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FACTORS AFFECTING TEACHERS' STRESS LEVELS IN THE BOTHA-BOTHE DISTRICT OF LESOTHO

by

ALICE 'MATELEKO MOHLOBOLI
(B.Ed. [National University of Lesotho],
B.Ed. [University of the Orange Free State])

Dissertation submitted in accordance
with the requirements for the degree

MAGISTER EDUCATIONIS

in the

FACULTY OF HUMANITIES
(Department: Psychology of Education)

at the

UNIVERSITY OF THE ORANGE FREE STATE
(Bloemfontein)

Study leader: Prof. J. du Plooy

November 1998

DECLARATION

I declare that this dissertation being submitted for the purpose of obtaining an M.Ed. degree at the University of the Orange Free State, is my original and independent work, and has never been submitted to any other university/faculty for degree purposes.

A.M. Mohloboli

ALICE MOHLOBOLI

(November 1998)

tered secondary and high schools of the Botha-Bothe district of Lesotho using random sampling.

Analysis and interpretation of data collected under the supervision of a registered psychologist was done through frequency distribution and analysis of variance through the computer section of the University of the Orange Free State. No stress was found. Summary suggestions and conclusions constitute the fifth chapter.

OPSOMMING

Stres word gekenmerk deur die inwerking daarvan op 'n persoon se geestes- en fisiese welsyn. Stres het negatiewe resultate, byvoorbeeld fisies (hoofpyne), op gedragsterrein (oorreageer), emosioneel (emosionele uitputting) en op die intellek (vergeetagtigheid).

Hierdie studie is onderneem om te bepaal of faktore wat stres veroorsaak, soos rolkonflik, roloorlading, rolontoereikendheid, roldubbelsinnigheid, verantwoordelikheid en die fisiese omgewing 'n impak het op onderwysers in die Botha-Bothe-distrik in Lesotho. Om dit te bepaal, is 'n gestandaardiseerde beroepstres-opnamevraelys (*OSI*) wat hierdie faktore meet, in die distrik geïmplementeer.

Die navorsingsmetode het die volgende behels: 'n Literatuurstudie is gedoen waartydens plaaslike en internasionale literatuur oor stres, insluitend faktore soos oorsake, gevolge en hanteringsmeganismes bestudeer is. Hierna is 'n empiriese studie gedoen en die data wat ingewin is, is geanaliseer en geïnterpreteer met die oog daarop om aanbevelings, gebaseer op die bevindinge van die studie, aan die Lesotho-regering voor te lê. Beide 'n nul- en alternatiewe hipotese is vir die studie gestel. H_0 stel dit dat onderwysers in Lesotho nie aan stres onderhewig is nie en dat daar geen faktore teenwoordig is wat vir hulle stres veroorsaak nie. Volgens H_1 ly onderwysers aan stres en speel sekere faktore 'n rol.

Aangesien 'n studie van hierdie aard nog nooit vantevore in Lesotho onderneem is nie, en omdat die teikengroep regerings-, sekondêre en hoërskole in die Botha-Bothe-distrik in Lesotho was, het die navorser gebruik gemaak van 'n gestandaardiseerde toets met 'n hoë geldigheid en betroubaarheid. Die beroepstres-opnamevraelys (*OSI*) is vir die inwin van inligting aangewend. Die *OSI* het 'n tweeledige doel: om generiese metings van stressors te ontwikkel wat oor verskillende beroepsvlakke aangewend kan word, en om metings te bepaal vir 'n geïntegreerde teoretiese model wat die oorsake van stres koppel aan die werkomgewing, die fisiologiese belemmeringe wat individue ervaar as gevolg van werkstres, en die hanteringsmeganismes wat beskikbaar is om die effek van stressors teë te werk en stres te verminder. Om substansie te gee aan die faktore wat met stres verband hou en dit te verifieer is 'n omvattende literatuurstudie oor die stresverskynsel onderneem. Relevante boeke, artikels, joernale en bulletins is geraadpleeg.

Die literatuurstudie het 'n omvattende idee gegee van wat stres behels. Aandag is geskenk aan stres in die algemeen, die effekte daarvan en die hanteringsmeganismes. In die empiriese studie is daar op drie domeinde gefokus: die beroepstresdomein (ORQ) is op ses skale gemeet. Die vraelys oor persoonlike stres (PSQ) en die

vraelys oor hulpbronne (PRQ) is beide op vier aparte skale gemeet. 'n Vraelys wat deur die navorser self opgestel is, is gebruik om algemene inligting van die individuele respondente te verkry, oor aangeleenthede soos pos, geslag, godsdiens, vlak van opleiding, ras, kwalifikasies, ouderdom, aantal kinders en ervaring. Daar is van ewekansige steekproeftrekking gebruik gemaak.

Die analise en interpretasie van die data wat ingesamel is, is gedoen onder toesig van 'n geregistreerde sielkundige, en wel deur frekwensieverspreiding en variansie-analise, gedoen deur die Rekensentrum van die Universiteit van die Oranje-Vrystaat.

Die resultaat was dat geen beroepsverwante stres onder die onderwysers van Botha-Bothe gevind is nie. 'n Opsomming van die aanbevelings en bevindinge word in hoofstuk 5 weergegee.

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SUMMARY

Stress is attributed to be an interference that disturbs a person's mental and physical well-being. Stress results have negative effects: physically (headaches), behaviourally (overreacting), emotionally (fatigue) and mentally (forgetfulness).

This study was undertaken to identify whether factors causing stress, such as role conflict, role overload, role insufficiency, role ambiguity, responsibility and physical environment are prevalent amongst teachers in the Botha-Bothe district of Lesotho. In establishing this, a standardized occupational stress inventory (*OSI*), measuring all these factors, was administered in the named area.

The aim of this study was to review the related local and international literature on stress regarding factors such as causes, effects and coping strategies, to do an empirical study, to analyse and interpret the data, to make suggestions to the government of Lesotho based on the findings in the study. Both a null and an alternative hypothesis were stated for this study. H_0: Teachers in Lesotho do not have stress and there are no factors causing stress amongst them. H_1: Teachers in Lesotho suffer from stress and there are factors, effects and coping strategies.

Because a study of this nature has never been undertaken in Lesotho and because the targeted clientele was government registered secondary and high schools of Botha-Bothe district of Lesotho, use was made of a standardised test which has a high validity and reliability. The occupational stress inventory (*OSI*) was chosen. The OSI was developed for two reasons: To develop generic measures of occupational stressors that would apply across different occupational levels of the environment and to provide measures for an integrated theoretical model, linking sources of stress in the work environment, the physiological strains experienced by individuals as a result of work stressors and the coping resources available to combat the effects of stressors and alleviate stress. In order to substantiate and verify all the factors relating to stress, a comprehensive literature study on the phenomenon "stress" was undertaken. Relevant books, articles, journals and bulletins were consulted.

The literature review gave a comprehensive picture of stress regarding stress in general, its effects and coping strategies. The empirical study concentrated on three domains: the occupational stress domain (ORQ) was measured on a set of six scales. The personal strain questionnaire (PSQ) and the personal resource questionnaire (PRQ) were both measured on four separate scales. The self-made questionnaire was also used to gather general information for individual respondents like post, sex, religion, level of teaching, race, qualifications, age, number of children of individual respondents and experience. Administration was applied on government regis-

DECLARATION

I declare that this dissertation being submitted for the purpose of obtaining an M.Ed. degree at the University of the Orange Free State, is my original and independent work, and has never been submitted to any other university/faculty for degree purposes.

A.M. Mohloboli

ALICE MOHLOBOLI

(November 1998)

DECLARATION

I declare that the dissertation hereby submitted by me for the Master of Education degree at the University of the Orange Free State is my own independent work and has not been previously submitted by me at another University/faculty. I furthermore cede copywright of dissertation in favour of the University of the Orange Free State.

ALICE M. MOHLOBOLI

November 1998

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Die analise en interpretasie van die data wat ingesamel is, is gedoen onder toesig van 'n geregistreerde sielkundige, en wel deur frekwensieverspreiding en variansie-analise, gedoen deur die Rekensentrum van die Universiteit van die Oranje-Vrystaat.

Die resultaat was dat geen beroepsverwante stres onder die onderwysers van Botha-Bothe gevind is nie. 'n Opsomming van die aanbevelings en bevindinge word in Hoofstuk 5 weergegee.

DEDICATION

this work is dedicated to

my family, for their encouragement,
including my son, Teleko Mohloboli,
and my dauthter, Puleng Mohloboli

DECLARATION

I declare that this dissertation being submitted for the purpose of obtaining an M.Ed. degree at the University of the Orange Free State, is my original and independent work, and has never been submitted to any other university/faculty for degree purposes.

ALICE MOHLOBOLI
(November 1998)

1 GENERAL ORIENTATION

1.1. INTRODUCTION

Stress is due to many external forces that act on one's mental and physical state either in a civil or professional occupational environment. Smith (1995:951) defines stress as "any interference that disturbs a person's healthy mental and physical well-being". He goes on to show that when stressed, the body responds by increasing the production of certain hormones such as cortisone and adrenaline, and these hormone changes lead to changes in pulse rate, hypertension as well as metabolic and other physical processes as the body tries to adjust its overall performance. He also explains that at certain levels, these hormones disrupt one's ability to cope with a stressful situation. From a theological perspective Selye (in Oates 1985:17) regards stress as pain. He says: "Pain is spoken of as undergoing hardship and the new Jerusalem is spoken of in Revelation as the time when there is 'no more death, mourning, crying or pain'. Here it seems as if some aspects of mankind hinge on the removal of stress, pain and suffering. Hence we tend to see stress as a bad state of being cocenter productive."

Smith (1993:7), on the other hand, defines stress as those pressures on the body that contribute to illness. As regards education, it may be observed that education is the fundamental preference to social, political and economic development in every country. The process of teaching in the education sector is central to the contractual and management of education in every country. Therefore, if teachers suffer from stress, the result is far-reaching within the national sector. According to Savery and Detuik (1986:273) excessive stress is not just a major concern for the education department because of the high economic costs caused by reduced effectiveness of some of its major resources from low to high ranks. Thus, the education department may be well advised to measure a teacher's own perceived level of stress and if she/he believes it is excessive, attempts should be made to reduce the level of stress generated at the work place.

Education in Lesotho is three winged, that is, it is dealt with by three parties which are the churches, government and community. Most of the schools are owned by churches. There are government schools, community and private schools. Even though most schools belong to churches, they are run by the government. The day to day functioning of schools is supervised by principals.

The tripartite structure of education in Lesotho, where a church is the partner and owner of most schools, has many rules, regulations and expectations from teachers for both primary and high school, especially principals. Teachers are expected to execute these regulations without asking questions. Parents, as partners in education, have a role to play where they are expected to liaise with teachers of schools. The government uses teachers as resource people through its many arms like the School Self-reliance Project (SSRP), Book Supply Unit (BSU), Food Supply Unit (FMU), and the Annual Statistical Return Unit (ASRU). This seems to cause what Cole and Walker (1989:37) call role conflict, which is defined as the degree of perceived conflict between role behaviours.

In Lesotho every teacher can be a principal, depending on who the church appoints. Sometimes the very person nominated could be the least qualified of all teachers. The *Lesotho Government Gazette* (1995:950) states that the principal means a teacher in charge of a school. This seems to have an indication of role ambiguity which Cole and Walker (1989:37) define as lack of clear information regarding expectations associated with a particular role.

Secondly, in Lesotho schools the day to day supervision is done by principals. The following are duties of principals as stated in the Education Amendment Bill (1996:56). "The principal shall (a) be responsible for the discipline, organisation and day to day running of the school; (b) be the chief accounting officer of the school and shall be responsible to the management committee or school board for the control and use of school funds; (c) maintain or cause to be maintained records of income and expenditure for the school; (d) prepare an annual budget for the school and submit to the management committee or school board for approval; (e) submit at the end of each school year a financial statement of the school to the management committee or school board for its approval; (f) perform any other duties as may be prescribed by the minister or delegated to him by the school board or the management committee." According to the *Lesotho Government Gazette Extraordinary* (1988:845),

"A teacher shall in addition to any other duties that may be delegated to him under regulation 14, (a) teach diligently the class assigned to him by the headmaster; (b) be responsible for the effective distribution, training and evaluation of the progress of pupils assigned to him and for the management of his class or classes; (c) be on the school premises before school opens at the start of a school day and remain there throughout the official school day; (d) only be absent from the school premises with the permission of the headmaster: Provided that for the purpose of paragraphs (c) and (d) residential housing on the school compound is not school premises; (e) prepare for use in his class or classes such teaching plans and outlines as are required by the headmaster and the appropriate departmental officer, and submit the plans and outlines to his headmaster or the appropriate departmental officer, as the case may be on request; (f) encourage pupils in the pursuit of learning; (g) inculcate by precept and example respect for Basotho culture and custom, the National Anthem, each other's religious views and practices, morality and the highest regard for truth, justice, loyalty, love of the country, humanity, benevolence, society, industry, frugality, temperance, neatness and all other virtues; (h) assist in developing co-operation and co-ordination of effort among the members of the staff of the school; (i) maintain under the direction of the headmaster, proper order and discipline in his classroom in the school and on its grounds; (i) conduct his classes with the school time-table; (j) participate in professional activities as are designed by the headmaster, the ministry or the board, as the case may be; (k) seek permission of the headmaster of his school if he is to be absent from school, giving reasons therefore; (l) carry out the supervisory duties assigned to him by his headmaster; (m) co-operate with heads of departments and with the headmaster in securing a suitable selection, arrangement and correlation of teaching materials and subject matter; (n) ensure that his classroom or teaching area is ready for the reception of pupils at least ten minutes before the commencement of classes in the morning and, where applicable, five minutes before the commencement of classes in the afternoon; and (o) deliver any school property or property of the ministry which may be in his possession, to the headmaster on demand, or to the board when his contract with the board has expired or when for any reason, his employment has ceased."

Looking at the above-mentioned duties of both the principal and the teacher, one feels that there may be an element of overload, for both the principal and an assistant teacher. For example, the teacher is doing daily preparations for every subject and

teaching at the same time for eight hours each day. The principal does the teaching and administrative work for eight hours each day. The situation is worse in primary schools as each teacher is responsible for some class for seven hours every day.

The third point is about the physical structure of Lesotho. The physical structure of Lesotho is such that there are mountain areas, foothill areas and lowland areas; there are urban and rural areas. Botha-Bothe district embraces the three areas. Thus, in Lesotho conditions such as very high temperatures, very low temperatures, noisy and quiet conditions prevail. All these conditions are experienced by teachers.

The fourth point is about the personal experience as a teacher trainer for the whole country. There are times when teachers are expected to attend on-campass sessions and off-campass sessions. One would find that some do not attend the sessions regularly. This means they have to be given special examinations as they would not be able to write normal exams. Sometimes even if they do attend the courses, they are absent most of the time. On approaching them, they give many different reasons, such as having gone to bury relatives; having to go to pay school fees for children; children being sick; having to take care of the family.

Against the background given above, it might be possible that teachers in Lesotho may be stressed. As Louw and Edward (1993:632-635) indicate, some of the causes of stress, as reflected in the above paragraph are role conflict; role ambiguity, responsibility; problems of daily life; and role inefficiency. This is the aim of this study; to find out if Lesotho teachers do suffer from stress.

1.2 STATEMENT OF THE PROBLEM

According to Charles (1988:27) the statement of the problem may be put in the form of a question to indicate what the researcher is trying to find out. Also, if it is put in the form of a hypothesis, the problem statement indicates a relationship between two or more variables that the investigator will attempt to verify. The statement of the problem for this study is in the form of a question as shown below.

Do teachers in Lesotho, especially in Botha-Bothe district, suffer from stress? If so:

- Which factors cause stress?
- What are the effects of stress on them?
- Which stress levels do teachers suffer the most and which group of teachers suffer the most, e.g. post, age, experience.
- How do they cope with stress?

1.3 AIM OF THE STUDY

The aim of this study is as follows:

- To do a review of related literature on stress, for example, to review the causes, effects and management strategies for stress.
- To do an empirical study on government registered secondary and high school teachers in Botha-Bothe district using a standardised questionnaire, to identify stress factors, their effects on and management strategies among teachers in Lesotho, that is Botha-Bothe district.
- To analyse and interpret data.
- To make a summary, suggestions and draw conclusion on the findings.

Having stated the aims the research outline will now be given.

1.4 RESEARCH PROGRAMME

The reports of the study is divided into five chapters. The first chapter deals with the general orientation which includes the introduction, statement of the problem, determination of aims, discussion on methodology issues, hypotheses, demarcation of research areas for the study, definition of terms and the conclusion.

The second chapter will concentrate on a review of the related literature on factors, effects and management strategies for stress.

Chapter three will deal with the discussion of the empirical research including research techniques and the instrument used in the collection of data.

Chapter four deals with the analysis and interpretation of data, and chapter five will be a summary of the findings, recommendations and conclusions.

1.5 HYPOTHESIS FOR THE STUDY

A hypothesis is the tentative answer to a cited problem. According to Leedy (1988:60) hypotheses are intelligent guesses posed to direct one's thinking towards the solution of the problem. He goes on to show that hypotheses and questions are helpful, because the researcher needs some point around which to orient the research in searching for relevant data and in establishing a tentative goal against which to project the data. Cates (1985:16) has a different view about a hypothesis. He says it is a statement of what the researcher believes will be the relationship between two or more variables in a study. He further shows that there are three types of hypotheses, which are research hypotheses, null hypotheses and alternative hypotheses.

For the purpose of this study two types of hypothesis will be used, which are null hypotheses and alternative hypotheses. Ary, Jacobs and Razavieh (1990:106) indicate that "a null hypothesis states a negation of what the experimenter expects or predicts, a null hypothesis is used because it enables researchers to compare their findings with chance expectations through statistical tests. The null hypothesis assumes that observed differences occurred because of chance alone and hence do not represent real differences at all."

The second is the alternative hypothesis. Ary *et al.* (1990:107) suggest that "the alternative is said to be non-directional because it does not state which groups' average score will be larger". Cates (1985:21) adds to the definition and says that often an alternative hypothesis will suggest a fruitful area for a new study. This method is also useful in evaluating the research reports of others, since it alerts the reader to possible explanations and influences which the researcher might have overlooked.

In the light of the above definitions the following two hypotheses will be stated: null hypothesis, symbolised by H_0:

- Teachers in Lesotho do not suffer from stress and there are no factors that cause stress among them.

The alternative hypothesis, symbolised by H_1:

- Teachers in Lesotho suffer from stress and there are specific factors that cause stress among them and therefore there are effects and coping strategies.

1.6 THE RESEARCH METHODOLOGY FOR THE STUDY

According to Cohen and Manion (1980:26) a research method is "a range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction".

For this study, the method will include both a literature review and the empirical techniques. The review will attempt to give the reader a comprehensive picture of stress, by looking into stress in general, it's effects and coping techniques that can be employed.

Secondly, the empirical part of the study will concentrate on two sections which are (i) a self made questionnaire which is aimed at gathering general particulars of respondents; (ii) a standardized questionnaire called occupational stress inventory (OSI), will be used. The OSI has a high validity and reliability. There are two reasons for using the OSI test and these are to develop generic measures of occupational stressors that would apply across different occupational levels and environment; and to provide measures for an integrated theoretical model linking sources of stress in the work environment, the psychological strains experienced by individuals as a result of work stressors, and the coping resources available to combat the effects of stressors and alleviate stress.

The OSI has three domains which are as follows: (1) The occupational stress domain is measured by a set of six scales which are collectively called the occupational roles questionnaire (ORQ). The ORQ scales are role overload (RO), role insuffi-

ciency (RI), role ambiguity (RA), role boundary (RB), responsibility (R) and physical environment (PE); (2) The personal strain questionnaire (PSQ) is a measure of the domain of psychological strain and comprises four scales, namely vocational strain (VS), psychological strain (PSY), interpersonal strain (IS), and physical strain (PHS).

Coping resources constitute the third domain of the OSI. The domain is assessed by the four scales which make up the personal resources questionnaire (PRQ). These four scales are recreation (RE), self-cares (SC), social support (SS) and rational coping (RC). By using the rating sheets for the test, raw scores are transferred to the profile form to facilitate calculation of T-scores. Interpretation of OSI scores requires familiarity with normative information. The use of normative scores (percentiles and T-scores) facilitates interpretation of scores on individual scales and profiles. A combined picture of stress amongst all respondents are also looked into.

1.7 DEMARCATING THE RESEARCH AREA FOR THE STUDY

Lesotho is divided into three regions and these are lowlands, foothills and mountains. These regions constitute the ten districts. Because the education is the same throughout the country and because Botha-Bothe district by virtue of its structure entails the three regions, it is considered to be what is going on in the whole country. Within this area of research, only the registered government secondary and high school teachers will be targeted by means of random sampling.

Now that the area has been demarcated the definition of terms will follow.

1.8 DEFINITION OF TERMS FOR THE STUDY

- *Schools*: All government registered high schools and secondary schools in Botha-Bothe district will be called schools.
- *Stress*: "The process that involves the perception a substantial imbalance between environment demand and response capability under conditions where failure to meet is perceived as having important consequences and is responded to with increased levels of state anxiety" (Martens in Cole & Walkers 1989:39).

- *Stress level*: This is the type of stress an individual suffers, for example, overload, ambiguity, conflict, responsibility and physical environment.

  - A specific response the body makes to all non-specific demands (Patel 1991:10).
  - Pain, hardship, suffering, burden and load (Selye in Oates 1989:16).
  - "Any interference that disturbs a person's healthy mental and physical well-being" (Smith 1995:951).

For this study, stress is going to be used the way both Smith and Selye define it. Smith's definition seems to encompass all the aspects of a stressful mind, while Selye's definition effectively likens the stressful mind to pain that a stressful teacher experiences.

1.9 CONCLUSION

Having dealt with the components of chapter one which are the introduction, statement of the problem, research aims, research outline, hypotheses, research method, demarcation of the research area and definition of terms, the next chapter will deal with the review of related literature on causes of stress, their effects, coping strategies for stress and definitions of stress.

2 THE NATURE, SOURCES AND EFFECTS OF COPING STRATEGIES FOR STRESS

2.1 INTRODUCTION

This chapter is a review of related literature. It consists of four parts. The first part comprises different authors' perception of stress and burnout. The second part focuses on causes of stress. The third deals with effects of stress and the last aims to address management strategies for stress.

2.2 DEFINITIONS OF STRESS AND BURNOUT

2.2.1 Stress

Many people define stress differently depending on the ways in which people behave when perceiving stress. Tanner (as quoted by Loate & Marais 1996:92) states that stress affects people from all walks of life - in business, professors, mothers, factory workers and even priests. Cooper and Stan (1987:6); Adam (1980:6), Cooper and Payne (1978:5); Telly (1990:3); Eckenrode (1991:240); Callahan and McCluskey (1983:6); Goldstein, Leonard, Carfield Sol (1985:3); Nucho (1988:3), Spielberger, Sarason and Strelau (1989:88); Proshansky, Ittelson and Rivlin (1970:322); Smith (1995:951); Oates (1985:17); Hayward (1991:5) and Quick and Quick (1984:8) all attempt to define stress. Some definitions seem to be the same while others are different.

In the first place, some authors such as Oates (1985:17), Quick and Quick (1984:8) and Hayward (1991:5) have the same view of stress. They look at stress in the same way, that is, stress as being both positive and negative. They refer to the positive stress as eustress and negative stress as distress.

Similarly the idea of Hayward (1991:5) and Quick and Quick (1984:8) is that "eustress" can be interpreted as that form of stress where positive outcome may result while their perceived opinions of "distress" could somehow be seen to lead to very adverse situations some form of avoidance. Quick and Quick (1984:8) postulate: "eustress is the healthy, positive, constructive outcome of the stress response. It includes the individual and organisational well-being associated with growth, flexibility, adaptability and high performance levels. Distress is the unhealthy, impartive destructive outcome of the stress response. It includes such adverse individuals and organisational consequences as cardiovascular disease and high absenteeism rates associated with illness, decay and death."

Hayward (1991:5), who agrees with Quick and Quick (1984:8) in defining stress observes that stress, is the individual's negative or positive response to a situation - whether the situation is of the past, the present or anticipated in the future. He relates that response may take various forms, viz distress (i.e. bad stress) eustress (i.e. good stress), hyperstress (i.e. overstress) and hypostress (i.e. understress). He also shows that it is the individual's unique perception which determines the degree of experienced negative or positive stress.

Eckonrode (1991:240) and Telly (1990:6) look at stress from a different point of view from the above-mentioned authors. They look at stress as a relationship between a person and the environment. It is a particular dynamic relationship between a person and the environment as they act on each other. Eckonrode (1991:6) observes that it is the relationship between a person and the environment.

On the contrary, Telly (1990:3) and Spielberger *et al.* (1976:88) have a different opinion about stress than the above-mentioned authors. They define stress from a psychological point of view. They say that stress has to do with disturbance in an organism which has to do with psychological changes. Telly (1990:3) suggests that it is individual's response when placed in a challenging or threatening environment. This refers to the individual's or group's psychological and physical reactions when exposed to a challenge in the environment. Spielberger and Sarahson (1996:88) observe that the state of the organism, essentially stress, represents some disturbance in the organism which is characterised by physiological changes.

It is worth noting that there are some authors who define stress differently from the above-mentioned authors. These people look at stress as a "demand". Carfield Sol

et al. (1985:3) and Nucho (1988:12) describe stress as "demands". Goldstein *et al.* (1983:3) regard stress as demands which tax the adaptive resources, while Nucho (1988:12) defines stress as the result of any demand upon the body.

On the other hand, Cooper and Stan (1987:6) have a different opinion from the two different groups of authors mentioned in the preceding paragraphs. They regard stress as perceived stressfulness of the events. They indicate minor events such as traffic jams, unpaid bills, inability to meet deadlines, minor events at home, school and work. When put together, they create stress or breakdown.

Cooper and Stan (1987:6) also have a different idea from the above-mentioned authors. They regard stress as biochemical reactions, which are chemical reactions taking place in living organisms. Hornby (1978:82) and Cooper and Stan all agree that stress is taking charge of the biological reactions in the body.

Another author, Selye (as quoted by Oates 1985:15) does not only look at stress from the scientific point of view, but discusses it from a theological point of view. His views differ from those of the above-mentioned authors. He indicates that in the Bible there are many words that mean stress. All these words help the reader to understand what stress is. For an example he uses affliction. He shows that God comforts us in all our afflictions. He also quotes Paul's use of suffering, meaning stress. He refers to words like burden and load, indicating stress. He also defines community stress affecting the body cooperate of all of us together. Selye (in Oates 1985:15) postulates that pain is spoken of as undergoing hardship and the new Jerusalem is spoken of in Revelation as the time when there is no more death, mourning, crying and pain. Here it seems that some aspects of hope in mankinds hinge on the removal of stress, pain and suffering. Hence we see much stress as bad, counter-productive and to be gotten through.

A different dimension of defining stress is that of Proshahansky *et al.* (1970:322) who look at stress differently from the previously mentioned authors. They regard stress as strain. According to them stress is mental strain arising from constantly having to "get along" with other people.

On the other hand, according to Adam (1980:6) there is no agreement met on the definition of stress and as a result, he does not agree with any of the above-mentioned authors on their definitions.

Having taken note of the definitions of stress discussed in literature, the definition selected for the purposes of this study is that of Smith (1995:951). He states that "stress is any interference that disturbs a person's healthy mental and physical well-being". Cognisance will also be taken of the definition of Selye (in Oates 1985:15) who refers to stress as pain, because they describe how one feels when the limits of a person's strength and energy are being tested severely.

In the light of these definitions of stress, it may be concluded that stress is any disturbance that results in the mulfunctioning of the body system. The next step is to deal with the definitions of burnout.

2.2.2 Burnout

Some people are able to develop mechanisms to cope with stress, while in others, stress may develop into a worse situation, referred to as burnout. Roth and Gold (1993:41), Cole and Walkers (1989:27), Patel (1991:51), Paine (1982:30), Cherniss (1980:17) and Smith (1993:201) all define burnout.

