when I encounter difficulties at work.	1	2	3	4	5
98.	I get on well with my colleagues.	1	2	3	4	5
99.	I can rely on my supervisor when I experience difficulties at work.	1	2	3	4	5
100.	I have a professional relationship with my supervisor.	1		2	3	5
101.	At work, I feel I am appreciated by my supervisor.	1	2	3	4	5
102.	I am clear about my responsibilities.	1	2	3	4	5
103.	I am aware of my supervisor's appraisal of my performance.	1	2	3	4	5
104.	I receive adequate information about the purpose of my work.	1	2	3	4	5
105.	I am kept up-to date about important issues within the education department.	1	2	3	4	5
106.	The education department's decision-making process is clear to me.	1	2	3	4	5
107.	I am clear on whom I should address within the education department for specific problems.	1	2	3	4	5
108.	I am able to discuss work related problems with my direct supervisor.	1	2	3	4	5
109.	I participate in decisions about the nature of my work?	1	2	3	4	5
110.	I have direct influence on the school's decisions	1	2	3	4	5
111.	I have contact with my colleagues as part of my work.	1	2	3	4	5
112.	I am able to interact informally with colleagues during working hours.	1	2	3	4	5
113.	I need to be re-assured that I will still be employed in one year's time.	1	2	3	4	5
114.	I need to be more secure that next year I will retain the same function level as currently.	1	2	3	4	5
115.	The education department pays good salaries.	1	2	3	4	5
116.	I am able to live comfortably on my salary.	1	2	3	4	5
117.	I am paid adequately for the work I do.	1	2	3	4	5
118.	My job offers me the possibility to progress financially.	1	2	3	4	5
119.	My organisation gives me the opportunities to attend training courses.	1	2	3	4	5
120.	My job gives me the opportunity to be promoted	1	2	3	4	5
121.	My job is considered to be very stressful.	1	2	3	4	5
122.	The teaching and learning process is becoming stressful.	1	2	3	4	5
123.	The behaviour and attitudes of the learners are making my job stressful.	1	2	3	4	5

124.	The conditions at work is a contributing factor to my stressors.	1	2	3	4	5
125.	Management delegates duties equitably.	1	2	3	4	5
126.	The management team is seen as being visionary.	1	2	3	4	5
127.	The management develops and maintains transparency, accessibility and representivity in terms of democracy.	1	2	3	4	5
128.	The principal acts as an arbitrator, negotiator and conflict resolution officer.	1	2	3	4	5
129.	Management develops and supplies strategies to manage contingencies.	1	2	3	4	5
130.	Lead by "doing" rather than simply by "telling".	1	2	3	4	5
131.	Management ensures that tasks are done properly and does not use its authority to obtain results	1	2	3	4	5
132.	Management leads by example.	1	2	3	4	5
133.	Management fosters collaboration among group members.	1	2	3	4	5
134.	Management encourages employees to be "team players."	1	2	3	4	5
135.	Management empowers its employees.	1	2	3	4	5
136.	Management creates opportunities for staff and school development.	1	2	3	4	5
137.	Management develops good relationships between all role players in the school.	1	2	3	4	5
138.	Management fosters educator development.	1	2	3	4	5
139.	Good financial management is seen as a priority for the school.	1	2	3	4	5
140.	Meetings are conducted in a democratic way.	1	2	3	4	5
141.	The management team is seen as innovative.	1	2	3	4	5
142.	Management is inspirational.	1	2	3	4	5
143.	Dissemination of departmental information, policies and procedures is forthcoming.	1	2	3	4	5
144.	Management comes across as having a laissez –faire approach.	1	2	3	4	5
145.	Transformational leadership is seen as a priority in the institution.	1	2	3	4	5
146.	Effective leadership is seen as a stepping stone in the progression of the institution.	1	2	3	4	5
147.	The management team puts school matters first.	1	2	3	4	5
148.	Management encourages staff to take responsibility for things they are in charge of, such as academic issues, cultural or extra-curricular activities.	1	2	3	4	5
149.	Management ensures that there is a strong link between transformational leadership and school effectiveness.	1	2	3	4	5

150.	This institution is considered to be progressive in the years to come.	1	2	3	4	5
151.	Training opportunities are only provided for other cultural groups in our organisation.	1	2	3	4	5
152.	My supervisor encourages us to work together as a multicultural group.	1	2	3	4	5
153.	Most of my group members at work are positive about diverse work teams.	1	2	3	4	5
154.	Most of my group members at work encourage us to embrace different opportunities offered by society.	1	2	3	4	5

Thank you very much for your participation.

ANNEXURE B: LETTER OF PERMISSION FROM THE DEPARTMENT OF EDUCATION - KWAZULU-NATAL

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATALI

DEPARTMENT OF EDUCATION
UMNYANGO WEMFUNDO

Tel: 033 341 8610
Fax: 033 341 8612
Private Bag X9137
Pietermaritzburg
3200

228 Pietermaritz Street
PIETERMARITZBURG

INHLOKOHOVISI | PIETERMARITZBURG | HEAD OFFICE

Imibuzo:	Reference:	Date:
Enquiries: Sibusiso Alwar	Inkomba: 002/2009	Usuku: 02 February 2009

Mrs K Naidoo
14 Hillview Cresent Mathinagar
Tongaat
4000

LIST OF (DISTRICT) SCHOOLS

1. Ilembe Disrtict
2. Port Shepstone District
3. Pinetown District
4. Empangeni District

Kind regards

R Cassius Lubisi, (PhD)
Superintendent-General

APPENDIX C: LETTER FROM LANGUAGE EDITOR

10 April 2011

Kiveshnie Naidoo
21677344

Re: Letter of confirmation of language editing

The PhD thesis "*Stress management and its impact on work performance of educators in public schools in KwaZulu-Natal"* was language, technically and typographically edited. The sources and referencing technique applied was checked to comply with the specific Harvard technique as per North-West University prescriptions.

Antoinette Bisschoff
Officially approved language editor of the NWU