Stress levels among government secondary school teachers in semirural area of KwaZulu-Natal

By

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DECLARATION

Unless specifically indicated to the contrary, this project is the results of my own work

[Signature]

Sadick S. Monareng

Date

18/12/06
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ABSTRACT

There is little or no information regarding stress levels among teachers in semi-rural government secondary schools in South Africa. Furthermore, findings regarding the relationship between gender, age and teaching experience and teacher stress appear to be equivocal. The present study aims to examine the levels of stress among a group of semirural secondary school teachers, and whether there is a relationship between stress levels and gender, age, teaching experience and medical/psychiatric treatment.

The researcher employed a survey using the Professional Life Stress Scale (PLSS) to assess teachers’ stress levels. The demographic checklist consisted of the following items: gender, age, length of service in the teaching profession, psychiatric or medical treatment during the previous 3 months. Participants included 102 teachers, 38 of whom were males and 64 were female, from 9 selected government schools in the Durban semirural area.

Descriptive statistics were used to describe the sample. T-tests were used to determine the relationship between gender and total stress scores, as well as to determine gender differences on individual items on the PLSS. Pearson correlation coefficients were used to determine the relationship between age and teaching experience and total stress scores. Chi squares were used to determine whether there was a relationship between gender and category of stress. In addition, reasons for obtaining medical/psychiatric services were examined.

The research findings indicate that these secondary teachers are experiencing high levels of stress and that gender, age, teaching experience have no significant effect on their levels of stress. In addition, few participants seek psychological and medical services and most participants report psychosomatic symptoms.
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CHAPTER 1
INTRODUCTION

Stress is a universal phenomenon, even though patterns of stress responses differ from person to person (Kyriacou & Sutcliffe, 1978a). The term “stress” became widely used following work on psychological stress by Selye in the 1950’s (Selye, 1956). Selye (1975: p27) defined stress as “the non-specific response of the body to any demand made upon it”. However, the definitions of stress are many and varied, ranging from simple one-word statements such as tension or pressure to complex medical explanations for the physiological responses of the human body to certain stimuli (Fontana & Abouserie, 1993). Cox and Mackay (1978) maintain that the concept of stress is elusive because it is poorly defined. On the other hand, Fontana and Abouserie (1993) claim that there is general consensus that stress is a physical, mental or emotional reaction resulting from an individual’s response to environmental tensions, conflicts, pressures and similar stimuli.

According to Cox (1978), stress is typically defined in terms of:

1) external environmental stimulus characteristics
2) individuals’ emotional states
3) an interaction variable emphasizing the relationships between individuals and their environment.

Various approaches to describing stress have been proposed by researchers over the years. The first approach known as the engineering model (Hinkle, 1974), describes stress in terms of the stimulus characteristics of disturbing environments, thus treating stress as an independent variable. This stimulus-based model accounts for stress in terms of physical, external events (Boyle, Borg, Falcon, & Baglioni, 1995). The major consideration in deciding whether a stimulus is considered a stressor or not is the “…intensity of the demand for readjustment or adaptation”
Stress is seen as a response to a challenging demand or event (Selye, 1976). Up to a point, stress can be tolerated and when it becomes intolerable, damage may result, either psychological or physiological, or both (Dunham, 1992). This approach is often criticized since it does not take into account individual differences in response to stress such as personality factors and previous experience with similar demands (Dunham, 1992).

The stimulus approach to the definition of stress is supported by many researchers (e.g. Anderson, 1978; Patel, 1991; Shafer, 1992), who variously define stress as: any given stimulus that demands a stressed individual to adapt or adjust to anything different from the way he or she behaves at any given moment (Anderson, 1978); “a specific response the body makes to all nonspecific demands” Patel (1991: 9); “the arousal of mind and body in response to demands made upon them” Shafer (1992:9).

The second approach, referred to as the physiological model, is a response-based approach. It treats stress as a dependent variable, describing it in terms of a person’s response to disturbing environments (Cox, 1978). Response based definitions define stress as an individual’s psychological or physiological response to environmental/situational forces (Coetzee & Rothmann, 2005). According to this approach, stress is the product of an imbalance between appraisals of environmental demands and individual resources (MacKay, Cousins, Kelly, Lee & McCaig, 2004), or a response to, or result of, an inability to cope with physical and/or mental demands, real or perceived (Olivier & Venter, 2003).

Neither of the abovementioned approaches, however, contains a cognitive appraisal aspect. Interaction approaches to stress (e.g. Kyriacou & Sutcliffe, 1978a) have been proposed in an attempt to link the extreme viewpoints of stimulus and response-based approaches. According to the interaction approach, the person’s perception of stressors has an influence on how seriously they affect him/her (Lazarus, 1991); in other words, potential stressors only become stressors if appraised as a threat to self-esteem/well-being (Kyriacou & Sutcliffe, 1978a). Therefore, according to Kyriakou & Sutcliffe (1978a), the appraisal depends on the interaction between
individual characteristics and the perception of demands by the individual; coping mechanisms might also be partly determined by individual characteristics. Thus, those who advocate for the interaction approach maintain that stress depends on the individual’s cognitive appraisal of events arising from a person’s transaction with the environment (Abel & Sewell, 1999). Strain on the individual (another way of describing the effects of stress) is thought to occur when there is an imbalance; that is, resources or responses are inadequate to manage the demands (Gardner, Rose, Mason, Tyler, & Cushway, 2005). This approach is also supported by many researchers (e.g. van Zyl & van der Walt, 1994; van Zyl & Pietersen, 1999; Sullivan, 1995; Kyriacou, 2001; Engelbrecht, Swart & Eloff, 2001).