Paine (1982:30) and Smith (1993:201) are similar in their views of burnout. They both are of the opinion that burnout is emotional exhaustion, a feeling of helplessness, resulting in a negative attitude. Paine (1982:30) remarks that burnout is "a state of physical, emotional and mental exhaustion marked by physical depletion and chronic fatique, feeling of helplessness and hopelessness and the development of negative self-concept and negative attitude towards work, life and other people".

Similarly Smith (1993:201), whose views agree with that of the above-mentioned author, explains burnout as emotional exhaustion, or a feeling of being drained and empty because of excessive work demands; depersonalization, or becoming insensitive, closed off, callous, cynical or hostile towards others. Such a person may have a low feeling of accomplishment or feel frustrated and helpless, because efforts seem wasted and worthless.

Cole and Walker (1989:17), who share the opinions of the above-mentioned authors, regard burnout as a state of mental, emotional and attitudinal exhaustion in teachers which results from prolonged experience of stress. Such teachers are still able to function as teachers, but they have largely lost commitment and enthusiasm for their work and this inevitably has an effect on their job performance.

Cherniss (1980:17-18) has a different view. He regards burnout as an imbalance, and postulates that it is a transactional process. More specifically, according to Cherniss (1980:17-18), burnout appears to be a process consisting of three stages. The first stage involves an imbalance between resources and demands (stress). The second stage is the immediate short-term emotional response to this imbalance, characterised by feelings of anxiety, tension, fatique and exhaustion (strain). The third stage consists of a number of changes in attitude and behaviour, such as a tendency to treat clients in a detached and mechanical fashion or a cynical preoccupation with gratification of one's own needs (defensive coping). He concludes that burnout refers to a transactional process, a process consisting of job-stress, work strain and psychological accommodation and, specifically, burnout can be defined as a process in which a previously committed professional disengages from his or her work in response to stress and strain experienced in the job.

Roth and Gold (1993:41) look at burnout from a different perspective. They regard burnout as a result of unmet needs. The essence of their view of burnout is not different from the essence of that of the previously mentioned authors, but they focus on unmet needs. Roth and Gold (1993:41) describe burnout as a syndrome which emanates from an individual's perceptions of unmet needs and unfulfilled expectations. It is characterized by progressive disillusionment, with related physiological and physical symptoms which diminish one's self-esteem. It develops gradually, over a period of time.

Patel (1991:55) approaches burnout in a different way. He talks of individual and organisational burnout. He calls burnout breakdown. Patel (1991:56) observed that the individual, his groups, the organisation in which he works, and the environment in which the organisation functions can all interact and contribute to a person's resilience or susceptibility. He further shows that breakdown occurs only when stressors exceed the capacity of the individual to cope when the individual has already been stretched by existing stress, a new stress may well tip the balance.

Examining all the above-mentioned definitions on burnout, one realises that burnout is the accumulated disturbance that leads to the permanent malfunctioning of the body system. In general, the definition of burnout emphasises the prolonged stress; therefore the causes of stress will be causes of burnout (Schamer & Jackson 1996:29).

2.3 SOURCES OF STRESS

According to Hornby (1978:840) a source is a place from which something comes. It may be likened to an original document, serving as material for a study, like that of a period in history. In the same manner, this part will deal with the origin of stress and burnout, such as role overload (RO), role insufficiency (RI), role ambiguity (RA), role boundary (RB), role responsibility (R) and physical environment (PE). Because burnout is prolonged stress, with similar causes effects and coping strategies, stress and burnout will hereafter be used interchangeably.

2.3.1 Role overload (RO)

Robertson and Matthews (1988:79), Savery and Detuik (1986:273), Cranwell-ward (1990:45), Zimbler, Solomon, YomTov and Cruzd (1985:192), Johnstone (1989:7), Fenlason and Beehr (1994:157), McNeely (1995:11), Perrewe and Ganster (1989:203), Reynold (1997:105), Veeran and Moodley (1994:356), Rifkin (1994:10), Kagan (1989:297) and Ray and Miller (1994:363) hold the idea that overload is a source of stress. They do not necessarily agree in explaining the idea of overload, but their theme is the same.

Some authors discuss overload focussing on the principals' duty at school. For example, Robertson and Matthews (1988:79) postulate that not only were principals bothered most often by workloads, but the intensity of the stress produced most frequently over time also become most severe, according to findings. They also explain that to examine this notion, a correlation was computed between the frequency and potency ratings of the individual principal to prove the presence of stress among principals.

Similarly Savery and Detuik (1986:273) explain the idea of overload, focussing on principals, but basically they deal with primary school principals. Savery and Detuik (1986:273) observe that: "Role overload for primary school principals highlights a major problem for the education department who may have to move away from the idea of having, generally, part-time principals in primary schools to full-time managers in the same way as the principals of high schools. However, some principals in both groups are working excessively long working weeks due to role overload and it appears to create a high level of perceived stress in the individuals involved."

Some authors, however, attempt to explain the idea of overload by way of defining it. Cranwell-ward (1990:45) postulates that excessive demands are pressures which occur as a result of too much to do and too little time to do it. The demands may come from the job or from non-work related responsibilities. A person may feel overloaded because of the number of competing demands, which relate either just to work, or to a combination of home and work demands. Alternatively, the level of one's work may be too demanding.

Another issue is that of the type of overload. Zimbler *et al.* (1985:192) show the difference between two types of overload, that is, where there is too much to do and qualitative overload, where the task is too difficult to do. Qualitative overload includes unrealistic deadlines, quotes and budgets, high responsibility for subordinates, many difficult meetings and continuous decision-making.

Some authors do not confine themselves to principals when discussing role overload in schools. They deal with teaching and teachers in general, as observed by Johnstone (1989:7). Several writers concur in their finding of major causes of stress in teaching, such as:

- Pupils failure to work or to behave
- Poor working conditions, generally in terms of relations with colleagues
- Workload, in terms of overload, underload or routine work
- Poor school ethos.

In brief these elements may seem self-evident, and indeed similar to the stressors found in any large-scale organisation dealing with people.

The majority of authors do not discuss the overload theme in isolation. They make mention of it in conjunction with other stressors. Kagan (1995:297) postulates that teachers who tended to fit the pragmatist profile obtained relatively high scores on three stress scales: Lack of administrative support, working with teachers, and task overload. A pragmatic cognitive style is characterised by the tendency to evaluate situations in terms of subjective costs and benefits. Teachers with such an outlook could have been more aware of inequities on the job, and this could have generated feelings of stress. Task overload was positively related to scores on the pragmatist,

analyst and realist scales of the Inquiry Model Questionnaire, but was negatively related to the idealist scale.

Another point is that of rewards. There are cases where authors compare causes with situation at work. For example, Rifkin (1994:10-11) postulates that: "Jobs that are more demanding also tend to offer other kinds of rewards, such as better pay, more opportunities for promotion, and respect from peers and society, which make the job more satisfying and less stressful. And because Edward thinks that workload is also an important variable, he is advocating a change in the methodology for measuring jobfit. He proposed that the traditional two-dimensional model be replaced by a three-dimensional approach to take into account workers who are overloaded and underutilized."

Some writers, seemingly find it difficult to separate stress factors. They discuss them all at the same time to show their negative impact to work. Veeran (1994:356) indicates that the lack of a clear job description is a contributory factor in the onset of stress, as unrealistic role expectations and excessive workloads are a common features in the absence of a job description. Other aspects of the job that are closely related to a worker's performance and sense of achievement are training and supervision. An organisation's sanctioning of programmes or projects was found to have facilitated the work of child care workers, and in that study it was ascertained that the dissatisfaction of child care workers with their jobs related to agency policy, programmes, projects, training, supervision and workload.

Reynold (1997:112) focuses on the interaction between the effects of industrial unemployment and job conditions on workers' levels of psychological distress. He observes that the results indicate that micro-economic context and job rewards interact in their effects on workers' distress, but macro-economic context and job demands do not. Industrial rates of unemployment have a direct effect on worker distress that is not accounted for by work conditions of overload or complexity. Furthermore, as predicted by the job salience hypothesis, industrial unemployment rates are most threatening to workers who occupy rewarding, complex jobs.

Some writers explain the overload factor by way of defining it. Perrewe and Ganster (1989:214) postulate that many of the demands individuals encounter in the workplace relate to various forms of stimulus overload. They explain that the concept of overload refers to an individual's capacity to handle incoming signals, while quanti-

tative overload is defined as the amount of work that exceeds what an individual can accomplish in a given period of time. Work that is overloading because it exceeds the skills, knowledge and abilities of individuals is referred to as qualitative work overload. Research as early as 1958 established that quantitative overload can lead to elevation in blood cholesterol levels.

Some people regard stress caused by overload as pressure. Lemley (1987:134) indicates that the desire to manage things well and to lead effectively certainly creates pressures and stresses. In most instances, the effective principal deals well with stressors of the job; however, even the most effective administrator occassionally succumbs to the pressure of task overload.

McNeely (1995:11) found that overload rated among the top five sources of stress, while she was doing research on stresses and coping strategies in nurses from palliative psychiatric and general nursing areas, where she identified five major sources of stress and concluded that for patients to receive quality care, then the needs of nurses must be taken into consideration. She points out that those things which let sample rated as the top five sources of stress (most often rated quite or extremely stressful) were directly related to the workplace situation. These top five sources are:

- Too much work/too little time;
- Inadequate staffing in the unit;
- Inability to meet patients' needs;
- Very difficult/violent patients;
- Inadequate support/understanding from senior staff.

Besides these top five sources, some authors mention stressors without necessarily explaining them. Fenlason and Beehr (1994:157) indicate that: "Many psychological stressors have been enumerated in the past research, including those in this study. Underutilization of skills, role overload and role conflict (e.g. Ganster, Fusilier & Mayes 1986; Kahn, Wolfe, Quinn, Snoek & Rosenthal 1964; Kaufmann & Behr 1986; Jayaratne & Chess 1984). Several psychological strains have also been studied as effects of the job stress, including job satisfaction, depression, anxiety, irritability, somatic complaints, emotional exhaustion, depersonalization, workload dissatisfaction and job boredom."

Having seen different perspectives from different authors about role overload, the researcher feels that role overload may be a source of stress amongst teachers in Lesotho. The next step is to look at role insufficiency as a cause of strain.

2.3.2 Role insufficiency (RI)

Osipow and Spokane (1981:1) define role insufficiency (RI) as measuring the extent to which the individual's training, education, skills and experience are appropriate to job requirements. The following people discuss role insufficiency as a stress factor in the occupational setting. Loate and Marais (1996:94), Teague, Van Dinter, Rosethal, Retish, West and Mobily (1987:61), Friedman and Farber (1992:30), Burke and Greenglass (1995:191), Byrne (1994:649), Fimian, Pierson and McHardy (1986:156), Strumpfer (1989:131), Bogg and Cooper (1995:330), Gunning and Cooke (1996:214), Soderfeldt, Soderfeldt and Warg (1995:44); Statland (1997:82, 83-86); Whitaker (1996:67), Poppleton, Deas, Pullin and Thompson (1987:314), and Boyle, Borg, Falson and Baglioni (1995:54) and *Managing stress* (1995:15).

Managing stress (1995:15) points out that job stress occurs across occupational boundaries and produces acute reactions which may lead to chronic illness. According to it stressors are divided into five broad categories which are:

- Those intrisic to the job;
- role in the organisations;
- relationships at work;
- career development;
- occupational structure or climate.

The second important point is that of synchronous and asynchronous types of communication. Statland *et al.* (1997:84-87) are of the idea that a manager who is not skilled in the following, is not able to perform duty effectively, namely the computer, the fax, the cell phone, the paper and all the trappings of the information age because incompetency in such areas causes stress in the workplace. Secondly, they show that knowledge of how and when to use them is essential to maintaining workplace sanity.

Thirdly, they divide communication into two, that is, synchonous, which includes telephone, cell, face to face conversation and video conferences and asynchonous, which are letters, faxes, e-mail and voice mail. The last important point is how to gain competency in using them, because this will counter role insufficiency and stress.

- Learn how to use all the communication devices available at work
- Separate urgent messages from non-urgent ones
- Separate important messages from less important ones
- Prioritize, based upon true urgency and importance of the messages
- Allow yourself the option of delegating a response if appropriate
- Respond briefly and to the point. Don't add more than one signal
- Schedule face to face meetings to build rapport with key individuals
- Be careful not to become addicted to your favourite communication device
- Leave the laptop at work when on vacation and over weekends
- Don't use a long-distance paper, unless it is absolutely necessary to do so
- Remember, virtual reality is not the same as true reality
- Be careful what you communicate. Your e-mail is probably unsecured
- Have fun with the toys of the information age. They'll make life easier.

Boyle *et al.* (1995:54) approach the inefficiency factor in a multi-dimensional fashion, without necessarily isolating it from other factors of stress. Boyle *et al.* (1995:54) observe that in their study: "The five factors accounted for approximately 65 per cent of variance factor (workload), accounted for 32,1 per cent of the variance and included items suggesting too much work (including lesson preparation and marking), too much responsibility for pupils and inadequate rest periods. Factor 2 (11,2 per cent of variance) loaded on items related to professional recognition needs,

including items pertaining to poor career structure, insufficient salary, and inadequate recognition of teaching competency. Factor 3 (7,7 per cent of the variance) loaded on items concerning student misbehaviour, noisy, difficult pupils, lack of class discipline, pupil impoliteness/poor attitudes and problems in managing additional children. Factor 4 (7,2 per cent of the variance) loaded on items indicating time/resource difficulties. This factor highlighted the problems of inadequate equipment and facilities, ill-defined syllabi, insufficient time available for individual tuition, and large size classes. The fifth factor (6.3 per cent of the variance) concerned poor colleague regulations, loading on items involving pressures from educational authorities, pressures from parents and attitudes of other teachers."

Poppleton *et al.* (1987:303) investigated the inefficiency factor by comparing USA teachers and United Kingdom teachers. The idea was for those teachers to exchange and share experiences in the two education systems. Poppleton *et al* . (1995:303) report on work of research groups at the University of Sheffield and in Michigan that embarked upon a comparative study of teacher satisfaction in secondary comprehensive schools. One of the themes that the Sheffield team wished to explore concerned the satisfactions and stresses of teaching in areas of economic and social disadvantage. They indicated that through teacher preparation and in-service programme they became aware that conditions in some schools were becoming more stressful and that stress presented the greatest contemporary challenge to the teaching profession.

Another point is about in-service training. In dealing with inefficiency as a factor for stress production, some authors confine themselves to certain specific groups of professionals only. Whitaker (1996:66-67) indicates that: "Historically, many professional development opportunities for principals have been devastating. Few principals want professional development, that is 'in-service' designed more for teachers than principals. Principals need development opportunities where they can view themselves as continual learners. One model that is being used more frequently is the work of principals' centres across the country. For example, at the Harvard Principals' Centre, groups of principals gather to share ideas and make decisions about their own growth and development. These centres provide mechanisms for reflective practice to occur as well as opportunities for principals to design their own professional development activities to reduce pressure."

Soderfeldt *et al.* (1995:44) depict inefficiency in the form of a table of factors associated with burnout as given below. He does not explain any factors.

Table 2.1 Factors associated with burnout

FACTOR	STUDY
Work related	
Low work autonomy	Arches (1991), Le Cray & Rank (1986)
Lack of change on the job	Ninde, Jayaratne & Thyness (1986)
Low degrees of support	Fahs Beck (1987), Himle, Jayaratue & Chess (1987), Jayratue & Chess (1988)
Role ambiguity	Himle, Jayratue & Chess (1987)
Work in public sector	Justice, Gold & Klein (1981)
Low professional self-esteem, low salary	Le Croy & Rank (1986)
Dissatisfaction with agency goals and minimal use of coping strategies at work	Flesh Beck (1987)
Difficulties in providing services to clients	Fahs Beck (1987)
Negative attitudes toward the profession, high degree of work pressure, bad agency functioning	Streepy (1981)
Client related negative impression of the clients	Corcoran (1987)
Empathy	Corcoran (1989)
Personal involvements in clients' problems	Fahs Beck (1987)
Involvement in the client-worker-relationship	Streepy (1981)
Workers' related chronic minor hassles of daily living	Johnson & Stone (1987)
Family income, attitudes toward the profession, years of experience and low education	Streepy (1981)

Gunning and Cooke (1996:213) indicate role insufficiency as a source of stress by tabulating six causes and defining them in the manner as shown below:

- Job characteristics: the quantity of work undertaken, deadlines, decisions required, physical condition.

- Role in the firm/organisation: lack of autonomy, role ambiguity, role conflict, position of influence, level of renumeration relative to others.
- Interpersonal relationship with superiors, colleagues, subordinates, friends and family.
- Career development pressure: where there are unclear goals (lack of ability, reaching a ceiling for promotion, or failure to satisfy personal desire for variety, challenges, learning, and use of skills).
- Climate and structure of organisation and job regarding ethics, pace, change, level of bureaucracy, insecurity.
- Interaction of work with private life: Conflicting needs of work and family, financial commitments, excessive demands from either side.
- Internal pressures: poor self-image, fear of failure, bad time management, unreasonably high standards (perfectionism).

The intrinsic factors playing a role are also addressed in literature. Bogg and Cooper (1995:330) indicate influencing factors intrinsic to the job, such as comparative pay and working conditions, and a strong feeling of possessing little control over their job and their organisation under role insufficiency. In their discussion they deal with several factors without separating them. In Bogg and Cooper's (1995:330) research the Sources of Pressure Scale of the occupational stress indicator was used to measure job stressors at work. Additional items, specific to civil servants were also included. There are 61 items in the original OSI scale, broken down into six subscales, which are compatible with the six sources of stress identified by Cooper (1988). The subscales are on factors intrinsic to the job ($a=0.70$), the managerial role ($a=0.80$); relationships with other people ($a=0.79$); career and achievement ($a=77$); organisational structure and climate ($a=0.84$) and the home/work interface ($a=0.83$).

Another factor to be discussed is that of deficiencies. Strumpfer (1989:131) addresses the issue of inefficiency by investigating the deficiencies of South African managers. He pointed out the fact that white human resources are over-utilized and black human resources are under-utilized. Strumpfer (1989:131) observed that one aspect of this constellation of shortage of high-level human resources and its consequent quality deficiency is that, arguably, it must on many occasions, result in a acutely stressful situation. More often than not, it must result in chronic and constant

stress for the limited number of people who have to fulfil the job demands, they themselves often less than optimally skilled and having to function through subordinates who may also be lacking in skills.

In the literature there also is reference made to two categories of teachers. Fimian *et al.* (1986:155) focus on teachers who teach learning disabled students and teachers of non-learning disabled students. In this case dependent variable ratings for the degree of intensity and the degree of frequency of the ten strongest and most frequent stress variables were made. In their attempt to rank order the variables they indicated inadequate discipline policies first. Among the variables the inefficiency factor for stress wasrank-ordered in the 6th place.

Another important point is that of classroom environment. Byrne (1994:649) investigated the impact of stress factors on three facets of burnout, which are emotional exhaustion, depersonalization and reduced personal accomplishment. In her study to investigate the impact of stress, she discussed the issue of inefficiency, which is called classroom climate in this case. Byrne (1994:649) postulates that classroom climate bears critically on teachers' attitudes toward teaching. Thus, it is not surprising that erosion of classroom climate leads to job stress. In particular, students' discipline problems, student apathy, low student achievement and verbal and physical abuse by students have been shown to be primary sources of teacher stress. Indeed, in a recent study of over 5000 American and Canadian teachers, 63 % reported student discipline problems as the most stressful factors in their environment.

Professional competency is another aspect of role insufficiency. Friedman and Farber (1992:30) explain the feelings of professional competence factor. They show that this factor reflects the educational-instructional aspect of teaching. It includes teaching, grading and helping students with both educational and personal issues, as well as considering students' feelings and having close contact with parents about school-related issues. They indicate that it includes things like:

- "I give my students all the help they need with their schoolwork", "My students learn many important things from me and I am a good teacher"
- Feelings of professional satisfaction: This factor assesses a teacher's self-acceptance, self-esteem and general level of satisfaction from

teaching. Two examples of items from this scale include: "I am satisfied with being a teacher", "I enjoy working with my students".

- Feelings of personal competence: This factor reflects the personal aspect of professional self-concept. It includes the teacher's ability to maintain self-control, to be interesting and to lead a class, and to function at a high level of efficiency. Examples include: "My classes are not as interesting as they should be", "I get angry very easily" and "I have strong self-control."

Insufficiency also has to do with independent roles. Teague *et al.* (1987:68) present a structural research model for addressing the relationship of organisational antecedents of work stressors to outcomes and behavioural outcomes. In their report they make mention of efficiency problems. Teague *et al.* (1987:67), drawing from Parasurman and Alutto (1984) and Ertz (1993), refer to specific stressors arising from situational factors. Of interest in this study were equipment breakdowns, delays in task completion by individuals in functionally independent roles, work overload, work interruptions, efficiency problems, role frustration, technical problems and inter-unit conflict. Research correlating these job stressors with job satisfaction and burnout include Steers (1977) and Maslach (1982). Role frustration, inter-unit conflict and overload were the principal variables related to burnout and job satisfaction found in these studies.

A last point about role insufficiency relates to inadequate orientation. Burke and Greenglass (1995:191) have this idea of role inefficiency and call it inadequate orientation. In their discussion, Burke and Greenglass (1995:191) postulate that: "The training I received for my present job allowed me to go out and handle the first day without any problems."

All the information given above makes it clear that role inefficiency may be one of the major stressors. The following subheading will deal with role ambiguity as a stressor.

2.3.3 Role ambiguity (RA)

Some authors have defined role ambiguity as a source of stress in an occupational setting. The following authors evidence this point, namely Peterson, Smith, Akande,

Ayestaran, Bockner and Callan (1995:429), Hayward (1991:3), Moore and Cooper (1996:82), Litt and Turk (1985:182), Ross (1993:334), Conley, Bacharach, Baner (1989:64), Widrich and Ortlepp (1994:122), Leong, Furnham and Cooper (1996:1345), Byrne (1994:648), Sowa, May and Niles (1994:22), Frone, Russell and Cooper (1995:1), Johnson (1994), Ferris, Frink, Galang, Zhou, Kaemar and Hayward (1996:234), Bruce and West (1996:209), Van Staden (1992:1), Hart, Wearning and Conni (1995:36), Garner (1988:7), Galloway, Bosswell and Cooper (1985:44).

In the first place, different authors discuss causes of stress differently. Some present them by way of tabulating all causes together, while others approach them by way of explaining the situation. Ross (1993:334) observes that, although burnout can be experienced in any occupation, among social workers who daily face stress and must deal with personal conflicts and the ambiguities of intervention, the incidence of burnout in South Africa is exceptionally high The mean working life of South African social workers has been found to be less than three years.

Litt and Turk (1985:182) agree with the above-mentioned authors that role ambiguity is a source of stress. But their report is not in a way of explaining the situation in South Africa. They describe it in the form of orthogonal factors in relation to job satisfaction and teachers' stress. Litt and Turk (1985:182) observe that: "Two sets of variables examined in this study appear to play a large role in terms of job satisfaction and teacher stress. They are the perceived role variables and teachers' perception of the principal. As noted before, factor analysis of the job-related tension scale resulted in identification of four orthogonals factors: role overload; relationship with supervisor; role conflict, and role ambiguity. The role of teachers has received much attention and a number of authors have focussed on role conflict and role ambiguity as important sources of teachers' stress."

Moore and Cooper (1996:82) have the same opinion as the above-mentioned authors about role ambiguity. They regard it as a source of stress. They take it to be an intrinsic source of stress to the job. They indicate that most work stress reported in the literature is that considered to be intrinsic to the job, that is, they emanate from within the organisation of the particular job role. Seemingly universal and variable amongst these stressors in the organisations are job pressure, role overload, role conflict and role ambiguity, that in turn are related to lack of job satisfaction and inadequate coping strategies.

Hayward (1991:3) agrees with the above-mentioned writers about role ambiguity as a cause of stress. He also approaches role ambiguity by way of defining it in the same manner as Ross (1993:334). He relates that the concept of role ambiguity has been defined because due to a lack of clear, consistent information regarding rights, duties and responsibilities, a person's occupational manager should demarcate, preferably in writing, the role expectations of each teacher to obviate undue stress within the teacher and conflict amongst teaching colleagues.

Widrich and Ortlepp (1994:122) concentrate on the study examining the relationship between work stress and a specific aspect of marital functioning, namely, marital interaction with the three stresses used as indicators, namely, role overload, role conflict and role ambiguity.

On the other hand, Conley *et al.* (1989:64) report on his work on role ambiguity by way of tabulating all stress factors against theoretical constructs. The organisational factors are as follows: role ambiguity, routinalization, absence of authority, influence deprivatation, contact with supervisors, contact with peers, positive supervisory behaviour, certainty of promotion process, rationality of promotion process, manageable class size, absence of student learning problems, and absence of student behaviour problems. Theoretical constructs are bureaucracy, powerlessness, communication, supervision, career development and classroom environment.

Byrne (1994:648) discusses the role ambiguity factor of stress by way of defining it in a study investigating the impact of stresses on the work setting. Byrne (1994:648) observes that: "Role ambiguity is associated with a lack of clarity regarding a worker's obligations, rights, objectives, status, and/or accountability. Other contributing factors include increasing complexity of tasks and technology, and continued rapid organisational change." Farber (1991) lists factors often cited by teachers as prime contributors to feelings of job stress, as (a) unclear and inconsistent policies regarding student behaviour; (b) required restructuring of curricula and pedagogical approaches in accordance with changing government mandates; and (c) the perception of being held in low esteem by students, parents, administrators and the general public.

Sowa *et al.* (1994:22) compared counsellors who reporting high strain with less coping strategies with counsellors who are perceiving lower levels of occupational stress. In their attempt, they used an occupational role questionnaire which uses six subscales to indicate causes of stress, including ambiguity. Sowa *et al.* suggest that:

"The six subscales of the ORQ are role overload (RO), which measures whether the individual is able to complete expected workload, role insufficiency (RI), which measures the extent to which the individual's skills and training are appropriate for the job requirements, role ambiguity (RA) which assesses the degree to which the priorities, job expectations and evaluation criteria are understood by the individual, role boundary (RB), which measures the degree to which the individual is experiencing conflicting role demands within work performance and well-being of others on the job; and physical environment (PE), which provides as assessment of the degree to which the individual is experiencing extreme physical conditions at work."

Frone *et al.* (1995:1) approach role ambiguity as a source of stress by way of defining it. In their attempt to define it, they do not isolate it from other main sources of stress. Frone *et al.* (1995:1) postulate that: "Work pressure (eight items, alpha = .78) reflects the frequency with which individuals perceive high job-related demands resulting from heavy workloads and responsibilities. Lack of autonomy (six items, alpha = .77) reflects the frequency with which individuals perceive constraints on their ability to function autonomously and influence important job parameters. Role ambiguity (six items, alpha = .71) reflects the frequency of being confused or unclear absent job-related goals and day to day tasks and expectations. The 20 items comprising these three scales were taken from several previously published measures of job stressors."

However, Johnson (1994:72) indicates that the tolerance for ambiguity common among social workers in chronic can be understood as an extension of care, social work ideology and practice, reflecting a general willingness to let go of control. Secondly he shows that some social workers in chronic even suggested that the unique contribution of the profession of social work within the context of medicine is precisely its focus on, and acceptance of, the various ambiguities and 'uncontrollables' in health care.

Similarly, Van Staden (1992:1) concentrated on future ambiguity as a factor under role ambiguity. He shows that it is dangerous to both individual and organisations. Van Staden (1992:1) observes that it has been widely recognised that job future ambiguity acts as a significant source of stress in the workplace. When not adequately addressed, this source of stress has dire consequences for both individual well-being as well as organisational effectiveness. The extent to which ambiguity in one's future career is perceived (be it in terms of cutbacks, retrenchments or reassignments) in the

long run is likely to manifest in the increase of stress and coping reactions by individual workers, ineffective organisational functioning and strained industrial relations.

