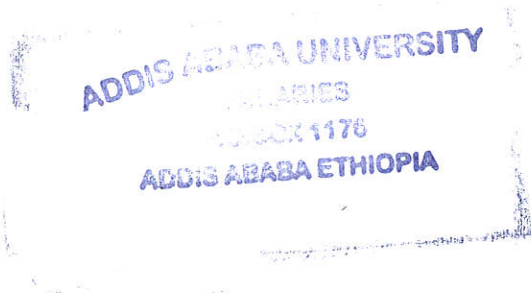


ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

A STUDY OF JOB STRESS AND COPING STRATEGIES
AMONG NORTH SHOA ZONE HIGH SCHOOL TEACHERS
IN RELATION TO SELECTED DEMOGRAPHIC
VARIABLES

BY
TESFAYE BAHIRU



JULY, 2007

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A thesis submitted to
the School of Graduate Studies
Addis Ababa University



in partial fulfillment of the requirement for the Degree of Master of
Arts in psychology

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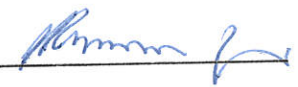
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ABSTRACT

This study attempted to investigate the main sources of teachers' stress and coping strategies, and to determine the effects of qualification level, grade level taught, and years of teaching experience on teacher stress and coping strategies. To realize the above stated objectives data were collected from 228 respondents (teachers) selected through stratified random sampling technique from North Shoa Zone high schools by using two questionnaires: namely, the teacher stress scale and teachers' coping strategy scale. Means, standard deviations, t - test, and ANOVA (one way, three way) were employed in the analyses of the collected data. The obtained results portrayed that the factor stressors: 'poor working conditions' and 'student misbehavior' and the factor coping, 'express feelings and seek support' were found to be the main sources of stress and coping in the present condition of teachers respectively. Besides, significant effects were obtained by grade level taught on stress and coping. Teachers who taught at grade nine and ten were more stressed than who taught at grade 11 and 12. Coping strategies were used more frequently in grade nine and ten teachers as well. Furthermore, high school teachers faced job-related stress regardless of their qualification level and years of teaching experience. Similarly, coping strategies were used invariably across the levels of qualification and experience. The significant interaction effects between the two demographic variables (grade level taught and teaching experience) indicated that beginner and more experienced teachers who taught at grade nine and ten found to use more coping strategies than their counterparts who taught at grade 11 and 12. The reverse held true to teachers with moderate experience. Those who taught at grade 11 and 12 used relatively more coping strategies than teachers who taught at grade nine and ten. Certain variations on the factors of stress and coping were obtained across these demographic variables. Finally conclusions and recommendations are made.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Teachers are the important actors in the development of human resource as they are the ones who directly affect student achievement, mediate student encounter with content, control classroom activities most directly related to learning; in the absence of them even technology based innovation have little success of working (Snyder, 1993). Hence, teachers are the ones who play a central role in the educative process through implementing the purposefully designed curriculum to achieve the desired national educational goals (Tesfaye, 2005).

To the contrary work of the teacher is considered as one of the most stressful professions (Hunter, 1977). Dick and Wagner (2001) confirmed that teachers are exposed to work loads, which result particularly in stress and strain.

In the study of classification of several occupations in terms of the degree of stress that faced employees, Cooper (cited in Antoniou, Polychroni, & Walters, 2000) found out that as far as occupation of social welfare are concerned teachers experience the highest level of stress next to the social service workers. Studies (Farber & Ascher, 1991; Dunham, 1978) indicated that teacher burnout and stress has become wide spread.

Research on teachers' survival rates in their profession (Charter, 1970, Mark & Anderson, 1978) has shown that about one out of every four teacher changes to another career.

Concerns regarding stress and coping among schoolteachers has been raised for over 40 years (Turk, Meeks & Turk, 1982). Studies relating to teachers' stress began to appear in 1960s. The first published review of research with the title referencing the term "teacher stress" appeared in 1978 (Kyriacou & Sutcliffe, 1978b). Kyriacou (2001) related that reasonable number of publications referring directly to stress in teaching began to appear in the mid 1970s; that studies reporting teacher stress grew rapidly in the 1980s, and that research literature on teacher stress became voluminous in the 1990s.

In general, teacher stress has been defined as the experience by teachers of unpleasant, negative emotions and distress that exist when the problem confronting teachers threaten their well being and surpass their ability to resolve these problems (Kyriacou & Sutcliffe, 1978a; Lazarus, 1984).

The commonly adopted psychological model of stress (Cox, 1977) sees stress as a state of distress in response to negative environmental forces called stressors.

A search of literature yields a long list of symptoms all cited several times by researchers. The symptoms of teacher's distress include physical or physiological manifestations such as body rashes, cardiovascular disease, hypertension, peptic ulcers, sleep disturbances, stomach upsets and weight loss; behavioral manifestations such as abuse of alcohol or other drugs, deterioration in interpersonal relations or work performance, increased defensiveness or self concern, irritability, extreme apathy or withdrawal; and psychological or emotional manifestations such as anxiety, confused thinking, depression, feelings of inadequacy, frustration, panic and phobias (Funch & Tuettemann, 1990).

Stress is a major fact in today's life and a major problem in the workforce. The world of work is constantly changing and filled with insecurities of downsizing, takeovers, and fierce competitions (Allison, 2004).

Though, published data on teacher stress are scanty, local researchers (Tesfaye & Manna, 2000; Darge, 2002) have shown that teacher dropout or brain drain has been an age-old problem in Ethiopia. Research on teacher exodus from primary schools (Aklilu, 1967) reported as a turnover rate of 67% was recorded referring to teacher trainees who graduated from just one institution over a nine-year period.

Getachew (1999) and Manna and Tesfaye (2000) pointed out that teachers' decision to leave their profession comes to be serious. They concluded that more than 49 % of the teachers were planning to leave the teaching profession.

Contrary to what had been a decade ago, in recent years, considerable attention seems to have been devoted to the expansion of secondary teacher education. The commitment to

bolster secondary teacher education can be substantiated by government investment in the opening of new colleges and faculties to meet the increasing demand of secondary schools. Nonetheless, the shortage of teachers at secondary school level continues to challenge the Ethiopian education system (Tesfaye, 2005). This is because the lack of initial commitment to join teaching by the young generation of university entrants on the one hand and the migration of qualified and experienced teachers at an alarming rate on the other. The magnitude of the problem forced the media to cover stories of teachers' migration from different regional states (Tesfaye, 2005). Tesfaye indicated, "A recent report corroborated that from Amhara regional state, around 1046 teachers left their jobs". Research elsewhere (Kyriacou & Sutcliffe, 1979a) indicated that relationship exists between reported stress and intention to leave teaching.

The level of stress a person experiences, and perhaps the extent to which deleterious effects occurs depends on how and how well he or she copes in stressful situations (Hagos, 1998). Though the importance of coping is acknowledged in theoretical research (Lazarus & Folkman, 1984), empirical studies of coping related to work setting are relatively few.

Coping is the method individuals use to manage environmental demands in their lives (Lazarus & Folkman, 1984). Needle, Griffen and Sevensen(1981) advised that making positive appraisals of individuals' work helped to lessen stress. Researchers found that teachers with strong beliefs in their ability to regulate their negative moods reported they relied on more adaptive active coping strategies and experienced lower levels of burnout and distress than did the group with weak beliefs (Mearns & Cain, 2003).

Burke, Greenglass and Schwarzer (1996) reported teachers who sought social support by talking to others also found this type of social support to be beneficial in relieving teachers' stress.

Research findings have shown that teacher background factors have their own effect on job stress and coping strategies. Teaching experience is one of the demographic characteristics, which significantly predicated scores on teacher stress and Maslach Burnout Inventory (Anderson & Iwanicki, 1984, Darge, 2002).

In another study, (Dunham cited in Borg, 1990) indicated that from the six categories of stress situations, the first five are commonly cited in different literatures. The sixth one- 'problem teachers' is new and considered as a stressful situation as those who are newly qualified, inexperienced or poorly trained; teachers lack the ability or willingness to change teaching skills.

Fiamin (1984) confirmed that beginner teachers as just as likely to burnout or leave teaching as any one. Malik (1991) tested a model of teacher stress that used grade level taught and years of teaching experience as independent variables. He found out that grade level taught had negative effect on teacher stress where as teaching experience did not account for a significant portion of the variance in the dependent variable.

Locally, empirical research on sources of teacher stress and coping strategies are sketchy. More specifically, there are no studies on the effects of years of teaching experience, qualification level and grade level taught on the perception of teacher stress and on using coping strategies as well. The present study, therefore deals with important research questions, which address this area of investigation.

1.2 Statement of the problem

Teacher stress as a problem has increasingly received international recognition in recent years. Kyriacou (1987) has highlighted the following reasons for the concern with levels of teacher stress.

- ❖ The mounting evidence that prolonged occupational stress can lead to both mental and physical health.
- ❖ A general concern to improve the quality of teachers' working lives.
- ❖ A concern that stress and burnout may significantly impair the working relation ship a teacher has with his pupils and the quality of teaching and commitment he is able to display.

In a study conducted by Global Campaign for Education (GCE), it is indicated that the crisis in the teaching profession is threatening the ability of poor countries to reach

internationally agreed targets to expand and improve education (Nock, 2006). It highlights the teaching force is demoralized and divided.

Farber (1984) stated that there has also been a recent increase in the number of teacher's claiming early retirement pensions on grounds of ill health precipitated by stress and attempts of teacher unions to include an element in their salary claim to cover stress.

More recently, the relation ship between student teacher stress and teacher stress is being recognized with statistic to suggest that coping with stress of teaching needs to be addressed at the pre-service stage of a teachers' career in order to help retain capable teachers who are leaving the profession because they find their work environment too stressful (Murray- Harvey 1999).

In Ethiopian context, particularly in the regional zones out of Addis Ababa like North Shoa, no research is conducted related to teacher stress and coping strategies. Therefore, there is a need to do research, which seeks sources of teacher stress, and coping strategies used by high school teachers. Besides, determining the effects of qualification level, grade level taught and years of teaching experience on teachers stress and in using coping strategies needs to be practiced.

1.3 Objectives

1.3.1 General objectives

The study is designed to explore and to identify the sources of Job Stress faced by North Shoa Zone Secondary School teachers and Coping Strategies they used. It is also designed to determine the effects of the selected demographic variables: Qualification level, Grade level taught, and Years of teaching experience on teachers' Job Stress and Coping Strategies.

1.3.2 Specific objectives

The specific objectives of the study include:

1. To find out the main sources of job related stress and strategies of coping used among the selected North Shoa Zone high school teachers.

2. To determine the independent main effects of demographic variables (Qualification level (A), Grade level taught (B), and Years of teaching experience(C)) on teacher stress.
3. To determine interaction effects between/among demographic variables (AXB, AXC, BXC, and AXBXC) on teacher stress.
4. To determine the independent main effects of demographic variables (Qualification level, Grade level taught, and Years of teaching experience) on teachers' coping strategies.
5. To determine interaction effects between/among demographic variables (AXB, AXC, BXC, and AXBXC) on teachers' coping strategies.
6. To identify whether there are variations in the factors of teacher stress and factors of coping strategies across the levels of demographic variables(Qualification level, Grade level taught, and Years of teaching experience).

1. 4. Operational Definition

Stress :It is an internal chronic, excessive, and reactionary state of an individual caused by an imbalance between environmental demands and the individuals' abilities to meet those demands, resulting in either positive or negative consequences.

Teacher stress: It is an internal chronic, excessive and reactionary state of a teacher caused by an imbalance among environmental demands of the work place, students, administrators, other teachers, and other humans and the teachers' abilities to meet those demands that result in negative consequences.

Coping: It refers to an individual's struggle to attempt to overcome problems and difficulties.

Coping strategies: These are behavioral techniques of individuals that allow them to withstand or reduce the amount of stress experienced in a given situation.

High schools: It represents secondary schools from grade nine to twelve, which are run by government and supervised by Education Department of North Shoa Zone.

Grade level taught: It represents a grade level (grade 9&10, grade 11&12 or preparatory I&II) at which a teacher is assigned to teach at the current academic year.

1.5. Significance of the Study

In a recent study, Attridge (2000) found that job stress affected teachers' health, job performance, and mental health. He also indicated that teachers' job stressors affect their student's achievement. In the study of student teacher stress, it has been evidenced that stress affects teacher behavior and this in turn reduces pupil achievement and increased levels of anxiety (Murray Harvey, 1999)

Therefore, this study is crucial to create self-awareness among teachers that help them to share experience with each other so that they can identify stressful situations which impair their teaching performance and to cop-up with these stressors. It is also important from the present day condition such as shortage of educated people, and the need for the cultivation of human resource have emphasized the need for more efficient teachers that determine the quality of teaching. The study about teacher stress therefore, would help to uncover factors that account for high rate of teacher stress and coping strategies used with the present day condition of teaching in Ethiopia in general and in the present study area in particular.

1.6. Delimitation of the study

The study is limited to government high school teachers of North Shoa Zone supervised by North-Shoa Zone Education Department under the Amhara Regional state. And hence, it might be difficult to generalize the findings of this study to other areas of the country.

1.7. Limitation of the study

Absence of adequate written materials and research works regarding the effects of the selected demographic variables on teachers' stress and coping strategies restricted the present investigator to justify his findings in terms of some empirical studies in Ethiopian context.

Full disclosure of the North Shoa Zone high school teachers' perception toward their own job stressors and coping strategies may be hindered by the individuals' reluctance to disclose their feelings.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The review includes the concepts, theoretical background and models of stress and coping; empirical studies related to the sources and model of teacher stress, the effects of Qualification level ,Grade level taught, and Years of teaching experience on Teacher Stress and teachers' Coping Strategies. Empirical studies related to dimensions and functions of teachers' coping strategies are treated as well.

2.1. Conceptual and Theoretical Background of stress and coping

Stress, like relativity, is a scientific concept, which has suffered from a mixed blessing of being too well known and too little understood. We are exposed to stress every moment of our lives, and our response to it often determines the quality of our life and health (Selye, 1956).

Stress is the non-specific response of the body to any demand. In some respects, every demand made on the body is unique; that is, specific. Heat, cold, joy, sorrow, muscular exertion, drugs, and hormones elicit highly specific responses. For example, heat produces sweating; cold produces shivering; exertion such as cycling up a hill at top speed, predominantly affects the muscles and the cardio vascular system. All these agents, however, have one thing in common: They increase the demand for readjustments, for performance of adaptive functions which reestablish normalcy. This rise in requirements is independent of the specific activity that caused the increase. In that sense the response is considered as non- specific (Selye, 1978; Kutash et al., 1981).

Stress cannot be avoided, since during every moment of our lives some demands for life maintaining energy exists. Even while we are asleep, the heart, the respiratory system, and many other organs continue to function. In this respect, it has been said that complete freedom from stress is death (Selye, 1956; 1975).

One of the first steps in studying stress is to define the term. There are several approaches in defining stress. On the one hand, it means the pressure one has placed upon him /her by the external environment which has been labeled the engineering model (Cox, 1975; Wild & Hanes, 1976). This is because engineers use the term stress to refer to environmental forces acting upon a body. Engineering model has been widely employed (e.g.; French & Caplan, 1972; Kollar, 1961), and utilized by Cooper and Marshall (1976) who defined occupational stress as negative environmental factors or stressors (e.g., work overload, role conflict/ambiguity, poor working conditions) associated with a particular job.