Occupational stress relates to stress that people attribute to the work environment rather than other life domains and it is distinguished from stress in general on the basis of the origin of the stressor, which in this case relates to a particular work environment (McCormick, 1997). According to Spielberger and Reheiser (1994: 19), “work stress results primarily from an incompatible person-environment fit that produces psychological strain and stress-related physical disorders”.

Researchers are in general agreement that work stress is a serious problem that requires management at individual and organizational levels (Cooper & Cartwright, 1994), as it could lower job satisfaction (Cooper & Smith, 1985). Reported sources of occupational stress include poor working conditions, work overload, role conflict and ambiguity, unsatisfactory career development and erratic work hours (Quick & Quick, 1984). How much stress each person reports, however, appears to be mitigated by factors such as job experience, ability level, type A personality pattern, self-esteem and fear of negative evaluation (Hogan & Hogan, 1982).

Teaching, like most human service professions, can be a stressful occupation (Seidman & Zager, 1991). Teaching has been identified as one of the most stressful occupations, with a large body of research supporting this conclusion (Pithers, 1995). It has also been established that
occupational stress reported by teachers cuts across all cultures (Cooper & Kelly, 1993). Kyriacou and Sutcliffe (1979, p.89) defined teacher stress as:

“a response of negative affect (such as anger and depression by a teacher, usually accompanied by potentially pathogenic physiological and biochemical changes (such as increased heart rate or release of adrenocorticotropic hormones into the bloodstream), resulting from aspects of the teacher’s job, and mediated by the perception that the demands made upon the teacher constitute a threat to his/her self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat”.

Moracco and Mc Fadden’s (1982) definition also incorporates an appraisal aspect: “Teacher stress is an alteration of psychological homeostasis resulting from aspects of the teacher’s job that are perceived as threats to an individual’s well-being/self-esteem” (p. 549). They suggest that other personal characteristics influencing appraisal may include age, gender, internal-external locus of control, anxiety proneness and personal resources.

The teaching profession demands serious consideration from school administrators and policy makers in order to protect the investment by government into education. Judging from the high level of turnover, even very developed countries are not immune to this problem of stress among teachers. Countries such as Singapore, with only one very advanced teacher training centre catering for its tiny population; also experience a high level of teacher turnover in spite of the above-average working conditions that the teachers enjoy (Lam, Foong & Moo, 1995). So do the relatively more affluent Northern Scandinavian countries (Huberman, 1993; Jacobsson, Poesette & Thylefors, 2001). Researchers in Switzerland, which has one of the highest standards of living since the Second World War, have found high levels of stress among teachers (Huberman, 1993).

In South Africa teachers have had to cope with successive rapid changes in education, with the consequent confusion having a serious bearing on stress levels among the teaching
fraternity (Cockburn, 1996). The demands facing teachers changed quite drastically with the emergence of the South African Schools Act (1996) which introduced the curriculum 2005 approach with its ‘Outcomes Based Education’ (OBE) leading to greater responsibility being imposed upon teachers (Ngidi & Sibaya, 2002). An atmosphere of inadequate autonomy, inadequate recognition and limited opportunities to be innovative exist within the teachers’ working environment (Van Zyl & Pietersen, 1999: 77). According to Hayward (1994), political change in South Africa, resulting in changes in the structures of teaching, is the single most important contributing factor to high levels of stress among teachers. Added to these demands, lack of discipline in schools, the abolition of corporal punishment, unmotivated learners, redeployment, retrenchments (right-sizing) and retirement packages for teachers, large pupil-teacher ratios and a new curriculum approach have all contributed to raising the stress levels of teachers (Saptoe, 2000).

Researchers have investigated the role of such variables as gender, age and teaching experience in the level of teacher stress. Various studies have found very little association between teacher stress and biographical variables (e.g. Kyriacou & Sucliffe, 1978; Borg & Riding, 1993; Soyibo, 1994; Olivier & Venter, 2003; Jepson & Forrest, 2006). However, other studies have found that biographical variables were significant predictors of teacher stress (e.g., Decker & Borge, 1993; Fumham & Walsh, 1993; Jeena, 1998). Van Zyl and Pietersen (1999: 74) maintain that information on the relationship between biographical factors and stress outcomes is inconsistent and requires further investigation.

The relationship between teacher stress and mental and physical illness has also been researched (Kyriacou, 1987; Van Wyk, 1998; Jonas, 2001; Olivier & Venter, 2003; Jackson & Rothman, 2006) and the general findings of these studies indicate a positive correlation between teacher stress and mental and physical illness. Saptoe (2000) points out that many teachers
nowadays complain about low morale, and illnesses such as hypertension, diabetes, ulcers and peptic ulcers.