Borg and Riding (1991:277) report on the role responsibility factor for stress based on their study where teachers' stress, job satisfaction, absenteeism, careeer intention, career commitment and self-esteem as teacher were investigated in a context which allowed for many of the characteristics of an educational system to be incorporated in the design. In relating those, Borg and Riding (1991:277) observe that results also indicated the role that different school contexts and teacher responsibilities may play in the teachers' stress perceptions. The greater stress reported by teachers with additional responsibilities who taught in boys' schools (as compared with their counterparts in girls' schools), may reflect an overall more stressful working environment in boys' schools, exacerbated no doubt by increased contact with pupils and additional responsibilities.

Carr (1994:30) also indicates the role responsibility in his discussion of his studies of stress among principals. In his study, Carr (1994:30) found that principals clearly feel like an employee of an education department on the one hand, on the other hand, at school level and in the industrial arena, principals are perceived as agents of the employer and responsible for the activities and resourcing of the school. There are numerous references in the interviews with the school principals that illustrate this phenomenon.

Breakwell (1990:31) discusses the responsibility factor without isolating it from other stress factors. He identified ten top stress factors for the caring professions, namely (1) long or unsociable hours; (2) job insecurity especially worries about management recognition or changes in job description; (3) not knowing what standards of service one can realistically be expected to provide; (4) poor pay or promotion prospects; (5) lack of autonomy or ability to participate in decision making; (6) work overload; either too much or the wrong sort; (7) poor (non-supportive) relationships with colleagues; (8) ineffective or time wasting arrangements; (9) poor communication channels, either with managers or with patients; (10) boredom.

A fourth important aspect to address is communication. Hayward (1991:93) refers to the responsibility factor in his article that describes managerial strategies to obviate unnecessary stress in the school. The best way to do this is through communication. Hayward (1991:93) observes that at staff level, interaction and communication

amongst teachers, as well as between teachers and supervisors, are important because they provide teachers with the critical information and instructions needed to perform their professional tasks. Also there is the formation of a potential network of social support. When there is better communication and cohesion between colleagues at all levels, teachers are less likely to experience stress.

Nash (1989:38) highlights the responsibility for stress based on research among nurses in their work setting. She describes stressors and their coping strategies for nurses. In her study, Nash (1989:38) observed that the organisation of the salient working unit can be a source of support, but also a source of tension. To strengthen her point, she asks a number of questions: Is there too much work to do? As over-stressed staff leave, there are few nurses left to cope; does time scheduling and shift work take too high a toll of the nurses' personal life? Does the nurse have a clear idea of what she is supposed to do? Are the boundaries between her work and that of other professionals clearly defined? Does she have a forum for sharing her feelings, opinions and ideas? Does she have enough supervision and support? Is there good team work and a sense of purpose in the unit? Is provision made for personal development? Is there recognition of the job stress and the need for its prevention?

Bogg and Cooper (1995:336) discuss the responsibility factor for stress in a report on their study which revealed senior UK civil servants to be significantly more job dissatisfied and to display more mental and physical ill health than their private sector counterparts. The main sources of stress were factors intrinsic to the job, such as poorer salaries and working conditions. In their discussion, Bogg and Cooper (1995:336) indicate that "senior civil servants show significantly worse health, well-being and work related attitudes, being significantly higher than private sector executives of equivalent level on mental and physical ill health, and also significantly more sources of job stress, particularly in their management role, their relationships at work (with boss, colleagues and subordinates) in career blockages and in their job interfering with their private and home life. Senior civil servants, however, do perceive significantly more stress from the intrinsic to their particular job, such as comparative (and worse) pay in contrast to their private sector counterparts, excessive hours of work, lack of task variety, etc."

In their argument, Boyle *et al.* (1995:54) address the theme of responsibility in their study of stress, job satisfaction and career commitment among full-time primary teachers. They indicate that responsibility is a source of stress. Boyle *et al.* (1995:54)

postulate that the workload factor accounted for 32.1 per cent of the variance and included items suggesting too much work (including lesson preparation and marking), too much responsibility for pupils, and inadequate rest periods. Factor 2 (11.2 per cent of variance), including items related to professional recognition needs, pertaining to poor career structure, insufficient salary and inadequate recognition for teaching competence. Factor 3 (7.7 per cent of the variance), comprised items concerning student misbehaviour, noisy difficult pupils, lack of class discipline, pupil impoliteness/poor attitudes and problems in managing additional children.

Another factor of importance is that of clinical psychologists. Cushway and Tyler (1996:145) include role responsibility as a stress factor. In their study, summarising a series of studies of British clinical psychologists and discussing them in relation to literature, four questions are raised which are:

- How stressed are clinical psychologists?
- Which psychologists are more stressed?
- What are the main sources of stress for clinical psychologists?
- What coping strategies are used by clinical psychologists?

In explaining the stress factor, they included other factors. Cushway and Tyler (1996:145) postulate that there is a large literature report on the stressors facing psychotherapists, which has been recently reviewed by Brandy *et al.* (1995). Some of the stressors for British clinical psychologists working in the National Health Service (NHS) are similar to those faced by other health professionals. These include pressure of workload, lack of resouces, conflicts in relationships with other professionals, and poor organisational communication and management.

The point of organisational stressors is also raised. Hart *et al.* (1995:36) explain the responsibility factor in writing a paper reporting on the evaluation studies that were conducted to assess the effectiveness of a programme and the examination of the assumptions which underpinned its implementation. Hart *et al.* (1995:36) indicate that three indicators were used to estimate the latent construct of organisational stressors. These indicators were based on the results of confirmatory factor analysis which showed that two items from the staff relations stressors' scale formed a separate factor reflecting communication stressors. Weighted composite variables were

generated for authoritarian leadership stressors, staff relations stressors, and communication stressors, based on the Linear Structural Relations (LISREL VII) factor regression scores and these were used to estimate the latest construct of organisational stressors.

Incentives is another important point under role responsibility. Garner (1988:7) indicates the responsibility factor for stress reporting on a survey into why head-teachers retire early. In his exploration Ganer (1988:7) observes that: "Obviously pay is not the only answer because better training, more administrative support for heads and a properly resourced national curriculum are also essential. However, unless salary levels provide more incentives than at present and unless they equate with the substantial responsibilities undertaken by our members, teaching will continue to lose experienced heads at an alarming rate."

Age is another important item of role responsibility. Galloway *et al.* (1985:44) happen to work on the responsibility factor in their study on sources of satisfaction and dissatisfaction among New Zealand primary school teachers. In summarising their findings, Galloway *et al.* (1985:44) postulate that: "The results are seen as broadly consistent with Herzberg's two-factor theory. The usefulness of a single-term measure of overall satisfaction is discussed critically. Comparison between groups of teachers suggests that the pupil intake, the adequacy of the school buildings and playground, the head-teacher's own age are all related to job dissatisfaction and stress."

One of the most burning issues about role responsibility is recognition. Farber (1984:325) talks about role responsibility as a factor for stress by spelling out sources of burnout in teachers due to unsuccessful administrative meetings, excessive paperwork and lack of advancement of opportunities in teaching. She discusses that by way of defining burnout. Farber (1984:325) observes that in general, burnout is a function of feeling inconsequential - feeling that no matter how hard one works, the payoffs in terms of accomplishment, recognition, or appreciation are not there. For example, it has been shown that when teachers' needs for self-actualization and self-esteem are fulfilled, there is a higher probability of burnout. Other literature has suggested that teacher burnout is the result of such stresses as student discipline problems, student apathy, overcrowded classrooms and shortages of available support staff, excessive paperwork, excessive testing, involuntary transfers, inadequate salaries, lack of promotional opportunities, demanding parents, lack of administrative support, role conflict and role ambiguity, and lack and public criticism of teachers.

Another factor in role responsibility is management style. Sparrius (1992:90) explores responsibility as a stress factor qualitative study conducted to identify the range of occupational stressors that occur among ambulance and rescue service workers in South Africa, where a range of negative stressors was identified. In his report Sparrius (1992:90) suggests that although the sub-category 'individual' contained the highest response frequency of stressors, the stressors that fell into the sub-category 'organisational-based' were consistently accorded the highest levels of negativity by the respondents. Among the most prominent of these stressors were the structure and functioning of the service, management style and the control systems.

On the other hand, Leong *et al.* (1996:1345) deal with the theme of role responsibility in their study to examine the effects of organisational commitment as a moderator of the stress outcome relationship. In their study they indicate role responsibility together with other stress factors and observe that major sources of occupational pressure were measured using the sources of pressure scale from the Occupational Stress Inventory (OSI).

Beck and Gargiulo (1983:169) show that teachers' stress is a negative response to anger, accompanied by potential pathogenic philosophical changes. Secondly they show that teachers' stress has been attributed to the routine of the school day and the amount of time spent in non-instructional activities, the size of the school, discipline problems and mixed ability grouping. Thirdly they indicate that continual exposure to stressful situations seriously depletes the teachers' emotional and physical resources, thus leaving the individual unable to cope successfully with further stress.

Classroom management is another important item of responsibility of teachers at a school. Addressing this issue, Pithers (1995:387) indicates the role responsibility factor without isolating it from other sources of stress. Pithers (1995:387) postulates that: "Pithers and Fogarty (1995) in their article in the symposium on teacher stress have summarised some of the most important findings in this area, which show commonly found stressors such as work overload, staff relationships, classroom discipline, lack of resources, poor management, role ambiguity and conflict; as well as lack of professional recognition among others (e.g. Cooper & Kelly 1993 Kyriacou 1989). Some studies of occupational stress have focussed on the range and intensity of stressors that are common to teachers and their relationship to psychological and physical symptoms (e.g. error making and burnout). Teaching context and personal factors also can

strongly affect a teacher's level of stress (e.g. Smith & Bourker 1992; Tuetteman & Pinch 1992)."

2.3.4 Role conflict or role boundary (RB)

Goldberger and Breznitz (1993:437), Bell and Morrison (1988:203), Savery and Detuik (1986:272), Corlett and Richardson (1981:115), Bacharach and Bamberger (1990:316), Milstein and Farkas (1988:233), Feitler and Tokar (1986:254), Strumpfer (1989:136), Snelgar (1990:42), Cooper (1988:86) and Lyons (1990:44) all talk about role conflict as a source of stress. These authors indicated how role conflict causes stress in the working environment.

Firstly, Savery and Detuik (1986:272) look at conflict from a principal's point of view. Their idea of conflict was reached after they had conducted an experiment among government schools in Australia. They indicate that the results showed that there was a problem among principals caused by stress. Two major sources were role overload and role conflict. Primarily teachers were the most overstressed due to role conflict.

A second point in this regard is that of administrative loyalties. Bell and Morrison (1988:203) seem to have similar views as Savery and Detuik (1986:272) in approaching the idea of conflict. They observed that, although all principals suffer from stress, principals who are doing both teaching duties and administrative duties are more stressed by public demands on the school as an institution. In their research it was found that primary head-teachers faced a much stronger pressure of conflict than high school head-teachers. They also point out that things such as planning suitable curricula, establishing, organising and implementing it, maintaining good communication and relations with parents, the community, colleagues and other head-teachers, creating good personal relations, creating a sense of purpose, pride and direction and using funds soundly, all create stress in principals.

Another source of conflict is that of non-workplace roles. Goldberger and Breznitz (1993:437) have the same view as the above-mentioned authors, but they approach conflict from a different point of view, that is, of mothers. Thaits and Verbrugge (in Goldberger & Breznitz 1993:437) postulate that when women's role as paid employees is considered, it is always in the context of women's non-workplace roles. Because the role of paid employee is assumed to be added on and thus to cause conflict, bur-

den and strain, women who occupy both family and workplace roles are automatically thought of as being stressed. Yet it appears that the role of paid employee is associated with significant physical and mental health benefits for women. In contrast to women who occupy only the roles of wife and mother, those who also occupy the role of paid employee experience a significant health advantage.

Corlett and Richardson (1981:115) have the same message as the above-mentioned authors. In their research they included a home and a working place and a family. Corlett and Richardson (1981:115) observe: "Work - home conflict - accentuated in a 'special' situation when the company dealt with the manager alone and ignored the fact that he was part of a larger decision-making unit, the family."

Another aspect to consider is that of the teacher's rank at school. Lyons (1990:44) discussed conflict focusing on principals and by comparing them to teachers. He shows that the goals of principals are different from the goals of teachers. The organisational structure of school districts makes a certain amount of role conflict in the principalship inevitable. Principals serve as members of the superintendent's administrative team and are expected to accomplish district goals and carry out policies and directives. Simultaneously, they serve as leader of the school's instructional team and its staff. Frequently, the goals, policies and directives from the central office are in conflict with the goals, wishes, and expectations of staff members. When such conflicts occur, principals may experience stress.

Another kind of stress is administrative stress. In her discussion, Cooper (1988:86) divides stressors into four categories, the administrative stress index:

- Role-based stress, which arises from conflicts over job responsibilities in the organisation.
- Task-based stress arising from the performance of one's duties.
- Conflict-mediating stress, derived from resolving conflicts within the school.
- Boundary-spanning stress, which comes from activities in school-community relations.

Cooper (1988:86) indicates that the results of her study show that the primary stressors of principals are from the task-based category. The conclusion is supported

by the fact that eight of the top ten stressor sources were task-based which have their origin in the day-to-day administrative duties of the principal.

Snelgar (1990:42) investigated role conflict in a study to determine the relationship between four variables. The results were significantly and positively intercorrelated and suggested that a higher failure rate was associated with high work stress. Snelgar (1990:42) defined role conflict as the simultaneous occurance of two or more opposing pressures, such that the response to one makes compliance with the other impossible. Evidence suggests that role conflict diminishes performance. In this study it was found that role conflict was significantly related to poor performance among professionals, technical, clerical and nursing staff.

Strümpfer (1989:136) identified role conflict as a source of stress when he compared South Africans Scottish people and Americans in their ways of showing clarity at work settings. In his study he discovered that on the average, the South Africans tended to report lower role ambiguity than several Americans samples and a Scottish one. They appeared to experience a favourable degree of clarity with respect to expectations and communications concerning their job. With respect to role conflict, they seemed to be in an intermediate position among the samples with which they were compared.

Another point raised, is that of sociological orientation. Feitler and Edward (1986:256) tend to talk about role conflict as a stressor in their study which presented data on and a discussion of the relationship between occupational stress and organisational theory in school administration. When role conflict or role ambiguity occurs, one manifestation is stress. They go on to link these organisational variables with the personal needs of the individual and his/her physiological make-up.

Milstein and Farkas (1988:234) explain role conflict without separating it from other sources of stress. They focus on four categories associated with stress which are as follows:

- Perceptions of lack of individual control (locus of control) and limited requisite authority (powerlessness) to handle assigned organisational responsibilities;
- role conflict and role ambiguity

- poor interpersonal relations in the workplace - with superiors, peers and/or subordinates, and between the school and its environment; and
- time management difficulties.

Bacharach and Bamberger (1990:317) explain the idea of role conflict as a source of stress in their study examining the degree to which two key affective work consequences and two of their hypothesized antecedents are likely to have the same effects on voicing and exiting intentions. In their explanation, Bacharach and Bamberger (1990:317) postulate that role conflict and ambiguity are both posited to have a direct effect on stress and an inverse effect on job satisfaction. The latter two variables are hypothesized to influence turnover intentions (job satisfaction resulting in lower turnover intentions, and stress resulting in higher turnover intentions).

Against the background of the above-mentioned information, it might be concluded that role conflict could be a source of stress among teachers in Lesotho, especially in Botha-Bothe district.

2.3.5 Responsibility (R)

Osipow and Spokane (1981:1) define role responsibility (R) as measuring the extent to which the individual has, or feels a great deal of responsibility for the performance and welfare of others on the job. The following authors all have studied role responsibility as a source of stress among workers and teachers in their work settings. Williamson and Campbell (1987:111), Zirkel and Gluckman (1987:113), Chan and Hui (1995:15), Pithers (1995:387), Beck and Gargiulo (1983:169), Leong, Furnham and Cooper (1996:1349), Sparrius (1992:90), Farber (1984:325), Galloway, Boswell, Panckhurst, Boswell and Green (1985:44), Garner (1988:7), Hart, Wearing and Conn (1995: 27), Cushway and Tyler (1996:145), Boyle, Borg, Falzon, Baglioni (1995:54), Bogg and Cooper (1995:336), Nash (1989:38), Hayward (1991:93), Breakwell (1991 :31), Carr (1994:30, Borg and Riding (1991:277), Tanner, Schnittjer, Atkins (1991:203), Dorn (1991:328), Zirkel and Gluckman (1981:113), Williamson and Campbell (1987: 109), Ferreira (1994:112), Ray and Miller (1994:363).

Williamson and Campbell (1997:111) indicate the responsibility aspect as a factor for stress production in four categories, indicated by teachers who participated in their study. These categories are:

- Management of time, which is negatively influenced by:
  - being interrupted frequently by telephone calls;
  - having one's work frequently interrupted by staff members who want to talk;
  - participating in school activities outside of the normal working hours at the expense of one's personal time;
  - too heavy a workload, one that cannot possibly be finished during the normal work day;
  - feeling that meetings take too much time;
  - trying to complete reports, memos, letters and other paperwork on time.

- Relations with supervisor which manifests in:
  - trying to resolve differences with one's supervisors;
  - not knowing how one's superior evaluates one's performance;
  - feeling unclear about the scope and responsibility of one's job;

- Relations with subordinates which include:
  - supervising and coordinating the tasks of many people;
  - having to make decisions that affect the lives of individual people that one knows (colleagues, staff members, students, etc.);
  - trying to resolve parent/school conflicts;
  - handling student discipline problems;
  - evaluating staff members' performance;
  - trying to resolve differences between/among staff members.

- Matters of finance which include:
  - preparing and allocating budget resouces;

- trying to gain public approval and/or financial support for school programmes.

Dorn (1991:328) approaches the aspect of responsibility without isolating it from the other main sources of stress. Dorn (1991:328) explains that in their study, extremely high scores on scales such as role overload, role insufficiency, and responsibility, coupled with low scores on all of the coping scales, especially self-care), helped them to determine why the respondent experienced such high levels of interpersonal and physical strain.

Tanner *et al.* (1991:203) relate the role responsibility factor for stress by identifying different items and situations which the principal feels his/her duty to deal with, but which are regarded as time wasters and stressors. The following are mentioned as examples: too many meetings, responding to requests for information, uncontrollable interruptions, conflict resolutions, checking on tasks that have been delegated, losing time when people needed are unavailable, sorting junk mail, screening advertisements and solicited materials, assigning, signing, authorising, ordering, approving, renting, endorsing, responding and "memo-ing", misplacing priorities, spending time on unimportant matters and neglecting the important, working without clear purposes and goals, confusing, unclear job descriptions, assuming responsibility without authority, using clerical service poorly, postponing decisions, failing to delegate wisely, using inefficient offices routines and filing systems; reading unselectively and unnecessarily, intervening unnecessarily in crisis or conflict, bypassing the chain of command, communicating poorly, deciding or acting on incomplete or inadequate information and over-committing to outside activities.

Chan and Hui (1995:16) identified the responsibility factor as a stressor in a study on the tripartite components of burnout and eight coping strategies which were assessed in a sample of 415 Chinese secondary teachers in Hong Kong. In their investigation Chan and Hui (1995:16) observed that: "In recent years, with the introduction of the policy of appointing a team of guidance teachers to provide guidance and counselling services to students in secondary schools in Hong Kong, teachers with heavy responsibilities are said to have experienced more stress than non-guidance activities, and are likely to be more vulnerable to burnout. Indeed, the difficulties that guidance teachers listed in their guidance work included, among others, heavy workload, insufficient time to carry out guidance activities, limited resources and facilities, inadequate co-operation from other teachers and parents and role conflict between

enforcing discipline or rules and counselling students with problems, often with little prior training (Hong Kong Government Education Department 1988)."

Zirkel and Gluckman (1987:113) refer to the responsibility factor in their study of the constitutional right of people to be secured in their houses and as regards their papers and effects, against unreasonable searches and seizures. Zirkel and Gluckman (1987:113) write that: "Ms A was a tenured teacher of Worcester, Mass. She participated in a multi-disciplinary team meeting to develop an individualized education plan for Chris, an emotionally disturbed student in her class. Evidencing hyperactive and sometimes suicidal tendencies, Chris had instigated fights in class, had melted crayons on the radiator, once had threatened to jump out of a window and on another occasion had held a knife to his throat." The above case on Ms A. and Chris is used to expand the depth to which the responsibility factor can be extended - where a highly qualified teacher could cope and assist the teacher to cope with his own stressful situation.

Farrugia (1986:221) refers to the responsibility factor in his study aimed at identifying the factors that influence the choice of a teaching career and also to distinguish between the factors that sustain or diminish Maltese teachers' occupational commitment. Farrugia postulates that: "Teachers' comments indicate that they derive satisfaction and frustration from occupational intrinsic as well as extrinsic factors. This situation appears to conform with Herzberg's 'two-factor' theory which applying to teaching, implying that teachers may experience intrinsic occupational satisfaction or frustration from pedagogical experiences quite independently of any influence that extrinsic factors such as low salaries and conditions of work may exert. Thus teachers may derive great satisfaction from teaching a particular group of students and at the same time feel dissatisfied or frustrated by unmet calls for better remuneration. Alternatively they may feel more than adequately paid for the service they render, but feel vocationally unfulfilled."

Bergin and Solman (1988:165) regard the following as causes of stress:

- Time to carry out job responsibilities;
- the amount of work one has to do interferes with how well it is done;
- teacher assessment decision-making process;

- range and responsibility of roles;
- making decisions that negatively affect the careers of teachers;
- teachers assessment appeals;
- management of conflict;
- teacher assessment list 4;
- official tasks beyond one's area of expertise;
- maintenance of curriculum standards;
- the quality of teaching as profession;
- management of change;
- the official representing the system in the community;
- a lack of support from superiors for decisions taken with respect to policy regulation implementation;
- disruption of family life;
- absence from home;
- recognition of your contribution to the system;
- deciding task priorities.

The last important item that falls under role responsibility is that of home and work demands. Rey and Miller (1994:363) include this factor in their study considering the nature of home/work stress and investigating the role of social support from both intra and extra-organisational sources in reducing stress and buffering its impact on burnouts. In their study the stress created by having to balance home and work demands was measured. Because no extent scale was available, items assessing the conflict between work and home spheres were developed specifically for this study. This five-item scale included items such as "I have a difficulty time balancing my work life and my home life", and "conflicts often arise between my home and work responsibilities."

Based on the above-mentioned information about responsibility the researcher feels responsibility may be a source of stress among teachers in Lesotho.

2.3.6 Physical environment (PE)

Different people explain different terms differently to suit the purpose of their study. Osipow and Spokane (1981:1) define physical environment as measuring the extent to which the individual is exposed to high levels of environmental toxic or extreme physical conditions. The following authors discuss physical environmental factors of strain or stress in a work setting: Burke and Greenglass (1995:188), Busser (1990:47), Fenwick and Tausing (1994:267), Hartzell (1991:75), Smilansky (1984:98), Murphy (1995:11), McLaughlin (in Abrams 1970:86-92), Manning, Jackson and Fusilier (1996:745), Judge, Boudreau and Bretz (1994:767), Jones and Fletcher (1993:882), Van Zyl (1997:83), Smith, Anderson and Lovrich (1995:264), Malherbe and Engelbrecht (1992:22), Farrugia (1986:227), Ripley (1997:63), Semmer, Zape and Greif (1996:302), Blix, Gruise, Mitchell and Blix (1994:158), Marais and Schepers (1996:1), Jex, Bechr and Roberts (1992:623), Ladikos (1994:106), Wilson, Mutero, Doolabah and Herzstein (1990:116).

Semmer *et al.* (1996:302) deals with physical environment as a factor for stress. In their study compared people with the same jobs and position and conditions, but exhibiting different symptoms of strain. Semmer *et al.* (1996:302), observe that the results of the estimated parameters of model MTMM B1 are presented in table 2.3. It was found that results were equal for observers and workers respectively. In table 2.3, results were higher for observers by about 20. Agreement was reached that loading was highest for environmental factors for both observers and workers (,82) observers and workers (0,57). For other three factors there was a lot of uncertainty between observers and workers.

Ripley (1997:62) discusses change as an environmental factor contributing to stress in his study which focussed on principals. He basically investigated principals and change. He approached this factor in the form of questions, such as: How should the principal maintain those traditions that enhance the development of children and the growth of the school culture in the face of constant pressure to change? How can one differentiate between doing things differently and doing things better? How can a

principal know what should be maintained and what aught to be changed in her or his school? The findings were that principals must deal with tensions every day.

Farrugia (1986:221) identified two-factor factors in his study aimed at identifying the factors that influence the choice of teaching career. He also investigated Maltese teachers' occupational commitment. In discussing that, Farrugia postulated that teachers' comments indicated that they derived satisfaction and frustration from occupationally intrinsic as well as extrinsic factors. He asserts that the situation appears to conform with Herzberg's 'two-factor' theory which, when applied to teaching, implies that teachers may experience intrinsic occupational satisfaction and frustration from pedagogical experiences quite independently of any influence that exterinsic factors, such as low salaries and conditions of work, may exert. Thus teachers may derive great satisfaction from teaching a particular group of students and at the same time feel dissatisfied or frustrated by unmet calls for better renumeration. Alternatively they may feel more than adequately paid for the service they render, but feel vocationally unfulfilled.

Malherbe and Engelbrecht (1992:22) talk about external stressors in referring to social work as being a most stressful occupation and in endeavouring to reflect a conceptualization of the stress phenomenon. Malherbe and Engelbrecht (1992:22) contend that the body's reaction to stress may be depicted as a three-phase response and is focused on positive and negative stress. A few internal and external stressors in the workplace of the social worker are identified.

The literature shows that some authors indicate environmental factors by explaining the process of stress and through indicating four identifiable stages. For example, Smith *et al.* (1995:264) observe that the stress cycle is composed of four distinct stages. Stage I is concerned with identification of stressors present in the environment. They further indicate that in the case of academics, sources of stress may include such things as excessively frequent or overly protected meetings, or conflicts with students and or colleagues. In stage II, the faculty member's perception of the demands from the environment determines how much stress is caused by these factors. The individual's stress response is the start of stage III. Stress is associated with the individual's perception of limited resources to meet the requirements of dealing with stress or demands. Whether or not the faculty member is able to garner the resources needed to meet these demands, is part of the third stage of the stress cycle.

Stage IV is termed the consequences of stress-induced damage to the heart muscle, cardiovascular system, gastro-intestinal tract, and other physiological systems.

Similarly, some authors indicate environmental factors such as political changes, commercial crimes and retrenchment as being sources of stressful situations. Van Zyl (1997:84) asserts that, while some people are of the opinion that the current economic situation in South Africa, as well as the political changes, could be coupled with stress amongst managers. According to these writers, the poor economic situation in particular can be coupled with overload and fear of retrenchment amongst managers. Coetzee (1990) is of the opinion that a manager suffering from overload and fear of being retrenched would work long hours, which may lead to self-alleniation and superficialization. Such a person is most probably more likely to be stressed and become involved in white-collar crimes (i.e. embezzlement).

The other important point about the environmental factor is stress transmission. Jones and Fletcher (1996:882), in the discussion of their study of the interface between work and family, indicate that work stress can be transmitted from one person to another. They contend that their study suggests that transmission of occupational stress does occur but that the direction of transmission is predominantly from men to women. Jones and Fletcher (1993) in a study investigating male transmission, suggest that the occupational environment in which a man works directly affects his cognitive structure, the way he thinks, his experience and his beliefs about himself, - with consequent effects on his psychological and physical well-being. This experience and his response to it influences his wife's cognitive structure, attitudes, beliefs and behaviour.

Many authors refer to the family role as an external factor for stress. Their focus is on the working mother and work demands. Some writers do not talk about the mother but simply concentrate on the family role and work role. Judge *et al.* (1994:769) in their study testing a hypothesized model of executive's attitudes involving job satisfaction, life satisfaction and work/family conflict, postulate that several relevant theories support the prediction that conflict between work and family roles leads to job stress. Role theory proposes that individuals experience role conflict when presented with incompatible demands, for example, compliance with the expectations of one role, makes performance of the other more difficult. One form of role conflict is that which may exist between work and family roles. Conflict between work and family roles leads to job stress, because interrole conflict (of which work-

family conflict is an example), requires that individuals enact incompatible behaviours in different domains.