On the other hand, McGrath (1970) defined stress in terms of a state or response pattern displayed by an individual, and essentially conceptualizes stress as something that happens with in the individual. Stress defined as a state of individual has also been labeled as the physiological model (Cox, 1975).

This is because the identification and quantification of the state of individual as stress was initially carried out with reference to the physiological response pattern of the individual (Selye, 1956).

Another researcher (Forbes, 1979) stated that “stress is any action or situation that places heavy or conflicting demands upon you that upset your body’s equilibrium”. Forbes also theorized “stress is neutral. It is our reaction to it which determines whether it will be beneficial or harmful”.

Integrating these, Greenberg (cited in Wilson, 2002) defines stress as “the combination of a stressor and stress reactivity (the response) “. Selye (1974) defined the term stressor as the external stimulus, which brings about stress. The stressor can be either physiological or psychological in nature and will elicit the same response in the organism.

Lazarus (1976) proposed that, stress occurs when there are demands on a person that tax or exceed his adjusting resources. This definition recognizes the two components of stress: The pressure imposed and the adaptive resources of the individual to withstand the pressure.

Other authors have argued that stress is the result of some appraisal mechanism (Appley & Trumbull, 1967), either the perception of threat from the environment or the endangerment of well-being or the perception that there is an imbalance or discrepancy between the demands made upon the individual and the individuals' ability to meet or cope with these demands (Gowler & Legge, 1975), where failure to meet or cope with these demands has important consequences for the individual (McGrath, 1970.).

Kutash et al. (1981) stated stress:

"... as an altered state of the organism, occurring when demands on the person exceed his response capabilities, is a function of the number, frequency, intensity, duration, and priority of the demands viewed in apposition to coping resources."

Definitions that conceptualize stress as the result of an imbalance or discrepancy between demands and ability have been labeled transactional models of stress (Cox, 1975). Transactional models still conceptualize stress as a response state. They may be regarded as qualified physiological models (Kyriacou & Sutcliffe, 1978).

Selye's definition in 1956 to stress as "the non specific response of the body to any demand made up on it "is interpreted as good things (for example, a job promotion) to which we must adapt (termed eustress) and bad thing's (for example, the death of a loved one) to which we must adapt (termed distress); both are experienced the same physiologically.

Greenberg (1996) stated that:

'Stress begins with a life situation that knocks you (gently or abruptly) out of balance. You are nudged or shoved into disequilibrium and needed to right your self. This life situation could be a change in temperature, a threat from another person, and the death of a loved one, or some other change in your life to which you need to adapt.'

We all know, however, that the same situation presented to different people may result in

different reaction. That is because different people will interpret the situation differently. This is termed their cognitive appraisal (Greenberg, 1996).

Once a life situation is perceived (or cognitively appraised) as distressing, what occurs next is an emotional reaction such as feelings of fear, anger, or insecurity, or feelings of being rushed, overwhelmed, frustrated, or helpless as a result of perceiving a life situation as stressful. These feelings lead to physiological arousal as a stress reactivity, which includes increase in serum cholesterol, respiratory and heart rates, muscle tension, blood pressure, and blood glucose, along with decrease in the effectiveness of the immunological system, strength of the cardiac muscle, digestion, and histamine effectiveness. If physiological arousal is chronic, prolonged, or goes unabated, illness or disease may result. In addition to illness or disease (be it physical or psychological) stress can lead to other consequences (poor performance in school or on the job, poor interpersonal relationships, or other such negative effects) (Greenberg, 1996).

This procedure gives the stress model shown in figure 1.

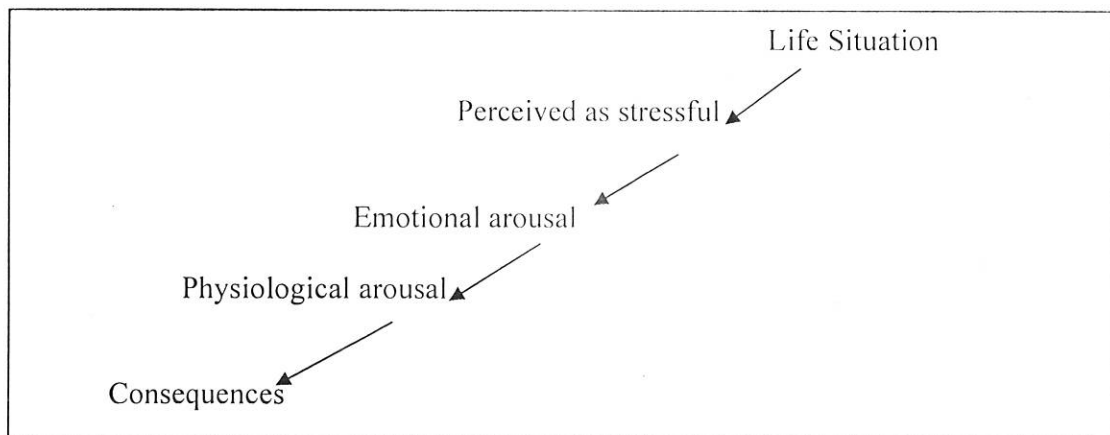


Figure.1: Stress model.

So far we have focused up on the negative consequences of stress. However, we can use the same stress model to better understand the positive consequences of stress. When stress results in good consequences, such as producing personal growth, actions that are beneficial to the person, we call eustress and, when stress encourages optimum performance that too is eustress (Green berg, 1996).

Once a person has appraised a transaction as stressful, coping processes are brought in to play to manage the troubled person environment relationship, and hence the kind and intensity of the stress reaction. Stress, appraisal, and coping are elements of dynamic interactive processes, termed "transactions" because both the person and the environment may mutually or reciprocally influence each other. Such a view propose a "de-emphasis of predominately structure or trait orientation toward the events intervening between the person and the environment, and an increasing emphasis on a process orientation centering on the persons continuing relation ship with the environment" (Lazarus, 1981).

This transaction view focuses on the process of continuous flow of events overtime as the person; with responses of appraisal and coping, and environment continually interchange with each other. Obviously, what one person may perceive as stressful may not be perceived as much by another. What is debilitating to one may be exhilarating to another. Though stress-coping processes and outcome have been described as adaptive or maladaptive, such concepts are obviously dependent up on individual interpretation, effects, and value system, as well as environmental factors (Sorenson, 1993).

Lazarus and Launier (1978) define coping as "efforts, both action oriented and intrapsychic, to manage (that is, to master, tolerate, reduce, minimize) environmental and internal demands and conflicts among them which tax or exceed a person's resources."

Sorenson (1993) stated the concept of coping as:

"Coping is increasingly viewed as a process, rather than an event or trait. That is, coping is studied best by methods that explore patterns of a person's continual appraisals, reappraisals, and actual response in particular contexts, rather than isolated hypothetical responses of what he or she might do in a given situations."

Thus, although particular coping styles have been examined (Holahan & Moos, 1985; Suls & Feltscher, 1985), the effectiveness of coping seems to depend more on repertoire than on style.

Lazarus and Folkman (1984) observed “ways people actually cope also depend heavily on the resources that are available to them and the constraints that inhibit use of these resources in the context of the specific encounter”. Coping resources are viewed as mediating variables interacting with the person and environment, influencing the stress-coping process.

Examples of individual coping resources listed by Lazarus and Folkman (1984) are health and energy, positive beliefs, problem solving skills, social skills, social support, and material resources.

2.2 The concept of teacher stress

The term “teacher stress ” is relatively new to educational and psychological literature, but the concept has appeared consistently since 1933 under such labels as “teacher anxiety,” “teacher morale,” “teacher problems,” and more recently “teacher burnout,” which address issues like situations and pressures present in the teacher environment that are troublesome or distressing (Turk et al., 1982).

The proliferation of similar terms such as ‘work stress’ (Warr & wall, 1975), ‘industrial stress’ (Buzzard, 1973), ‘organizational stress’ (Miles, 1976), ‘job stress’ (Caplan, Cobb & French, 1975), ‘job pressure’ (Buck, 1972), and the widely used one occupational stress (Cooper & Marshall, 1976; Ferguson, 1973), only serve to add a conceptual confusion regarding this area of investigation.

However, Warr and Wall (1975) have used the term stress explicitly to refer to a state of the individual, and have defined occupational (work) stress in terms of the individual’s experience of tension, anxiety, fear, discomfort and associated psychological disorders, resulting from aspects of the work situation which depart from the optimum (e.g. too little or too much work).

Besides, Warr and Wall (1975) have argued also that the conceptualization of stress as affective reactions of the individual is most in line with common usage. Furthermore, the engineering model appears to be inappropriate to a model of stress where the perception and appraisal of the stimulus characteristics of the environment plays an important part.

Teacher stress is a transactional concept that depends both on the school environment and teacher appraisals of problems and demands, as well as on appraisals of coping resources available for resolving, minimizing or avoiding these problems and demands (Turk et al., 1982).

Teacher stress may be defined as a response of negative affect (such as anger, Fear, depression by a teacher usually accompanied by potentially pathogenic physiological and biochemical change (such as increased heart rate or release of adreno-corticotrophic hormones in to the blood stream) resulting from aspect 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 (Kyriacou & Sutcliffe, 1977, 1978).

Kyriacou and Sutcliffe (1978a) and Lazarus (1974) described the term "teacher stress" as the state that exists when the problems confronting teachers pose a threat to their self-esteem or well-being, and surpass their resources for resolving these difficulties.

Kyriacou (2001) defined teacher stress as the experience by teachers of unpleasant, negative emotions, such as anger, anxiety, tension, frustration, depression, resulting from some aspects of their work as a teacher.

2.3 Model of teacher stress

Kyriacou and Sutcliffe (1978a) indicated that before research on teacher stress can be carried out meaningfully, a clear definition and model of teacher stress needs to be developed. Based on this opinion, the authors developed a definition and model of teacher stress that takes in to account the various approaches that have been utilized regarding the study of occupational stress generally.

It is this model of teacher stress (Kyriacou & Sutcliffe, 1978a) that the present research on teacher stress is based as described under this section.

Rather than starting with the sources of stress (stressors) at work, the model distinguishes between potential occupational stressors (fig.2, box.1) and actual occupational stressors (fig.2, box.3). Potential occupational stressors are objective aspects of a teacher's job (such as too much work or high noise levels), which may result in teacher stress (fig.2, box.5) occurring. Potential occupational stressors will only result in teacher stress if they are first perceived by the teacher to constitute a threat to his self-esteem or well-being (fig. 2, box.2). Such an appraisal may occur in two ways. Firstly, the teacher may feel he is unable to meet or cope with demands made up on him, and such failure has important consequences for him. Or secondly, the demands made up on the teacher conflict with his higher order needs (Beehr, Walsh & Taber, 1976).

The appraisal made by a teacher of the demands made up on him will depend on the interaction between the teacher's individual characteristics (Fig. 2, box .7) and the teacher's perception of the demands made up on him. The individual characteristics that may be of primary importance include biographical details (e.g. sex, age, teaching experience, level of qualification), personality traits (e.g. anxiety proneness, flexibility-rigidity), higher order needs (e.g. need for self-actualization), ability to meet or cope with the demands, and the teacher's beliefs, attitudes- values system.

It should be noted however that it is the teacher's perception of his own ability to meet or cope with the demands made up on him rather than his actual ability that will partly determine his appraisal.

Research elsewhere (Lefcourt, 1976) has indicated that people differ in the degree to which they perceive themselves to have control over their environment. Lazarus (1966) has argued that such difference may partly explain individual differences in appraisal between people of similar objective ability to meet the demands made up on them. Indeed, it has been argued (Averill, 1973) that perceived lack of control is a necessary condition for stress to occur. The appraisal may also be affected by potential stressors (such as life crises or ill health) that are not specifically aspects of the job. Such stressors have been termed potential non-occupational stressors and it is not included in the model presented for this study. This is because the present study focuses only on the potential occupational stressors.

A distinction is also made between potential occupational stressors that are essentially psychological (e.g. demands for high quality work, poor relationships with colleagues) and those which are essentially physical (e.g. dashing between classes, high noise levels). Whilst recognizing that potential occupational stressors (e.g. making numerous exam papers) may be a mixture of the two. However, it is argued there that potential physical stressors, as well as potential psychological stressors, may only lead to teacher stress when the individual teacher perceives a threat to his self esteem or well-being (Lazarus, 1974; Mason, 1971). Potential occupational stressors that have been appraised as constituting a threat have been termed actual occupational stressors (fig. 2 box. 3).

Coping mechanisms (fig.2 box.4) are introduced to deal with actual occupational stressors by the individual, i.e. to deal with that subset of potential occupational stressors that constitute a threat to the teacher's self-esteem or well-being. Coping mechanisms are also partly determined the individual characteristics. Teacher stress is conceptualized as being directly related to the degree to which the coping mechanisms are unable to deal with actual stressors, and the degree to which the teacher appraises threat.

Further more, Lazarus (1966) has argued that the amount of stress occurring is determined by the degree of threat, by the quality and the type of coping process employed. Both Lazarus points have been implicitly adopted in the model presented here.

Teacher stress is primarily conceptualized as a response of negative affect, such as anger or depression, which is usually accompanied by other phenomena, which may be regarded as response correlate of teacher stress (fig.2 box.5). These response correlates may be psychological (e.g. high job dissatisfaction), physiological (e.g. high blood pressure) or behavioral (e.g. absenteeism). The potentially pathogenic nature of the physiological and biochemical changes that accompany teacher stress may not lead to psychosomatic symptoms (e.g. peptic ulcers) but to even more chronic symptoms such as coronary heart disease and mental ill health (Cooper and Marshall, 1976) (Fig. 2 box. 6).

Three important feed back loops are also prepared as (a), (b) & (c) respectively in fig.2. Firstly, that the coping mechanisms adopted by the teacher to deal with actual stressors may affect the teacher's appraisal of potential stressors, as for example when denial is employed as a coping mechanism (Lazarus, 1966). If successfully employed, then the actual stressor will be reduced to the status of a potential stressor (Houston, 1973). This is shown by loop (a). Secondly, that teacher stress itself may also affect appraisals either directly, loop (b) in that a teacher highly dissatisfied with his job may increasingly perceive demands as threats to his self-esteem or well being, Finally, Wild and Hanes (1976) have argued that a feed back loop should be included in a model of stress to represent the fact that failure to meet or cope with demands in the past may affect the individual's future appraisal of his ability to meet or cope with new demands. This is shown by loop (c).