Most of the South African research on teacher stress, however, has been conducted in urban schools. The aim of this study was to determine levels of stress among a sample of teachers in semi-rural government secondary schools, and to explore correlations between levels of stress and age, gender, teaching experience, and psychiatric/medical problems.
CHAPTER 2
LITERATURE REVIEW

History and background

The issue of teacher stress has established itself as a major area of international research interest (Kyriacou, 2001). Literature on stress indicates that stress related to work is a major problem for those in the teaching profession (Hodge, Jupp & Taylor, 1994). With greater stress, teachers find it difficult to carry out their work (Fontana & Abouserie, 1993; Gaziel, 1993; Neumann & Finlay-Neumann, 1993). Kyriacou (2001), in his review of teacher stress research, concluded that one in four teachers regard teaching as a 'very or extremely stressful' job.

Studies carried out in several countries indicate that a substantial proportion of teachers report relatively high levels of stress (Borg & Riding, 1993). In the United Kingdom studies have found typical rates of approximately 30% to 40% of teachers reporting that their job was very stressful (e.g., Kyriacou & Sutcliffe, 1978a; Borg, Riding & Falzon, 1991; Capel, 1991; Kyriacou, 1998). According to van Dick, Phillips, Marburg and Wagner (2001) stress is considered to be the main factor contributing to job-related illnesses, job dissatisfaction and early retirement among teachers in England, with Brown and Ralph (1992) concluding that few would dispute that teaching is a stressful profession in that country.

A number of studies in other European and Middle Eastern countries also indicate high levels of stress among teachers: e.g. Kramer-Hayen and Goldstein (1990) in Israel; Borg and Falzon (1991) in Malta; and McEwen and Thompson (1997) in the Republic of Ireland. In Russia, glasnost and perestroika in the early 1990's had triggered havoc to the meagre remunerations of teachers, thus compounding the stress levels of teachers in the ex-Soviet Union (Berger, 1993). Studies using Australian and New Zealand samples have found 'high' levels of stress among teachers similar to those reported in the United Kingdom (e.g., Otto, 1986;
O'Connor & Clarke, 1990; Pithers & Soden, 1998). Studies on teacher stress in the United States of America indicate ‘high’ and ‘extreme’ stress levels (e.g., Coates & Thoreson, 1976; Abel & Sewell, 1999). Literature citing the negative physical effects of teacher stress in other developing countries in America bears testimony to the argument that stress among teachers is a universal and far-reaching problem (Kyriacou & Sutcliffe, 1978a).

Research findings on the relationship between gender and teacher stress has been inconsistent. According to Jepson & Forrest (2006) international studies examining teacher stress levels have often failed to find any gender differences (e.g., Solman & Solman & Fled, 1989; Martocchio and O’Leary, 1989; Fontana & Abouserie, 1993; Soyibo, 1994; Jepson & Forrest, 2006). On the other hand, Kyriacou and Sutcliffe (1979) and Payne and Furnham (1987) found female teachers were significantly more stressed by pupil misbehaviour than their male colleagues. Other studies have found that females tend to report greater stress due to time pressures than males (Laughlin, 1984; Payne & Furnham, 1987, Borg, Riding & Falzon, 1991). Okebukola and Jegede (1989) reported that female teachers were more stressed by administrative procedures than were their male counterparts.

In South Africa, several research studies have found no significant differences on stress levels between male and female teachers (e.g., Mwamwenda, Monyooe & Glencross, 1997; Ngidi & Sibaya, 2002; Olivier & Venter, 2003). However, Van Zyl and Pietersen (1999) found that gender did have a significant effect on stress levels. They found that female teachers experience higher levels of stress than male participants and that married female teachers in particular experience high levels of stress. According to Van Zyl and Pietersen (1999: 77) female teachers are over-burdened because they have to be ‘the homemaker, a supportive wife and mother, and at the same time a good worker’.

International researchers have also explored the relationship between teacher stress levels and age. Findings suggest that age is not a significant predictor of stress levels (e.g. Soyibo, 1994; Fontana & Abouserie, 1993; Green-Reese, Johnson & Campbell, 2001). In South Africa, no
research has found significant relationship between age and teacher stress levels (e.g. Van Zyl & Pietersen, 1999; Olivier & Venter, 2003).

With regard to teaching experience research is equivocal. Some research findings show that inexperienced teachers tend to report greater stress than experienced ones (e.g. Okebukola, & Jegede, 1989; Ngidi & Sibaya, 2002), while other researchers have found that teaching experience does not correlate with stress levels (e.g., Solman & Flod, 1989; Soyibo, 1994; Jepson & Forrest, 2006).

Studies investigating sources of teacher stress have identified poor working conditions (Borg, Riding, & Falzon, 1991; Kyriacou & Sutcliffe, 1978b), workload (Blase, 1986; Boyle et al., 1995), poor school ethos and staff relations (Borg, Riding, & Falzon, 1991; Kyriacou & Sutcliffe, 1978a), students' poor attitudes (Kyriacou, 1987), time pressures (Borg, Riding & Falzon, 1991), teacher's role (Conley & Woosley, 2000), and personality factors (Wilson, Mutero, Doolabh & Herzstein, 1990; Ngidi & Sibaya, 2002; Jepson & Forrest, 2006).