According to Cranwell-ward (1990:45) external factors are called problems of daily life. She defines them as pressures which occur from situations usually beyond our immediate control which on themselves may appear insignificant, but cumutively they can contribute to high levels of stress. Such events as commuting, queing, loosing items, lateness, computors, rail strikes, machine breakdowns (at home and at work), interruptions, jet lag and many others play a role.

Louw and Edward (1993:632) have the same theme as Cranwell-ward (1990:45). Lazarus, Delongis, Folkman and Green (1985) as quoted by Louw and Edward (1993:632) postulate that major stressful life events are usually rare; many people live for years without experiencing any of them. Secondly, they indicate that many everyday events may be experienced as very stressful, such as household hassles, time pressure hassles, concern hassles, environmental and financial responsibilities and work hassles. They assert that the more common, but countless and minor sources of stress of low intensity occur much more frequently.

Patel (1993:17) who agrees with the above-mentioned authors about environmental factors, indicates that predominantly, the energy people expend on trivial, countless daily annoyances, cumatively make a major impact on people's health and functioning. Examples are getting up late, because the alarm failed to go off; coping with a hot-water tank that starts leaking; noisy roadwork when a job requires total concentration - all these cause stress.

In their explanation, Blix *et al.* (1994:156) call problems of daily life uplifts or hassles. They agree with the above-mentioned authors that hassles are a source of stress. They regard environmental factors as minor or micro-stressors.

The other pertinent issue in the environmental factor is sex roles. Wilson *et al.* (1990:116) focus in their study on sex roles and personalities among Zimbabwean teachers. According to them, sex roles are still very traditional in Zimbabwe. Women still tend to be supplementary rather than primary income earners and are encouraged to value vicarious accomplishments by the spouse, offspring and those in their care. The ambitious and competitive tendencies of type A men achievement oriented and ultracompetitive, may therefore make them more vulnerable to stress resulting from low salaries, modest status and limited scope for direct personal attainment. In con-

trast type A women achievement oriented and ultra competitive, may be partially buffered from stress, because they see their salaries as a supplementary source of income. As a result they may combine teaching with family activities, which may satisfy their competitive tendencies through their success as teaching. They contend that though the explanation is consistent with Zimbabwe's traditional sex roles, it is offered with great difference. Sex roles and salaries are therefore external factors.

On the other hand, Manning *et al.* (1996:738) refer to external factors as a source of stress in their study on relationships among health care costs, social support and occupational stress. In their research, Manning *et al.* (1996:738) observed that their results appeared to be consistent with the psychosomatic literature. This perspective asserts that a concentrated experience of stressful life events and resulting strain will be related to the onset of disease and illness. When too much adaptive energy is required of an individual in a given time frame, the individual's immune system breaks down and disease is imminent.

Smilansky (1984:84) indicates an environmental stress factor in his study examining the nature of feelings of work satisfaction and reports of job-related stress. Teachers were asked to rate themselves regarding various aspects of their work functioning. Data used for the study were collected from principals, other teachers, parents and pupils. In his work Smilansky (1984:84) observes that: "In contrast, teacher's feelings of stress were much more related to the external factors in the environment. Specifically, all four principal's ratings of the teacher's degree of effectiveness in their work significantly correlated with the teacher's own ratings of the overall level of stress associated with their job (correlations of 0.31, 0.34, 0.43 and 0.52). Teachers' reports of work-related stress were also negatively related to their pupils' ratings of the amount of competition in their class (-0.37), and negatively related to pupil's rating of the amount of competition in their class (-0.41). No significant results were obtained regarding the relationship between teacher reports of stress and ratings done by parents and socio-metric choices received from their colleagues."

On the other hand, Hartzell (1991:75) indicates that any change in jobs creates stress. He also found that veteran assistant principals who change jobs may encounter an entirely different set of stress-inducing factors than do new assistant principals.

Fenwick and Tausing (1994:267) undertook a study with a model that conceptually links research on macro-economic causes of stress with research on job struc-

ture causes among employed workers. In their study, Fenwick and Tausing (1994:267) observed that to deal with this problem individual level studies attempt to document a relationship between the direct experience of unemployment which is seen as a stressor, and greater physical and mental distress (Pearlin & Schooler 1978; see Liem & Rayman 1984, and Jahoda 1988 for summaries). At the individual level, however, the ecological context (unemployment rates) disappears. The overall results suggested that macro-economic changes such as recessions can affect individual stress because they lead to changes in routine.

Similarly, Busser (1990:47) deals with environmental sources of the occupational stress factor by way of definition. He indicates that it encompasses those factors intrinsic to the position. He found that high-level management jobs involve stress from time pressures, too many meetings, or difficulty in attaining productivity standards. He also found that both upper and middle managers reported deadlines and time pressures as the single most frequent stressor in the job. He examined workload, distinguishing between quantitative overload (i.e. the amount of work required, which is associated with deadlines) and qualitative overload (i.e. taxing the person's capabilities, which may contribute to a fear of failure). A summary of his findings indicated both quantitative and qualitative overload invoking at least nine different symptoms of psychological and physical strain on the individual.

Burke and Greenglass (1995:189) in their study where they examined antecedents and consequences of psychological burnout among human service professionals, attempted to approach the environmental factor by way of defining it. Burke and Greenglass (1995:189) indicate that there is a considerable evidence that work setting characteristics, particularly work stressors, influence levels of psychological burnout Such characteristics included features of the job itself, quality of supervision, unmet expectations and constraints in one's organisational environment.

Another important aspect is that of task orientation. Murphy (1995:11) indicates that the work environment scale model was not developed to assess the job stress; rather it was designed to assess the general work climate. This model contains 90 items which comprise 10 subscales (e.g. work pressure, control, task orientation, supervisory support) and it uses a true-false response format. The subscale has demonstrated acceptable reliability and validity, and has often been used by researchers over the past 15 years.

McLaughlin (in Abram 1970:86) indicates environmental stressors in the form of the list given below:

weightlessness
radiation
confinement
social isolation
monotony
threat of danger
artificial atmosphere
toxic substance
particular matter
micro-organisms
change in cireadian rythm
magnetic fields
ultraviolent exposure
infrared exposure
noise.

Blix and Lee (1994:158) identified the environmental factor in their study using a person fit model to analyse the lack of fit between motivational style and job rewards as a contributing factor in developing occupational stress symptoms in university teachers. Blix and Lee (1994:158) maintain that although there is no concensus in the literature on a definition of occupational stress, it usually refers to the inability of the individual worker to cope effectively with various work demands. The person-environment fit (P-E fit) model of occupational stress contributes much to the understanding of the interaction between worker and the environment. In the P-E fit model occupational stress is believed to arise from a misfit between the worker and the work environment.

Marais and Schepers (1996:1) deal with restructuring in their study where they examined the effects of organisational restructuring on employees' job satisfaction career aspirations and stress levels. In their attempt, Marais and Schepers (1996:1) indicated that the results provided no support for the expectation that after a time elapse of eight months the effects or organisational restructuring would diminish and that workers would experience a greater degree of job satisfaction. In addition, it would appear that the time lapse did not improve perceived career prospects or that stress levels decreased.

Behaviour is another issue in the environmental factor. Jex *et al.* (1992:623) explain environmental factors by way of defining stress. In their report they indicate that: "In contrast, a response definition of stress is associated with what was referred to earlier as strain. Stress is an individual's response to work-related environmental

stressors. Selye (1976) refers to stress as the reaction of the organism, which can be psychological, physiological or behavioural."

Against this backdrop, it may be maintained that among Lesotho teachers, stress may be caused by the previously mentioned factors. The following literature is the effects of stress.

2.4 SYMPTOMS AND EFFECTS OF STRESS

Spielberger *et al.* (1989:33) indicate that stress may be linked to disease in at least five ways: (1) acute stress, as in sudden fright, may have short-term but sometimes fatal consequences, for example, by including cardiac arhythmias; (2) chronic stress may be accompanied autonomic and endocrine changes and lead directly to damage in vulnerable organs, as in the case of ulcers; (3) some of the physiological changes accompanying stress (particularly, but not only, secretion of adrenocortical steroids) may have a secondary effect of inhibiting the immune system, thus increasing susceptibility to a wide range of diseases from the common, cold to cancer; (4) stress may also lead to coping behaviours (e.g. drug abuse, improper diet, recklessness) that increase the risk of contracting a disease or sustaining injury; (5) stress may influence the way a person responds to a discrete already contracted (e.g. symptom recognition, the utilization of health services), thus altering the course of the disease. In the light of the above information different effects of stress will be given in the form of different diseases.

The following people below contribute in showing different types of diseases and symptoms of stress among different people. Jackson, Thoits, Taylor (1995:543), Cherian (1989:117), Doby and Caplain (1995:1116), Meier (1991:91), Kivimaki Elovainio and Nord (1996:769), Kagan, Kagan and Watson (1995:71), Wilson, Mutero, Doolabah and, Herzstein (1989:115), Cooper, Cartwright (1994:451), Scott and Wimbush (1991:506), OCrady (1989:19), Rigby, Bennett and Boshoff (1996:38), Cooper (1988:86), Sturt (1986:21), Brown (1986:22), Monteiro (1990:80), Fontana and Abouserie (1993:266), Hodge, Jupp and Taylor (1994:64), Friedman (1993:1035), Cherniss (1992:1), Cooper (1995:69), Pithers and Fogarty (1995:65), Birkett (1998:362), Jones and Fletcher (1996:89), Kantor and Schomer (1991:30), Horwitz, White and White (1996:278), Blix and Lee (1991:289), Loannid (1984:173), Friedman (1995:64), Medlen (1989:37), Tips (1996:364), Spielberger, Sarason and Strelau

(1989:33), Coleman (1978:114-116), Birkett (1998:362), Hlaty (1996:364), and Medien (1989).

2.4.1 Vocational strain (VS)

Teachers exhibiting effects of this calibre have a poor attitude towards their work, including dread, boredom and lack of interest. They may report making errors in their work or having accidents. Concentration problems and absenteeism may be evidenced.

To start with, some authors have an idea that absenteeism among teachers is a symptom of stress. Scott and Wimbsh (1991:507) suggest that: "in fact in a recent article, Foldesy and Foster (1989) simply reported the correlationship among a number of variables that researchers had thought were related to the absenteeism of teachers (i.e. age, gender, race, marital status, family size, educational level, job level, tenure, years of experience, stress, and organisational influences). They did not attempt to develop a theory or model of absenteeism that might explain the findings from these studies."

According to Cherniss (1992:1) there has been considerable research on the immediate consequences of burnout in human service professionals. She further shows that in a review of a research, Kalill (1988) found that burnout often leads to poor physical health, depression turnover, unpredictive work behaviours, problematic interpersonal relations and reduced job satisfaction. She also shows that in a study of social workers, it was found that burned out staff perceived clients less favourably.

Subsequently, Fontana and Abonserie (1993:226) show that moodiness is another symptom of stress. Fontana and Abonserie (1993:226) observe that: "the results showed a significant correlation between neuroticism (EPON) and teacher stress, high: EPON scores characterise the person who is anxious, worrying, moody, frequently depressed and who shows strong emotional reactions likely to interfere with his or her proper adjustments and further research into the extent to which high EPON scores render individuals unsuitable for a potentially stressful occupation like teaching may well be needed." Therefore, there is ample evidence in literature that vocational strain significantly contributes to stress and its accompanying symptoms.

2.4.2 Interpersonal strain (IS)

According to Osipow and Spokane (1981:5) interpersonal strain (IS) refers to the symptoms of a person who shows a frequency for frequent quarrels or excessive dependence on family members, spouse and friends. A person may report wanting to leave and have time alone, or conversely, not having time to spend with friends.

O'Grady (1989:19) reports on a woman who was the head of a primary school for over fifteen years and who retired early two years earlier because of stress. She had asthma, which the doctor concluded had been caused by pressure and other symptoms of exhaustion. This is to evidence how the severity of stress can be dangerous to some people especially in important positions.

Some people categorise the effects of stress into three groups. They do not discuss each disease independently. Cooper (1995:69) postulate that: "In the mid-80's, Milstein and Galoszenski (1985) lamented absent teacher stress. The end result is that many talented men and women with high expectations of achievement are despirited and disillusioned. Some leave the profession, others stay, but are plagued by a multitude of physical, emotional and behavioural stress-related manifestations."

Other authors approach the effects of stress from the burnout point of view. Friedman (1993:1035) maintain: "It was reported that feelings of frustration, discouragement from work, and a desire to quit teaching constitute the climax of burnout. Depersonalization, followed by emotional exhaustion, were found to be closest in degree of severity to this climax, while feelings of non-accomplishment were conceptually more distant from this climax. Depersonalisation and emotional exhaustion were found to be independent of non-accomplishment, in relation to the climax of burnout."

From the literature it may be gathered that when there is strain in interpersonal relationships, it will result in major stress, causing people to wish to quit their job - that is, burnout.

2.4.3 Psychological strain (PSY)

Effects that fall under this category are those people who report feeling depressed, anxious, unhappy and or irritable, complaining about little things, responding badly in routine situations and having no sense of humour. Teachers here may report that

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things are not going well. To start with, Kivimaki *et al.* (1996:769) show that depression is the result of stressful life situations. They also attempt to show that the relationship between reaction to lack of structure, neuroticism and the tendency toward depression are depressive symptoms of occupational strain measure.

Meier (1991:91) is of the idea that measures of occupational stress typically correlate highly with each other as well as with supposed distinct constructs such as depression and anxiety. He further maintains that studies revealed intercorrelations among stress, anxiety, and depression. Scales were examined as well as the ability of measures of depression and anxiety to add to the predictive power of occupational stress for a recognition memory task and self-reported physical symptoms. The results indicated that stress, depression, and anxiety measures were moderately to highly intercorrelated and were significantly related to physical symptoms.

Doby and Caplain (1995:1105) again, are aware that the effects of stress are contagious. For example, Doby and Caplain (1995:1105) observe: "It was hypothesized that the employees experience a threat to their reputations with their supervisors, they are particularly likely to experience anxiety that will be carried over into their home settings. This response was predicted on the grounds that perceived reputation is an important determinant of self-esteem, that need to maintain high self-esteem is a major motive, and that threat to reputation represents both potential frustration of this need and loss of highly valued resources. The convergence of results from the two sects of respondents in our study support this hypothesis."

On the other hand, some authors prefer to generalize symptoms according to gender and race. For example, Jackson *et al.* (1995:543) postulate that: "Kanter's theory of proportional representation suggests that tokens should experience more work stress and psychological symptoms than non-tokens. We examine the effects of proportional representation by race and by gender on work stress and symptoms. Data come from structured personal interviews with a disproportionate stratified sample of elite black leaders in US (N=167). Consistent with expectations, analyses showed that numerical rarity by race and gender significantly increased symptoms of depression and anxiety respectively. Numerical rarity by race significantly increases 'token' stress (e.g. loss of black identity, multiple demands of being black, sense of isolation having to show greater competence) and a high degree of gender tokenish increase overload. Some, but not all, of the total impact of proportional representation is me-

diated through work stressors since these stressors are themselves directly associated with higher psychological symptoms."

Kagan *et al.* (1995:76) approached the effects of stress from a stress reduction programme point of view as a means of eradicating a stressful life situation. Kagan *et al.* (1995:76) suggest: "Stress reduction programms are effective for employees in a work environment considered to be highly stressful. Depression, anxiety, psychological strain, physical strain, emotional exhaustion, depersonalization and personal accomplishment as well as interpersonal sensitivity abilities and job performance, were all significantly and positively influenced by psycho-educational training programmes."

Stress is a disease. Some writers regard stress as a source of different diseases. Monteiro (1990:80) observes that stress is a killer disease. Forty to fifty percent of all diseases are stress related. Recent studies even claim that stress can suppress the immune system. But, if the stressful condition continues, the body's adaptive energy will eventually run out, and stage three, exhaustion, is launched. During this stage, the bodily functions slow down and continued exposure to stress will result in disease.

Among the diseases that are stress related are sexual disorders. Birkett (1998:362) refers to literature dealing with valuable information on psychiatric and psychological explanations and treatments of disorders such as "sex disorders, depression and 'organic' first rank psychiatric symptoms (e.g. hallucinosis)." The work he discusses offers a wealth of "psychologically oriented information, including such often neglected topics as family stress and mediological aspects of cerebrovascular disease". These diseases all seem to be stress-related.

Friedman (1991:333) summarises the effects of burnout by means of a teacher burnout scale. He tabulated responses such as: I feel emotionally wornout from teaching; I feel wiped out at the end of a teaching day at school; I feel exhausted in the morning, when I have to leave for another teaching day at school; I feel that working with students for a full day is an oppressive effort; I feel that teaching gives me great satisfaction; I feel burned out from teaching and working with students; I feel that teaching frustrates me; I feel that I have to work too hard in teaching; I feel that working closely with students creates a great deal of tension in me; I have considered leaving teaching; I feel that as a teacher I am not getting ahead in life; I feel that teaching is turning me into an impatient person.

Hodge *et al.* (1994:64) are of the opinion that stress in teaching has a number of problematic outcomes. It causes emotional distress such as anxiety, depression and psychosomatic complaints and burnout, that is, emotional exhaustion, propensity to depersonalise others, and lowered self-esteem. Pupils of stressed teachers receive less effective professional and personal attention, with attendant negative educational consequences. In the short-term, work stress results in excessive sick leave and other forms of absenteeism, which in the long run mean early retirements and resignations, and thus premature loss of expertise from the education system.

Different authors have different ways of approaching the same topic. Some writers concentrate on the general effects of stress, while others chose a particular organ and examine it. Blix and Lee (1991:289) suggest: "A poor fit may lead to a various types of strain. Psychological strain may include job dissatisfaction, anxiety, depression or complaints of insomia and restlessness. Physical strain includes high blood pressure and elevated serum cholesterol. Behavioural strain may be manifested in smoking, drinking, over-eating or frequent visits to a health office. Continuous strain over a period of time may lead to a variety of physical illnesses such as peptic ulcers, head disease, and diabetes (Karl 1978). Psychiatric ailments may also result (Jenkin 1979). Behavioural outcomes may include absenteeism, tardiness and turn-over (Lyons 1971)."

Friedman (1995:641) concentrated on burnout. He maintains that the findings of his study support its underlying hypothesis that school principal burnout involves negative experiences such as fatigue and discontentment that can be internally or externally directed. He explains that more specifically, a burned-out school principal experiences physical, mental and cognitive exhaustion, emotional and personal detachment from recipients of services and belittles and derogates those who work for or with him or her.

Some authors do not pinpoint a particular disease in their findings. They indicate effects by just generalising the negative effects of stress. Brown (1986:21) indicated that the effects of stress became even more important when it is realized that those head-teachers interviewed who seemed to be suffering least from stress had one thing in common - an outside interest which occupied a large proportion of their out of school hours. The price in terms of wastage of talent and of human misery would seem to be very high if the problems of head-teachers are not resolved as a matter of urgency."

Rigby *et al.* (1996:38) indicate certain effects of stress in their study where two different teachers interventions were evaluated, using a randomised pre-test, post-test research design and a waiting-group control. In their attempt they indicated stress symptoms by way of defining the process of stress. Rigby and Benett (1996:38) quote Kyriacou and Sutcliffe (1979:89) who defined stress as "a syndrome of negative affect (such as anger and depression) usually accompanied by potentially pathogenical changes (such as increased heart rate) 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 self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat."

Coleman (1978:112-116) observes that the effects of stress on the body are so far-reaching that no organ remain unaffected and there are few diseases which are not made worse by stress. Stress causes physiological changes in the body and those changes are harmful to the entire human being. He identified the following as conditions that all are stress-related:

accidents
accident proness
aerophobia
additition
aggression
agoraphobia
aichmophobia
ailrophobia
alcoholism
allergic rhimitis
alopecia
anaemia
engina pectors
ankylosing spondylitis
anorexia
anthropophobia
antidepressants
anxiety
capthous ulcers
appetite
apoplexy
aquaphobia
arthritis
asthma
backache
baldness
barbiturate poisoning
battered babies
bedwetting
bereavement
blood pressure
brandophobia
breaste (sore/swollen)
breathlessnes
bronchitis
cancer
cancerophobia
cardiac failure
cerebral arteriosclerosis
cerebral haemorrhage
cerebral thrombosis
cholelystitis
cholesterol
clandication intermittent

arrythmia
arteriosclerosis
colitis, mucous
colitis, ulcerative
coma
constipation
cough
crying
cyesis
cynophobia
cystis
death
demophobia
depression
dermatitis
diabetes
diarrhea
digestive disorder
dizzyness
drugs
duodenal ulcer
dysmenorrhoea
dyspepsia
dysphazia
dysporoea
eating problems
eczema
eneuresis
epilepsy
equinophobia
failing marriage
faints
fat
fear
fever, hay
irritability
ischaemic heart disease
itching
joint diseases
kaino phobia
libido loss
lumbago
clanstrophobia
cold common
flatubence
frigidity
gall bladder disease
gall stone
gastritis
gastroenteritis
giddyness
gout
grand mal
habituation
haematemesis
hair loss
hay fever
headaches
heart attack
heart failure
heart burn
hepatitis
herpetophobia
homosexuality
hypertension
hypochondriasis
hysteria
impotence
incontinence
indigestion
infraction
infective disease
infective hepatitis
influenza
insomia
intermitted clanchlation

phomophobia
poisoning
post babies blues
pregnancy
premenstruous tension
pruritis
psoriasis

malignancy
marriage problems
masturbation
melaena
memory failure
menopause
menstruation
migraine
mucous cohitis
myocardial infarction
mysophobia
myxoedema
nausea
nervous breakdown
nightmares
nyctophobia
obesity
obsessions
obsessional behaviour
ophidophobia
osteoatheritis
overwork
palpitations
peptic ulcers
personality disorders
petit mal
phobias
ulcer aphthous
ulcer duodenal
ulcer gastric
ulcer peptic
ulcerative colitis
xenophobia
puerperal depression
pyrophobia
reactive depression
remedial exercises
respiratory diseases
retirement
rheumatic fever
rheumatoid arthritis
school phobia
sciatica
sexual problems
shortness of breath
sickness
siderodomophobia
sleeplessness
smokers cough
stammer
status asthunaticus
stroke
stuttering
suicide
tension
thanadophobia
tremors
tumours
thyroid troubles
thyrotoxicosis
urinary infection
viruses
vomiting
wheezing
urinary disease
zoophobia

Cherian (1989:117) commenting on polygamous families, point out the detrimental effects of conditions such as jealousy, opposing motives, conflict, tension, emotional stress, insecurity and anxiety. Anxiety is a very uncomfortable emotion that cannot be tolerated for long. Emotional stress, insecurity and anxiety can affect a pupil's school progress.

Horwitz *et al.* (1996:278) observe that high rates of symptoms are used as indicators of either greater exposure or greater vulnerability to stressors. Yet, over twenty years ago, epidemiologist John Cassel (1974) noted that one of the most prominent aspects of exposure to stressors is the wide variety of resulting mental and physical health effects, including mortality, morbidity, alcoholism, suicide and distress.

2.4.4 Physical strain (PHS)

Physical strain is the last category in the signs and symptoms of stress. All the effects that fall under this group indicate that teachers have frequent worries about their health as well as a number of physical symptoms such as colds, heart palpitations, aches and pains, erratic eating habits, over use of alcohol and disturbances in sleeping patterns.

Some authors indicate that accidents are the effects of stress. Cooper and Cartwright (1994:455) observe that: "Against the background of mounting research evidence (Cooper & Payne 1988), there can be little dispute that stress has a dysfunctional impact on both individual and organisational outcomes. Links have been demonstrated between stress, coronary heart disease, mental breakdown, poor health behaviours, job dissatisfaction, accidents, family problems and certain forms of cancer (e.g. McLean 1980; Frese 1985, Cooper & Watson 1991). Almost half of all premature deaths in the UK are attributed to lifestyle and stress-related illnesses (Palmer 1989)."

Wilson *et al.* (1989:115) regard the effects of stress from an angle of personalities. Although they look at it from a personality point of view, they are not different from the rest of the authors above - they still address the issue of effects. Wilson *et al.* (1989:115) postulate that: "Type A personalities contrasted with type B personalities, are described by Friedman and Rosenman (1974) as achievement oriented and ultra-competitive. Type A behaviour has been linked to several dysfunctional conditions, including coronary disease (Cooper, Detre and Weiss 1981), and depression, headache, stomach trouble and other psychosomatic complaints (Matteson & Ivancevich 1982; Matteson Ivancevich & Smith 1984). An association between type A behaviour and occupational stress has been reported among sales persons (Matteson *et al.* 1984). Teachers and other human service personnel may be at particular risk for stress" (Maslach & Jackson 1981).

Some authors concentrate on specific organs when indicating the effects of stress. Loannidis (1988:173) postulates that: "Arterial diseases (AD) nowadays represent the main form of premature death in industrialized countries. They primarily affect the arterial circulation system and depending on their target organ or the form of dysfunction, are subdivided into a variety of diagnoses, such as ischemic (atherosclerotic, or coronary), heart disease (HD), cerebrovuscular accidents (CVA), systemic hypertension and peripheral artery disease." Stress can be linked to many diseases affecting these organs.

Contrary to this, Tips (1996:364) assert that patients with known risk factors for cardiac disease are often told to reduce stress, but little scientific evidence supports this advice. They indicate that Hlatky and colleagues (as quoted by Tips 1996:364) studied the correlation between job-related stress and coronary artery disease in a cohort of patients undergoing diagnostic cardiac angiography. Hlatky (in Tips, from other journals 1996:364) concludes that job-related stress does not increase patients' risk of coronary artery disease.

Medien (1989:74) concentrated on the physiological effects of stress. These include the following symptoms and signs: "a state of tension, palpitations, a fast pulse, raised blood pressure, shortness of breath, tense muscles, headaches, urinary frequency, sleep difficulties, backache, gastro-intestenal disturbance, etc."

Marmot *et al.* (1997:235) also show social gradiant in mortality from coronary heart disease among British civil servants. They finally indicate that there were higher rates in men of lower employment grade. About a quarter of them were affected by coronary heart disease which is believed to be due to stress.

Pithers and Fogarty (1995:3) look at the effects of stress from the psychological factors point of view. They observed that health problems can take the form of coronary disease, alcoholism, fatique, headaches, insomia, nervous tension and a range of other problems. Psychological factors linked to stress include high anxiety, depression, irritability and hostility, emotional exhaustion and burnout. They maintain that health and psychological outcomes can lead to poorer teaching performance, lower self-esteem, poor job satisfaction, increased absenteeism, poor decision-making and bad judgement. Lastly, they indicate that this above-mentioned situation often leads to a breakdown.

Kantor and Schomer (1991:30) regard the effects of stress as signals. These signals are common reactions to too much stress at work. They describe some of these signals, e.g. a person withdraws physically by either resigning or spending as little time as possible at work, or a person talks to others about the situation, but takes no further action. This creates ambivalence and loss of enthusiasm and can have a snowball effect. A person works longer hours and harder to overcome the pressure - this results in stress at home and physical and mental exhaustion. A person makes home-life and recreation time the focus of the day, work fills the gaps. Initiative and creativity at work are lost. A person analyses the problem, revises the coping strategy and looks for solutions. This can be the cause of more stress if the solution lies beyond the control of the individual.

The last thing about vocational strain is what Jones and Fletcher (1996:889) describe as effects of stress by way of showing cognitive symptoms. A four-item scale was used to measure headache, difficulty in concentrating, difficulty with memory. Respondents were asked to indicate the extent to which they experienced each item during the day, on a seven-point scale from "not at all" to "very much". The study found evidence of transmission of stress from men to women, but no corresponding transmission from women to men.