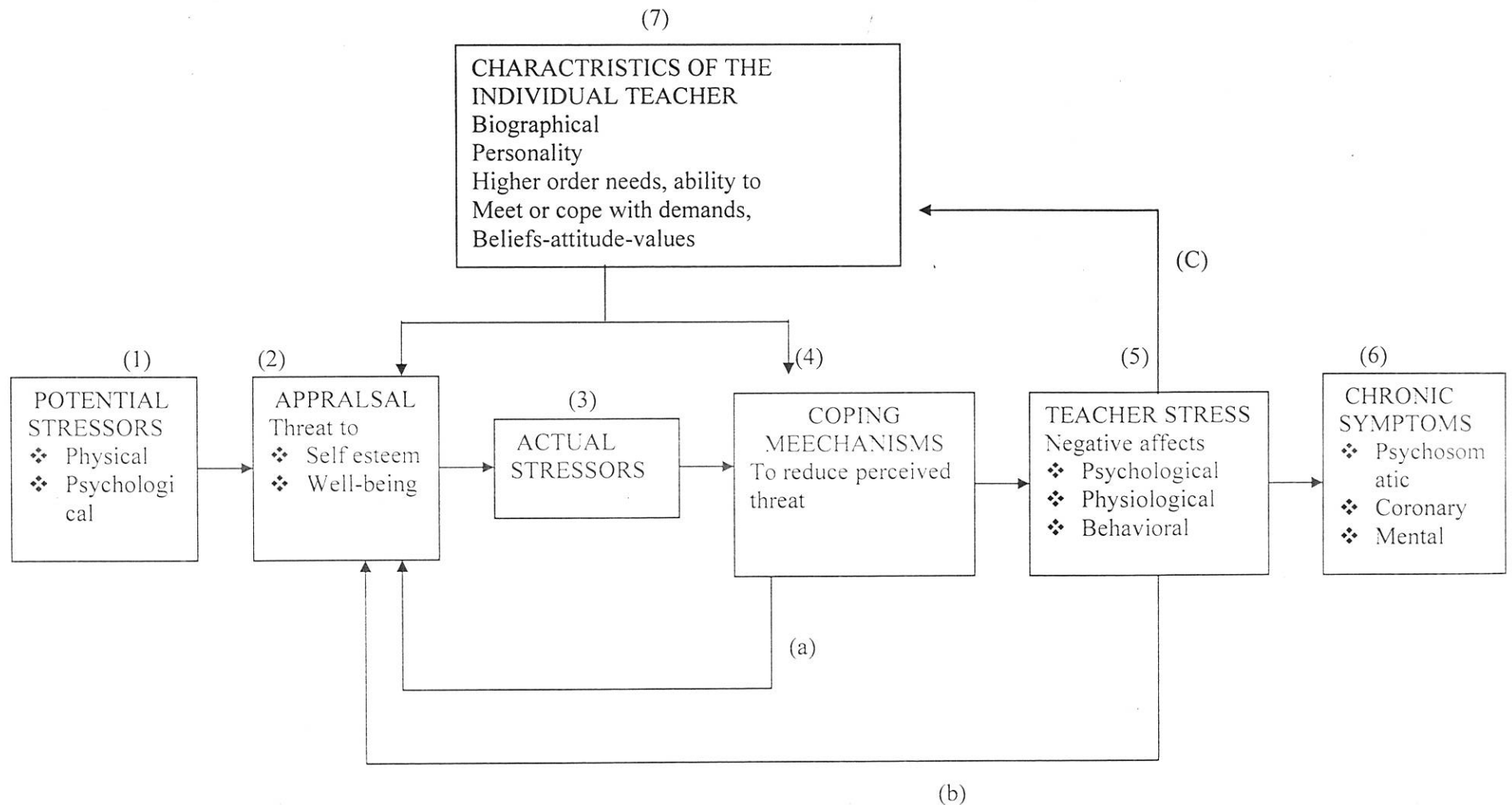


Figure. 2: A model of teacher stress

2.4 Empirical Studies Related to Sources of Teacher Stress

A vast number of studies exist in the relevant literature identifying the main job stressors facing teachers (Antoniou, Polychroni & Walters, 2000). The bulk of evidence points to specific factors that are responsible for high levels of psychological pressure for teachers, such as high ratio between teacher-pupils, limited progress of pupils, heavy workload, role overload and role conflict, relationships with colleagues/poor working environment, insufficient salary, status, time/resource difficulties, professional recognition needs (Kyriacou & Sutcliffe, 1979; Kyriacou, 1987; Travers & Cooper, 1996)

Kyriacou (1997) reported seven areas which are commonly reported to be the main sources of stress that affect teachers: pupils who misbehave, pupils with poor attitude to wards work, poor working conditions, inadequate salary, poor school ethos, status of the profession and coping with change.

In a number of studies, change it self is implicated in teacher stress: it can be a problem or challenge (Wilson, 2002). Travers and cooper cited in Wilson (2002) also reported that the five top sources of job pressure were all problematic changes. These included:

- Lack of support from the central government
- Constant changes within the profession
- Lack of information as to how changes are to be implemented.
- Diminishing social respect for teaching
- The move towards a national curriculum.

A review of literature (Turk et al., 1982) conducted on forty Years of research on problems relating to teacher stress summarized as consistently revealing seven problem areas. These are poor school environment, pupil misbehavior, poor working conditions, personal concerns of the teacher, and relationships with parents, time pressure and inadequacy of training.

Information regarding sources of teacher stress derived through interview or questionnaire methods of investigation indicates poor public image of teacher and education (Iwanicki, 1983).

A research on teacher stress and burn out (Kalker, 1984) showed a decline in public support for education has led to decreased funding. Teaching aids instructional materials and supplies have been cut, and classes have been combined and become over crowded. Lack of support by school administration and parents like has led to high levels of teacher frustration and stress. Often the undisciplined and unmotivated students are coming from a home in which little emphasis is placed up on the importance of education (Kalker, 1984).

It has been also indicated that some educators climb up the administrative ladder as a way of escaping a job in which they have burned out (Pines, Aronson & Kaley, 1981). Many of those who do end up as burned out administrator providing little or no support for the new teachers who have taken their places. The new teachers may now become frustrated and cynical, and the situation worsens.

In another study, Dick and Wagner (2001) found out that mobbing is also a more recent concept describing certain kinds of psychological terrorizing at the work place by colleagues or school principals and it leads to more physical symptoms.

Dunham (1976) asked 658 pre-school, junior and secondary school teachers in the UK (attending conference and courses) to report on the common stress situation, which they had to cope with in their work. Working in large schools, and teaching pupils who have a much wider range of abilities and attitudes; poor working condition (Poor communications between teachers with in the school or between teachers and other adults outside school, and inadequate buildings and high noise levels), role conflict and role ambiguity were identified as the most stressful ones. Trendall (1989), in her study of stress in teaching and teacher effectiveness found that lack of time, large classes, workload and pupil misbehavior were the most apparent stressors based on the reported agreement across groups (i.e. primary, secondary and special school teachers).

Kyriacou and Sutcliffe (1978 b) asked their sample of 257 comprehensive school- teachers 51 sources of stress and found out four factors, which accounted for 52% of the total variance. These were pupil misbehavior, poor working conditions, time pressure and poor school ethos. In this study, the 10 sources of stress with the highest mean values were: 'pupils' poor attitude to work', 'trying to uphold /maintain values and standards', 'poorly motivated pupils', covering lessons for absent teachers', 'too much work to do', lack of time to spend with individual pupils, 'individuals who continually misbehave', 'pupils who show a lack of interest', 'not enough time to do the work' and 'lack of time for marking'.

Other researchers (Kloska & Ramasut, 1985) drew up a list of 11 sources of stress and asked the 64 teachers in four comprehensive schools to rate the items according to the perceived degree of stress. The three sources of stress with the highest mean value were 'lack of pupil motivation, 'lack of time to resolve problems with individual children' and 'pupil indiscipline'.

A number of researchers have also investigated the causes of stress for comprehensive secondary school teachers by adopting a case study approach. In one such study which sought to identity those facets of the organization of one large comprehensive school that were causes of stress to members of the teaching staff, Coldicott (1985) asked participants to rate each of 21 possible sources of stress on a scale ranging from 'very stressful' to 'not stressful' (as in Kyriacou and Sutcliffe, 1978b, 1979a). Results showed that the two sources of stress, which were considered by the sample to cause the greatest stress, were 'difficult individual pupils' and 'trying to maintain and raise standards' (30% of the sample said they found each of these two sources very stressful). 'Pupils attitude to work' represented a very stressful situation at above 28% of the respondents. Coldicott remarked that it was interesting that the major sources of stress are brought about by the teacher's desire to achieve good level of work with the pupils rather than by factors attributed to the organization of the school.

In Ethiopian context, Darge (2002) conducted a study to establish the levels of stress experienced by teachers using data from 144 respondents in four centrally and peripherally located government high schools of Addis Ababa. The study focused on seven plausible

sources of stress: salary and opportunities, student characteristics, performance evaluation, time pressure, resources, regulations and relations. The results identified problems related to salary and opportunities, student characteristics and performance evaluations to be equally important origins of teacher stress.

Evaluation of teacher performance, a process that is related to salary and career advancement seems to be a slippery task (Darge, 2002). Tolor (cited in Darge, 2002) indicated that the reliability of data obtained from individuals (like parents) who often have limited information about teachers, or from evaluators who may not share the same understanding of the criteria is questionable.

Teacher evaluation criteria comprising fourteen major categories appear in the revised version of the new career structure (MOE, 1999). The criteria include adequacy in general knowledge, contribution to the application of education to development, and research. It has further been promulgated that, aside from the school administration, students and parents should participate in teacher evaluation and that committees should be set up at school, woreda (district) and zone levels to process the evaluation.

Still, informal discussion with high school teachers Debebe, et al. (cited in Darge, 2002) suggests that some teachers are dissatisfied with the criteria.

Studies have shown that teachers generally view their profession as offering them low social status and prestige compared to other professions (Aklilu, 1967; Getachew, 1999).

The existing educational leadership is also found to be a major factor that contributes to increased teacher stress (Getachew, 1999). Among the typical features that characterize our schools as unattractive workplace are overcrowded classrooms, heavy-workload, and serious resource constraints (Tesfaye, 2005). Indeed, this is very much in line with what other researchers have found as evidenced by the findings reviewed above.

From the above findings, it transpires that there are no single predominant sources of teacher stress. It seems that the sources of stress are many and varied, and that these tend to change from one context to another. They also seem to change overtime.

2.5 Effects of Back Ground Variables on Teacher Stress

2.5.1 Effects of teaching experience on teacher stress

Early research in the area of teacher stress was concerned primarily with the personal concerns of novice teachers (Nass, 1959; Travers, Rabinowitz, & Nemovicher, 1952). These studies were based on traditional psychodynamic views of anxiety, and findings are therefore biased towards problems related to unconscious conflicts of inexperienced teachers.

The intensity and frequency of problem of pupil misbehavior does vary across studies. For example, Cruickshank, Kennedy, and Myers (1974) polled experienced teachers and found that although control problems are highly “bothersome,” they are not frequent. In contrast, in Coates and Thoresen’s (1976) review, a major anxiety of student teachers and beginner teachers was the ability to maintain discipline. One speculation from these data and other studies (Nass, 1959; Travers, 1952) is that the ability to maintain discipline is a common concern of novice teachers but diminishes with experience, giving way to other issues.

Chapman and Hutcheson (1982) also indicated that with experience, people become clearer about their assets and liabilities as well as about the opportunities and limitations of their job. This clarity may lead to job or career change whenever what they have been working stressed them.

2.5.2 Effects of qualification on teacher stress

Darge (2002) described that Degree holding, experienced, and pedagogically trained teachers, bear greater stress than their counterparts. This is because it is precisely those kinds of professionals that have better chances for employment elsewhere but they are most needed by the educational system. Cox (1977) found that degree holders experience greater stress as they have unfulfilled ambition like further training, or other more socially valued jobs.

2. 6 Dimensions and Functions of Teachers' Coping

Coping with occupational stress among teachers (teachers stress) is rapidly becoming a major issue in schools (Gaziel, 1993). A number of initiatives are aimed at helping teachers cope with the job-related pressure which many feel have increased during the past decade. These attempt either to address stress directly by removing or mitigating its perceived causes (direct action coping) or indirectly by suggesting palliative measures which teachers may take to help them cope more effectively with potentially stressful situations (emotion focused coping) (Wilson, 2002).

Research on teacher stress (Kyriacou, 1987) also indicated that there are three main types of strategies for coping with teacher stress. These are palliative or emotion focused, direct action or problem focused, and preventive.

Another line of research by Kyriacou and Sutcliffe (1979) identified the most frequently used coping actions of elementary and secondary school teachers which were labeled as "express feelings and seek support", "take considered action "and" think of other things" which are the same as the previously listed strategies except their labeling.

Palliative, or emotion - focused coping strategies are most useful when the individual believes that nothing can be done to change the situation.

Preventive coping strategies are aimed at promoting one's wellness and reducing the likelihood of potential problem. It is believed that a preventive coping strategy is the most effective strategies. It helps to avoid or deal with a situation before it becomes unmanageable (Kyriacou, 1987).

The third one, Problem focused or direct-action, is considered to be more effective of the two coping strategies that one can implement when prevention is no longer feasible (Billings and Moos, 1981).

In the model used by Kutash et al. (1981), coping serves two main functions: the alteration of the ongoing person-environment relationship (instrumental or problem oriented) and the control of stressful emotions (emotion regulation). Problem oriented coping refers to

efforts to deal with the sources of stress, whether by changing one's own problem-maintaining behavior or by changing environmental conditions. Emotion regulation refers to coping efforts aimed at reducing emotional distress and maintaining a satisfactorily internal (for example, hormonal) state for processing both information and action.

On another study, Folkman (1982) put the two functions facilitate each other as

".... a person might feel it necessary to control his or her emotion (e.g. anxiety, anger) before being able to engage in problem- solving activity. In this case emotion focused coping facilitates problem- focused coping. On the other hand, a person might engage first in problem-focused coping, which leads to transformation or reduction of the emotional response. In still other instances a person might purposefully use problem focused coping not only to manage or solve a problem, but also as a strategy for regulation emotion, e.g. getting to work on a problem as a way to stop worrying about it ".

The coping process is a dynamic constellation of many acts and both the demands and the strategies of the person change as the transaction unfolds. Coping with extreme stress often involves an acute phase, in which efforts are most appropriately diverted toward minimizing or defensively distorting the impact of the event (emotion regulation); and a reorganization phase, in which the harm, loss, or threat is recognized and coping efforts are focused on altering the troubled person- environment relation ship (Kutash et al.,1981).

2.7 Empirical studies related to frequently used coping strategies

Kyriacou (1980b) conducted a study to identify the frequency with which teachers reported using various action to cope with stress in their work .The response showed that the three most frequently used coping actions (as evidenced by their mean values) were: 'try to keep things in perspective', 'try to avoid confrontations', and 'try to relax after work'. A principal component analysis revealed three factors accounting 36.7% of the total variance. These factors were labeled 'express feelings and seek support', 'take considered actions' and 'think of other things'.

In another study (Freeman, 1987), 'keep things in perspective', 'think objectively about the situation and try to keep emotions under control' and 'try to take some immediate action on the basis of your present understanding of the problem' were found to be the most frequently used coping strategies. Kyriacou (1980b) remarked that the most frequently used coping strategies adopted by teachers involve social support and the expression feelings.

Borg (1990) stated that both palliative and direct action coping strategies were the most frequently used coping strategies. Although there is no single way of enabling teacher to cope with occupational stress, the implication of the findings in different studies emphasizing for the need of an adequate support structure in schools (Borg, 1990)

2.8. Effects of Qualification and Teaching Experience on Coping Strategies

Studies (Billings & Moos, 1981; Gaziel, 1993) found that better educated respondents more likely to rely on problem- focused coping strategies and less likely to use avoidance coping. Higher levels of cognitive complexity and realistic appraisals of stressful situations are used by people of higher educational status where as effective escapism is employed by people of less formal education (Tsigie, 1997). A good prediction of teachers' coping strategies is achieved by using the variable experience. Teachers' coping strategies are influenced by their experience substantially (Hagos, 1998).