Kyriacou (2001: 29) reviewed studies on teacher stress and concluded that the main sources of stress were:

- teaching pupils who lack motivation;
- maintaining discipline;
- time pressure and workload;
- coping and change;
- being evaluated by others;
- dealings with colleagues;
- self-esteem and status;
- administration and management;
- role conflict and ambiguity;
- poor working conditions.
The Problem: South African Perspective

The following review of South African studies has been limited to those done after the commencement of the education system under the new dispensation in South Africa. According to Hayward (1994), political change in the structures of teaching in South Africa is the single most important contributing factor to high levels of stress among teachers. Changes in education have been identified as a major factor among sources of stress for teachers in Britain (Travers and Cooper, 1996). Wedekind (1995) believes that change in the education system does not just signal the end of a part of our history; but rather it marks the beginning of a long process of adjustment, undoing and rebuilding. With the introduction of the National Qualifications Framework (NQF), teachers have had to teach learners at different levels of education, age and regardless of the learners’ circumstances (Bhengu, 1997). Van Zyl and Pietersen (1999) are of the opinion that retrenchment of teachers, changes in the syllabuses and the process of changing the structures of teaching are some of the main causes of teacher stress, while Saptoe (2000) believes that lack of discipline in schools, abolition of corporal punishment, unmotivated learners, redeployment, retrenchments (right-sizing) and retirement packages for teachers, large pupil-teacher ratios and a new curriculum approach are some of the changes that have contributed to raising the stress levels of teachers.

Studies carried out in several countries indicate that a large proportion of teachers report relatively high levels of occupational stress (Ngidi & Sibaya, 2002). Studies conducted in South Africa (e.g., Hayward, 1994; Ferreira, 1994; Van Wyk, 1998; Ngidi, 1999; Van Zyl & Pietersen, 1999) support those that were carried out in other countries, in reporting that among many occupations, teaching is one of the most stressful professions and that a large proportion of teachers experience relatively high levels of occupational stress. Van Zyl and van der Walt (1994) found that approximately 30-40% of South African teachers suffer from high levels of stress. In
the Eastern Cape (Van Wyk, 1998) found that 35.5% of High School teachers suffered from stress and that 40.8% of this group were from the schools of the former Department of Education and Culture. Van Zyl and Pietersen (1999) found high levels of stress among a group of secondary school teachers. In Kwa-Zulu Natal, 67.1 percent of Ngidi’s (1999) sample of teachers reported above average levels of occupational stress. Olivier and Venter (2003) found that 33.1% of their sample of Southern Cape teachers indicated that their job was a major cause of stress.

Researchers in South Africa have explored the relationship between teacher stress and psychological and psychiatric variables such as locus of control and personality factors. Rigby, Bennett and Boshoff (1996) examined only ‘type A’ personality and found that the Coping Skills Intervention enabled teachers to reduce A-type behaviour. Ngidi and Sibaya (2002) attempted to explain how personality characteristics interact with specific work-related stress factors. They found that teachers who obtained high scores on introversion were susceptible to stress caused by changes in the education system. Jeena (1998) investigated teachers’ mental health status, stress levels and incidence of burnout during a period of change and reorganization within the South African education system, and found that a large number of teachers reported that occupational stress had a negative effect on their health. Olivier and Venter (2003) reported that a third (31%) of their research participants recorded high scores for the emotional manifestation of stress and approximately one out of 15 teachers experienced behaviour disorders such as alcohol and drug abuse.

Various studies have been conducted in South Africa with the aim of identifying work-related stress factors among teachers. Saptoc (2000) found that lack of discipline in schools, abolition of corporal punishment, unmotivated learners, redeployment, retrenchments (right-sizing) and retirement packages for teachers, large pupil-teacher ratios and a new curriculum approach all contributed to raising the stress levels of teachers. For men, the inadequate salary was the single most stressful factor (Marais, 1992). Saptoc (2000) reported that an inadequate
salary, workload, unnecessary waste of time by pupils, teachers' inability to air their views and unmotivated pupils were some of the factors that were attributed to the levels of teacher stress.

Many South African studies have found a correlation between coping strategies and stress levels (Wayne-Potts, 1996; Rigby, Bennett & Boshoff, 1996; Niehaus & Myburgh, 1997; Davis, 2000; Engelbrecht, Swart & Eloff, 2001; Van den Berg, 2002). Some studies have reflected on the particular coping strategies needed to overcome stressful situations (e.g., Rigby, Bennett & Boshoff, 1996; Van Wyk, 1998; Basson, 2000; Saptoe, 2000; Jonas, 2001; Engelbrecht, Swart & Eloff, 2001; Jaye, 2002). According to Van Wyk (1998) teachers handle stress through supportive relationships by belonging to a support group. Rigby, Bennett & Boshoff (1996) found that the Teacher Stress Innoculation Intervention significantly reduced teachers' state anxiety and their feelings of tension, nervousness, worry and apprehension. In the case of serious problems, Saptoe (2000) suggested a number of coping strategies, including considering professional help such as therapy, medical help and counselling.