Gaziel (1993:67) maintains that at individual level, stress manifests in the feelings of fatigue, loss of sleep and feelings of burnout. In serious cases it is followed by symptoms such as hypertension, rashes and ulcers. At school level, the increase in stress is reflected in a growing annual average of days of teacher absences and a rise in the number of early retirements. These stress-related symptoms often lead students to questions with minimal enthusiasm.

Against the backdrop, it may be maintained that teachers in Lesotho have some of these signs and symptoms of stress. Following is a review of literature on how to cope with stressful situations.

2.5 COPING STRATEGIES

Everly (1989:44) indicate that to further refine the notion of coping, it may be suggested that coping strategies can be either adaptive or maladaptive. Adaptive coping strategies reduce stress while at the same time promoting long-term health (for

example, exercise, relaxation, proper nutrition). Maladaptive coping strategies on the other hand, do indeed reduce stress in the short-term but serve to erode health in the long-term (alcohol/drug abuse, cigarette smoking, interpersonal withdrawal).

The following authors attempt to indicate different coping strategies for stress: Cartwright, Cooper and Barron (1996:201), Gmelch (1988:138), Ninomiya and Okato (1990:249), Long and Schutz (1995:266), Marmot, Bosma, Hemingway, Brunner and Stansfeld (1997:235), Trends (1996:9), Gaziel (1993:67), Lerner, Levine, Malspeis and D'Agostino (1994:1580), Deary, Raymond, Agnius and Sadler (1996:114), Sweeney and Nichols (1996:132), Lefcourt (1988:181), Basson and Van der Merwe (1995:96), Jones and Fletcher (1993:319), Daniels and Guppy (1994:1523), Levi (1988:169), Westman and Eden (1997:516), Lawson, Mamand, Tonkovic, Bean, Metzger, Abernathy (1995:25), Umiker (1994:30), Roxburgh (1996:267), Firth-Cozens and Hardy (1992:81), Haidee (1996:9), Chan (1995:382), Cooper and Kelly (1993:130), Terrill (1993:90-93), Du Toit (1988:75), Goeller (1995:111-113), Bailey, Filos, Kelly (1987:79), Cockburn (1996:403).

2.5.1 Recreation (RE)

According to Osipow and Spokane (1981:5) people who adopt coping resources may report taking advantage of recreational/leisure time, engaging in a variety of activities which they find relaxing and satisfying, and doing things they enjoy in their spare time. Vacation is one of the most effective stress management techniques.

Westman and Eden (1997:516) report that: "In a quasi-experiment designed to examine the relief from job stress and burnout afforded by a vacation respite, 76 clerks completed measures of job stress and burnout twice before a vacation, once during vacation and twice after vacation. There was a decline in burnout during the vacation and a return to prevacation measures indicated no anticipation effects. However, the return to work showed gradual fade-out, as burnout returned part way towards its prevacation level by 3 days after the vacation and all the way by 3 weeks after the vacation. Women and those satisfied with their vacations experienced greater relief; however, both samples also experienced the quickest fade-out."

Ninomiya and Okato (1990:252) indicate the following items as sources of job satisfaction and as such measures to control stressful life situations.

- Pleasant physical surroundings at work.
- Freedom to decide how teachers do their work.
- Enough materials and equipment for the work.
- Good pay.
- Reasonable class size.
- The support and co-operation of colleagues.
- Sharing in the guidance system.
- Being involved in counselling individual students.
- Undertaking the running of clubs, sports, drama trips.
- Giving prompt attention when issues of student behaviour arise.

According to Goeller (1995:105) research indicates that women in general are increasingly turning to alcohol, drugs and food as weapons in combating stress. Secondly they relate that, because of the scarcity of research into educational administration, educational researchers need to focus on this critical concern of how females deal with stress.

According to Cooper (1988:86) coping strategies used by principals can be grouped into seven categories which are:

- Consultative: talking with colleagues or friends in education.
- Workaholic: taking work home at night or on weekends.
- Eat/sleep: Altering one's eating or sleeping patterns.
- Exercise: running, jogging, aerobics, etc.
- Time out: taking a short break.
- Recreation/passive: thinking about past events.
- Taking an alcoholic drink, delegating or swearing.

Another author, Umiker (1994:29-30) mentions a couple of strategies that could be adopted to alleviate stress. These strategies do not involve using chemicals, exercise and any other things that are tangible in order to alleviate stress. Natural things are involved in this case such as

- *Impowering ourselves*: The solution is to unminimize ourselves against stress and burnout by enhancing our personal power.
- *Psycho-cybernetics*: This is how people get personal power, become more stress-resistant, inspire optimism and enthusiasm and increase energy level. Cybernetics being science of control. Psycho-cybernetics being science of mind control system.
- *Our self-image:* Every person carries a mental picture of oneself that is built up from experiences, how people reacted to oneself, image received from parents, etc.
- *Self-improvement strategies*: Capability to control oneself, one's image and programming one's automatic guidance system for success.
- *Enhance your expertise*: Keep up to date technically and professionally.
- Appreciate the fact that you have more power than you realize.
- Look in the mirror and like what you see.
- Improve your internal dialogue - your self-talk, that is, accentuate the possitive, eliminate the negative. Follow 'council' with affirmations, e.g. 'people like me. I am a worthy person. I can handle that. I feel good about that. I learned that I am calm and confident'.
- Shower your subconsciousness with positive affirmations. They are most effective when uttered first thing in the morning and just before dropping off to sleep.
- *Practice success imaging*: This is called mental practice, reflective learning, and visual motor rehearsal. This is the process of using your creative imagination to select positive images for yourself and to counter the false, destructive images in your subconscious.

- *Be assertive*: Always try to stand up for your personal rights and express those feelings and beliefs in direct, honest ways that do not violate the rights of others.
- *Strategies for passive people*: Take an assertiveness course or read a book on the subject; appreciate the fact that you have more power than you realize; set boundaries or limits, learn to say no.
- Laugh and seek escape.
- Learn relaxation techniques.
- Seek out and help others.
- Get up on the right side of the bed.

In the same manner, according to Haidee (1996:9) there are nine tips for coping with stressful life situations which together falls under recreational strategies, because they are adopted voluntarily. These strategies are:

- If your workload is too heavy, ask for more flexibility in scheduling and pace. Discuss priorities regularly with your boss.
- When working on large projects, define milestones to provide a sense of accomplishment along the way.
- If possible, work on different settings - such as at home and in the office, library, conference room, or cafeteria.
- Group administrative tasks together, and tackle them at periodic intervals instead of letting them pile up.
- Establish a confidential relationship outside of your circle of friends or at work to discuss stressful events and possible positive actions.
- Attend and initiate social get-togethers with co-workers.
- Be aware of and respect others' work styles and patterns.
- Organize your work so that you don't sit for extended periods.

- Personalize your work area with things associated with pleasant memories or feelings, such as family photos, vacations shots, and other knicknacks. But don't overdo; that can be distracting.

2.5.2 Self-care (SC)

Teachers who use coping resources this type include regular excercise, sleep eight hours per day, are careful about their diet, practice relaxation techniques and avoid harmful substances, e.g. drugs, tobacco and coffee (Spokan & Osipho 1981:5).

To start with, Cooper and Kelly (1993:134) classify coping strategies into four factors. They do not elaborate much on them, but just mention them.

- Direct strategies, e.g. involve yourself in work, deal directly with the stressful event and reinterpret the situation in a more positive light.
- Diversionary strategies, e.g. take excercise, pursue outside interests.
- Withdrawal strategies, e.g. do nothing, avoid the stressful situation.
- Palliative strategies, e.g. take alcohol, take tranquillizers/other medication.

According to Firth Cozens and Hardy, (1992:81) there are several strategies for coping with stress. Of these main strategies only ten have been tested and have been found to be the most effective and are perculiar to teachers.

- Thorough lesson planning. It may be part of the job, but it actually seems to markedly reduce anxiety according to 95 % of the respondents.
- Ensuring that one understands the work he/she is about to teach.
- Keeping the paperwork up to date - the base of the profession, but worth keeping under control.
- Making an effort to get to know your pupils' as individuals. Although it is tremendously important, the author was surprised that 86 % people found this helped reduce stress.

- Asking teachers for advice. Many found this had a calming effect, but it can be hard if one does not get along with one's fellow teachers.
- Asking friends for advice, but choose your friend carefully.
- Making lists. This can be very helpful in taking out the strain from your overloaded day.
- Encourage your pupils to be more independent.
- Chatting about recreational interests to collegues. There are other things to talk about than school.
- Learning from your mistakes and forgiving yourself. This may not be easy, but 73 % said was it was worth the effort.

These are traditional ways of coping with stress. They used to be used, and are still used now and are still effective. Cooper and Kelly (1993:130) indicate that traditional ways of reducing stress, including physical exercise, dietary restrictions and elimination of cigarette smoking are certainly prudent. Having discussed the recreational strategies, attention will now be paid to social support.

2.5.3 Social support (SS)

This category includes people feeling that there is at least one person they can count on and who values and/or loves them; having sympathetic people to talk to about work problems and having help to do important things around the house. Being close to another individual. Cockburn (1996:402-403) shows that on the average there are strategies teachers can try, there can be 70 % chance of them finding each of them to be effective. She further indicates that there are six strategies which are considered to be the most effective in reducing stress. Among the six strategies four are specifically related to teachers and could be applied during the course of their working day. Cockburn (1996:402-403) postulates that: "Another significant observation is that, while one might be tempted to advocate these strategies, a sizeable percentage of respondents found them ineffective in reducing stress. It may be that they were applying them in an inappropriate manner - for example thorough lesson preparation' does not necessarily mean spending hours preparing." Table 2.2 overleaf shows some strategies used in Cockburn's study on the reduction of stress.

Table 2.2 The six most effective strategies in reducing stress

	THOUGHT OF & TRIED BUT INEFFECTIVE	TRIED AND EFFECTIVE
		%
▫ Ensuring that you understand the work you are about to teach	5,4	69,3
▫ Thorough lesson preparation	12,5	68,7
▫ Finding the humour in the situation	14,6	68,6
▫ Abandoning sessions which are not going well	15,9	62,5
▫ Discussing your concerns with teachers	15,9	62,5
▫ Setting priorities	15,0	62,4

On the other hand, some authors believe that there are only four categories of coping behaviours, which are physiological, socio-psychological, avocational/recreational and management skills. Bailey (1987:79) contends that: "Of the four major ways of coping, physiological patterns seemed to be less evident than others. We included in this category detailed questioning about exercise routines (intensive, duration, frequency, etc.), nutritional and general health practices (diet, vitamins, smoking, drinking, drugs, coffee/tea consumption, etc.), forms of relaxation (yoga, naps, TM, sensory relaxation response, etc.), and amount of sleep. Since it is generally concluded that the more coping mechanisms the better, points were awarded when they were judged to be making constructive use of any of the above items."

Goeller (1995:105, 111 & 113) also indicates a couple of ways of coping with stress. First she states that research indicates that women in general are increasingly turning to alcohol, drugs and food as weapons in combating stress. She also maintains that socialization for females is useful for coping with stress. The third coping strategy she advocates is relying on rational and objective resources when coping with problem situations, and the capability of mobilizing rational cognitive coping resources when faced with administrative challenges. Lastly she mentions the use of recreational activities.

Therapy is also advocated as a way of coping with stress. Du Toit (1988:75) postulates that: "Many of the requests for vocational counselling seem to come from people who are not really equipped to cope with life's stresses. As a preventive measure against possible maladjustment in the future, as well as an effort to enhance more effective coping abilities, short term psychotherapeutic assistance is given. In

many of these cases a stitch in time saves nine and the time spent on therapy is offset by the gain of a more effective worker in the long run."

Roxburgh (1996:267) suggests that a number of job stress/strain models identify social support in the workplace as a resource that is deployed to help workers cope with job strain. She shows that co-workers' support has been regarded as particularly important in explaining the beneficial effects for women. She indicates that literature on co-workers' support raises the possibility that it is differentially significant for men's and women's well-being. Regarding the point of vulnerability and exposure there are two possibilities which are that there may be gender differences in the amount of co-workers' support men and women perceive. Alternatively, controlling for differential exposure, the impact of social support on men and women may differ. The fact remains, however, that the co-worker support has a weaker effect on women's well-being because of gender differences in environments as women are more vulnerable to stress and co-workers' social support is a less salient resource in enhancing their well-being.

It can be noted that some authors do not have a long list of management strategies, but only refer to counselling or therapy. For example, Lawson *et al.* (1995:26) postulate that: "Several companies mentioned that they also provide counselling for the employees who weren't terminated, to cope with the loss of their co-workers and job insecurity. Companies have found that coping with stress makes the difference between successful and unsuccessful job performance in the future."

Social support seems to be one of the main coping strategies. Daniel and Guppy (1994:1523) postulate that: "A significant three-way interaction is expected among locus of control, control and occupational stressors that predicts well-being control in the workplace may be obtained from three different sources, job autonomy, participation in decision-making and social support. Hence it is to be expected that social support, job autonomy and participation in decision-making all seperately interact with stressors and locus of control."

Additional variance is another issue in stress control. Jones and Fletcher (1993:328) observe that: "Social support accounted for additional variance, over and above job demand and job discretion, for the psychological strain variables, job satisfaction and life satisfaction. This reinforces the view that support factors are important determinants of how people respond to stressors and that predictive models of

work stress need to include variables which are more encompassing than simply work demands and discretion."

It is worth noting, however that some authors do not pinpoint a certain strategy for managing stress. They talk in general terms. Sweeney and Nichols (1996:132) observe: "Occupational therapists (OTS) are an autonomous body of health care professionals, who play a vital role in the rehabilitation team and who contribute to the evaluation, management and treatment of many groups of unwell individuals. In the United Kingdom, around 30 % of qualified occupational therapy practitioners specialise in the clinical arena of adult mental health, with an additional 15 % specialising in the associated psychosocial field of learning disability. Although work related stress and burnout have been studied extensively in many of the human service professions, it has received relatively little attention in occupational therapy, and little effort has been made to explore the impact of clinical speciality on the experience of stress with this occupational group."

Nevertheless, Cartwright and Cooper (1996) indicate that the coping strategies seak of the Occupational Stress Inventory (OSI) was used to assess the way in which company car drivers coped with pressure. The scale is comprised of six subscales: social support, task strategies, logic, homework strategies, time management, and environment. And lastly, the Cronbach alphas were all satisfactory for each of these subscales: 0.68; 0.70; 0.69; 0.70; and 0.69 respectively.

2.5.4 Rational/cognitive (RC)

People using this category of coping by strategies, use a systematic approach to solving problems, think through the consequences of their choices, and are able to identify important elements of problems encountered. They are able to set and follow priorities and have techniques to avoid being distracted (Osipow and Spoken 1981:5).

Terrill (1993:90-93) suggests a couple of strategies that may be adopted by principals for controlling stress:

- Honest communication with staff members to let them know the issues.
- Soliciting assistance from staff members; delegating responsibilities for specific jobs.

- Giving teachers more power in decision-making and discipline.
- Practising sound time management strategies.
- Taking care of personnel development items like exercise and hobbies.
- Setting limits on the amount of time spent at school and committed to keeping personal time.
- Being willing to take some risks.
- Practising seeing issues from others' perspectives.
- Avoiding expending too much energy in trying to change people.
- Forming friendships and support systems outside school circles.
- Staying away from school on weekends, except when absolutely essential.
- Acknowledging type A and workaholic tendencies and implementing appropriate measures to balance them.
- Work on your attitudes.
- Create a new personal focus.
- Initiate a new professional focus.
- Be good to yourself, that is, relax in a sauna or hot tub. Buy yourself a new racket or the clubs you've been wanting. Take in a movie.
- Make sure your support system is established and used.
- Look at other options.
- Don't waste your time trying to fix blame.
- Don't self-medicate.
- Don't ignore it.
- Don't lose your perspective.
- Don't try to teach a pig to sing.

- Revise your priorities.

Levi (1988:171) indicates that for management of stress, trade unions, occupational safety and health personnel, supervisors and government agencies should undergo the following:

- The job should be reasonably demanding in terms of other things than sheer endurance and provide at least a minimum of variety.
- The worker should be able to learn on the job and go on learning.
- The job should comprise some area of decision-making that the individual can call his or her own.
- There should be some degree of social support and recognition in the workplace.
- The worker should be able to relate what he or she does or produces to social life.
- The worker should feel that the job leads to some sort of desirable future.

Some people believe that a sense of humour is a strategy for coping with stressful life events. Lefcourt (1988:179) says: "What has occupied myself and my colleagues for the last year were the beneficient effects of a sense of humour upon the experiencing of stress. Much of our efforts was reported in a monograph that was published and released in 1986 (Lefcourt & Martin 1986). In that volume we have described the construction of measures and the conceptualizations that have shaped our thinking about what it is we mean when we speak about humour as a stress moderator."

Methods are particular and personal. Some authors choose to group management strategies into three groups. Deary *et al.* (1996:114) observe that: "The degree to which doctors used different coping strategies was assessed using the coping inventory for stressful situations. The following types of coping were measured. Task-oriented, emotion-oriented and avoidance-oriented. There are 16 questions for each strategy. Avoidance coping dimensions may be further divided into distraction and social diversion."

Long and Schutz (1995:266) are of an idea that cognitive and behavioural efforts used to reduce or eliminate the effects of stress are expected to vary from one nation to another. Secondly they indicate that coping consistency has been found for situations that are from several weeks to seven years apart. Thirdly coping responses are likely to be moderately consistent when the stressor events are more similar than different.

Among the many strategies used for coping with stress counts discipline. Chan (1995:381) postulates that: "In addition to the problems that comparison can be made only with non-teachers, some items relating to occupational or environmental stressors or coping resources may not be relevant for teachers and conversely, other items specifically relevant to teachers, such as student misbehaviour as a stressor, and discipline as a coping strategy, may not be included in the standardized instruments."

Gmelch (1988:138) indicates that as far as the coping process is concerned, the individual is the most important variable - not one coping technique is equally effective for all individuals in all situations. Secondly he shows that prescription of coping techniques must be sensitive to cultural, social, psychological and organisational differences and thirdly that individuals who cope best display a repetoire of techniques to counteract different stressors in different situations. Lastly, he quotes Selye whom he calls a foremost authority of stress, that, despite everything that has been researched, written and practised in the name of stress reduction, no ready-made formula exists which suits all individuals. Coping with stress remains an individual art, not a science to be experimentally dissected, diagnosed and applied.

2.6 CONCLUSION

This chapter gives the general information about what stress is and what burnout is. It also gives a wide perspective of causes of stress such as role overload, role insufficiency, role boundary or conflict, role ambiguity, role responsibility and physical environment. Thirdly this chapter orientates the reader to the different symptoms and effects of stress which are physiological, psychological and behavioural. Finally it concentrates on different management techniques for stress which are either adaptive or maladaptive. The next chapter will deal with methodology.

3 RESEARCH DESIGN

3.1 INTRODUCTION

This chapter serves to show the aims of the empirical study and explains both the self-compiled questionnaire and the standardized questionnaire. It will also point out the limitations of the study and give conclusions for this chapter.

3.2 METHOD OF DATA COLLECTION FOR THE STUDY

Different authors describe methodology differently. Cohen and Manion (1980:26) look at method as a "range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction". Borg and Gall (1989:321) describe research design and methodology as "a process of creating an empirical test support or refute a knowledge claim". Ary, Jacobs and Razavieh (1990:32) explain a research method as "the general strategy followed in gathering and analysing the data necessary for answering the question at hand. It is the plan of attack for the problem under investigation." In the light of the above definitions, for the purpose of this study, the researcher used the standardized questionnaire, namely the Occupational Stress Inventory (OSI). This is a concise measure of three dimensions or domains of occupational adjustment, which are occupational stress, psychological strain and coping resources. For each of these domains, detailed information is provided by scales measuring specific attributes of the environment or individual that represent important facets of the domains.

3.3 AIM OF THE EMPIRICAL STUDY

The aim of the study is to investigate:

- The stress factors among teachers in Lesotho schools, especially in Botha-Bothe.
- Effects of stress among teachers in the Botha-Bothe district.
- Strategies employed by teachers in Lesotho in coping with stress.
- The discussion of the two types of questionnaires used in this study.

3.4 MEASURING INSTRUMENT

Although the Occupational Stress Inventory (OSI) was used, it was necessary to develop the self-made questionnaire for relevance of this study. The following are the demographic questions which supply the necessary information regarding the respondent. A copy will be attached as attachment A at the end of the dissertation.

- What is the sex of the respondent?
- Is the respondent a male or a female?
- What is the qualification of the respondent?
- What is the age of the respondent?
- How many years of teaching experience does the respondent have?
- To which church denomination does the respondent belong?
- What is the marital status of the respondent?
- How many children does the respondent have?
- What levels does the respondent teach?
- What is the nationality of the respondent?

3.5 THE OCCUPATIONAL STRESS INVENTORY (OSI)

The Occupational Stress Inventory (OSI) was used in the collection of data. The OSI has a high validity and reliability. There are two reasons for using the OSI test and these are: to develop generic measures of occupational stressors that would apply across different occupational levels and environments; and to provide measures for an integrated theoretical model linking sources of stress in the environment, the psychological strains experienced by individuals as a result of work stressors, and coping resources available to combat the effects of stressors and alleviate stress.

3.5.1 Domains of OSI

The Occupational Stress Inventory has three domains which are as follows: (1) The occupational stress domain that is measured by a set of six scales which are collectively called the occupational role questionnaire (ORQ). The ORQ scales are role overload (RO), role insufficiency (RI), role ambiguity (RA), role boundary (RB), responsibility (R) and physical environment (PE). The personal strain (indicates effects of stress) questionnaire (PSQ) is a measure of the domain psychological strain and comprises four scales, namely vocational strain (VS), psychological strain (PSY), interpersonal strain (IS) and physical strain (PHS). Coping resources make up the third domain of the OSI. The domain is assessed by the four scales which make up the personal resources questionnaire (PRQ). These four scales are recreation (RE), self-care (SC), social support (SS) and rational coping (RC). By using the rating sheets for the test, raw scores are transferred to the profile form to facilitate calculation of T-scores. The use of nominative scores (percentiles and T-scores) facilitates interpretation of scores on individual scales and profiles. A combined picture of stress amongst all respondents are also looked into.

3.5.2 OSI materials

All of the items of OSI are contained in an eight page item booklet. All responses are made on a separate rating sheet. The first page of the item booklet contains instructions for the respondent. The remainder of the booklet is divided into three sections corresponding to the three questionnaires - the ORQ, PSQ and PRQ. Pages two and

three of the item booklet contain the items for the six scales of the ORQ (10 items for each of the six scales, totalling 60 items). Page four of the item booklet contains the 40 items (10 items per scale) for the four scales of the PSQ. The 40 items (10 items per scale) of the PRQ scales are contained on page five of the item booklet.

3.5.3 Rating sheet

The rating sheet (designated as forms HS) is designed to be hand scored. The rating sheet provides an area for demographic information and the responses to the OSI items.

A profile form provides a table which can be used to graph a profile of scores for all scales. The profile form facilitates calculation of T-scores and the analysis of the pattern of OSI scores.

3.5.4 Administration

The OSI requires about 20 to 40 minutes to complete. Administration of OSI began by having the respondent complete the demographic information on the rating sheet. The items in the booklet and the response options on the rating sheet are identified both by questionnaire ORQ, PSQ and PRQ and item number. Care was taken to provide a quiet environment for the respondent to concentrate.

3.5.5 Scoring

When using the forms HS rating sheet, the top paper of the rating sheet is removed. The bottom page of the rating sheets provides scores for ratings for each of the scales. The direction of scoring is not the same for all items. Some scores are reversed-scores (i.e. a rating of never produces a score of 1 on some items and 5 on others). The scores for each column are totalled and the total is entered in the space provided at the bottom of the columns. These totals constitute the raw scores for each of the scales.

3.5.6 Profiling

Raw scores can be transferred to the profile form to facilitate calculation of T-scores. The appropriate side of the profile form (male or female) is used, depending on the sex of the respondent. The raw score for each scale along the bottom of the profile form in the space provided is entered. The raw scores for each scale on the vertical column above each raw score are plotted. T-scores can be identified by referencing the columns at the left and right of the profile form.

3.5.7 Normative information

Percentiles and T-scores are provided separately for males and females in appendix A. T-scores are non-normalized linear transforms of raw scores and have a mean of 50 and a standard deviation of 10. T-scores are based on the normative sample and are also easily obtained by plotting raw-scores on the profile form. To the left and right of the profile form are equivalent T-scores for raw scores for each scale. Therefore, scores will be ROT, RIT, RAT, RBT, RT, PET, VST, PSYT, IST, PHST, RET, SCT, SST and RCT.

3.5.8 Interpretive guidelines

For the ORQ and PSQ scales, high scores suggest significant levels of occupational stress and psychological strain. Since scores above a T-score of 70 % occurred only about 2 % of the time within the normative sample, scores at or above 70 are statistically significant and indicate a strong probability of maladaptive stress. Scores in the range of 60-69 are not as significant statistically, but do suggest mild levels of maladaptive stress. Scores in the range of 40-59 are within a standard deviation of the mean and should be interpreted as being within normal ranges. Scores below 40 indicate a relative absence of occupational stress and psychological strain. This will be indicated by means of a frequency distribution called histograms in chapter 4.3.

For the PRQ scales higher scores indicate highly developed coping strategies. For these scales, scores at or below a T-score of 30 are indicative of significant lack of coping resources. Scores in the range of 30-39 suggest mild deficits in coping skills, scores in the range of 49-59 indicate average resources, while higher scores indicate

increasingly strong coping resources. This will be shown by the last 4 scales of every figure of chapter 4.4.

Analysis of the average level of elevation for each set of scales provides a general profile of the differences of the individual's psychological status in the workplace. Individuals with high average elevations on the ORQ and PSQ scales and a low average elevation on the PRQ scales are very likely to be experiencing significant psychological distress. Below are the stress indicators and their interpretation as shown by the occupational stress inventory.

Table 3.1 Scale description and possible high score interpretation

SCALE NAME	INTERPRETATION
Role overload (RO)	High scores may describe their workload as increasing, unreasonable, unsupported by needed resources. Not feeling well trained or competent for the job at hand, in need of more help and working under tight deadlines.
Role insufficiency (RI)	High scores may report a poor fit between their skills and the job they are performing. Needs for recognition and success may not be met.
Role ambiguity (RA)	High scores may report a poor sense of what they are expected to do, how they should be spending their time, and how they will be educated. They may also report no clear sense of what they should do to get ahead.
Role boundary (RB)	High scores may report feeling caught between conflicting supervisory demands and factions; being unclear about authority lines and having more than one person telling what to do.
Responsibility (R)	High scores may report high levels of responsibility for activities and work performance of sub-ordinates. They are worried that others will not perform well.
Physical environment (PE)	High scores may report being exposed to high levels of noise dust, heat, cold, light, poisonous substances, or unpleasant odours. They may feel having an erratic work schedule or feeling personally isolated.
Vocational strain (VS)	Poor attitude towards their work, including dread, boredom and lack of interest. They may report making errors in their work or having accidents. Concentration problems and absenteeism may be evidenced.
Psychological strain (PS)	High scores may report feeling depressed, anxious, unhappy and or irritable. Complaining about little things, responding badly in routine situations, and having no sense of humour. They may report that things are not going well.

Interpersonal strain (IS)	Frequent quarrels or excessive dependence on family members, spouse and friends. They may report wanting to leave and have time alone, or controversially, not having time to spend with friends.
Physical strain (PHS)	Frequent worries about their health as well as a number of physical symptoms (cold, heart palpitations, aches and pains, erratic eating habits. Overuse of alcohol and disturbances in sleeping patterns. Feeling lethargy and apathy.
Recreation (R)	High scores may report taking advantage of the recreational/leisure time, coming to them and engaging in a variety of activities which they find relaxing and satisfying. Doing the things they enjoy in their spare time.
Self-care (SC)	Regular exercise, sleep eight hours per day, are careful about their diet, practise relaxation techniques and avoid harmful substances (eg. alcohol, drugs, tobacco, coffee).
Social support (SS)	Feelings that there is at least one person they can count on and who values and/or loves them. Having sympathetic people to talk to about work problems and report having help to do important things around the house. Being close to another individual.
Rational/cognitive (RC)	Having a systematic approach to solving problems, think through the consequences of their choices, and are able to identify important elements of problems encountered. Being able to set and follow priorities and having techniques to avoid being distracted.