CHAPTER THREE

METHODOLOGY

This chapter includes the research method, the variables of the study, study area, population and sampling, instruments, scoring, pilot testing, data collection procedures, and method of data analysis.

3.1 Research method

Quantitative survey research method was used to find out the sources of secondary school teachers' stress and coping strategies used by them to cope up with the same. It was also designed to determine the effects of qualification level, grade level taught and years of teaching experience on teachers' stress and coping strategies.

3.2 Variables

3.2.1 Independent Variables

The independent variables of the study were qualification level, grade level taught and years of teaching experience. Qualification has two levels: diploma and Degree. Years of teaching experience in the current research has three levels: one to four years, five to nine years, and 10 years and above in the teaching profession. Grade level taught has two levels (Grade 9 to 10 and grade 11 to 12). The classification of years of teaching experience is based on Kyriacou and Sutcliffe(1978b) classification. The classifications of qualification level and grade level taught were based on the objective condition of assigning teachers in the present study area.

3.2.2 Dependent Variables

The dependent variables of the study were teacher stress and teachers' coping strategies scores.

3.3. Study Area

The study areas were North Shoa Zone (high schools) with center at Debire birhan which are found in Amhara region far from the regional town Bahir Dar but 135 kilometers from

the capital city Addis Ababa to the northern part of the country. This site was selected purposefully because of the following reasons:

1. It has both diploma and degree teachers with almost 50% from each qualification level so that selection of samples in each cell of the design could be possible. This is because Diploma teachers trained at regional colleges are assigned at many high schools to meet the demands of shortage of high school teachers in different subjects in addition to degree holders.
2. The present researcher could get better cooperation in data collection in the way the research is designed which was thought to help for the validity of the present research work.
3. Absence of language barrier among the present researcher, the respondents and zone education officials in obtaining important and related documents to this study.

3.4 Population and Sampling

The target population of the study was 858 (M = 760, F = 98) government high school teachers of North Shoa Zone. The total population was stratified on the basis of their qualification level, grade level taught and years of teaching experience to select the sample respondents. Thus, 228 secondary school teachers were selected through stratified random sampling technique. Experimental design is possible with different number of cases in different cells provided that proportionality holds within the cells of any given row or column satisfying $n_{jk} = (n_j * n_k) / N$ in each cell, for n_j - row total, n_k - column total and n_{jk} = sample size in j^{th} row versus k^{th} column cells (Hays, 1994). This is because ANOVA is considered as experimental in its design.

The respondents were also taken using the assumption of Hays (1994), which requires the minimum observation of 2 respondents in each cell. Therefore, a minimum of 14 observations in this study is sufficient to reach generalization. As the number of female teachers is very few, effect of sex on the dependent variables was not considered. The stratification of sample respondents by the demographic factors considered is displayed in Table 1.

Table 1: Stratification of sample respondents across the three demographic factors

Grade level taught	Teaching Experience	Qualification level		
		Diploma	Degree	Total
9&10	1-4years	22	22	44
	5-9 years	24	24	48
	≥10 years	22	22	44
11&12	1-4years	16	16	32
	5-9 years	14	14	28
	≥10 years	16	16	32
Total		114	114	228

3.5 Instruments

Under many circumstances, self-report measures of stress and coping strategies are preferred because of their greater content validity and reliability (Matthews, Joyner, Gilliland, Campbell, Falconer, and Huggins (cited in Davis, 2006). Therefore the following self-report instruments were used to measure the aforementioned variables. The instrument consisted three sections.

3.5.1. Demographic Information of Respondents

The first section consisted items, which were related to demographic variables: category of qualification, grade level taught, and years of teaching experience.

3.5.2. The sources and dimensions of teacher stress scale

This section consisted 60 items with five point Likert scale from not at all stressful (rated 1), mildly stressful (rated 2), moderately stressful (rated 3), much stressful (rate 4) ranges

to extremely stressful (rated 5). This scale helps to investigate the sources of teacher stress related to the teaching profession. Previously, Kyriacou and Sutcliffe (1978b) developed this questionnaire with a high reliability index i.e., a Cronbach alpha of 0.86 for the scale. This teacher stress has seven subscales including the newly treated dimensions of teacher stress by the present investigator. Namely,

1. Pupils' misbehavior
2. Poor working conditions
3. Time pressures
4. Poor school ethos
5. Performance evaluation
6. Personal opinion
7. Mobbing

The first four were taken from Kyriacou and Sutcliffe (1978b) with 44 items. In this scale, Kyriacou and Sutcliffe used 51 items of which seven were not relevant to Ethiopian context and excluded through experts' judgment. The next three subscales with 16 items were included selecting from different literatures and constructing some items based on the suggestions during the pilot test.

In the present study, these items were coded as S01 to S60 to represent source of stress one through source of stress - sixty (see section II -Appendix .A).

3.5.2.1. Description of Teacher Stress Scale Factors

1. ***pupil misbehavior***: it represents characteristics at which teachers are concerned about maintaining discipline or controlling a class, maintaining a positive teacher pupil relationship, difficulties from noisy, over active children, too abusive, insolent and violent pupils (e.g., poor motivation to learn, not doing class work, coming class late, disrespecting teachers, leaving classroom without permission) (Turk et al., 1982).
2. ***Poor working condition***: It refers to uncomfortable situation of work in the teaching profession that impinges on the individual (e.g., large classes and inadequate salary, poor facilities, financial constraints, excessive non teaching duties like clerical paper work, supervisory duties, lack of opportunity in decision making).

3. ***poor school ethos***: It represents common set of values, beliefs and ways of doing things found in a particular classroom system:(e.g., trying to maintain values and standards, relationship with unit leaders, staff, school administration, clique formation, attitudes and opinions).
4. ***Time pressure (work overload)*** : It represents teachers' having pressure by the work that they have to do, having a workday that is too fast, work loads teachers' did not have sufficient time to complete the tasks satisfactorily.
5. ***Performance evaluation***: It refers to adequacy and relatedness of the currently used performance evaluation form (criteria) for high school teachers.
6. ***Personal opinion***: it focuses on one's personal views of the teaching profession about the social values, personal satisfaction, interest towards teaching and sense of accomplishment.
7. ***Mobbing***: It refers to certain kinds of terrorizing at work place by colleagues and / or principals, which includes unjustly criticized by the principal, being excluded from the social activities spreading rumors about someone by colleagues and treating a teacher as if he/she has no importance in the school.

3.5.3. Teachers' coping strategy scale and its dimensions

This scale was constructed by Kyriacou (1980b) and reported with reliability index of Cronbach alpha 0.88. The scale was described with three subscales. These are:

1. Express feelings and seek support
2. Take considered actions; and
3. Think of other things. It consists of 33-items with five point Likert scale labeled 'always' 'usually', 'sometimes', 'rarely' and 'never' (scored from five to one respectively) so that respondents could answer how frequently they use each coping strategy in coping with teacher stress.

The items in this scale were coded as CS01 to CS33 to represent coping strategy one through coping strategy thirty three (see section three - Appendix-A).

3.5.3.1 Description of Coping Strategy factors

1. *Express feelings and seek support* (emotion focused coping): It focuses on the regulation of stressful emotions consisting of items largely to do with seeking advice and social support (e.g. doing enjoyable things at evenings, avoiding confrontations, relaxing after work, talk about the situation with some one at work).

2. *Take Considered Actions* (Problem Focused Coping): It consists of items to do with reflecting the situation and taking action to deal with the sources of stress (e.g. planning and thinking out a solution, problem solving and decision making, attempting to change a source of stress, trying to see things in perspective, transferring a trouble maker student to another class).

3 *Think of Other Things* (defensive strategy): It expresses attempts to focus attention away from the stressful situation towards other things. . It is an array of ways in which teachers act or cope in the face of stress (e.g. Intellectualization, denial and trying to see the bright side of the situation).

One open-ended question was included to seek respondents' free opinions related to other sources of teacher stressors they faced and the associated coping strategies used.

3.6 Scoring

Items worded both positively and negatively seek the level of stressfulness of the work of secondary school teachers. Therefore no reversing the positively and negatively worded items for scoring was made. The possible minimum and maximum scores of teacher stress were 60 and 300 respectively. High scores indicated that these high school teachers faced high stress.

The possible minimum and maximum scores of teachers' coping strategies were 33 and 165 respectively. High scores indicated more coping strategies were used frequently by the high school teachers of the study area.

3.7. Pilot testing

A pilot test was carried out on 70 selected high school teachers of Mehal Meda and DebireBirhan high schools a month before the main study. Sixty-two useable

questionnaires were returned. On the basis of item analyses items that had the lowest item reliability indices were revised to increase the reliability of the instrument to the main study.

The categorization of the two scales : teacher stress and coping strategy scales in their corresponding factors were made based on the groupings(factors) every item belongs in different studies reviewed (Turk et al.,1982; Dick &Wagner,2001, Kalker,1984; Borg,1990; Gaziel,1993) teacher stress.

The results of the pilot study in revising items in factor groupings of teacher stress and coping strategy are described in Table 2 and Table 3 respectively. The item - total correlation statistics was computed for every item of the two scales as shown in Appendices-B and C

Table 2: Stress Items per factor groupings

No.	Factors	Number of items in each factor	Items finalized from each factor	Revised items
1	Student misbehavior	11	S01 -S11	S02, S08, S11
2	Poor working conditions	23	S12-S33, S41	S21, S22, S23, S24, S27, S32, S33
3	Time pressure	7	S34-S40	
4	Poor school ethos	4	S42-S45	S43
5	Performance evaluation	7	S46-S52	S48
6	Personal opinion	4	S53-S56	S54, S55
7	Mobbing	4	S57-S60	S57

Table 3: Coping Items per factor groupings

No	Factors	Number of items	Items finalized from each factor	Revised items during pilot test
1	Express feelings and seek support	18	CS01_CS06, CS08_CS15, CS17_CS19,CS25	
2	Take considered actions	7	CS20_CS24,CS26, CS33	
3	Think of other things	8	CS07- CS16, CS27-CS32	

The reliability index of the sources of teacher stress scale before revising the aforementioned items was .88 of Cronbach alpha. Yet, some items were found to be vague to the respondents. The reliability index of the teachers' coping scale in the pilot test was .908 Cronbach alpha and no items found to have weak correlation to the total coping scores. Finally, after revising teacher stress items tabulated above, a total of 93 items from the two instruments /sources of teacher stress scale and teachers' coping scale were administered in the main study (see appendix A).The reliability indices of teacher stress scale and teachers' coping strategy scale were found to be increased to .93 and .94 Cronbach-alpha respectively.

3.8 Data Collection Procedure

List of high school teachers and their background information were collected from the zone education department of the study area. Based on the background information of teachers at each high school, the total population was stratified with the strata qualification level, grade level taught and years of teaching experience.

On the basis of the strata, sample respondents were selected with random sampling technique using random number table. Based on the selected respondents' working place 10 high schools were taken to undergo the study.

Research assistants were assigned at most of the selected high schools to collect the data. They were informed how and to whom to distribute questionnaires based on the strata. School administrators, directors were contacted to adjust the condition for the data collection. A total of 270 questionnaires were distributed to these selected high school teachers. Extra questionnaires for each stratum were considered in the distribution, as some teachers may not be voluntary to fill it. 237(88%) of the questionnaire were returned. out of 237 questionnaires five had no demographic information and four were not completed based on the strata. Totally, nine questionnaires were discarded. Therefore, 228 (85%) cases were used in the analysis.

3.9. Methods of Data Analysis

In this study, Descriptive statistics were used to find out the sources of teacher stress and to investigate the most frequently used coping strategies. Analysis of variance (ANOVA) was performed to determine the effects of independent variables on dependent variables. The main statistical analyses include:

- A. Mean was used to explore the sources of teacher stress. The mean of each category (grouping) of teacher stress was utilized to find out the most stressful factors (categories). This was done by first dividing the sum of scores in each category by the number of items in the category. This gave us the average score on each category per case. Finally, the sum of the means in each category was divided by total number of respondents.
- B. Three-way ANOVA was employed on 2 x 2 x 3 (Qualification level x Grade level taught x Years of teaching experience) factorial design to determine the effects of qualification level, grade level taught and years of teaching experience on the total variation of teacher stress scores. . A global measure of magnitude of effect size partial eta squared (partial η^2) is employed.
- C. t-test and one way analysis of variance followed by Post-hoc test were used to investigate the variation in factors of stress and coping across the levels of demographic variables.
- D. Cronbach alpha was used to determine the reliability indices of the scales.

The same statistical tests were used in the case of teachers' coping strategies as well. All the above statistical techniques were performed using SPSS Version 12.00.

CHAPTER FOUR

RESULTS AND DISCUSSION

The major aspects of the description of the results were descriptive statistics like mean, and standard deviations were used to find out the sources of teacher stress and strategies of coping among the factors of stress and factors of coping strategies. Besides, means and standard deviations were calculated on the independent variables (qualification level, grade level taught, and years of teaching experience) with respect to the total scores of teachers' stress and coping strategies.

Inferential statistics like, three - way ANOVA (2X2X3) design, t-test, and one -way analysis of variance (ANOVA) followed by post-hoc test were employed to determine effects of the independent variables on the dependent variables and to identify significant variations on the factors of teacher stress and coping strategies across the levels of independent variables.

Thus, all the results have been presented in two sections. The first part deals with results from descriptive statistics and the second part deals with results from inferential statistics.

4.1. Result

4.1.1. Descriptive information

Table 4: Teacher Stress and Coping Strategies' means and standard deviations for total Sample and demographic sub-groups.

Demographic characteristics (variables)	Category	n	Means		SD	
			Stress	Coping	Stress	Coping
Qualification level	Diploma	114	203.71	117.07	34.52	17.35
	Degree	114	197.59	113.40	31.566	16.015
Grade level taught	9 &10	136	206.11	117.45	32.78	16.53
	11 &12	92	192.59	111.32	32.18	16.63
Years of teaching experience	1-4years	76	05.17	117.32	29.38	15.72
	5-9 Years	76	199.19	113.80	39.11	16.49
	≥10years	76	197.60	114.57	29.99	17.99
Total	-	228	200.65	115.23	33.14	16.76

Table 4 depicts diploma teachers reported relatively high level of stress (M =203.71) than degree- holding teachers (M =197.59). High level of stress was also reported by those who have taught at grade nine and ten (M = 206.11) compared to those who have taught at grade 11 and 12 (M = 192.59).

Similarly, beginner teachers (1-4 years) reported high level of stress (M= 205.17) compared to moderately experienced teachers (5 - 9 years) and teachers with considerable experience (10 years and above) having mean scores 199.19 and 197.60 respectively. In general, the level of stress reported was seen decreased as years of experience increased in the present status of North Shoa Zone high school teachers.

Descriptive results regarding the coping strategies as the mean score depicts in Table 4, diploma teachers reported using coping strategies more frequently (M = 117.07) than degree teachers (M = 113.40). Furthermore, the mean coping score of teachers who have taught at grade nine and ten (M = 117.45) was considerably higher than the mean coping score of teachers who taught at grade 11 and 12 (M = 111.32).The mean coping score for teachers with moderate experience (M = 113.80) was lower than the mean coping score for beginner teachers (M = 117.32) and teachers with considerable experience (M = 114.57).

4.1.1.1. Results related to the sources of teacher stress

Results on the sources of teacher stress based on the mean score of stress factor groupings are presented in order of level of stressfulness as shown in Table 5.