Some studies in South Africa have examined the relationship between job satisfaction and teacher stress (e.g., Mwamwenda, 1995; Steyn & van Wyk, 1999, Van der Westhuizen & du Toit, 1995). Van der Westhuizen and du Toit (1995) conducted their study in the Diamond Field Region of the Department of Education and Training and found that their sample of black female teachers reported job satisfaction, citing such factors as teaching tasks, safety and relationship with pupils as sources of satisfaction. Mwamwenda (1995) also reported job satisfaction among teachers in the Eastern Cape. The majority of the teachers in Mwamwenda's (1995) study reported that they would not opt for another career besides teaching. However, contrary to the findings of Van der Westhuizen and du Toit (1995) and Mwamwenda (1995), Steyn and van Wyk (1999) found many factors contributing to job dissatisfaction among principals and teachers in
township schools; some of these were the school culture, environmental factors, support by educational authorities, nature of work and workload, interpersonal relations, physical and emotional effects on teachers, job security and salaries.

Motivation

Much of the research among South African teachers report high levels of occupational stress (Van Zyl & Pietersen, 1999). There is little or no information regarding stress levels among teachers in semi-rural government secondary schools in South Africa. Furthermore, findings regarding the relationship between gender, age and teaching experience and teacher stress appear to be equivocal. The present study aims to examine the levels of stress among a group of semi-rural secondary school teachers, and whether there is a relationship between stress levels and gender, age and teaching experience.
CHAPTER 3
METHODOLOGY

Research Design

The quantitative survey method using a questionnaire was utilized to obtain data. According to Picciano (2004) one of the major benefits of a quantitative descriptive study is its potential for generalization and a researcher can thus appropriately suggest that the findings be extended to the larger population. McNeill (1990) has also pointed out that when quantitative research is used, the researcher’s values will not affect the data collected.

Sample

Nine semi-rural, secondary schools in the Outer West region of Durban were identified. This area was chosen for the investigation because of the researcher’s informal experience of complaints by teachers in the local community. Schools were accessed through referral from colleagues. All schools fall under the Department of Education and Culture. The schools included Grades 9 to 12. Grade 9 corresponds with the final phase of the General Education and Training Certificate band (GETC) which includes learning programmes registered on the National Qualifications Framework (NQF) at level 1. All level 1 teachers (male and female) at the selected schools were invited to participate in the study, but some teachers declined. Eventually, 140 teachers agreed to participate, and 102 questionnaires were completed and returned, giving an overall return rate of 72.8%. The final sample consisted of 64 females and 38 males.

Questionnaires

Biographical checklist

This consisted of the following items: gender, age, length of service in the teaching profession, psychiatric or medical treatment during the previous 3 months.
**Professional Life Stress Scale (PLSS)**

This scale was developed by Fontana (1989), using 49 items aimed at identifying stress levels, as experienced by an individual in relation to his or her job circumstances. The scale was subsequently modified by Fontana and Abouserie (1993). The PLSS was used because it evaluates the stress levels and stress manifestations of teachers within the context of the school and work situation. It is designed to evaluate a broad spectrum of psychological stress-related factors. According to Fontana and Abouserie (1993) the reliability indicators for the PLSS are .74 and .65 by alpha coefficient and split half methods respectively. The validity of the PLSS has been confirmed by Fontana and Abouserie (1993).

The PLSS yields a total professional stress score subdivided into four intervals. The four equal-interval advisory stress level categories are as follows:

- **0-17 Low Stress.** Stress in this level is not problem in the subject’s life. This does not mean that the individual has no stress at all since s/he will definitely need some stress in her/his life in order to be challenged.

- **18-34 Moderate Stress.** Scores here indicate that the individual has a problem and s/he will have to look at ways that can assist her/him to minimize its level for her/him to function normally.

- **35-51 Serious Stress.** These scores indicate that the individual has a serious problem with stress that needs serious attention. The person will need help in order to change her/his state.

- **52-68 Very Serious Stress.** At these levels stress is a major problem. The subject may be nearing the stage of collapse as defined by Fontana and Abouserie (1993), and the pressure upon her/him must be eased without delay.
Procedure

Permission was obtained from the Superintendent-General of the Department of Education and Culture, and from the principals of the nine participating schools (Appendix C & D). The principal of each school was contacted to ask permission to approach the teachers, and dates and times were set for a meeting with the teachers. Principals and teachers in the participating schools were briefed about the purpose of the study. Questionnaires were distributed to those teachers who had agreed to participate. A covering letter accompanied the questionnaires giving a brief introduction to the investigation and contact details, in case any of the participants wished to receive any additional information concerning the study. The teachers were briefed as to how to complete the questionnaires and that it would take about 15 minutes to complete. They were also advised that participation was entirely voluntary and confidential and that the results would be used for research purposes only. The participants were requested to complete the questionnaires and return them to the researcher or to the school the following day. Data collection was conducted over a period of 21 school days.