3.6 STATISTICAL TECHNIQUES USED FOR THIS STUDY

In this study two techniques were used, namely frequency distribution and ANOVA. Lapin (1995:15-24) shows that frequency distribution is a statistical technique which does a couple of things with data. For example, it rearranges data in a meaningful manner. It represents data by means of bars of varying heights divided by intervals with horizontal and vertical axes. It groups data into meaningful fashions. It puts data in the form of curves. It may put data in the form of spikes. It can also represent data in the form of histograms. Kleka, Nie and Hull (1975:4) relate that ANOVA is a statistical technique that is used to investigate differences among the means of two or more populations. They also indicate that ANOVA is based on the fact that the means of subgroups are very different, the variances of the combined groups are larger than the variances of separate subgroups. Miller (1997:121) on the other hand, explains that ANOVA is used for testing a null hypotheses.

For this study the researcher will use frequency distribution to arrange data in a meaningful pattern to show frequency distribution according to demographic questions. Secondly, frequency distribution will be used in the form of histograms to indicate whether teachers suffer from stress and if they do, which stress level affects how many respondents. Four different groups will be used in chapter 4.4 one for each stress level. These are: no stress, little stress, moderate stress and severe stress. ANOVA is going to be used in chapter 4.3 to indicate which stress level affects which group of variables. This will be done by comparing means of T-scores and standard deviations of stress indicators and variables. The P-value (probability value) will indicate the significant difference of stress between the stress indicators and variables.

3.7 TARGET GROUP

As has been indicated in chapter one the targeted clientele is government registered high (from form A to form E) and secondary schools (from form A to C) in the Botha-Bothe district, chosen through random sampling. Principals and teachers of eleven schools were tested; these are Botha-Bothe HS, Botha-Bothe CHS, St Cyprians HS, St Paul HS, Khukhune HS, Qalo HS, Lepekola Sec., Bokoro Sec., Qholaqhoe HS, Linokong Sec., Sefako HS, President of LAT. The president of principals' association, and the executive secretary for LAT were tested. The total number of respondents who were tested is one hundred and forty five. Both males and females were tested. All teachers in a school who could have time to fill up the questionnaire were tested.

3.8 LIMITATIONS DURING THE DATA COLLECTION

Collection of data was done under the supervision of a registered psychologist. Since it was not possible to get many respondents at a time because of time constraints, two to five people were tested at a time. So if it happened that they did not finish, the researcher could wait until they were through with their normal tasks. People were willing to give assistance during their leisure times. The whole day could be spent at one school. Care was taken not to disrupt their teaching to ensure their future co-operation.

The research was conducted at the commencement of the second semester before the final examination started. Respondents were not excited and were co-operative. The return rate was hundred percent.

3.9 CONCLUSION OF THE CHAPTER

This chapter dealt with the structure of the stress inventory and the self-made questionnaire and explained how data were collected in the identified schools. The following chapter will deal with discussion of findings of data collected during the empirical research.

4 ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The purpose of this chapter is to analyse and interpret the research findings pertaining to the research aims that guided the study. The research aim for this study was

- to determine the sources of stress amongst teachers in Botha-Bothe district of Lesotho;
- to determine the stress levels that affect teachers in Botha-Bothe district;
- to investigate the effects of stress;
- to determine the coping strategies employed by respondents and suggest appropriate management strategies.

This chapter comprises three sections. The first indicates the response pattern of participants in the study according to demographic factors such as rank, sex, age (see table 4.1) of respondents. The second deals with the frequency distribution to indicate the severity of stress and its levels by means of histograms. The last serves to compare the means of T-scores for stress indicators and demographic variables to determine the presence or not of stress.

4.2 SECTION A

What follows is an indication of the frequency distribution according to demographic factors.

Table 4.1 Summary of frequency distribution according to demographic factors

	VARIABLES		TOTAL	%
1	Rank of respondents	Principal	13	9,0
		Vice principal	7	4,8
		Department head	22	15,2
		Secondary assistant	87	60,0
		Primary assistant	16	11,0
			145	**100 %**
2.	Sex	Male	72	49,7
		Female	73	50,3
			145	**100 %**
3.	Academic qualifications	Certificate	60	41,4
		A.C.P.	11	7,6
		Degree	54	37,2
		L.C.P.	4	2,8
		Master's and/or other	16	11,0
			145	**100 %**
4.	Age (in years)	20-30	61	42,0
		31-40	53	36,6
		41-50	21	14,5
		51-60	9	6,2
		61 plus	1	0,7
			145	**100 %**
5.	Teaching experience (in years)	4-8	83	57,2
		9-13	22	15,1
		14-18	21	14,5
		19-23	11	7,6
		24-33	4	2,8
		34-plus	4	2,8
			145	**100 %**
6.	Religious affiliation	A.M.E.	6	4,1
		A.C.L.	25	17,2
		L.E.C.	38	26,2
		R.C.C.	55	37,9
		Other	21	14,5
			145	**100 %**
7.	Level at which respondents teach	A - C	6	4,1
		D - E	25	17,2
		C - E	38	26,2
		A - E	55	38,0
		Other	21	14,5
			145	**100 %**

8.	Marital status	Single	35	24,1
		Married	103	71,0
		Divorced	1	0,7
		Widowed	5	3,5
		Other	1	0,7
			145	**100 %**
9.	Number of children each teacher has	One	46	31,7
		Two	30	20,6
		Three	13	9,0
		Four	13	9,0
		Other	43	29,7
			145	**100 %**
10.	Race	Mosotho	121	83,4
		Indian (Lesotho) citizens	12	8,3
		Asians	1	0,7
		Other Africans	8	5,5
		Other	3	2,1
			145	**100 %**

In the first place the frequency distribution according to rank of respondents, indicates that secondary assistant teachers contribute the highest group, namely 87 (60 %), then comes the department heads who are 22 (15,2 %). The primary assistant teachers come third. They are 16 (11,0 %). Principals make the fourth group with 13 (9,0 %) and the last group are vice principals (4,8 %) 7 in number.

Secondly, the frequency distribution according to the sex of respondents indicates that female teachers are slightly more dominant in number, namely 73 (50,3 %) than male teachers who are 72 (49,7 %).

The frequency distribution according to the variable of academic qualifications indicates that certificated teachers (60) make the largest group (41,4 %), followed by teachers with degree qualifications, counting 54 (37,2 %). Teachers that have masters' degree and doctorate or honours degrees count 16 (11,0 %). The fourth group comprises those with Advanced College of Preceptors (ACP) qualifications, namely 11 (7,56 %), and the smallest number, those with Licentiate College of Preceptors (LCP), 4 (2,8 %).

The fourth frequency distribution is that of age. Teachers whose ages range from 20-30 years count 60 (42,0 %); they make up the largest group, followed by the age group ranging from 31-40 years, 53 (36,6 %). Third is the group with ages ranging

from 41-50 years, counting 21 (14,5 %). Teachers aged between 51-60 years make the fourth group, 9 (6,2 %), and the last are those older than 61 years (1).

Another demographic indicator is that of teaching experience. The majority of the teachers in the sample have 4-8 years of teaching experience, namely 83 (57,2 %). Those with teaching experience of 9-13 years count 22 (15,1 %). They make up the second greatest group, while those with 14-18 years teaching experience are 21 (15,2 %) in number. The teaching experience of teachers (7,6 %) ranged from 19-23 years, while 4 (2,9 %) teachers had teaching experience of 29-33 years, making the fifth largest group. Four teachers (2,8 %) had teaching experience of more than 34 years.

As for religious affiliation, teachers who belong to the Roman Catholic Church (RCC) constitute the largest group, 55 (37,9 %), followed by members of the Lesotho Evangelical Church (LEC) who are 38 (26,2 %). Teachers belonging to the Anglican Church of Lesotho (ACL) ranked third, namely 25 (17,2 %), twenty one (14,5 %) teachers belong to other churches like the Methodist, Apostolic and so on. The African Methodist Episcopal Church (AME) had 6 (4,1 %) members in the sample.

The frequency distribution according to the variable of levels of teaching at which respondents teach was calculated too. Most teachers in the sample teach junior and senior certificate grades A-E, namely 55 (38,0 %). The second largest group is that of teachers who teach the last level of junior and senior certificate (C-E). They are 38 (26,2 %). The third group is of those who teach senior certificate (D-E), counting 25 (17,2 %). The teachers who teach other groups, such as home economics and wood work, numbered 21 (14,5 %), while those that teach junior certificate (A-C) formed the smallest group with 6 (4,1 %) teachers.

Marital status forms the eighth frequency distribution. The majority of the respondents were married, namely 103 (71,0 %). Single teachers counted 35 (24,1 %), and widows 5 (3,5 %). One (0,7 %) teacher was divorced, the last variable separated or engaged, 1 (0,7 %).

Another variable is that of the number of children an individual respondent had. Respondents having one child make the majority, namely 46 (31,7 %). The second largest group is those that have more than four children, namely 43 (29,7 %). Those

with two children numbered 30 (20,6 %). Thirteen teachers have 3 children (9,0 %) and 13 teachers have four children (9,0 %).

The last frequency distribution according to the various variables is nationality. Most respondents were Basotho, namely 121 (83,4 %), with the second most common nationality Indians (Lesotho citizens), counting 12 (8,3 %). Expatriate teachers constitute the third, fourth and fifth categories. These are other Africans besides Basotho, namely 8 (5,5 %) teachers. There were 3 (2,1 %) others and one Asian (0,7 %) teacher.

4.3 SECTION B

What follows is an indication of whether teachers suffer from stress or not according to the scales of the standardised test, Occupational Stress Inventory (OSI), also known as stress indicators.

These ten stress indicators are role overload (RO), role insufficiency (RI), role ambiguity (RA), role boundary (RB), responsibility (R), physical environment (RPE), vocational strain (VS), psychological strain (PSY), interpersonal strain (IS), and physical strain (PHS). They make up the first two categories, namely causes and effects of stress. The stress indicators have been analysed through frequency distribution with the use of four categories. These categories are no stress, little stress, moderate stress, and high stress according to percentiles.

The last four scales of OSI are not included in the test, because they indicate the coping resources. The rule of no stress, little stress, moderate stress and high stress would not apply to them.

What follows are figures according to the ten indentified stress indicators, figures 4.1 - 4.10.

Figure 4.1

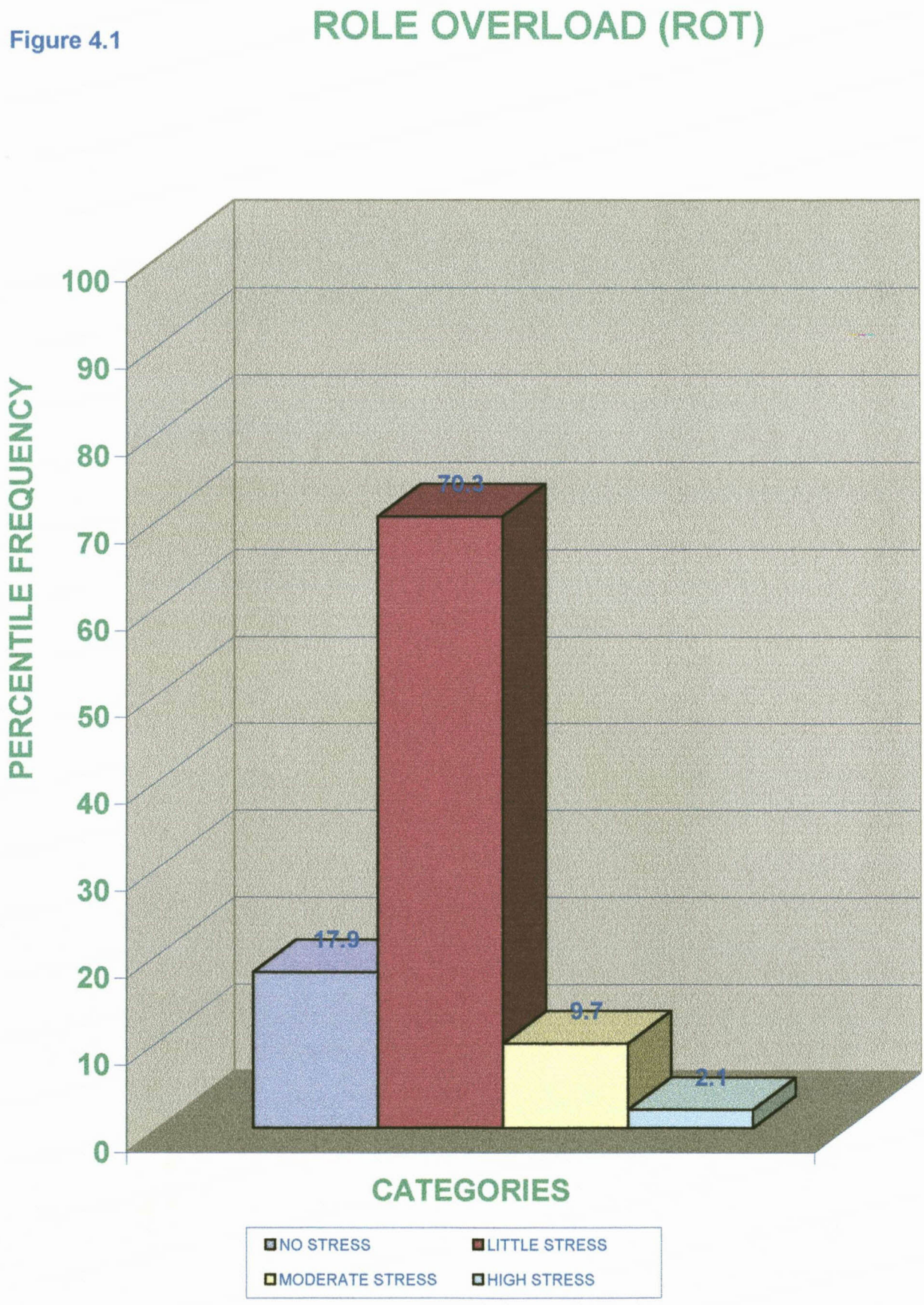

ROLE OVERLOAD (ROT)
PERCENTILE FREQUENCY
100
90
80
70
60
50
40
30
20
10
0
70.3
17.9
9.7
2.1
CATEGORIES
NO STRESS
LITTLE STRESS
MODERATE STRESS
HIGH STRESS

Figure 4.2

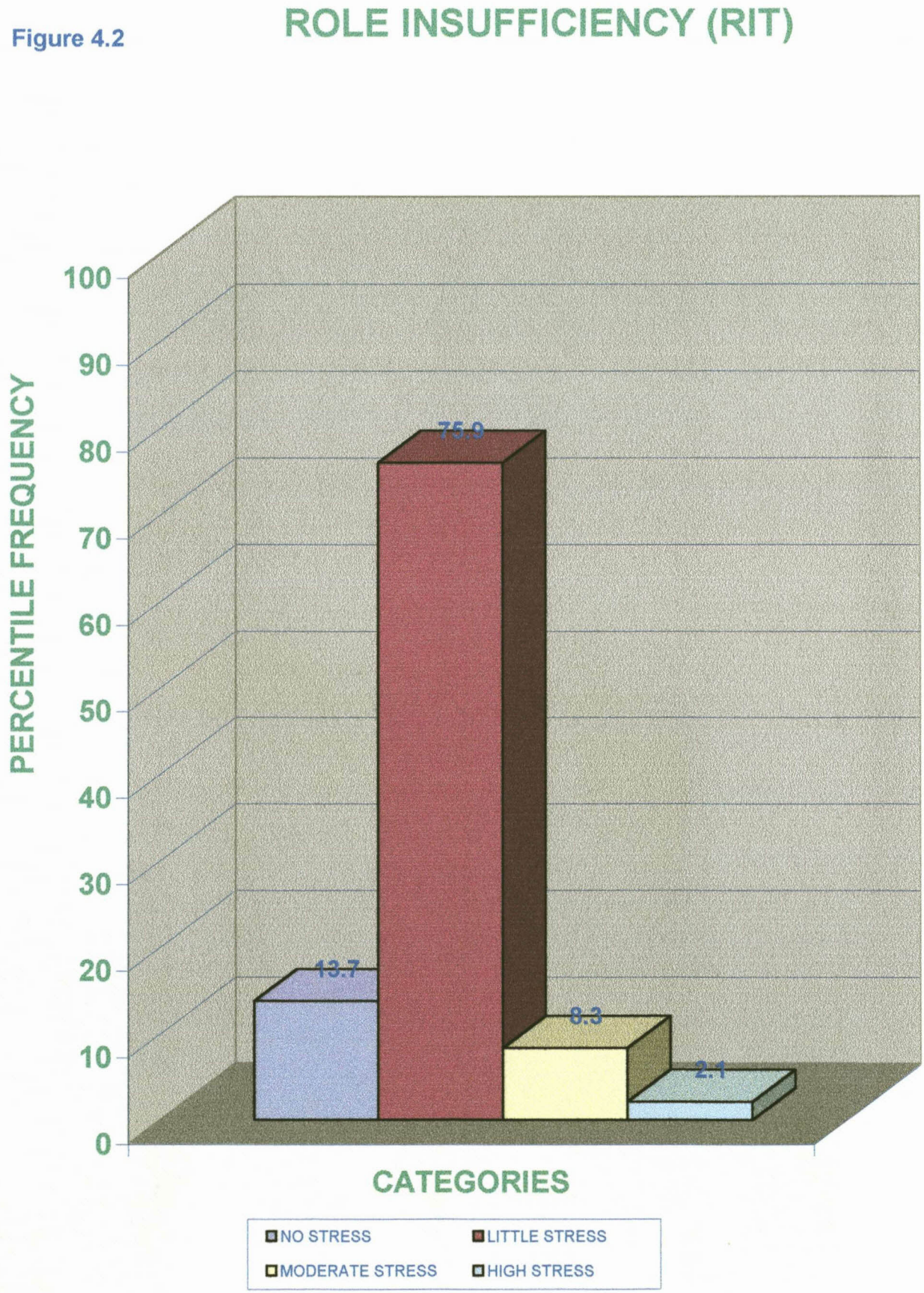

ROLE INSUFFICIENCY (RIT)
PERCENTILE FREQUENCY
100
90
80
70
60
50
40
30
20
10
0
75.9
13.7
8.3
2.1
CATEGORIES
NO STRESS
LITTLE STRESS
MODERATE STRESS
HIGH STRESS

Figure 4.3

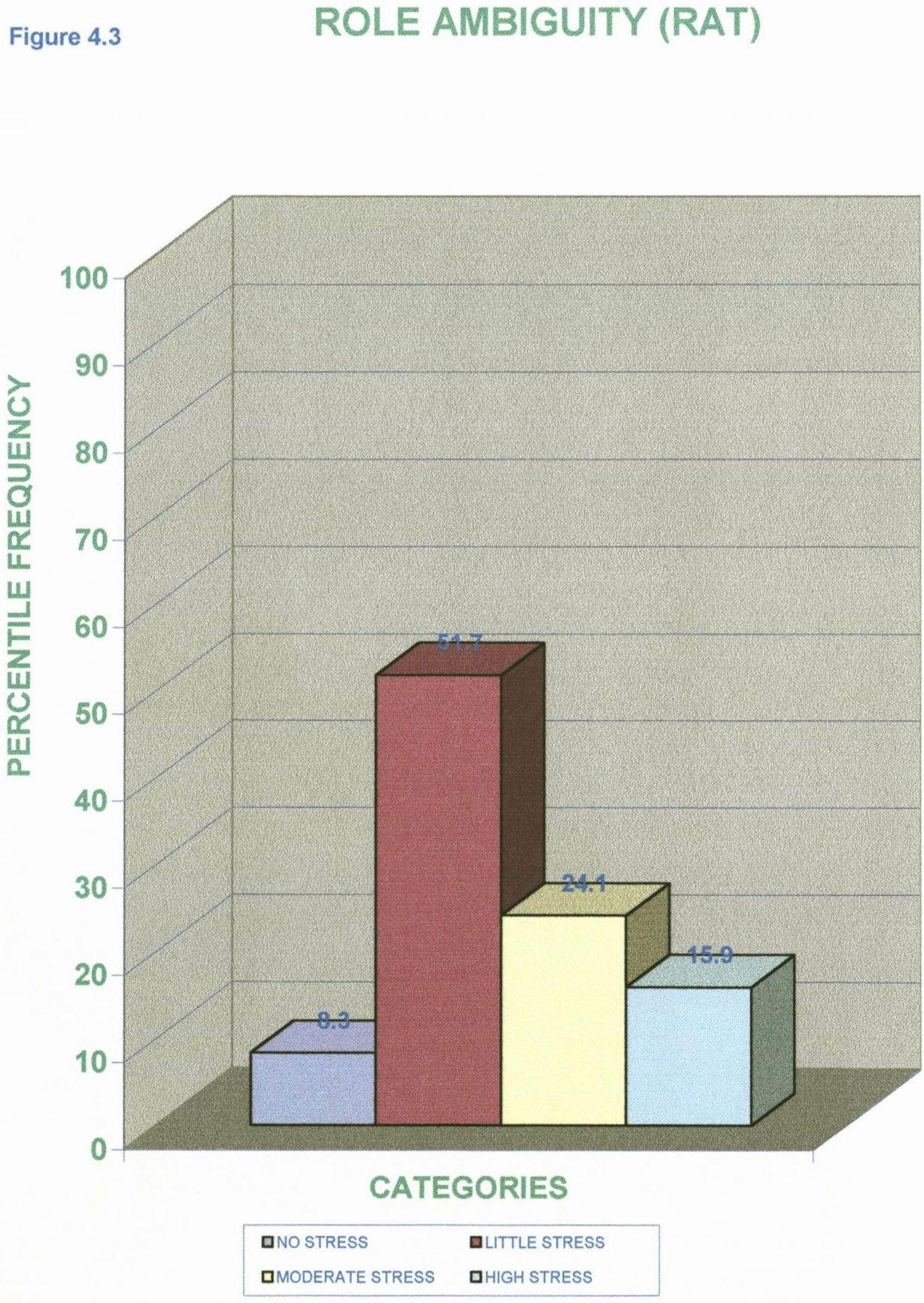

ROLE AMBIGUITY (RAT)
PERCENTILE FREQUENCY
100
90
80
70
60
50
40
30
20
10
0
8.3
51.7
24.1
15.9
CATEGORIES
NO STRESS
LITTLE STRESS
MODERATE STRESS
HIGH STRESS

Figure 4.4

ROLE BOUNDARY (RBT)

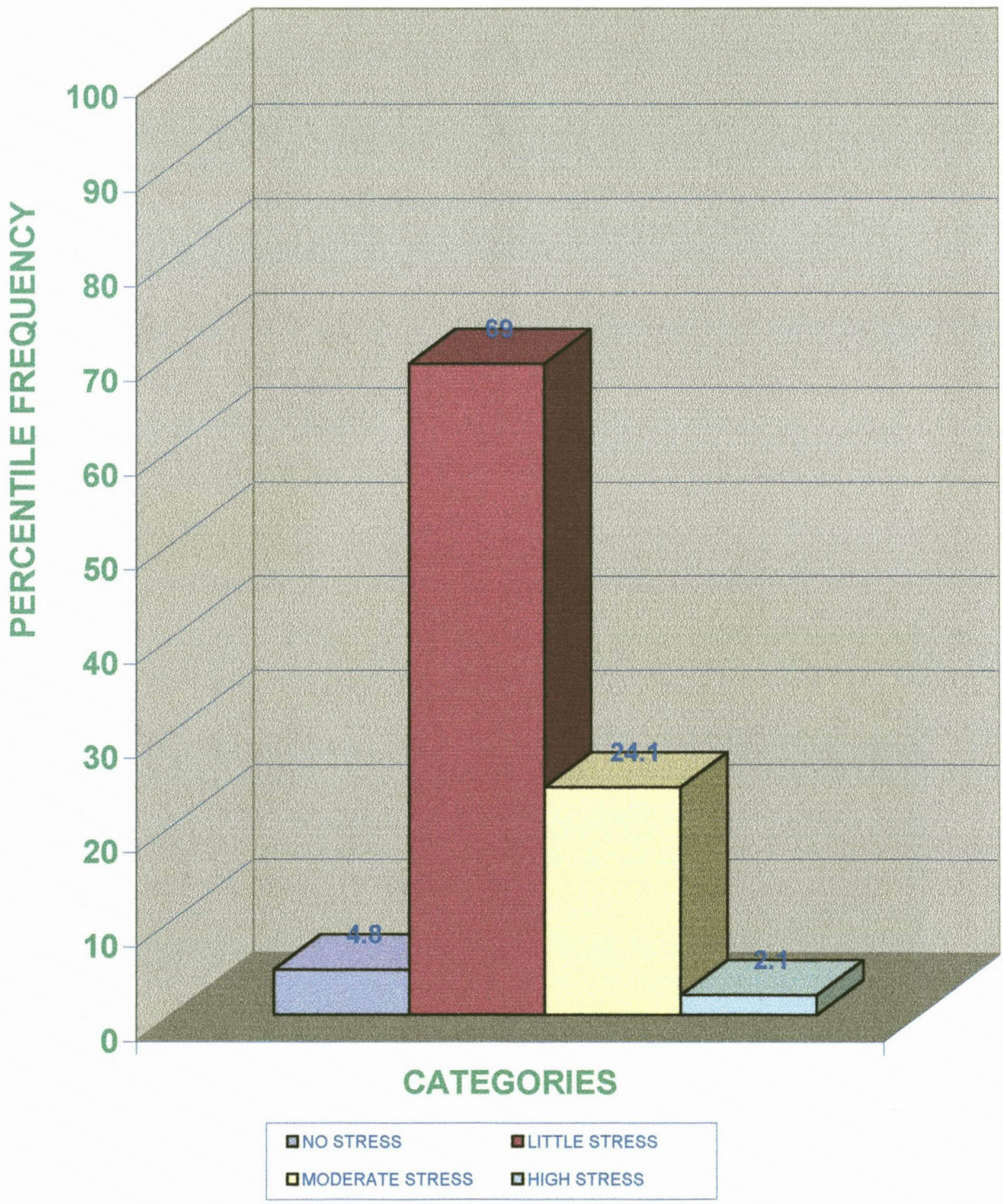


Figure 4.5

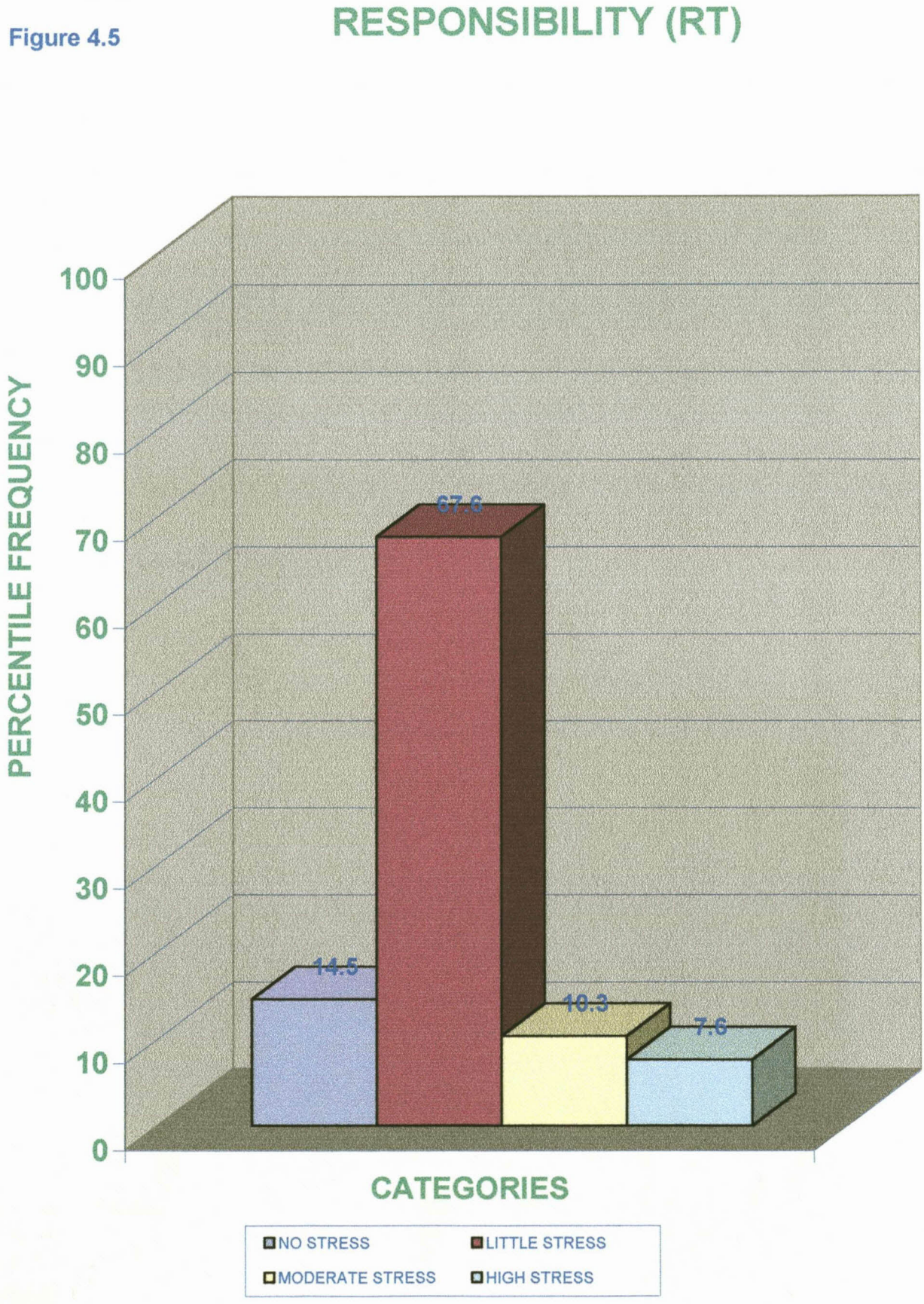

RESPONSIBILITY (RT)
PERCENTILE FREQUENCY
100
90
80
70
60
50
40
30
20
10
0
67.6
14.5
10.3
7.6
CATEGORIES
NO STRESS
LITTLE STRESS
MODERATE STRESS
HIGH STRESS