Table 5: Summary of total Frequencies, Means, and Standard Deviations for seven factors of teacher stress.

Seven stressor groupings	n	Scoring range	Mean score	SD
Poor working condition	228	0-115	78.51	13.95
Student misbehavior	228	0 -55	38.67	7.90
Performance evaluation	228	0 -35	24.11	5.62
Time pressure	228	0 -35	22.61	6.14
Personal opinion	228	0 -20	14.00	4.11
Poor school ethos	228	0 -20	12.42	3.61
Mobbing	228	0 -20	10.34	4.57

It is indicated in Table 5 that poor working condition and student misbehavior have the maximum mean scores ($M = 78.51$) and ($M = 38.67$) while mobbing has the minimum mean score ($M = 10.34$) from overall seven categories of teacher stress.

This descriptive result indicated the working condition and student misbehavior were the highest sources of stress for selected group of high school teachers in the present condition of North Shoa Zone high schools.

In addition to closed ended questions in the survey form, respondents were asked to give additional source of stress faced by high school teachers (see Appendix. A). Though, teachers reported large number of stressors, issues raised related to poor working conditions and student behavior problems which were covered in the closed ended questions. Additional seven stressors were reported by almost 32% ($n = 73$) of the respondents and indicated as a constant source of stress at these high schools. These additional stressors include:

- ❖ Lack of transfer
- ❖ Efficiency evaluation unrelated to teaching profession.
- ❖ School principals who are assigned without academic merit
- ❖ Un conducive school physical setting
- ❖ loose promotion of students from Junior secondary schools
- ❖ poor attitude towards teaching by some colleagues
- ❖ Negative influence imposed on high school teachers by politicians.

4.1.1.2. Results related to teachers' coping strategies

A summary of frequencies, means, and standard deviations for the three coping strategy groupings are displayed in Table 6 in the order they have been used by respondents.

Table 6: Summary of total Frequencies, Means and Standard Deviations for Coping Strategy Groupings.

Coping strategy groupings	n	Scoring range	Mean score	SD
Express feelings and seek support	228	0-90	61.33	9.62
Think of other things	228	0-35	29.17	4.80
Take considered actions	228	0-40	20.87	4.03

Table 6 depicts “express feelings and seek support” (emotion focused) coping strategy was reported more frequently than take considered actions’ and ‘think of other things’. The result indicated teachers used coping strategies which enable them to control emotions, seeking support, or coping defensively than trying to alter the stressful situation or changing ones stress maintaining behavior.

4.1.2. Inferential statistics result

4.1.2.1. Results concerning teachers stress

Main effects and interaction effects of certain demographic variables (qualification level (A), grade level taught (B), and years of teaching experience (C)) on teachers stress scores are indicated in Table 7.

Table 7: Summary of three -way ANOVA for Teacher Stress scores

Source	SS	df	MS	F	P	partial η^2
Qualification level(A)	182.98	1	182.98	0.17	.677	.001
Grade level taught (B)	9046.29	1	9046.29	8.60	.004*	.038
Year of teaching experience (C)	383.82	2	191.91	0.18	.833	.002
A X B	243.71	1	243.71	0.23	.631	.001
A X C	3830.13	2	1915.07	1.82	.164	.017
B X C	968.43	2	484.22	0.46	.632	.004
A X B X C	5039.81	2	2519.90	2.39	.093	.022
Residual	227168.44	216	1051.71			
Total	246863.68	217	1137.62			

* Significant at $\alpha = .01$ level

As it is indicated in Table 7, one of the three main effects, ‘grade level taught’ showed significant effect on teacher stress ($F_{(1, 216)} = 8.60, P < .01$). The other two main effects: ‘qualification level’, and ‘years of teaching experience’ and the four interaction effects (two- way, three-way) did not bring significant effect on teacher stress in North Shoa Zone high school teachers.

The result of descriptive statistics confirmed this finding, indicating that teachers who have taught at grade nine and ten had high stress mean score than those who taught at grade 11 and 12. The proportion of variance accounted for by grade level taught to teacher stress was 3.8% (partial $\eta^2 = 0.038$).

4.1.2.2. Results concerning coping strategy

Main effects and interaction effects of the selected demographic variables (qualification level, grade level taught and years of teaching experience) on teachers’ coping strategies were depicted in Table 8.

Table 8: Summary of three- way ANOVA for Teachers' Coping Strategy Scores

Source	SS	df	MS	F	P	partial η^2
Qualification level(A)	48.05	1	48.05	0.18	.67	.001
Grade level taught (B)	1620.91	1	1620.91	6.07	.01*	.027
Year of teaching experience (C)	303.92	2	151.96	0.57	.56	.005
A X B	169.57	1	169.57	0.64	.43	.003
A X C	1090.17	2	545.08	2.04	.13	.019
B X C	1623.89	2	811.95	3.04	.05*	.027
A X B X C	564.98	2	282.49	1.06	.34	.010
Residual	57685.62	216	267.06			
Total	63107.11	217	290.81			

* is significant at $\alpha = 0.05$

As it is indicated in Table 8, the main effect 'grade level taught' showed significant effect ($F_{(1, 216)} = 6.07, P=.01$) in using coping strategies to relieve stress among high school teachers of the study area. One interaction effect (two - way) by grade level taught and years of teaching experience showed a certain significant effect ($F_{(2, 16)} = 3.040, P = .05$) on coping strategies. The other two main effects, namely qualification level and years of teaching experience, and the three interaction effects (two - way, three- way) did not bring significant effect in using coping strategies. This implies that the effect of the levels of one independent variable is the same across the levels of the other independent variable(s).

The descriptive result confirmed this result as teachers who taught at grade nine and ten showed using coping strategies more frequently than teachers who taught at grade 11 and 12. The proportion of variance accounted for by grade level taught to teachers' coping strategy scores was 2.7 % (Partial $\eta^2 = 0.027$). Beginner teachers (1- 4 years) and teachers with considerable experience (10 years and above) who taught at grade nine and ten used more coping strategies than those who taught at grade 11 and 12.

For moderately experienced teachers (5-9years), the reverse held true in using coping strategies (see Fig. 3).

Estimated Marginal Means of Coping Strategy Scores

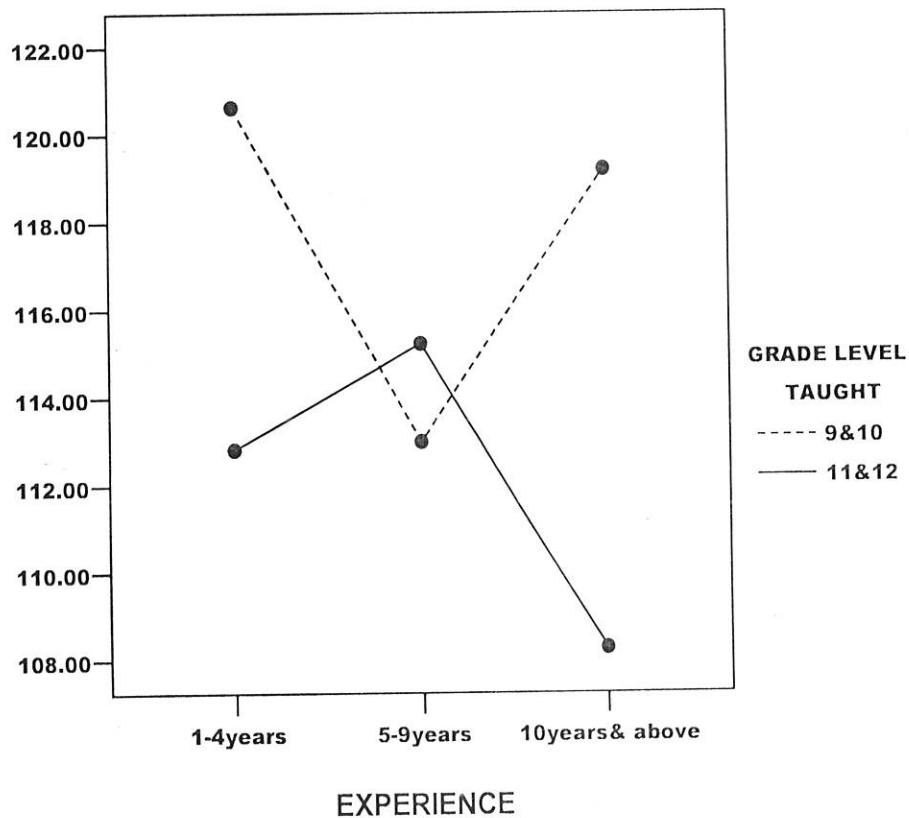


Figure.3: Two Way Interaction of Grade level taught and Teaching experience

4.1.2.3. Comparison of stressor and coping strategy factor groupings for differences among the demographic characteristics

Comparisons of the seven – stressor groupings and the three coping strategy groupings for differences among demographic characteristics (qualification level, grade level taught and years of the teaching experience) were made through t-test for independent samples. Levene's test for equality of variance was calculated to test for homogeneity of variances. When the probability level of Levene's test for equality of variances was greater than 0.05, the t –test for assumed equal variance was used. With a probability of less than or equal to 0.05, Levene's test for equality of variance was considered to be significant, and equal

variance were not assumed. When equal variance was not assumed, an adjusted t-test was used. An ANOVA was used when there were more than two levels of the independent variable in the groupings. Each comparison of the factor for the independent variable was determined through ANOVA testing.

For each of the factors of teacher stress and coping strategies, the mean difference between individuals with qualification diploma and degree was tested on significances utilizing a two group independent tests. A summary of the results of those analyses is presented in Table 9.

Table 9: t-test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable – Qualification level

Factors	Qualification	n	Mean	SD	t - test for equality of Means		
					t	Sig. (2-tailed)	Mean difference.
<u>Stressor groupings</u>							
Student misbehavior	Diploma(A ₁)	114	39.14	7.78	0.897	.371	0.938
	Degree (A ₂)	114	38.20	8.01	-	-	-
Poor working conditions	A1	114	79.18	14.41	0.730	.466	1.35
	A2	114	77.83	13.49	-	-	-
Time pressure	A1	114	23.29	6.45	1.699	.091	1.37
	A2	114	21.92	5.77	-	-	-
Poor school ethos	A1	114	12.46	3.65	0.183	.855	0.087
	A2	114	12.37	3.58	-	-	-
Performance evaluation	A1	114	24.49	6.08	1.037	.301	0.771
	A2	114	23.71	5.11	-	-	-
Personal opinion	A1	114	14.21	4.24	0.772	.441	0.421
	A2	114	13.78	3.98	-	-	-
Mobbing	A1	114	10.92	4.64	1.954	.050*	1.175
	A2	114	9.75	4.43	-	-	-
<u>Coping strategy</u>							
Express feelings and seek support	A1	114	62.14	10.18	1.268	.206	1.614
	A2	114	60.52	8.99	-	-	-
Take considered actions	A1	114	21.25	4.09	1.414	.159	0.754
	A2	114	20.50	3.96	-	-	-
Think of other things	A1	114	29.85	4.65	2.183	.030*	1.377
	A2	114	28.48	4.86	-	-	-

*The mean difference is significant at the .05 level

In observing Table 9, it may be ascertained that difference obtained for factor groupings 'mobbing' and for factor grouping coping strategy 'think of other things' (defensive Strategies). It appears that respondents with diploma qualification facing stressor 'mobbing' use factor coping strategy of 'think of other things' to relieve their stressors.

For each of the factors of teacher stress and coping strategies, the mean difference between individuals with respect to grade level they taught (Grade 9 and 10, Grade 11 and 12) was tested on significance utilizing a two group independent tests. A summary of the results of those analyses is presented in Table 10.

Table 10: t-test Comparison of Respondents' stressors and Coping strategies by Independent variable Grade level taught

Factor	Grade level taught	n	Mean	SD	t- test for equality of Means		
					t	sig. (2-tailed)	Mean difference
<u>Stressors groupings</u>							
Student misbehavior	9&10 (B ₁)	136	39.72	7.39	2.46	.014*	2.60
	11&12 (B ₂)	92	37.12	8.40	-	-	-
Poor working conditions	B1	136	80.63	13.37	2.83	.005*	5.26
	B2	92	75.37	14.25	-	-	-
Time pressure	B1	136	23.69	6.00	3.30	.001*	2.68
	B2	92	21.01	6.03	-	-	-
Poor school ethos	B1	136	12.54	3.56	0.62	.533	0.30
	B2	92	12.24	3.69	-	-	-
Performance evaluation	B1	136	24.41	6.01	1.00	.318	0.75
	B2	92	23.65	4.98	-	-	-
Personal opinion	B1	136	14.44	3.86	1.98	.049*	1.09
	B2	92	13.35	4.40	-	-	-
Mobbing	B1	136	10.67	4.76	1.31	.190	0.81
	B2	92	9.85	4.23	-	-	-
<u>Coping strategies.</u>							
Express feelings and seek support	B1	136	62.69	9.57	2.62	.009*	3.36
	B2	92	59.33	9.39	-	-	-
Take considered actions	B1	136	21.29	3.90	1.87	.062	1.01
	B2	92	20.27	4.17	-	-	-
Think of other things	B1	136	29.60	4.72	1.65	.099	1.07
	B2	92	28.53	4.87	-	-	-

*The mean difference is significant at the .05 level

In observing Table 10, it may be ascertained that differences were obtained for factor stressor groupings 'student misbehavior', 'poor working conditions', 'time pressure' and 'personal opinion'. Similarly, difference was obtained for factor coping strategies 'expresses feelings and seek support' (emotion focused coping). It appears that respondents who have taught at grade nine and ten experiencing stress factors: 'student

misbehavior', 'poor working conditions', 'time pressure', and 'personal opinion' use factor coping strategy, 'express feelings and seek support' to relieve their stressors.

For each of the factors of teacher stress and coping strategies, the mean difference among individuals with respect to the years of teaching experience they have (1- 4 years, 5-9 years , and 10 years and above) was tested on significance utilizing a one way analyses of variance(one way ANOVA). This was performed after homogeneity of variances was tested and satisfied. Summaries of the results of those analyses are presented in Table 11.

Table 11: ANOVA summaries for respondents' Stressors and Coping Strategy Groupings by Demographic Variable - Years of teaching experience.

Sources	Sum of squares	df	Mean square	F	Sig.
<u>Stress groupings</u>					
Student misbehavior	206.28	2	103.14	1.66	.192
Poor working conditions	148.35	2	74.17	0.37	.685
Time pressure	241.48	2	120.74	3.26	.040*
Poor school ethos	136.50	2	68.25	5.44	.005*
Performance evaluation	3.97	2	1.98	.062	.940
Personal opinion	75.86	2	37.93	2.26	.106
Mobbing	126.42	2	63.21	3.08	.048*
<u>Coping strategy groupings</u>					
Express feelings and seek support	65.50	2	32.75	0.35	.704
Take considered actions	75.21	2	37.61	2.33	.099
Think of other things	20.86	2	10.43	0.45	.638

* is significant at $\alpha = 0.05$

In observing Table 11, it may be ascertained that differences were obtained for factor stressor groupings: time pressure, poor school ethos and mobbing. To identify the pairs of experience levels that differ in these factors, multiple comparisons with post – hoc test were computed using the Tukey method as there were equal sample sizes among the three experience groups.

Table 12: Post-hoc tests for teaching experience levels with respect to the identified Stress factors.