Data Analysis

Data analysis was done using the SPSS 12.0 programme. Descriptive statistics were used to describe the sample. T-tests were used to determine the relationship between gender and total stress scores, as well as to determine gender differences on individual items on the PLSS. Pearson correlation coefficients were used to determine the relationship between age and teaching experience and total stress scores. Chi squares were used to determine whether there was a relationship between gender and category of stress. In addition, reasons for obtaining medical/psychiatric services were examined.
Sample description

The final research group consisted of 102 teachers, 64 females and 38 males. The sample ranged in age between 23 and 49 years, with a mean age of 34.87 years and a standard deviation of 5.37 years. The participants’ teaching experience ranged from 1 to 25 years, with a mean of 9.36 years and a standard deviation of 5.51 years. With regard to medical/psychiatric treatment, 7.9% of the male participants and 12.9% of the female participants reported that they had had medical/psychiatric treatment in the previous three months.

Stress levels

The participants’ stress scores ranged from 3 to 53, with a mean of 26.3 and a standard deviation of 9.05. More than half (N=55; 53.92%) of the teachers were experiencing moderate levels of stress, about one third (N=32; 31.37 %) were suffering from serious stress, and for 2 teachers (1.96%) stress was a major problem. This means that the majority (N= 89; 87.25%) of the teachers in this sample were experiencing stress in their work, and only 13 (12.7%) reported no stress. Table 4.1 below shows the number of teachers in each category. The “Stress a major problem” category has been combined with the “Serious stress” category because of the small number in the uppermost category.
Table 4.1 Stress Scores

<table>
<thead>
<tr>
<th></th>
<th>Stress not a Problem</th>
<th>Moderate range of stress</th>
<th>Stress clearly a problem</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole sample</td>
<td>13 (12.74%)</td>
<td>55 (53.9%)</td>
<td>34 (33.36%)</td>
<td>102</td>
</tr>
<tr>
<td>Males</td>
<td>7 (18.42%)</td>
<td>19 (50%)</td>
<td>12 (31.58%)</td>
<td>38</td>
</tr>
<tr>
<td>Females</td>
<td>6 (9.37%)</td>
<td>36 (56.25%)</td>
<td>22 (34.37%)</td>
<td>64</td>
</tr>
</tbody>
</table>

There were no significant differences between males and females on total stress scores as Table 4.2 shows.

Table 4.2 Relationship between gender and total stress scores (N = 102)

<p>| | | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>M</td>
<td>M</td>
<td>Total</td>
<td>t (df)</td>
</tr>
<tr>
<td>X_M</td>
<td>X_F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.29</td>
<td>26.31</td>
<td>26.30</td>
<td>-0.012 (100)</td>
</tr>
</tbody>
</table>
There was no significant relationship between age and teaching experience and total stress scores as Table 4.3 indicates.

**Table 4.3** Correlation between age and teaching experience and total stress scores

<table>
<thead>
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<th>Variable</th>
<th>( r )</th>
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<tbody>
<tr>
<td>Age</td>
<td>0.041</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Chi-squares indicated that there was no significant relationship between the gender of the participants and stress category as indicated in Table 4.4.

**Table 4.4** Gender and stress category

<table>
<thead>
<tr>
<th>Gender</th>
<th>Low (%</th>
<th>Moderate (%)</th>
<th>Major (%)</th>
<th>Total (%)</th>
<th>( X^2 )</th>
<th>( p ) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7 (18.4)</td>
<td>26 (68.4)</td>
<td>5 (13.2)</td>
<td>38 (100)</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>10 (15.6)</td>
<td>45 (70.3)</td>
<td>9 (14.1)</td>
<td>64 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\((X^2 = 0.138; df = 2; p > 0.05)\)
Gender differences on individual PLSS items

T-tests were done to explore whether there were significant gender differences on individual PLSS items.

Female participants had significantly higher scores on the following items:

- tearfulness;
- being able to speak your mind to your boss within reasonable professional and personal limits;
- having enough time to spend on yourself;
- feeling adequately valued for your abilities and commitment to your work;
- feeling your superiors actively hinder you in your work;
- rating how much one likes oneself;

Male participants had significantly higher scores on the following items:

- poor appetite;
- getting up late at weekends if you want without feeling guilty;
- finishing the working day feeling satisfied with what you have achieved.

Medical/psychiatric treatment and stress scores

Eleven (10.78%) participants had sought psychological and medical services during the previous three months. The problems cited by the participants were headaches, depression, gastrointestinal problems, insomnia, anal infection, high blood pressure, dizziness, urinary problems, ulcers, neck
stiffness and sinusitis. Only one participant with depression had sought psychological treatment. The difference between yes/no on medical treatment and total PLSS scores was tested using t-tests to compare the mean responses and was shown to be non-significant, t (1.01) = 0.032, p = .858.
CHAPTER 5

DISCUSSION AND CONCLUSION

Discussion

The aim of this study was to determine stress levels among government secondary school teachers in semi-rural areas, and whether there was any relationship between gender, age and teaching experience and stress levels. A major finding of this study was that one in three teachers experienced high to extreme levels of job-related stress (see Table 4.1). Overall, results showed that 87.25% of the teachers were experiencing stress and of these 31.37% reported high levels of stress. The results are consistent with those of other South African studies (e.g. Van Zyl & Van der Walt, 1994; Olivier & Venter, 2003) that found that approximately 30-40% of South African teachers suffered from high levels of stress. Boyle, Borg, Falzon and Baglioni (1995) also reported that at least one third of the teachers in their sample were suffering from stress. Hayward (1994) and Nell (2005) are of the opinion that political change in South Africa, resulting in changes in the structures of teaching contributes to high levels of stress among teachers. Van Zyl and Pietersen (1999) reported that inadequate autonomy, limited opportunities to be innovative and inadequate recognition within the teaching profession have also had significant implications for stress among teachers.