Figure 4.6

PHYSICAL ENVIROMENT (PET)

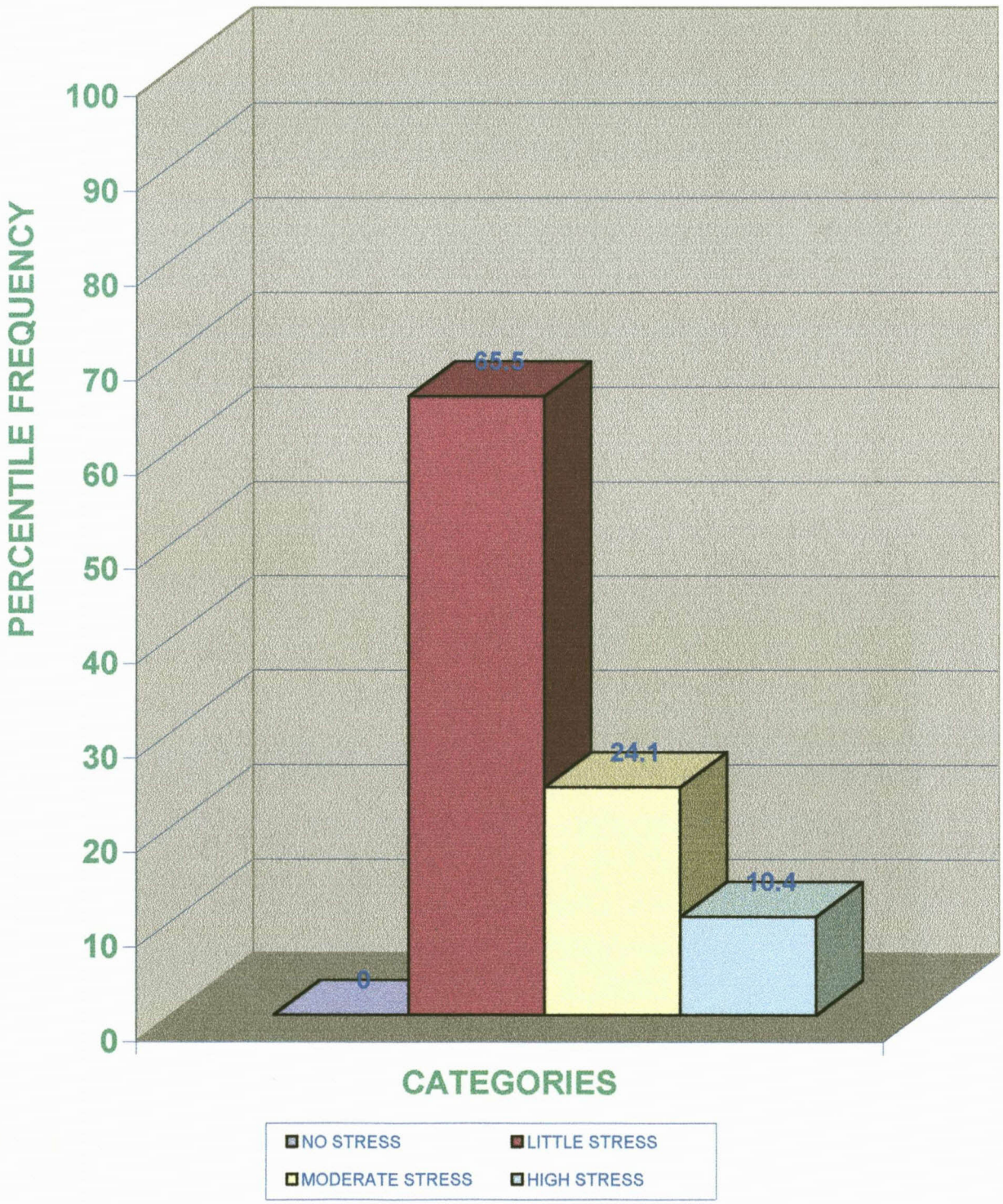


Figure 4.7

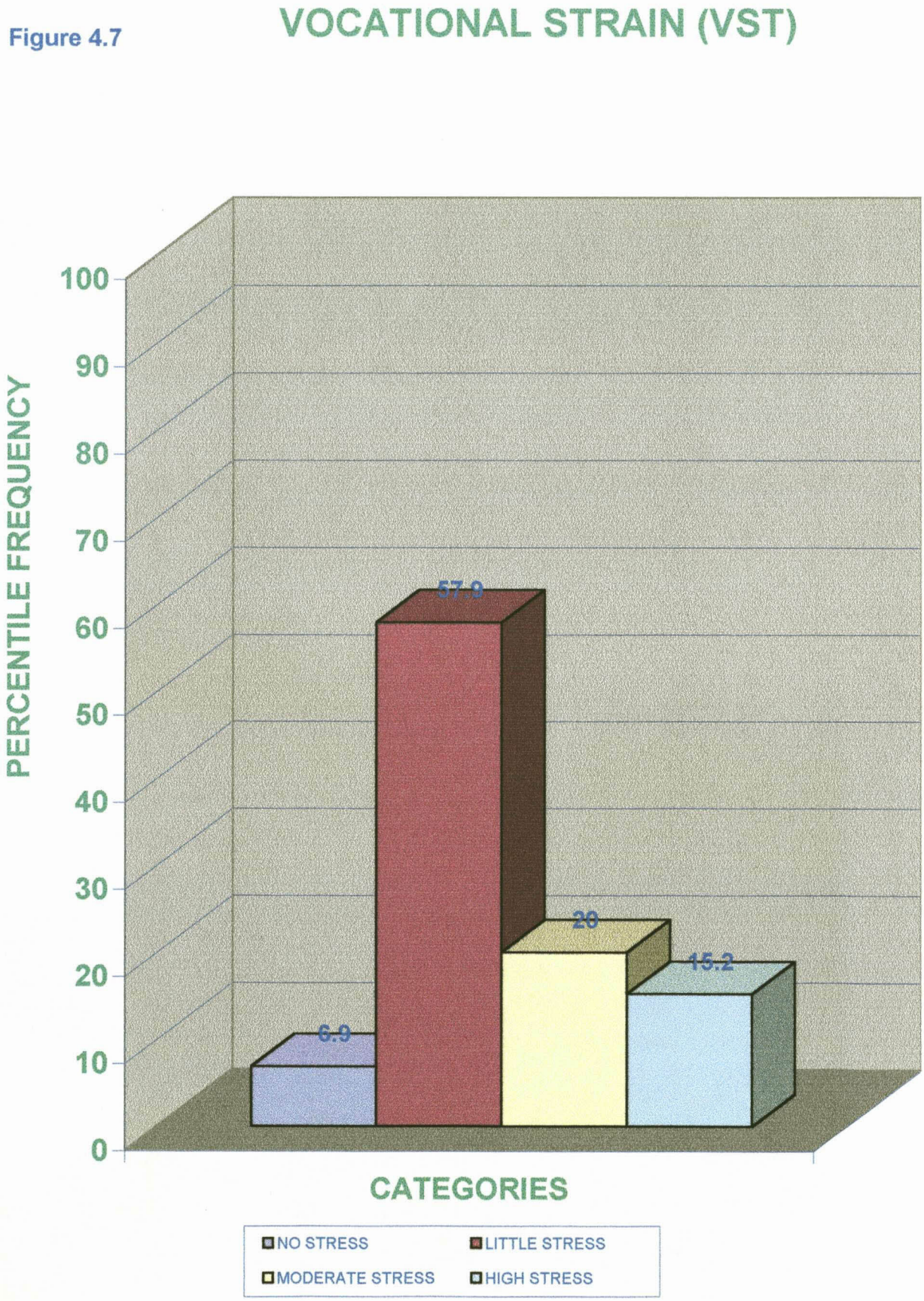

VOCATIONAL STRAIN (VST)
PERCENTILE FREQUENCY
100
90
80
70
60
50
40
30
20
10
0
57.9
20
15.2
6.9
CATEGORIES
NO STRESS
LITTLE STRESS
MODERATE STRESS
HIGH STRESS

Figure 4.8

PSHYCHOLOGICAL STRAIN (PSYT)

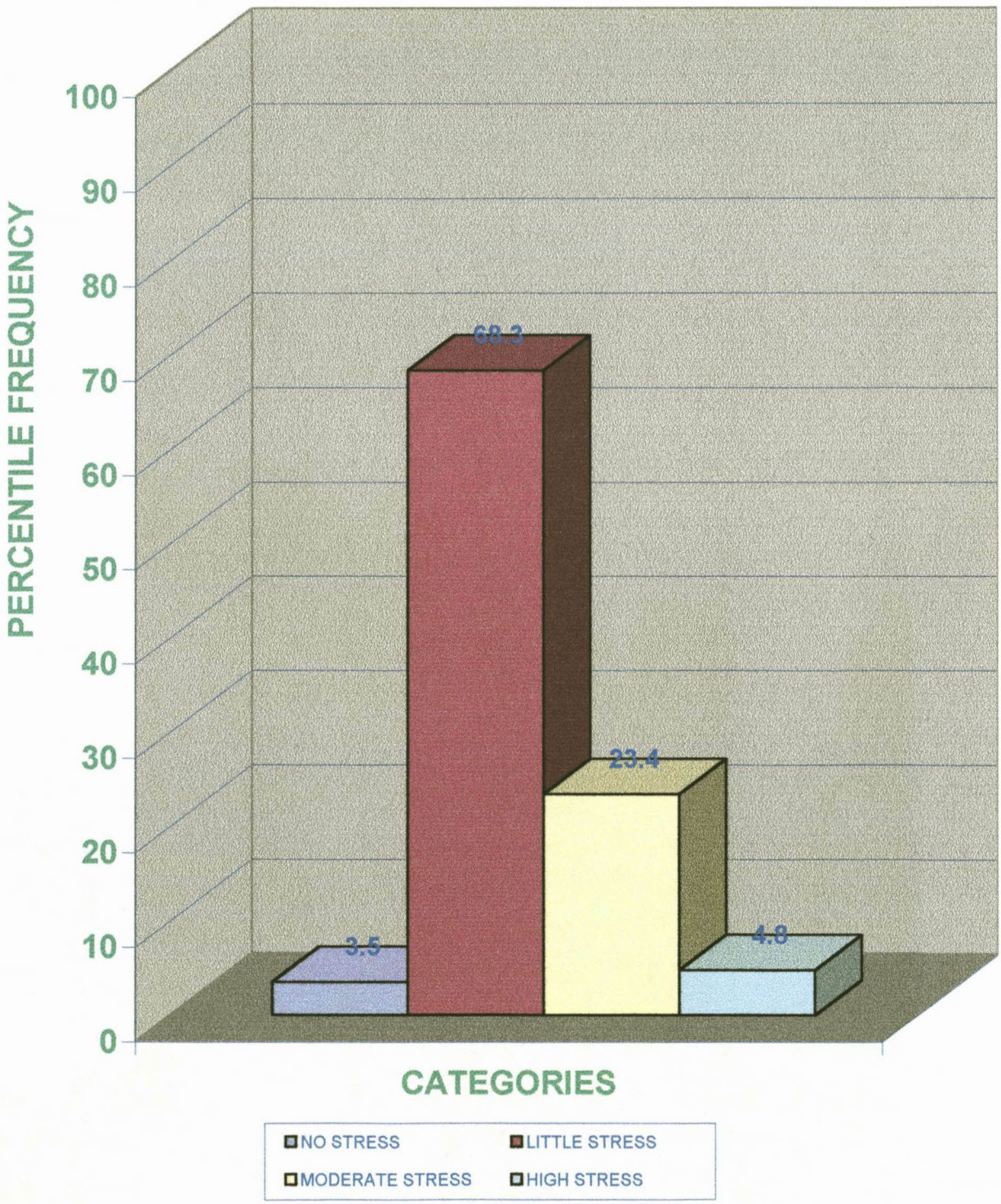


Figure 4.9

INTERPERSONAL STRAIN (IST)

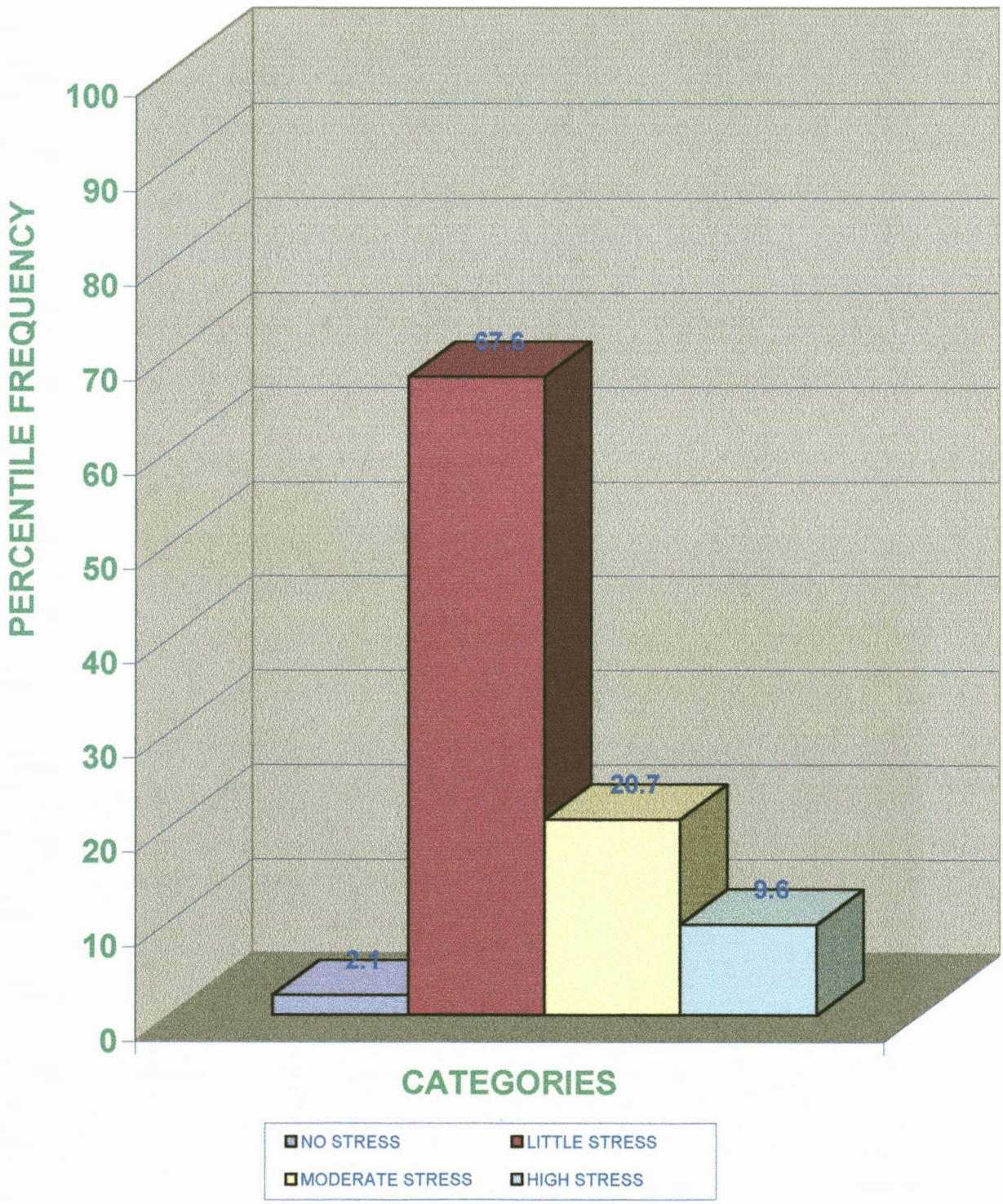
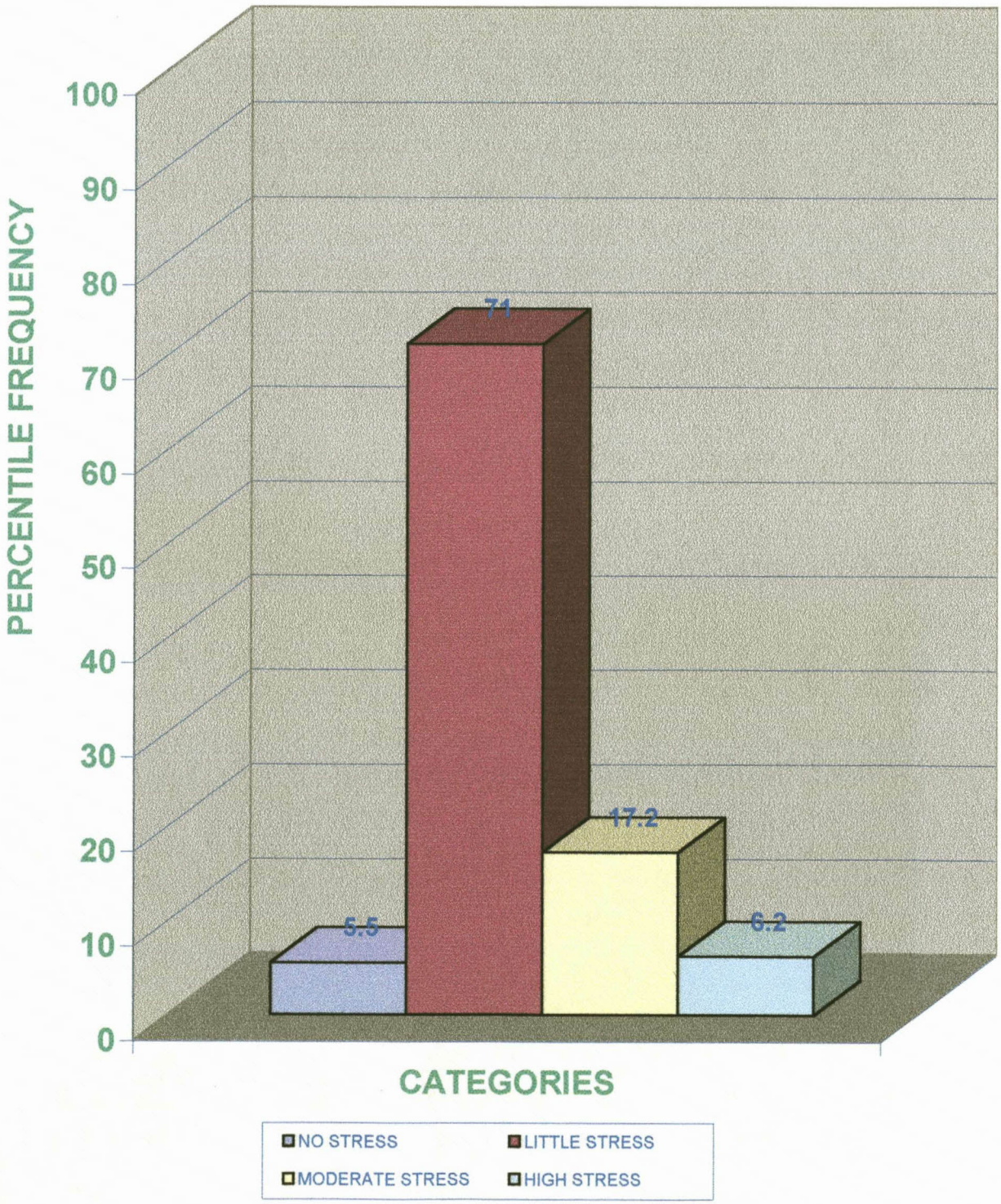


Figure 4.10

PHYSICAL STRAIN (PHST)



4.3.1 Interpretation of figures

What follows is an interpretation of figures 4.1 - 4.10.

- *Figure 4.1*: According to the stress indicator *role overload (ROT)* 26 (17,9 %) teachers have no stress, 102 (70,3 %) have little stress, 14 (9,7 %) have moderate stress and 3 (2,1 %) have high stress.

- *Figure 4.2*: According to the stress indicator *role insufficiency (RIT)* 20 (13,7 %) teachers have no stress, 110 (75,9 %) have little stress, 12 (8,3 %) have moderate stress and 3 (2,1 %) have high stress.

- *Figure 4.3:* This figure shows that, according to the stress indicator *role ambiguity (RAT)*, 12 (8,3 %) teachers have no stress, 75 (51,7 %) have little stress, 35 (24,1 %) have moderate stress while 23 (15,9 %) have severe stress.

- *Figure 4.4*: This indicates that as far as the stress indicator *role boundary (RBT)* is concerned, 7 (4,8 %) teachers have no stress, 100 (69,0 %) have little stress, 35 (24,1 %) have moderate stress and 3 (2,1 %) have severe stress.

- *Figure 4.5*: In this figure the stress indicator *responsibility (RT)* it is indicates that 21 (14,5 %) teachers have no stress, 98 (67,6 %) have little stress, 15 (10,3 %) have moderate stress, while 11 (7,6 %) have severe stress.

- *Figure 4.6*: As far as the stress indicator *physical environment (PET)* is concerned, no one person has no stress, 95 (65,5 %) teachers have little stress, 35 (24,1 %) have moderate stress and 15 (10,4 %) have high stress.

- *Figure 4.7:* According to the stress indicator *vocational strain (VST)* 10 (6,9 %) teachers have no stress, 84 (57,9 %) have little stress, 29 (20,0 %) have moderate stress and 22 (15,2 %) have severe stress.

- *Figure 4.8:* Figure 4.8 shows that, according to the stress indicator *psychological strain (PSY)*, 5 (3,5 %) teachers do not suffer from stress, 99

(68,3 %) suffer from little stress, 34 (23,4 %) have moderate stress and 7 (4,8 %) have severe signs of stress.

- *Figure 4.9*: This indicates that as far as the stress indicator *interpersonal strain (IST)* is concerned, 3 (2,1 %) teachers suffer no stress, 98 (67,6 %) suffer little stress, 30 (20,7 %) suffer moderate stress and 14 (9,6 %) suffer high stress.

- *Figure 4.10*: This figure shows that, according to the stress indicator *physical strain (PHST)*, 8 (5,5 %) teachers have no stress, 103 (71,0 %) have little stress, 25 (17,2 %) have moderate stress and 9 (6,2 %) have severe stress.

4.4 SECTION C

In this section the researcher will compare the means of T-scores as determined by the OSI, with demographic factors to determine the presence or not of stress.

A comparison of means of T-scores of stress indicators and demographic variables was done to see if there is a statistically significant difference among demographic factors such as grade, sex, academic qualifications, age, experience, race, number of children and denomination of teachers and stress indicators measured by the OSI, namely role overload (ROT), role insufficiency (RIT), role ambiguity (RAT), role boundary (RBT), responsibility (RT), physical environment (PED), vocational strain (VST), psychological strain (PSYT), recreation (RET), self-care (SCT), social support (SST), rational/cognitive (RCT). It should be noted that T-scores at or above 70 are statistically significant and indicate strong probability of maladaptive stress, scores in the range of 60-69 are not significant statistically, but suggest mild levels of maladaptive stress. Scores in the range of 40-59 are within a standard deviation of the mean and should be interpreted as being within normal ranges. Scores below 40 indicate absence of stress and psychological strain. On the other hand, for stress indicators such as RET, SCT, SST, SCT, collectively known as PRQ, high scores show high development of coping resources. Scores at or below 30 are indicative of significant lack of coping resources. Scores in the range of 30-39 suggest mild deficits in coping skills. Scores in the range of 40-59 indicate average resources, while higher scores indicate increasingly strong coping resources.

What follows is an indication of comparison of indicators and demographic factors such as rank of respondents, sex, academic qualifications, age, etc. These comparisons will be indicated in tables 4.2 - 4.11.