Dependent variable	(I) Experience	(J) Experience	Mean Difference (I - J)	Std Error	Sig.
Poor school ethos	1- 4 years	5-9 years	1.6973*	.5746	.010
		10 years & above	1.5789*	.5746	.018
	5 - 9 years	1- 4years	-1.6973*	.5746	.010
		10 years & above	-0.1184	.5746	.977
	10 years & above	1- 4years	-1.5789*	.5746	.018
		5 -9 years	0.1184	.5746	.977
Time pressure	1- 4years	5 -9 years	2.0000	.9872	.108
		10 years & above	2.3289*	.9872	.050
	5 - 9 years	1- 4years	-2.0000	.9872	.108
		10 years & above	0.3289	.9872	.941
	10 years & above	1- 4years	-2.3289*	.9872	.050
		5 - 9 years	-0.3289	.9872	.941
Mobbing	1- 4years	5 - 9 years	1.6052	.7346	.076
		10 years & above	1.5526	.7346	.089
	5 - 9 years	1- 4years	-1.6052	.7346	.076
		10 years & above	-0.0526	.7346	.997
	10 years & above	1- 4 years	-1.5526	.7346	.089
		5 - 9 years	0.0526	.7346	.997

*The mean difference is significant at the .05 level.

Table 12 indicated that beginner teachers (1-4 years) reported high stress in stress factor grouping, 'poor school ethos' than teachers with moderate experience (5 - 9 years) and teachers with considerable experience (10 years and above) ($p < .05$). Time pressure was found to be high stressor to beginner teachers than teachers having experience 10 years and above ($P = .05$). Though the post-hoc test (Tukey HSD) was not significant, the factor stressor 'mobbing' showed certain difference between beginner teachers and teachers having teaching experience 5-9 years.

4.2 Discussion

In this section, the findings of the present study have been discussed in the light of the results of the previous studies and the actual observations along with the objectives already set.

4.2.1 The sources of teacher stress and strategies of coping

Concerning the sources of stress in terms of the factors described in chapter 3, the present study tried to find out the main source of stress, the selected high school teachers in the study area experienced. This was done by calculating the means and standard deviations for each category of stress.

Table 5, in the result section indicated that 'poor working condition' and 'student misbehavior' were the highest stressors while 'mobbing' was found to be the least sources of teacher stress. Generally, all the seven factors of stress had high mean scores, implying high school teachers in North Shoa Zone experienced job related stress in different factors with different degree of stressfulness of the factors involved in this study.

Evidences from other studies substantiate this finding. For example, from the stressors that the present factors of stress include : pupils who misbehave, pupils with poor attitudes towards work, poor working conditions like inadequate salary, poor school ethos and status of the profession had been found to be the main sources of teacher stress as reported by Kyriacou (1997).

The present finding is also consistent with the findings of the study by Kyriacou and Sutcliffe (1978b). The finding on the factor 'performance evaluation' is also in support of the previous study by Darge (2002).

Above 32 % (n = 73) of the teachers in the study area responded to the one open ended question included in the questionnaire that evaluation criteria was not fair and adequate. Efficiency evaluation did not consider performances on ones work; rather, it was treated relating to political commitment. According to the respondents, those school principals who were assigned with out academic merit interfere with teachers' work unreasonably. This made the working condition stressful in general and to beginner teachers in particular.

This finding is also in line with the finding by other study (Pines et al., 1981) indicating some educators climb up the administrative ladder as a way of escaping a job in which they have burned out and providing no support for the new teacher who have taken their places. The new teachers may now become frustrated and cynical, and the situation worsens. Findings on the two highest stress factors “poor working conditions” and “student misbehavior” are also in support of the findings obtained by other local researchers (Getachew, 1999; Tesfaye, 2005) reporting the over crowded classrooms, heavy work load, serious resource constraints and the existing educational leadership found to be major factors that contribute to increased teacher stress. These sources of stress are under the two factors of stress identified as the main source of stress in the present findings.

Related to the source of coping strategies, in terms of the three factors described in chapter three, “Express feelings and seek support” (emotion focused coping) was found to be the most frequently used coping strategy while the factor “Take considered actions” (Problem focused coping) was found to be the least used coping strategy. The result implies that teachers in North Shoa Zone high schools used emotion reduction than dealing with problems either by changing the sources of stress or by changing problem handling behavior. The coping factor “Think of other things” (Defensive strategy) was found to be the second frequently used strategy which is still not related to finding solutions directly but an attempt to escape from the immediate problem that could be unmanageable.

This finding is in support of the finding by Kyriacou (1980b) which remarked the most frequently used coping strategies adopted by teachers involves social support and express feelings. The implication from the present findings appears to have (establish) adequate support structure in schools, which is in support of the implication given by Borg (1990).

4.2.2. Effects of demographic variables on teacher stress

A. Independent main effects of qualification level and years of teaching experience.

The result of the present study showed that qualification level and years of teaching experience independently had no effect on teacher stress perception. This finding was not found to be consistent neither with the findings of the local researcher Darge (2002)

reporting degree holding, experienced and pedagogically trained teachers bear greater stress than their counterparts nor to the findings of Dunham (1976) reporting newly qualified, inexperienced, poorly trained teachers lack the ability or willingness to change teaching skills found to be stressful situations to these teachers themselves. However, this finding is in support of the findings by Malik (1991) in that experience did not account for a significant portion of the variance in the dependent variable in the model he developed by taking grade level taught and teaching experience as independent variables and job-related teacher stress as dependent variables.

This might be because high school teachers in the study area have been experiencing job-related stress at both qualification and experience levels invariably implying the level of stress teachers faced goes beyond the way they manage by qualification and experience levels they got in course of time.

Based on the observation by the present investigator and the responses given by large number of teachers to the open ended question included in the questionnaire, they raised almost similar sources of stress like low salary, lack of further education opportunity, student misbehavior, inadequate evaluation criteria, political interference by the school principals and others which led to conclude teacher stress in North Shoa high school teachers was not peculiar to a certain qualification and experience levels (groups).

B. Effects of grade level taught on teacher stress.

As it is presented in summary ANOVA Table 7 of the result section, grade level taught had a significant effect on the teacher stress. Those who taught at grade nine and ten found to be highly experienced (faced) job-related teacher stress than their counter parts who taught at grade 11 and 12 which was described in Table 4 of the descriptive result section.

This finding is consistent with the finding of other study by Malik (1991) reported grade level taught had negative effect on teacher stress.

This could happen by poor working condition of teaching at this level such as large class sizes, too many periods teaching, inadequate disciplinary policy of the school and student misbehavior, such as poor respect to teachers, poor attitude towards study, pupils who continually misbehave, poorly motivated students.

Some students who do not have sufficient school performance in their academic achievement may not have clear direction for themselves either to join the vocational schools, college preparatory level or others. This situation led them to be restless and difficult to the teachers work in the classroom.

On the other hand, the age of students at this level by itself brings psychological and behavioral changes when they come to high school from junior secondary schools. Particularly, teaching in grade 10 were found to be problematic to teachers' classroom management as the students depend on the result from Ethiopian General Secondary Education Certificate Examination (EGSECE) to complete secondary education whatsoever the result could be. From the observation made by the investigator and repeatedly reported additional source of stress, students at this level have poor attitude towards study. This implies policy formulation which could consider the values given to classroom performance more than what it has been already given.

Students at grade 11 and 12 observed to have a clear future direction in their academic prospect. They follow up the courses, which were given at the freshman level of university students. This could be what initiated them to change their attitudes towards academic work. The actual class size observed also ranged from 40 to 60, which is manageable to the class room teachers. This in turn reduces teachers' stress at this level at a certain extent.

4.2.3. Interaction effects of the demographic variables on teacher stress.

As it can be observed from Table 7 of summary ANOVA, there were no significant interaction effects between /among, demographic variables (AXB, AXC, BXC and AXBXC) on the dependent variable teacher stress total score. This finding implies the levels of one independent variable have similar effect on the levels of the other independent variable(s) to the total stress.

4.2.4 The independent main effects of demographic variables on strategies of coping

A. Qualification level and years of teaching experience.

From Table 8 in the result section, it was ascertained that qualification level and years of teaching experience had no independent significant effects on the strategies of coping. This

finding was not consistent with the finding of the study of Hagos (1998) which reported as teachers coping strategies are influenced by their experience substantially. It was not also in support of the findings of other study by Tsigie (1997) reported degree holder respondents who make more use of coping strategies.

According to the present investigator, the findings related to coping happened because there were no variations in the perception of stress in the levels of these demographic variables. The implication is the more stressed group the more they used strategies of coping to relieve their stress. The investigator observed that when ever there is a group more stressed in job-related stress the same group found to use strategies of coping more frequently. This stress-coping correspondence has been observed in other studies (Hagos, 1998; Tsigie, 1997) as well.

B. Effects of grade level taught on strategies of coping.

From the summary ANOVA Table 8, it is indicated grade level taught had significant effect on strategies of coping. From the descriptive statistics in Table 4 of the result section, teachers at grade nine and ten used coping strategies more frequently ($M = 117.45$) than those who taught at grade 11 and 12 ($M = 111.32$).

The finding of the present study could be because of high stress teachers faced at grade nine and ten which in turn required to use more coping strategies to manage the troubled person-environment relationship and hence the kind and intensity of the stress reaction.

Stress, appraisal, and coping are elements of dynamic interactive process (Sorenson, 1993). In the relative absence of variations in stress and appraisal, coping might not be frequently used by those who taught at grade 11 and 12 for the present findings. In other words, this finding is in line with the theories developed by Lazarus (1981), Lazarus and Launier (1978). They defined coping as efforts both action oriented and intrapsychic, to manage environmental and internal demands and conflicts among them which tax or exceed a persons resources. This implies, in the presence of stressors and stress appraisal, frequency and intensity of using coping strategies would be increased.

4.2.5. The interaction effects of selected demographic variables on strategies of coping.

Results from summary ANOVA in Table 8 indicated as there were interaction effects among the levels of grade level taught and the levels of years of teaching experience. Figure 3: depicts the profile plots of estimated marginal means for sum of coping strategy scores.

Beginner teachers (1- 4 years) and teachers with considerable experience (10 years and above) who taught at grade nine and ten used coping strategies more frequently than those who taught at grade 11 and 12. For teachers with moderate experience (5-9 years) the reverse held true.

The findings of this study implies external and internal demands (stress) that tax or exceed the resources of beginner and considerably experienced teachers who taught at grade nine and ten required to use more coping strategies than those who taught at grade 11 and 12. On the other hand, the demand for moderately experienced teachers who taught at grade 11 and 12 required them to use relatively coping strategies frequently than their counter parts who taught at grade nine and ten.

Implication of this finding indicated that using coping strategies more frequently associated with the intensity, frequency, and number of environmental or internal demands (appraised stressors) imposed on a certain demographic group regardless of the type of coping strategies used. The demands identified in the descriptive result section were 'poor working conditions' and 'student misbehavior' in terms of the factors of teacher stress considered in this study.

4.2.6. Effects of demographic variables on factor groupings of teacher stress and coping strategies

A. Qualification level

The comparisons on respondents' stressors and coping strategies by independent variable qualification level shown in Table 9 of the result section revealed significant difference was obtained on factor grouping "Mobbing". Teachers at the diploma qualification level experienced high stress with mobbing than degree holding teachers. This might be because assigning teachers at the diploma level to work at high schools is not the policy direction of the present education system of Ethiopia. It happened to meet the demands of shortage of qualified teachers that they are assigned to teach in that level by giving in-service training in the summer courses and distance education.

Perhaps, these teachers might be reassigned to junior high school for from the zone or district towns transferring from high schools whenever their performances and relation with the school community found to be weak or when degree holders come to replace their places. This could led diploma teachers to lose confidence and psychologically terrorized by encounters they have with the school administrators and staff.

Regarding the comparison of coping strategy factors on the levels of qualification, significant differences obtained by the factor, 'Think of other things' (defensive strategy) implying that these teachers used to focus their attention away from the situation. They did not find direct solutions to the stressors; instead, they used defensive strategy to escape from the situation before it comes unmanageable.

From the above findings, it appears that when ever diploma teachers face stressful situations by the factor stressor 'mobbing', they used defensive strategy to relieve.

B. Grade level taught

The comparison on respondents stressors and coping strategies by independent variable grade level taught as show in table 10 of the result section, significant differences were obtained on factor stressors 'student misbehavior; ' poor working conditions', 'Time pressure' and 'personal opinion'.

In summary ANOVA Table 7, it was indicated that grade level taught had significant effect on the total teacher stress mean score. In this section, the particular stress factors that grade level taught had effect were identified.

It was indicated that student misbehavior, the working condition, and time pressure imposed on high school teachers who taught at grade nine and ten were stressful. These led high school teachers at this level to have negative personal opinion to the profession, which in turn became by it self job related stressor to these teachers themselves.

Regarding the comparison on respondents' coping strategy factors, significant differences obtained on 'express feelings and seek support' (emotion focused coping) which might enabled them to cope up the identified stressors.

C. Years of teaching experience

Comparisons of respondents' stressors and coping strategies by the independent variable years of teaching experience in Table 11 of one way analysis of variance (ANOVA) revealed that significant differences were obtained on 'Time pressure', 'poor school ethos', and 'mobbing'.

From Post-hoc test (ANOVA) in Table 12, it was observed that beginner teachers (1-4 years) faced high stress on these factors. This finding is consistent with the findings of other studies like Fiamin (1984) reporting beginner teachers feel burn out and they leave teaching early of their professional endeavor.

This might because the beginner teachers were new to the amount and type of work, the trends, and standards and commonly set of values, beliefs, the behavior of the school principal and other administrative personnel. These led beginner teachers to get into being stressed compared to moderately experienced teachers (5-9 years) and teachers with considerable experience (10 years and above).

The present finding implies that an adequate induction program should be arranged at the school and department level of the North Shoa Zone high schools.

Regarding the comparison of factors of coping strategies by independent variable years of teaching experience, no significant differences were observed as shown in Table 11. The implication is that teachers at these experience levels used the three coping strategy factors invariably.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

The major purpose of this study was to examine the sources of job - related stress and strategies of coping among North Shoa Zone high school teachers and to investigate whether there were variations in teacher stress and in coping strategies as a result of differences in qualification level, grade level taught, and years of teaching experience.

On this purpose the following specific objectives were set.

1. To find out the main sources of job- related stress and strategies of coping used among the selected North Shoa zone high school teachers.
2. To determine the independent main effects of qualification level (A), grade level taught (B), and years of teaching experience (C) on teacher stress.
3. To identify significant interaction effects between/ among qualification level, grade level taught, and years of the teaching experience (AXB, AXC, BXC, and AXBXC) on teacher stress.
4. To determine the independent main effects of qualification level, grade level taught and years of teaching experience in frequency of using strategies of coping.
5. To identify significant interaction effects between/among qualification level, grade level taught, and years of the teaching experience (AXB, AXC , BXC, and AXBXC) in frequency of using strategies of coping by these teachers.
6. To find out significant variation in the factors of stress and coping by the changes in the levels of independent variables.

To arrive at a solution to these objectives, 228 respondents were selected and two part structured questionnaires were administered. One open ended item was also supplemented to uncover other possible contents of teacher stress at the high school level of the study area.

Results of the descriptive statistics (mean, standard deviation) and inferential statistics (t-test, one –way ANOVA, three way ANOVA) revealed the following findings.