Results on teacher stress levels emphasize the need for further investigation into the stressors in teachers’ work, and for identifying ways in which those who are vulnerable to stress can be afforded some degree of protection. Considering the high level of attrition of trained teachers, there seems to be an urgent need to train teachers on how to cope effectively with job-related stress. Some researchers (e.g. Rigby, Bennett and Boshoff, 1996; Van Wyk, 1998) have made a significant start in coaching teachers in South Africa on how to manage stress. Van Wyk (1998)
provides guidance on how teachers could handle stress through supportive relationships by belonging to a support group.

The current study also investigated the influence of selected biographical variables, namely gender, age and teaching experience. No gender differences in stress levels were found (see Table 4.2). This finding concurs with those of other researchers (e.g. Fontana & Abouserie, 1989; Mortocchio & O’Leary, 1989; Poppleton & Riseborough, 1990; Soyibo, 1994; Olivier & Venter, 2003; Jepson & Forrest, 2006).

However, an examination of gender differences on individual items of the PLSS indicated that female teachers were more stressed about organisational and interpersonal issues including the working climate and leadership in the school environment. They tended to express themselves more emotionally (tearfulness) than male teachers. Male teachers, on the other hand, felt more stressed about personal issues, but they experienced their stress more somatically (poor appetite) compared with female teachers.

Similar to several other studies (e.g. Soyibo, 1994; Fontana & Abouserie, 1993; Green-Reese, Johnson & Campbell, 2001), the present study also found that age does not affect work stress (see table 4.3). On the other hand, contrary to the findings of some studies that reported that inexperienced teachers tend to report greater stress than experienced ones (e.g. Okebukola & Jegede, 1989; Ngidi & Sibaya, 2002), the current study did not find teaching experience to be a significant factor in teachers’ job stress (see Table 4.3). These results do, however, concur with other findings (e.g. Solman & Fled, 1989; Fontana and Abouserie, 1993; Soyibo, 1994; Jepson & Forrest, 2006).
Contrary to what other researchers (e.g. Jeena, 1998; Jonas 2001; Olivier & Venter, 2003; Jackson & Rothman, 2006) have found, the present study found no correlation between stress levels amongst teachers and medical treatment. However, those teachers who did report accessing medical intervention (10.78% of the sample), did so for what were mainly psychosomatic symptoms. Of some concern is that the majority of the 89.22% of the teachers in this sample who reported job stress were not seeking medical/psychiatric care. The reasons for this need to be explored in future research. One possibility is that such services could be difficult to access outside of standard working hours in the semi-rural areas. Future research could also explore what measures teachers use to cope with stress.

Findings such as those presented in this study open the way to a range of new research initiatives, many of which may potentially be of considerable practical benefit to teachers operating in what is an increasingly demanding professional environment.

**LIMITATIONS OF THIS STUDY**

The following are some of the limitations of this study, which could be considered in future research:

- While the questionnaire provided overall stress levels, individual interviews with the participants could have provided a greater depth of information regarding sources of stress, coping strategies, etc.
- Marital status should be included to see whether it has an impact on stress levels.
- The study could have included concerns linked to HIV among teachers.
Conclusions

The study has shown the prevalence of the problem of stress among teachers in government schools in semi-rural areas. Although the study relied on self-report by teachers the findings support the conclusions of other researchers. Not only are large numbers of teachers experiencing stress but the levels are extremely high and this shows how important it is that the Department of Education addresses this problem.

Recommendations

- Future research should compare rural, semi-rural, township and urban schools to determine differences in the levels and kinds of stresses experienced by teachers in these different geographical locations.
- Management style should be more democratic and include teachers in decision-making.
- Teacher training programmes should include coping skills as part of the curriculum.
REFERENCES


Olivier, M.A.J. & Venter, D.J.L. (2003). The extent and causes of stress in teachers in


APPENDIX A

BIOGRAPHICAL DETAILS

Please circle the block applicable to you

1. Gender:
   
   MALE  FEMALE

2. Years of experience as a teacher: ......

3. Age in years: ......

4. Have you had psychiatric/medical treatment during the last 3 months:
   
   YES  NO

   If yes, what type of treatment?

   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
APPENDIX B:
Professional Life Stress Scale

Instructions
Please answer each question by putting a circle around the ‘A’, ‘B’ or ‘C’, etc., as appropriate on the answer sheet for each question. There are no right or wrong answers and no trick question.

1. Two people who know you well are discussing you. Which of the following statements would they be most likely to use?
   A- ‘X is very together. Nothing much seems to bother her/him.’
   B- ‘X is great. But you have to be careful what you say to her/him at times.’
   C- ‘Sometimes always seems to be going wrong with X’s life.’
   D- ‘I find X very moody and unpredictable.’
   E- ‘The less I see of X the better!’