Table 4.2 **Comparison of means of T-scores of stress indicators and the rank of the respondent (see question 1 of attachment A)**

	PRINCIPAL		VICE-PRINCIPAL		DEPARTMENT HEAD		SECONDARY ASSISTANT		PRIMARY ASSISTANT	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	55.61	13,29	47,85	5,81	48,59	8,03	47,51	8,87	49,12	7,47
2 RIT	49,0	7,15	47,85	5,66	48,04	7,8	48,32	8,73	50,68	7,88
3 RAT	57,07	10,91	51,42	9,86	54,63	12,24	56,7	11,7	61,68	13,79
4 RBT	58,84	10,88	46,85	6,41	53,04	7,73	54,13	7,46	55,56	9,45
5 RT	64,23	10,6	52,57	3,30	51,27	10,36	49,55	9,65	46,68	10,01
6 PET	54,15	9,36	49,57	7,36	54,36	9,93	56,39	10,54	58,75	11,33
7 VST	54,46	10,35	46,14	5,36	57,0	9,56	55,4	12,76	60,18	10,94
8 PSYT	53,3	6,10	45,85	5,52	55,63	8,46	55,63	8,46	57,06	8,48
9 IST	54,53	11,55	47,57	2,69	57,4	8,35	55,59	9,84	56,0	9,65
10 PHST	54,15	13,32	43,28	4,23	51,13	8,76	53,16	9,27	53,87	12,83
11 RET	44,84	10,17	54,71	8,71	46,22	7,79	49,34	10,05	48,81	10,32
12 SCT	54,92	6,48	53,14	7,51	46,04	10,0	50,31	10,84	50,81	10,57
13 SST	48,53	8,19	50,85	4,09	41,18	10,82	42,51	9,73	38,37	10,45
14 RCT	54,38	9,35	53,14	13,38	43,09	11,69	44,71	10,99	44,81	14,39

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources

M = Mean
SD = Standard deviation

Table 4.3 **Comparison of means of T-scores of stress indicators and sex of the respondent (see question 2 of attachment A)**

	MALES		FEMALES	
	M	SD %	M	SD %
1 ROT	45,66	9,30	51,49	8,04
2 RIT	51,08	9,14	46,10	6,27
3 RAT	54,91	12,02	58,58	11,58
4 RBT	53,63	9,33	54,20	8,23
5 RT	48,06	9,74	50,95	10,52
6 PET	57,23	11,54	54,41	8,90
7 VST	55,31	11,97	55,95	11,79
8 PSYT	53,37	7,90	56,65	8,50
9 IST	54,08	9,44	56,78	9,70
10 PHST	53,12	11,22	51,97	8,70
11 RET	49,33	10,01	48,01	9,64
12 SCT	51,79	10,88	48,76	9,71
13 SST	43,02	11,35	42,57	8,54
14 RCT	48,95	11,79	42,58	11,03

For the first 10 scales:
0-40 = no stress
40-59 = little stress
60-69 = moderate stress
70 plus = high stress

For the last 4 scales (11-14):
0-30 = lack of coping resources
30-39 = mild deficits
40-59 = average
60 plus = strong coping resources

M = Mean
SD = Standard deviation

Table 4.4 **Comparison of means of T-scores for stress indicators and qualifications of respondents (see question 3 of attachment A)**

	CERTIFICATE		ACP		DEGREE		LCP		MASTER'S & OTHERS	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	49,48	8,40	49,90	8,99	48,20	10,24	43,25	9,74	47,75	8,30
2 RIT	48,80	8,16	47,63	9,13	47,96	8,34	49,75	8,38	50,18	7,85
3 RAT	59,33	11,26	57,90	13,67	54,03	12,16	53,50	6,13	56,37	12,23
4 RBT	56,75	7,40	50,45	7,76	51,77	8,69	56,50	4,20	54,81	8,13
5 RT	50,08	8,81	48,27	8,35	51,42	11,83	54,50	19,07	53,62	11,12
6 PET	56,75	10,53	53,09	9,80	54,98	10,03	49,25	6,84	58,62	11,54
7 VST	57,73	11,97	55,63	13,01	53,83	10,98	47,25	6,23	56,00	13,72
8 PSYT	57,43	8,44	55,36	6,05	52,90	8,43	49,50	11,90	54,31	6,04
9 IST	56,90	9,79	56,81	9,53	54,05	10,06	53,75	10,21	54,12	7,50
10 PHST	53,70	10,28	50,72	6,38	52,55	10,53	50,50	9,00	49,93	9,75
11 RET	49,10	10,56	49,63	11,22	49,00	9,20	48,75	13,94	45,25	9,24
12 SCT1	48,81	9,37	49,54	10,26	51,59	10,28	48,75	15,17	52,12	13,42
13 SST	40,78	8,68	39,72	10,08	45,35	10,06	45,50	17,05	43,18	11,46
14 RCT	42,46	10,52	48,00	15,62	48,66	11,06	47,25	15,37	46,31	13,56

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources

M = Mean
SD = Standard deviation

Table 4.5 **Comparison of means of T-scores of stress indicators and age of the respondents (see question 4 of attachment A)**

	20-30		31-40		41-50		51-60		61 PLUS
	M	SD %	M	SD %	M	SD %	M	SD %	M %
1 ROT	47,50	7,90	49,18	9,10	48,04	10,72	54,77	12,06	40,0
2 RIT	49,91	7,78	46,69	7,69	47,95	9,81	52,77	8,05	42,0
3 RAT	57,52	12,13	56,92	12,44	51,80	9,06	64,22	8,04	39,00
4 RBT	54,70	8,24	53,62	7,90	52,90	8,16	59,44	6,91	34,00
5 RT	48,63	8,28	51,09	11,10	53,04	11,44	60,77	13,78	53,00
6 PET	57,65	10,99	55,79	8,95	48,23	7,15	62,11	12,05	47,00
7 VST	57,55	12,48	54,24	12,06	53,38	9,58	58,00	9,02	38,00
8 PSYT	56,04	8,17	55,35	8,92	50,61	7,09	57,77	4,86	43,00
9 IST	55,70	9,43	56,24	9,03	51,66	10,02	58,88	12,39	45,00
10 PHST	54,03	9,82	52,28	9,33	47,90	10,75	54,66	12,16	54,00
11 RET	49,44	10,57	49,41	9,24	46,42	9,95	43,88	6,66	52,00
12 SCT	50,01	9,32	50,62	11,87	48,09	10,62	53,77	7,04	61,00
13 SST	41,32	9,45	43,84	9,98	44,71	9,99	40,66	13,15	56,00
14 RCT	45,31	10,61	44,35	12,49	47,61	11,41	51,22	15,92	58,00

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources
M =	Mean	SD =	Standard deviation

Table 4.6 **Comparison of means of T-scores of stress indicators and years of experience of the respondent (see question 5 of attachment A)**

	4-8		9-13		14-18		19-23		24-33		34 +	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	48,15	7,93	47,45	7,95	49,28	10,44	51,90	13,24	50,90	16,67	50,00	13,97
2 RIT	49,31	17,68	46,09	10,00	47,85	8,48	45,18	5,19	56,00	6,48	52,75	8,13
3 RAT	57,42	12,23	55,63	12,15	56,47	11,49	51,36	9,30	67,25	9,81	55,25	11,61
4 RBT	54,87	8,33	51,22	6,99	55,00	6,95	51,00	8,97	60,25	6,89	52,25	14,87
5 RT	49,46	9,31	50,27	7,29	52,52	13,08	57,18	13,71	47,50	12,23	63,75	14,22
6 PET	58,20	10,66	53,45	7,13	52,14	9,73	50,45	10,27	56,25	15,81	52,75	6,50
7 VST	57,19	12,32	49,95	10,82	56,09	11,10	55,09	10,26	55,00	9,48	54,50	13,91
8 PSYT	55,54	7,69	53,36	9,25	53,85	9,64	54,90	7,10	60,25	14,29	54,75	7,93
9 IST	55,40	9,47	57,68	10,74	55,14	8,41	54,00	13,26	53,00	6,05	51,75	5,56
10 PHST	53,48	10,23	51,04	7,31	51,19	9,43	51,54	15,24	52,25	7,93	51,50	9,60
11 RET	49,04	9,85	50,09	9,58	48,95	9,20	48,00	11,08	39,25	9,42	42,75	9,03
12 SCT	50,74	9,73	48,36	10,97	50,28	12,70	48,63	11,65	48,75	9,53	56,75	4,99
13 SST	41,57	9,82	47,00	8,31	42,85	10,72	44,81	10,99	33,25	10,37	48,75	6,94
14 RCT	44,83	11,42	45,50	12,84	44,76	9,08	50,27	14,69	47,75	18,33	57,00	6,69

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources
M =	Mean	SD =	Standard deviation

Table 4.7 **Comparison of means of T-scores of stress indicators and religious affiliations of the respondent (see question 6 of attachment A)**

	AME		ACL		LEC		RCC		OTHERS	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	45,50	10,46	49,52	8,79	48,02	10,03	49,70	8,64	46,52	9,00
2 RIT	50,50	3,39	47,16	6,89	47,36	8,14	49,50	8,52	49,47	9,75
3 RAT	62,83	14,24	57,72	10,35	56,76	11,89	57,87	11,73	51,00	12,55
4 RBT	53,00	3,57	55,28	8,11	53,10	8,64	55,03	7,59	53,04	10,24
5 RT	48,16	12,92	53,68	8,96	50,78	11,54	50,03	10,72	51,23	9,42
6 PET	51,50	8,36	57,36	9,96	53,21	8,57	56,89	11,20	57,09	11,61
7 VST	55,16	11,61	56,72	10,91	55,05	12,60	56,92	11,99	52,19	11,48
8 PSYT	59,66	12,30	55,64	6,83	55,63	9,25	54,30	8,36	53,76	7,06
9 IST	60,50	10,76	56,40	10,37	55,60	10,26	55,34	8,54	52,80	10,15
10 PHST	56,83	9,53	52,32	10,22	52,97	9,07	52,54	10,78	50,80	9,94
11 RET	44,33	11,48	47,16	8,26	49,89	11,79	49,34	8,93	47,71	9,61
12 SCT	50,16	7,44	52,72	8,63	51,73	10,21	49,20	12,10	47,52	7,87
13 SST	44,33	8,06	42,28	8,00	44,18	10,96	41,58	10,73	43,66	9,19
14 RCT	48,50	14,52	47,08	11,96	44,92	14,24	45,70	10.02	45.00	11,33

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	lack of coping resources	0-30	lack of coping resources
40-59	mild	30-39	mild
60-69	average	40-59	average
70 plus	high stress	60 plus	strong resources
M =	Mean	SD =	Standard deviation

Table 4.8 **Comparison of means of T-scores of stress indicators and level of teaching for respondents (see question 7 of attachment A)**

	A-C		D-E		C-E		A-E		OTHERS	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	48,78	7,91	50,25	10,98	51,30	10,56	48,45	9,66	41,88	8,80
2 RIT	48,76	8,43	46,50	8,61	50,38	7,01	47,69	7,99	51,88	8,69
3 RAT	57,90	11,82	57,33	13,97	55,15	10,72	55,10	12,20	58,55	10,92
4 RBT	56,33	7,56	56,58	5,55	55,61	10,22	51,00	8,05	49,88	8,40
5 RT	50,12	8,84	53,91	13,60	54,61	12,79	50,78	11,51	48,66	8,77
6 PET	56,35	10,55	53,50	7,87	60,53	11,96	55,98	10,09	47,77	6,99
7 VST	56,98	12,51	54,83	10,63	55,00	12,84	54,41	10,48	54,22	15,08
8 PSYT	56,90	7,59	58,58	11,52	52,30	7,53	53,06	7,75	50,66	9,15
9 IST	55,83	9,32	57,50	12,54	53,76	10,56	55,78	9,14	50,55	9,15
10 PHST	53,89	9,45	54,75	10,52	51,53	12,43	52,36	9,76	49,44	12,25
11 RET	49,32	10,02	49,91	13,25	47,76	9,22	47,73	9,08	48,33	9,21
12 SCT	50,63	9,51	50,41	9,81	52,00	10,65	50,36	11,92	44,44	8,38
13 SST	41,43	9,24	41,25	11,78	43,30	10,16	44,80	9,92	43,77	13,18
14 RCT	44,73	12,25	48,25	10,43	54,00	9,09	45,67	10,47	45,44	16,40

For the first 10 scales:

0-40	no stress
40-59	little stress
60-69	moderate stress
70 plus	high stress

For the last 4 scales (11-14):

0-30	lack of coping resources
30-39	mild deficits
40-59	average
60 plus	strong coping resources

M = Mean
SD = Standard deviation

Table 4.9 **Comparison of means of T-scores of stress indicators and marital status of the respondents (see question 8 of attachment A)**

	SINGLE		MARRIED		DIVORCED	WIDOWED		OTHERS
	M	SD %	M	SD %	M	M	SD %	M
1 ROT	45,94	7,82	48,95	9,17	48,00	55,80	9,98	70,0
2 RIT	52,42	9,42	47,54	7,46	51,00	44,0	6,06	39,00
3 RAT	57,48	13,14	56,69	11,70	63,00	52,60	10,13	53,00
4 RBT	55,11	8,52	53,90	8,22	62,00	51,00	1,28	61,00
5 RT	48,60	8,94	51,14	10,80	60,00	57,20	9,20	74,00
6 PET	57,85	11,56	55,26	9,83	64,00	47,20	2,38	76,00
7 VST	56,62	12,92	55,43	11,50	72,00	47,20	7,12	68,00
8 PSYT	57,05	8,47	54,1	8,06	69,00	49,40	9,93	61,00
9 IST	57,45	10,34	54,69	9,20	56,00	51,80	8,34	79,00
10 PHST	56,11	9,99	51,46	9,42	60,00	42,80	6,05	80,00
11 RET	52,00	10,90	47,45	9,26	50,00	49,80	11,47	50,00
12 SCT	50,17	11,22	50,02	10,12	57,00	52,20	12,13	62,00
13 SST	40,31	10,72	43,32	9,68	37,00	48,80	9,85	52,00
14 RCT	47,20	11,15	44,71	11,69	44,00	53,61	16,59	64,00

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources

M = Mean
SD = Standard deviation

Table 4.10 **Comparison of means of T-scores of stress indicators and number of children for respondents (see question 9 of attachment A)**

	ONE		TWO		THREE		FOUR		OTHERS	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	46,89	8,30	51,43	9,52	52,69	7,99	43,92	10,31	48,62	8,97
2 RIT	48,52	8,70	47,13	6,35	43,69	6,53	49,00	10,04	51,00	8,06
3 RAT	54,69	12,63	58,26	10,91	59,53	11,77	54,84	11,55	57,67	12,01
4 RBT	52,19	7,88	54,70	6,71	56,07	7,51	55,00	9,41	55,18	9,20
5 RT	48,36	8,29	51,93	10,60	56,23	10,83	50,69	6,84	51,53	12,83
6 PET	55,65	10,22	55,33	8,47	55,76	9,78	55,92	11,75	56,30	11,80
7 VST	56,19	12,21	56,36	13,13	56,76	12,96	55,07	11,14	54,37	10,74
8 PSYT	53,34	8,20	54,13	7,69	62,00	10,54	53,69	6,38	55,74	7,92
9 IST	53,19	9,29	55,80	8,00	58,92	9,67	50,38	11,24	58,06	9,72
10 PHST	51,69	10,23	51,83	9,42	55,69	7,16	49,84	9,73	53,81	10,97
11 RET	48,71	10,40	46,33	9,14	53,76	9,91	49,30	8,54	48,51	9,77
12 SCT	49,23	9,33	51,90	12,36	51,84	8,47	50,15	8,38	49,79	11,24
13 SST	41,76	9,98	44,20	8,36	46,53	0,07	42,69	9,79	41,83	11,36
14 RCT	46,15	11,74	46,26	11,30	44,15	11,57	43,15	13,86	46,23	12,09

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources

M = Mean
SD = Standard deviation

Table 4.11 Comparison of means of T-scores of stress indicators and race of respondents (see question 10 of attachment A)

	MOSOTHO		INDIAN		ASIAN		OTHER AFRICANS		OTHERS	
	M	SD %	M	SD %	M	SD %	M	SD %	M	SD %
1 ROT	48,32	9,14	48,00	7,71	50,00		54,37	8,03	46,33	17,38
2 RIT	48,70	7,97	46,25	9,07	57,00		50,75	9,30	44,33	12,34
3 RAT	57,45	11,41	51,00	14,49	67,00		53,62	11,09	57,00	22,06
4 RBT	54,75	8,10	49,33	6,54	61,00		55,37	8,76	46,00	12,12
5 RT	50,68	10,50	47,41	9,92	53,00		60,50	9,48	50,00	7,93
6 PET	55,11	10,26	58,75	7,72	79,00		58,87	11,14	56,33	11,94
7 VST	56,09	11,39	52,33	12,07	79,00		56,00	15,20	42,00	8,18
8 PSYT	55,26	8,45	51,75	6,95	66,00		56,37	7,36	51,33	10,78
9 IST	55,88	9,71	52,16	9,45	54,00		54,87	8,11	52,66	14,57
10 PHST	53,21	10,26	48,33	5,74	74,00		48,37	7,59	46,33	4,72
11 RET	48,60	9,88	47,75	10,10	54,00		48,50	8,36	53,66	14,57
12 SCT	49,56	9,94	52,91	13,37	65,00		52,50	12,07	57,33	8,14
13 SST	42,06	9,99	48,00	9,31	49,00		46,00	8,97	49,00	15,39
14 RCT	44,64	11,71	48,91	10,64	40,00		52,87	11,77	60,66	5,68

For the first 10 scales:		**For the last 4 scales (11-14):**	
0-40	no stress	0-30	lack of coping resources
40-59	little stress	30-39	mild deficits
60-69	moderate stress	40-59	average
70 plus	high stress	60 plus	strong coping resources

M = Mean
SD = Standard deviation

4.4.1 Interpretation of tables

What follows is an interpretation of tables 4.2 - 4.11:

- *Table 4.2*: In this table there are three scores which are between moderate and high stress. For the category "principals", the score for responsibility (RT) is 64,23. The "Primary assistant" category has two scores, which are role ambiguity (RAT) (61,68), and vocational strain (VST)

(60,18). For the personal resource questionnaire (PRQ) (11-14) all scores are on the average.

- *Table 4.3*: As far as sex is concerned, neither females nor males have moderate to severe stress. All coping resources are on the average.

- *Table 4.4*: According to qualifications there is no teacher category having moderate to high stress. Coping resources (ORQ) are all on the average.

- *Table 4.5*: According to this table, there are four scores indicating moderate to high stress. They are in the role ambiguity (RAT) (64,22), responsibility (RT) (60,77), physical environment (PET) (62,11) for the categories age group 51-60 years. For age group 61 years plus, there is no strong self-care (SCT) score 61,00 under coping resources (PRQ). The remainder is on the average.

- *Table 4.6*: This table indicates that, in the category of teaching experience of 29-33 years, there are three scores indicating moderate to high stress. They are role ambiguity (RAT) (67,75), role boundary (RBT) (60,25), and psychological strain (PSYT) (60,25). There is another score responsibility (RT), in the category "34 years plus experience", at 63,75 indicating moderate to high stress. Coping resources in this table are all on the average.

- *Table 4.7*: In this table there are two scores, role ambiguity (RAT) (62,83) and interpersonal strain (IST) (60,50) indicating moderate to high stress, under category African Methodist Episcopal Church (AME). Coping resources (PRQ) in this table are all on the average.

- *Table 4.8*: In Lesotho schools, secondary education has five levels, these are form A, B, C (Junior certificate [JC] and Cambridge overseas senior certificate [COSC], also called forms D and E. As far as levels of teaching are concerned, there is only one score, namely physical environment (PET) (60,53) for category level C-E, indicating moderate to high stress. All coping resources (PRQ) are on the average.

- *Table 4.9*: Under marital status, category "divorced", indicates scores on moderate to high stress and at high stress. These are role ambiguity (RAT) (63,00), role boundary (RBT) (62,00), responsibility (RT) (60,00), vocational strain (VST) (72,00), psychological strain (PSYT) (69,00), physical environment (PET) (64,00) and physical strain (PHST) (60,00). In the category "others" there are also scores indicating moderate to high stress and high stress. These are role overload (ROT) (70,00), role boundary (RBT) (61,00), responsibility (RT) (74,00), physical environment (PET) (76,00), vocational strain (VST) (68,00), psychological strain (PSYT) (61,00), interpersonal strain (IST) (79,00) and physical strain (PHST) (80,00).

- On the other hand, *table 4.9* indicates that ORQ (11-14) has scores below average, on the average and above average. Self-care (SCT) (62,00) in the category "others" and "rational or cognitive" (RCT) (64,00) in the same category.

- *Table 4.10*: In this table there is only one score indicating moderate to high stress. It is psychological strain (PSYT) (62,00) in the category of teachers with three children. Coping resources are all on the average.

- *Table 4.11*: This table indicates that the category "Asians" and "other Africans" have scores indicating moderate to high stress. In the category of "Asians", the following apply: role ambiguity (RAT) (67,00), role boundary (RBT) (61,00), physical environment (PET) (79,00), vocational strain (VST) (79,00), psychological strain (PSYT) (66,00) and physical strain (PHST) (74,00). In the category "other Africans", responsibility (RT) scored 60,50. Coping resources in this table are all on the average, except for self-care (SCT) (65,00) in the category "Asians", and rational or cognitive (RCT) (60,66) in the category "others".

4.5 CONCLUSION

In this chapter analysis according to three sections was done and reported. The summary, findings and conclusions will follow.

5 SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The purpose of this chapter is to summarise the nature of the investigation and findings, to formulate recommendations and to conclude the study. The activity entails a summary of the literature review, and empirical study, and recommendations.

5.2 FINDINGS FROM THE LITERATURE STUDY

What emerged from both local and international literature on stress is that the inability to cope with challenges that one encounters leads to physical, emotional, behavioural and mental mulfunctioning of the body system. Two things can be used in explaining stress. Stressors that induce stress (factors), and reaction to stress, that is, how one responds to stress (effects).

Because the researcher used the occupational stress inventory (OSI) during the empirical study, it was found that the literature survey could be categorised according to the fourteen scales of the OSI. For example, factors could be classified according to the occupational role questionnaire (ORQ), as role overload (RO), role insufficiency (RI), role ambiguity (RA), role boundary (RB), responsibility (R) and physical environment (PE). Effects of stress could be classified into four categories together known as personal strain questionnaire (PSQ), namely vocational strain (VS), psychological strain (PSY), physical strain (PHS) and interpersonal strain (IS). The last category is the personal resource questionnaire (PRQ), which represents all coping strategies within four categories, called self-care (SC), social support (SS), recreation (RE) and rational/cognitive (RC).

5.3 FINDINGS FROM THE EMPIRICAL STUDY

In applying the rule of decision (0-40 no stress; 40-59 little stress; 60-69 moderate stress; and 70 plus high stress) with different stress indicators of the OSI on teachers in the Botha-Bothe district, it was found that, with role overload (ROT), the majority of teachers reported little stress (102, 70,3 %), while 3 (2,1 %) had severe stress. With role insufficiency (RIT) 110 (75,9 %) teachers had little stress, while 3 (2,1 %) had high stress. Concerning role ambiguity 75 (51,7 %) teachers had little stress, and 23 (15,9 %) had severe stress. As for role boundary (RBT) 100 (69,0 %) had little stress as opposed to 3 (2,1 %) who had severe stress. With responsibility (RT) 98 (67,6 %) had little stress and 11 (7,6 %) had high stress. Regarding the physical environment (PET), 95 (65,5 %) had little stress, while 15 (10,4 %) had high stress. As far as vocational strain (VST) is concerned, 84 (57,9 %) had little stress and 22 (15,2 %) had high stress. As regards psychological strain (PSYT), 99 (68,3 %) had little stress while 7 (4,8 %) had high stress. Regarding interpersonal strain (IST), 98 (67,6 %) reported little stress, while 14 (9,6 %) reported high stress. Similarly as for physical strain (PHST) 103 (71,0 %) had little stress and 9 (6,2 %) had severe stress.

On the other hand, in comparing the means of average T-scores of stress indicators with the demographic factors, using the same rule of decision (0-40 no stress; 40-59 little stress; 60-69 moderate stress; and 70 plus severe stress), it was found that only the one divorced teacher suffered high stress, namely vocational strain (VST) (72,00).

It was also found that in the category "others" there was one person who used strong coping resources. Two scores were found namely self-care (SCT) (62,00) and rational/cognitive (RCT) (64,00) when applying the second rule of decision, where T-scores 0-30 is lack of coping resources, 30-39 mild deficits, 40-59 average and 60 plus, strong coping resources.

5.4 RECOMMENDATIONS

Among the respondents in the Botha-Bothe district, there is only one divorced teacher who suffers due to vocational strain (VST) stress. According to Osipow and Spokane (1981:1) VST indicates the extent to which the individual is having problems with work quality or output. Attitudes towards work are also measured. The re-

searcher suggests that the concerned respondent be encouraged to adopt recreation (RET) which measures the extent to which the individual makes use of and derives pleasure and relaxation from regular recreational activities. Also, the respondent should use social support (SST), which measures the extent to which the individual receives support and help from those around him/her, especially the principal and colleagues. Similarly, the respondent can use self-care (SC), which measures the extent to which the individual often engages in personal activities which reduce or alleviate chronic stress. Lastly he can adopt rational or cognitive (RCT) measures that measure the extent to which the individual possesses and uses cognitive skills in the face of work-related stresses.

The other response of concern is that of the category "others". This category has only one teacher, who could be engaged, or separated legally from the partner. He/she suffers from stress due to overload (ROT) (70,00), role responsibility (RT) (74,00), physical environment (PET) (76,00), interpersonal strain (IST) (79,00) and physical strain (PHST) (80,00). Osipow and Spokane (1981:5) relate that ROT indicates the extent to which job demands exceed resources. Individuals may describe themselves as not feeling well-trained or competent for the job at hand, needing more help, and working under tight deadlines.

Responsibility (RT), indicates high levels of responsibility for the activities and work performance of subordinates. He/she may be worried that his/her learners may not do well. He/she may be having poor relationships with people at work or feel pressure from working with angry or difficult employees or the public.

Physical environment (PET) indicates that the respondent may be exposed to high levels of noise, wetness, dust, heat, colds, light, poisonous substances or unpleasant orders.

Interpersonal strain (IST) shows that the respondent may be reporting frequent quarrels or excessive dependency on family members, spouse and friends. He/she may be reporting to withdraw and have time alone or conversely, not having time to spend with friends.

Physical strain indicates that he/she may be reporting frequent worries about his/her health as well as a number of physical symptoms (colds, heart palpitations,

aches and pains, stomach aches, and erratic eating habits). He/she may be reporting unplanned weight changes, overuse of alcohol and disturbance in sleeping patterns.

Because this category, "others" suffers stress due to the above-mentioned causes, and because the respondent uses only two categories of the personal resources questionnaire (ORQ), namely self-care (SCT) and rational/cognitive (RCT), the researcher recommends that the respondent be advised to use the two other remaining categories, recreation (RET), which indicates that high scores may report taking advantage of the recreational or leisure time, and engaging in a variety of activities which he/she finds relaxing and satisfying. He/she may do things he/she most enjoy in his/her spare time, and social support (SST) which indicates that high scores may report feeling that there is at least one person he/she can count on and who values and or loves him/her. He or she may have sympathetic people to talk to about work problems and report having help to do important things around the house. He/she may also report feeling close to another individual.

5.5 CONCLUSION

The findings of this study of a population of 145 teachers of government registered secondary and high schools in the Botha-Bothe district of Lesotho through statistical techniques, reported in histograms and tables, revealed that 17,69 % of the respondents suffer moderate stress and 7,6 % suffer high stress. Stress levels on the T-score 0-69 encompassing the no stress, little stress and moderate stress categories are normal, according to Osipow and Spokane (1981:7). They do not interfere with the expected performance levels of people. Therefore the decision has been made, based on a critical value of 70, only 7,6 % of the teachers in government registered secondary and high schools of Botha-Bothe suffer from high stress. The frequency of this, 7,6 % within the population of teachers of Botha-Bothe is one. This is an insignificant value as compared to the other categories, that is no stress, little stress and moderate stress, which represent negligible stress levels. Therefore one can conclude that these teachers do not suffer stress and hence the null hypothesis, stated in chapter 1.5, "teachers in Lesotho do not suffer from stress and therefore there are no factors causing stress among them" does hold. This could be brought about by the fact that the standardised inventory used for collecting data was developed and tested overseas; and in Lesotho where such an instrument does not exist, is not applicable.

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ATTACHMENT A

This section deals with general particulars of respondents. Mark your answer with a cross in the applicable block.

1. **What is the grade of your present post? (If you are acting in a post, indicate as if you occupy the post permanently.)**

1.1 Principal
1.2 Vice Principal
1.3 Departmental head
1.4 Secondary assistant
1.5 Primary assistant

2. **Sex**

2.1 Male
2.2 Female

3. **What are your qualifications?**

3.1 Certificate
3.2 ACP
3.3 Degree
3.4 LCP
3.5 Masters and/or others (specify)

4. **What is your present age?**

4.1 20-30 years
4.2 31-40 years
4.3 41-50 years
4.4 51-60 years
4.5 61 - plus years

5. How many years of teaching experience?

5.1 4-8 years
5.2 9-13 years
5.3 14-18 years
5.4 19-23 years
5.5 24-33 years
5.6 34 - plus years

6. Religious afficiation

6.1 AME
6.2 ACL
6.3 LEC
6.4 RCC
6.5 Others (specify)

7. Level at which one is teaching

7.1 a-c
7.2 d-e
7.3 c-e
7.4 a-e
7.5 Others (specify)

8. Marital status

8.1 Single
8.2 Married
8.3 Divorced
8.4 Widowed
8.5 Others (specify)

9. Number of children

9.1 One
9.2 Two
9.3 Three
9.4 Four
9.5 Others (specify)

10. Race

10.1 Mosotho
10.2 Indian
10.3 Asian
10.4 Other Africans
10.5 Others (specify)