1. High school teachers of the study area faced poor working condition and student misbehavior as major sources of job related stress and mobbing was found to be the least source of stress in terms of the categories of stress described in the method section. Regarding the sources of coping strategies, 'express feelings and seek support' (emotion focused coping) was found to be first and 'think of other things' used in the second place in the order of their mean values.
2. Grade level taught had significant effect on teacher stress. Those who had taught at grade nine and 10 experienced more stress than their counterparts who had taught at grade 11 and 12. Qualification level and years of teaching experience did not have significant effects on teacher stress. All the groups revealed high stress mean scores, implying the groups invariably appraise the teaching profession is stressful.
3. Interaction effects between /among qualification level, grad level taught and years of teaching experience were not found to be significant to the variation of total stress scores. The levels of one demographic variable have similar effect on the levels of the other demographic variables.
4. Grade level taught was found to have significant effect in using coping strategies. Those who taught at grade nine and 10 use more coping strategies than those who taught at grade 11 and 12. Qualification level and years of teaching experience did not bring significant difference in using coping strategies.
5. Interaction effects between grade level taught and years of teaching experience had significant effects in using coping strategies. Beginner teachers (1-4years) and teachers with considerable experience (10 years and above) who taught at grade nine and 10 used more coping strategies than their counterpart who taught at grade 11 and 12. The reverse held for teachers with moderate experience (5-9 years) in that teachers who taught at grade 11 and 12 used more coping strategies than those who had taught at grade nine and ten. This interaction effect is displayed in fig. 4 of the result section.

6. Comparison of factors of Stress and Coping strategies across the levels of the three independent variables

- A. From t-test comparison of respondents' stressors and coping strategies, more specifically, qualification level was found to have significant effect on the factor stressor 'mobbing'. Diploma teachers experienced high stress with mobbing. It was also found that the coping strategy factor 'Think of other things' to bring variations among the qualification levels. It appears that diploma teachers who have been stressed with mobbing use think of other things to relieve their stress.
- B. From one way analyses of variance, years of teaching experience was found to have significant effect on the factor stressor groupings: 'Time pressure ', 'Poor school ethos and 'mobbing'. Beginner teachers (1-4years) are relatively experiencing stress with these factors even though experience did not bring significant effect on the total stress score. Experience did not have significant effect on the factors of coping strategies (see summary-one way ANOVA Table 11) and multiple comparison Table 12 of the post -- hoc test.
- C. From t-test comparison of respondents' stress and coping strategies grade level taught had significant effect on teacher stress factor groupings: 'student misbehavior', 'poor working conditions; 'Time pressure;' and 'personal opinion'. Those who had taught at grade nine and 10 experience more stress with these factors than their counterparts. Regarding coping strategy factors 'express feelings and seek support' brought significant variation by grade level taught. Grade nine and 10 teachers were found to use this coping strategy more frequently. It appears teachers at this level who experience stress with student misbehavior, poor working condition, time pressure and personal opinions used express feelings and seek support to alleviate it.

5.2 Conclusion

- ❖ Results from the descriptive part indicated that 'poor working conditions' and 'student misbehavior' were found to be the main source of teacher stress in the study area.
- ❖ Regarding the sources of strategies of coping, the factor 'express feelings and seek support' (emotion focused coping) was found to be the main source of coping strategies used in terms of the factor coping strategy groupings. Think of other things (defensive strategy) was used in the second place.
- ❖ The implication is teachers in North Shoa Zone high schools used more emotion focused coping, which requires establishing school based support system like guidance and counseling service to strengthen their coping up stressors.
- ❖ Teachers who taught at grade nine and ten experienced more stress than those who taught at grade 11 and 12 regardless of their qualification and experience levels.
- ❖ Teachers experienced job related stress invariably across their qualification level and years of teaching experience.
- ❖ None of the interactions (two ways and three ways) brought significant effect on teacher stress.
- ❖ Teachers who taught grade nine and ten used coping strategies more frequently than their counterparts who taught at grade 11 and 12.
- ❖ No variation in using strategies of coping was observed across different levels of qualification and teaching experience.
- ❖ Beginner (1-4 years) and considerably experienced (10 years and above) teachers who taught at grade nine and ten use more coping strategies (emotion focused) than those who taught at grade 11 and 12.
- ❖ Moderately experienced teachers who taught at grade 11 and 12 used coping strategies more frequently than those who taught at grade nine and ten with the same experience level.

- ❖ The factor stressor group 'mobbing' has significant difference across qualification levels. The coping factor 'think of other things' has also significant difference in the qualification levels. It appears that diploma teachers who faced stress by mobbing used defensive strategy to cope up with these stressors.
- ❖ Factor stressors: student misbehavior, poor working conditions, time pressure and personal opinion brought significant difference across the grade level taught. Teachers who taught at grade nine and ten faced stress by these factors. Related to the coping factor, 'express feelings and seek support' (emotion focused) coping brought significant difference across the grade level taught. Teachers who taught at grade nine and ten used these strategies more frequently to alleviate the stressors identified above.
- ❖ Factor stressors: time pressure, poor school ethos and mobbing brought significant differences across experience levels in the teaching experience. Beginner teachers (1-4 years) faced stress with these factors with significant differences from moderately experienced teachers and teachers with considerable experience (10 years and above).

5.3. Recommendations

Although changing the working conditions in teaching, behavior of students, societal attitude towards the profession and status of the profession is time taking, the following recommendations are made on the bases of the present findings.

- ❖ To improve and change the working condition of the teaching at the high school levels collaborative efforts of the government, the society and the teachers themselves play a great role.
- ❖ Educational policy makers should focus on valuing students' performance at the classrooms at lower grades of the high school level (grade nine and ten) in the same way the value given to higher grade levels.
- ❖ Education Department of the region and zone assign school principals on the basis of their academic merit.

- ❖ Zone and district education departments should focus particularly to the management of General Secondary School (grade 9 and 10) working conditions and student behaviors, free from political interference by politicians on teachers' work and giving recognition to good performance in teaching.
 - ❖ The government policy makers should consider establishing independent and adequate school based support system to help teachers cope – up with job – related stress that would impair teachers' wellbeing which in turn affects students' achievement and the country's development as well.
 - ❖ School administrators and teachers should work cooperatively to establish a good communication among them which in turn enable to reduce the source of stress and develop social support system in which teachers use to cope -up job – related stress at school level.
- Finally, to get a better insight into the contribution of the factors of teacher stress and factors of teachers' coping strategies to their corresponding total variation of scores, further studies need to be done using two independent one way analyses of variance. Other demographic variables also need to be included as the proportions of total variances accounted by these three independent variables on the two dependent variables were found to be small. To identify the underlying constructs (factors) to the sources of teacher stress in the current status of high school teachers, factor analysis should be employed by taking large sample respondents which requires a change of method of data analysis.

REFERENCES

- Aklilu Habte (1967). Brain Drain in the Elementary Schools. *Ethiopian Journal of education*, 1(1), 27-39.
- Allison, G. (2004). *Perceived and Reported Occupational Stressors and Coping strategies of selected community college Business Faculty members in Texas*. PhD Thesis. Texas A & M University. Retrieved February 11, 2007, from <http://www.org/release/Human.res dev.html>.
- American psychological Association (1996). Work stress, Family stress: separate but equal experiences for mom and dad. Retrieved October 6, 2006, from <http://www.Apa.Org/releases/work str.html>.
- Anderson, C. (1977). Locus of control, coping behaviors and Performance in a stress setting: a longitudinal study. *Journal of Applied Psychology*, 62, 446 - 451.
- Anderson, M.B. & Iwanicki, E.F (1984).Teacher motivation and its relationship to burnout. *Educational Administration quarterly*, 20,109 -134.
- Antoniou, A.S., Pollychorni, F. & Walters, B. (2000). Sources of stress and professional burnout of teachers of special educational needs in Greece. Paper presented at ISEC 2000. Retrieved January 5, 2007, from <http://www.Teacher stress /special ed.com>.
- Appley, M.H. & Trumbull, R. (1967). *Psychological stress*. New York: Appleton.
- Attridge, M. (2000). Trouble at the head of the class: Teachers say job stress impacts their students' academic performance, but it's a condition that can be reversed. *EAP Digest*, 30-32.
- Averill, J.R. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80, 286-303.
- Beehr, T.A.,Walsh, J.T. & Taber, T.D. (1976). Relationship of stress to individually and organizationally valued states: higher order needs as a moderator. *Journal of Applied psychology*, 61, 41- 47.
- Benson, H. (1975). *The relaxation response*. New York: William Sorrow & co.
- Billings A.G., & Moos, R.H. (1981). The role of coping responses and social resources in attenuating the impact of stressful events. *Journal of personality and Social Psychology*, 4, 139-157.

- Billings, A.G. & Moos, R.H. (1984). Coping with stress and social resources among adults with unipolar depression. *Journal of personality and social Psychology*, 46, 877-891
- Borg, M.G. (1990). Occupational stress in British educational settings: *A review in Educational Psychology*, 10(2), 103 -127.
- Buck, V.E. (1972). Working under pressure. London: staples press.
- Burke, R.J; Greenglass, E.R.; & Schwarzer, R. (1996). Work stress, role conflict, Social support, and psychological burn out among teachers. *Psychological Reports*, 73, 371 -380.
- Buzzard, R. (1973). A practical look at industrial stress. *Occupational psychology*, 47, 51-61.
- Caplan, R.D., Cobb. S. & French, J.R.P. (1975). Relationships of cession of smoking with job stress, personality, and social support. *Journal of Applied psychology*, 60, 211 -219.
- Chan, D.W. (1998). Stress, Coping Strategies and psychological distress among secondary school teachers in Hong Kong. *American Educational Research Journal*, 35, 145 -163. Retrieved December, 26, 2006, from <http://www.jstor.org>
- Chapman, D.W. & Hutchesen, S.M. (1982). Attrition from teaching careers: A discriminate analysis. *Journal of American Educational Research*, 19, 93-105.
- Charter, W.W. (1970). Some factors affecting teacher survival rates in school districts. *Journal of American Educational Research*, 7 (1), 1-27.
- Coates, T.J. & Thoresen, C.E. (1976). Teacher anxiety: A review with recommendations. *Review of Educational Research*, 46(2), 159 -184.
- Coldicott, P.J. (1985). Organizational causes of stress on the individual teacher. *Educational Management and Administration*, 13, 90-93.
- Cooper, C.L. & Kelly, M. (1993). Occupational stress in Head Teachers: A national UK study. *British Journal of Educational Psychology*, 63, 130-143
- Cooper, C.L. & Marshal, I. (1978). Sources of managerial and white collar stress, in: L. cooper & R. Payne (Eds) *stress at work* (New York, Wiley).
- Cooper, C.L., & Marshall, J. (1976). Occupational Sources of Stress: A review of the literature relating to coronary heart disease & mental ill Health. *Journal of occupational psychology*, 49, 11-28.

- Cox, T. (1975). Stress and well being in school teachers. *Journal of Educational Research*, 78, 169 -177.
- Cox, T. (1977). *The nature and Management of stress in schools*. Mold:Education Department, Clwyd country council.
- Cruickshank, D.R., Kennedy, J.J. & Myers, B. (1974). Perceived problems of secondary school teachers. *Journal of educational Research*, 68,154 -159.
- Darge Wole (2002). The predominance of Different sources of stress Among Teachers in Government Senior High Schools of Addis Ababa. *The Ethiopian Journal of Education*, XXII (1), 1 -32.
- Davis,T.W.(2006).*Effects of Stress, Coping Style, and confidence on Basic Combat Training Performance, Discipline, and Attrition*. PhD Thesis. Verginia Polytechnic Institute and State University.
- Dewe, P.J. (1986). An investigation into the cause and the consequences of teacher stress. *New Zeeland Journal of Educational studies*, 22(2), 145 -157.
- Dick, R. & Wagner, U. (2001). Stress and strain in teaching: A structural equation approach. *British Journal of Educational Psychology*, 27, 243-259.
- Dunham, J. (1976). Stress situations and responses. In: National Association of school masters (Ed.) *Stress in schools*. Hemel Hempstead: National Association of School masters.
- Dunham, J. (1978). Change and stress in the head of Department's role. *Educational research*, 21, 44- 47.
- Farber, B. & Ascher, C.(1991).Urban School Restructuring and Teacher Burn out.
- Farber, S. (1984).Stress and burn out in sub urban teachers. *Journal of educational Research*, 77, 325 -331.
- Ferguson, D. (1973). A study of occupational stress. *Ergonomics*, 16, 649 -664.
- Fimian, M.J. (1984). Stress, burn out and role problems among teacher trainers and first year teachers. *Journal of occupational Behavior*, 8, 157-165.
- Fimian, M.J. (1986). Social support, stress, and special education teachers: improving the work situation. *Pointer*, 31, 49-53.
- Folkman ,S.& Lazarus R.S.(1980).An analysis of coping in a middle- aged community sample. *Journal of Health and Social Behavior*,21,219-239.
- Fontana, D. (1986). *Teaching and personality*. Oxford: Basil Blackwell.
- Forbes, T. (1979). *Life stress*. New York: Double day and company, Inc.

- Freeman, A. (1987b). The coping teacher. *Research in Education*, 38, 1-16.
- French, J.R.& Caplan, R.D. (1972). Organizational stress and individual strain. *The failure of success*. New York: AMACOM.
- Friedman, I. (1995). School principal burnout: The concept and its components. *Journal of organizational Behavior*, 16, 191 – 198.
- Gaziel, H.H. (1993). Coping with occupational stress among Teachers: a cross – cultural study. *Comparative education*, 29 (1).67-78.
- Getachew Haile (1999). Stress in school teachers. *The Ethiopian Journal of education*, XIX (2), 15– 46.
- Gmelch, W.H. (1983). Stress for success: How to optimize your Performance. *Theory into practice*. 22, 1-14.
- Gowler, D. & Legge, K. (Eds.). (1975). *Managerial stress*. London: Gower press.
- Greenberg, J.S (1963). *Comprehensive stress management*. Dubuque, IOWA: WM.C. Brown & company
- Greenberg, J.S. (1996). *Comprehensive stress management (5th. Ed.)* University of Maryland.
- Hagos Zeray (1998).The relationship between sex and other characteristics to Teachers' stress and coping strategies. *Unpublished MA Thesis*. Addis Ababa University, Addis Ababa.
- Hays,W.L.(1994).*Statistics*. University of Texas : Harcourt Brace college publishers.
- Hinkel, L.E. (1974). The concept of stress in the biological and social sciences. *International Journal of psychiatry in medicine*, 5, 335 -357.
- Hinkel,D.E.(1994).*Applied statistics for the behavioral Science(3rd Ed.)*. Boston: Houghton Mifflin.
- Holahan, C, & Moos, R. (1985). Life stress and health : personality, coping, and family support in stress resistance. *Journal of personality and social psychology*, 49, 739 -747.
- House, J.S. (1981). Work stress and social support. *Reading, M.A.* Addison Wesley, 8-29.
- Houston, B.K. (1973). Variability of coping strategies, denial, and response to stress. *Journal of personality*, 41, 50 -58.
- Hunter, M. (1977). Counterirritants to teaching. *Instructor magazines*, 87, 122-125

- Ivancevich, J.M, and Matteson, M.T. (1980). Work stress management and intervention *American psychologist*, 24,252-261.
- Iwanicki, E.F. (1983).Toward understanding and alleviating teacher burn out. *Theory into practice*, 22, 27 -32.
- Kalker, P. (1984) Teacher stress and burnout: causes and coping strategies. *Contemporary*, 56(1), 16-19.
- Kloska, A. & Ramasut, A. (1985). Teacher stress. *Maladjustment and Therapeutic Education*, 3(2), 19-26.
- Kobasa, S.C. (1984). Hardiness and health: prospective study. *Journal of personality and social psychology*, 42,168-177.
- Kobasa,S.C.(1979).Stressful life events, Personality, and health: An inquiry into hardiness. *Journal of personality and Social Psychology*, 37(1), 1-11
- Kollar, E.J. (1961). Psychological stress: a re –evaluation. *Journal of Nervous and Mental Disease*, 132, 382– 396.
- Kutash, I.L. Schlesinger & Associates. (1981).*Hand Book on stress and Anxiety*. Jossey –Bass.
- Kyriacou , C.(1987).Teacher Stress and burnout: an international review. *Educational Research*, 29(2), 146-152.
- Kyriacou , C.(1997).Teacher Stress: past and present. In J. Dunham &Varma (Eds.) *Stress in Teachers: past present and future*,1-13.London:Whurr.
- Kyriacou, C. & Sutcliffe, I. (1978b). Teachers stress: prevalence, sources, and symptoms. *British Journal of Educational Psychology*, 48, 159 -167.
- Kyriacou, C. & Sutcliffe, J. (1978 a). A model of teacher stress. *Educational studies*, 4, 1-6.
- Kyriacou, C. & Sutcliffe, J. (1979a). A note on teacher stress and locus of control *Journal of occupational Psychology*, 52,227-228.
- Kyriacou, C. & Sutcliffe, J. (1979b). Teacher stress and satisfaction. *Educational Research*, 21, 2, 89-96.
- Kyriacou, C. & Sutcliffe, J. (1987). Teacher stress and burnout. *An international review.Educational Research*, 29(2), 146 -152.
- Kyriacou, C. & Sutcliffe. (1977). Teacher Stress. A review. *Educational Review* 29, 299-306.