2. Are any of the following common features of your life?
   1. Feeling you can seldom do anything right?
      A-Yes B-No
   2. Feelings of being hounded/trapped or cornered.
      A-Yes B-No
   3. Indigestion
      A-Yes B-No
   4. Poor appetite
      A-Yes B-No
   5. Difficulty in getting to sleep at night
      A-Yes B-No
   6. Dizzy spells or palpitations
      A-Yes B-No
   7. Sweating without exertion or high air temperature
      A-Yes B-No
8. Panic feelings when in crowds or on confined space  
   A-Yes B-No
9. Tiredness and lack of energy  
   A- Yes B-No
10. Faintness or nausea sensations without any physical cause  
    A-Yes B-No
11. Inability to unwind in the evenings  
    A-Yes B-No
12. Waking regularly at night or early in the morning  
    A-Yes B-No
13. Inability to think about problems or day’s events  
    A-Yes B-No
14. Tearfulness  
    A-Yes B-No
15. Convictions that you just can’t cope  
    A-Yes B-No
16. Lack of enthusiasm even for cherished interests  
    A-Yes B-No
17. Reluctance to meet new people and attempt new experiences  
    A-Yes B-No
18. Inability to say ‘no’ when asked to do something  
    A-Yes B-No
19. Having more responsibility than you can handle  
    A-Yes B-No
20. Feelings of helplessness (What’s the use of anything?)  
    A-Yes B-No

3- Are you more or less optimistic that you used to be (or about the same)?  
   A-MORE B-LESS C-ABOUT THE SAME
4- Do you enjoy watching sport?
   A-YES      B-NO      C-TO SOME EXTEND

5- Can you get up late at weekend if you want to without feeling guilty?
   A-YES      B-NO      C-SOMETIMES

6- Within reasonable professional and personal limits, can you speak your mind to your
   1- your boss  A-Yes  B-No
   2- your colleagues A-Yes  B-No
   3- member of your family A-Yes  B-No

7- Who usually seems to be responsible for making important decisions in your life?
   A- Yourself  B-Someone else?

8- When criticized by superiors at work, are you usually
   A- very upset.
   B- moderately upset.
   C- mildly upset.

9- Do you finish the working day feeling satisfied with what you have achieved?
   A- often
   B- sometimes
   D- only occasionally

10- Do you feel most of the time that you have unsettled conflicts with colleagues?
    A-YES      B-NO      C-_UNSURE

11- Does the amount of work you have to do exceed the amount of time available?
    A-habitually
    B-sometimes
    C-only very occasionally
12. Have you a clear mind of what is expected of you professionally?
   A-mostly
   B-sometimes
   C-hardly ever

13. Would you say that generally you have enough time to spend on yourself?
   A-YES         B-NO         C-UNSURE

14. If you want to discuss your problem with someone, can you find a sympathetic ear?
   A-YES         B-NO         C-UNSURE

15. Are you reasonably on course towards achieving your major objectives in life?
   A-YES         B-NO         C-UNSURE

16. Are you bored at work?
   A-often
   B-sometimes
   C-very rarely

17. Do you look forward to going to work?
   A- most days
   B- some days
   C- hardly ever

18. Do you feel adequately valued for your abilities and commitment to work?
   A-YES         B-NO         C-UNSURE

19. Do you feel adequately rewarded (in terms of status and promotion) for your abilities and commitment at work?
   A-YES         B-NO         C-UNSURE
20- Do you feel your superiors
   A- actively hinder you in your work?
   B- actively help you in your work?
   C- undecided?

21- If 10 years ago you had been able to see yourself professionally as you are now, would you have seen yourself as
   A- exceeding your expectations?
   B- fulfilling your expectation?
   C- falling short of your expectation?

22- If you had to rate how much you like yourself on a scale from 5 (most like) to (least like), what would your rating be?
   A-1     B-2     C-3     D-4     E-5
APPENDIX C

PO Box 141733
Madadeni
2951
20 September 2005

The Principal
Mdepha High School
Cato Ridge

Dear Sir/Madam

REQUEST TO CONDUCT RESEARCH WITH EDUCATORS AS PARTICIPANTS

I am a Masters student in Clinical Psychology at the above-mentioned university. I am conducting research into stress levels among educators in secondary schools. The title of my study is *Stress Levels among Government Secondary School Teachers in a Semi-Rural Area of Durban, Kwa-Zulu Natal.*

I trust that my request will meet with your approval

Thank you
Yours sincerely

Sadick S Monareng
Supervisor
APPENDIX D

***** Method 1 (space saver) will be used for this analysis *****

<table>
<thead>
<tr>
<th>Statistics for</th>
<th>Mean</th>
<th>Variance</th>
<th>Std Dev</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE</td>
<td>21.6569</td>
<td>60.4652</td>
<td>7.7759</td>
<td>45</td>
</tr>
</tbody>
</table>

Reliability Coefficients

N of Cases = 102.0
N of Items = 45

Alpha = .7874