- Kyriacou, C. (1980b). Coping actions and occupational stress among school teachers, *Research in education*, 24, 57-61.
- Kyriacou, C. (2001) Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal and coping*, New York: Springer.
- Lazarus, R.S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7, 375 – 389
- Lazarus, R.S. (1966). *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Lazarus, R.S. (1974). Psychological Stress and Coping in adaptation and illness. *International Journal of Psychiatry in Medicine*, 5, 321 -333.
- Lazarus, R.S. (1976). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lazarus, R.S. (1981). The stress and coping paradigm. *Models for clinical psychopathology*, New York, 177 -214.
- Lazarus, R.S., & Launier, R. (1978). *Stress-related transactions between person and environment*. Perspectives in interactional psychology (pp. 287 -327). New York: plenum.
- Lefcourt, H.M. (1976). Locus of control: current Trends in Theory and Research. Hillsdale.
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of work and organizational Psychology*, 5, 165-184.
- Malik, J.L. (1991). The effects of teaching experience and grade level taught on teacher stress. *Journal of Teaching and Teacher Education*, 7, 57– 62.
- Manna Olango & Tesfaye Semela. (2000). Determinants of Teachers' decision to leave or stay in the teaching profession. *The Ethiopian Journal of Education*, 20(1), 1-23
- Mark, J.H . & Anderson, B.D. (1978). Teachers survival rates: A current look *Journal of American Educational Research*, 15(3), 379 -383.
- Mark, J.H. & Anderson, B.D. (1978). Teacher servival rates: A current look. *Journal of American Educational Research*, 15 (3), 379-383.

- Mason, J.W. (1971). A re-evaluation of the concept of non specificity in stress theory. *Journal of psychiatric Research*, 8, 323 -333.
- MC Grath, J.E. (1976). *Stress and behavior in organizations*. Hand book of Industrial and organizational psychology. Pp. 1351–1395.
- McGrath, J.E. (Ed) (1970). *Social and psychological Factors in stress* (New York, Holt, Rinehart & Winston).
- Mearns, J. & Cain, J.E. (2003). Relationships between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. *Anxiety, stress and coping* 16(1), 71 -82.
- Miles, R.H. (1976). Role requirements as sources of organizational stress. *Journal of Applied psychology*, 61, 172 -179
- MOE (1999). Guideline for the implementation of career structure for teacher – revised version, Addis Ababa.
- Murray –Harvey, R. (1999). Under stress: The concerns and coping strategies of teacher education students. *Paper presented at the colloquium in field Based Education, Flinders university, Adelaide*. 24 -26 November. Retrieved December 14, 2006, from [http:// www.workstres/parctium. Com](http://www.workstres.parctium.Com).
- Nass, M.L. (1959). Characteristics of a psychotherapeutically oriented group for beginning teachers. *Mental illness*, 43, 562-567.
- Needle, R.H. Griffen, T. & Svendsen, R.(1981). Occupational stress: coping with health problems of teachers. *Journal of Health*, 51: 157 -181.
- Nock, S. (2006). Teachers for all: What governments and donors Should do? *Global Campaign for education*.
- Pearlin, L.I. & Schooler, C (1978). The structure of coping. *Journal of Health and social Behavior*, 19, 2-21.
- Pines, A.M., Aronson, E. & Kaley, D. (1981). Burnout. NewYork: the Free press.
- Pratt, J. (1978). Perceived stress among teachers: The effects of age and background of children taught. *Educational Review*, 30, 314.
- Price, L.W. (1971). Organizational stress and Job satisfaction in public high school teachers. *Dissertation Abstracts international* 31 (11-A), 5727 -5728.
- Price,E.C.(1989). Coping: Stress management techniques for students and teachers.
- Punch, K.F & Tuetteman, E. (1996). Reducing teacher stress: prevalence, sources and symptoms. *British Journal of Educational Psychology*, 68: 269 -2 79

- Punch, K.F. & Tutteman, E. (1990). Correlates of Psychological Distress among secondary school Teachers. *British Journal of Educational Research*, 16(4), 369 -382. Retrieved October 16, 2006, from [http://www. Jstor. Org/Journals/ taylorfrancis.html](http://www.Jstor.Org/Journals/taylorfrancis.html).
- Selye, H. (1956). *The stress of Life* (Mc Graw -- Hill).
- Selye, H. (1974). *Stress without Distress* (Philadelphia, Lippin cott Co.).
- Selye, H. (1975). Implications of the stress concept, *New York state Journal of Medicine*, 75, 2139 -2145.
- Similansky, I. (1984). External and internal correlates of teachers' satisfactions and willingness to report stress. *British Journal of Educational Psychology*, 54, 84 -92.
- Snyder, T.D. (Ed.) (1993). 120 Years of American education: A statistical portrait. Washington, D.C.: *National center for educational Statistics*.
- Sorenson, E.S. (1993). *Children's stress and coping*, pp. 11-15.
- Suls, J.& Felcher, B. (1985). The relative efficacy of avoidant and non avoidant coping strategies: A Meta-analysis. *Health psychology*, 4, 249 -288.
- Taylor, S.E. (1981). *Health psychology (2nd Ed.)* New York: McGraw --Hill.
- Terendall, C. (1989). Stress in teaching and teacher effectiveness: A study of teachers across main stream and special education. *Educational Research* 31, 52-58.
- Tesfaye Semela. (2005). Teachers' working conditions and their impact on plan to stay in their career in sub-Saharan Africa: The case of southern Ethiopia Retrieved on 30 April, 2007 from <http://WWW.google.com/> project Tesfaye.
- Travers, C. & Copper, C. (1996). Teachers under pressure: stress in the teaching profession. London: Routledge.
- Travers, R.M.W., Rabinowitz, W., & Nemovicher, E. (1952). The anxieties of a group of student-- teachers. *Educational Administration and supervision* 38, 368 -375.
- Tsige Gebremeskel (1997). *Perceived sources of Job-Related stress and coping -- up strategies among high school teachers in Addis Ababa*. Unpublished MA Thesis. Addis Ababa University, Addis Ababa.

- Tuettmann, E.& Punch, K.F.(1990).Correlates of Psychological Distress among secondary school teachers.*British Educational Research Journal*, 16(4), 369 -382.
- Turk, D.C, Meeks, S. Turk, L.M. (1982). Factors contributing to teachers stress: Implications for Research, prevention, and Remediation. *Behavioural counseling quarterly*,2(1).
- Warr, P. & Wall, T. (1975). *Work and well-being*. Harmondsworth: penquin
- Welford, A.T. (1973).Stress and performance. *Ergonomics*,16, 567 -580.
- Wild, B. & Hanes, C.(1976). A dynamic conceptual frame work of generalized adaptation to stressful stimuli. *Psychological Reports*, 38, 319 -334.
- Wilson, V. (2002). Feeling the strain: An overview of the literature on teachers' stress. *The Scottish council for research in education*. SCRE university of GlasGow. Retrieved December 20, 2006 from [http:// www. org.Occp.strs](http://www.org.Occp.strs).

APPENDICES

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APPENDIX A

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION
DEPARTMENT OF PSYCHOLOGY**

Questionnaire to be filled out by high school teachers

Dear teacher

The purpose of this questionnaire is to collect information for a study on high school teacher's job related stress and how they cope up with the same. The questionnaire contains three sections:

I. Back ground information about respondents

II. Sources of stress and

III. Coping strategies, which are equally important to the study. The items in each of the two sections (sources of stress and coping strategies) are clear and succinct that can be easily responded.

Therefore, your genuine response to each section would highly help in making this study a success. Confidentiality of your responses is secured. No name is required and there are no wrong answers. What ever you answer is considered right; so feel free and give your true feelings on each item.

Thank you

SECTION I. Background information

Directions: please make a tick mark (✓) in the boxes provided and write brief answer on the space provided.

1. Name of the school _____

2. Your present job title _____

3. Sex 3.1 male ☐ 3.2 female ☐

4. Level of education

4.1 Diploma ☐ 4.2 BA/BSC/BED ☐ 4.3 MA/MSc ☐

4.4 others (specify) _____

5. Teaching experience

5.1 1_4 years ☐ 5.2 5_9 years ☐ 5.3 10 years and above ☐

6. Grade level taught 6.1 9&10 ☐ 6.2 11&12 ☐

SECTION II. In this section, the items ask you how much you have experienced a stressful event. Each item has a scale of 1-5. Please make a tick mark (✓) on the space corresponding to your choice according to the values the numbers represent.

5- Extremely stressful

4- Much stressful

3- Moderately stressful

2- Mildly stressful

1- not at all stressful

No.	Sources of stress	5 extremely stressful	4 much stressful	moderately stressful 3	2 mildly stressful	not at all stressful 1
1	Poorly motivated pupils					
2	Pupils' poor attitudes towards study					
3	Pupils' non acceptance of teachers' authority					
4	Pupils' general misbehavior					
5	Maintaining class discipline					
6	Pupils who continually misbehave					
7	Pupils who show a lack of interest					
8	Difficult behavior problems					
9	Constant monitoring of pupils' behavior					
10	Noisy pupils					
11	Pupils' impolite behavior					
12	Lack of recognition for extra work					
13	Inadequate disciplinary policy of school					
14	Low status of the teaching profession					
15	Lack of time for further study					
16	Lack of recognition for good teaching					
17	Poor school facilities					
18	Inadequate salary					
19	Poor promotion opportunities					
20	Participation in decision making					
21	Poor career advancement					
22	Shortage of teaching materials/equipments					
23	Too many periods teaching /teaching overload/					
24	Large size of classes					
25	Supervisory duties (e.g. play ground, school meals)					
26	Too much paper work					
27	School too big					
28	Administrative work					
29	Demands after school time					
30	Pupils' general low ability					

No.	Sources of stress	5 extremely stressful	4 much stressful	3 moderately stressful	2 mildly stressful	1 not at all stressful
31	Mixed ability groupings					
32	Large group variability class					
33	Accountability for pupils success in exams					
34	Lack of time to prepare lessons					
35	Too much work to do					
36	Pace of school day is too fast					
37	Not enough time to do the work					
38	Lack of time for marking					
39	No time to relax between classes					
40	Lack of time to spend with individual pupils					
41	Covering lessons for absent teachers					
42	Trying to uphold /maintain values and standards					
43	Attitudes and behavior of some colleagues					
44	Attitudes and behavior of the head master					
45	Strict rules and regulations of the school					
46	Inadequacy of the present inspection system					
47	Evaluation is mostly used as a means of tit for tat					
48	The evaluation process sometimes fosters clique/group formation					
49	The currently used measure of teacher competency is not fair and adequate					
50	The criteria in the new teacher evaluation form are unrelated with the teaching learning process					
51	Mostly evaluation focuses on individuals instead of on work related problems					
52	Ratings of teacher effectiveness made by supervisors and administrators are not adequate					
53	I feel that teaching profession is not well valued in the society					
54	My dissatisfaction in the teaching profession					
55	My diminishing interest in teaching profession					
56	I feel unaccomplished at the end of the day					
57	Principal's ignorance of my presence/importance in school					
58	I am unjustly criticized by the principal					
59	Colleagues spread rumors about me					
60	I am excluded from social activities, like parties or informal meetings					

SECTION III .In this section, possible coping strategies are stated. Please consider each statement listed below and indicate by putting a tick mark (✓) on how frequently you use such strategies or actions to cope with stress in work. Each item has a response scale of 1-5.

5- always

4- usually

3- sometimes

2- rarely

1- never

No.	Teachers coping strategies	always 5	usually 4	sometimes 3	rarely 2	never 1
1	Get rid of the tension by expressing some irritability and frustration to yourself					
2	Let people know exactly where you stand					
3	Express your irritation to colleagues at work just to be able to let off steam					
4	Try to relax after work					
5	Think objectively about the situation and keep your feelings under control					
6	Try to get advice and suggestions from someone at work					
7	Try to see the humor of the situation					
8	Make a concerted effort to enjoy your self with some pleasurable activity after work					
9	Try to avoid confrontations					
10	Do nothing and carry on as usual					
11	Try to reduce the tension by after work physical activity					
12	Talk about problems with spouse or some one else after work					
13	Make sure people are aware you are doing your best					
14	Try to reassure yourself every thing is going to workout alright					
15	Express your feelings and frustrations to others so that you can think rationally about the problems					
16	Take a day off to recover					
17	Talk about the situation with someone at work					

No.	Teachers coping strategies	always 5	usually 4	sometimes 3	rarely 2	never 1
18	Try to forget work when the day is finished					
19	Just let the feeling wear off					
20	Leave the problem and try to solve it later by taking it through at home					
21	Consider a range of plans for handling the sources of stress –set priorities					
22	Try to find out more about the sources of stress-look out additional information					
23	Try to keep things in perspective					
24	Try to nip potential sources of stress in the bud					
25	Stand back and rationalize the situation					
26	Don't let the problem go until you solved it or reconciled it satisfactorily					
27	Throw yourself into work and work harder and longer					
28	Become more involved in life at home					
29	Become more involved in after work activity outside home					
30	Think of good things in the future					
31	Try not to worry or think about it					
32	Take some extra work home and work on it					
33	Try to take some immediate action on the basis of your present understanding of the situation					

IV. Please list any secondary school teacher stress with their solutions, which you think of are additional.

Problems_____

Solutions_____

APPENDIX – B **Item Total Statistics for Stress Scores**

Item Code	Stress items	Scale Mean if Item Deleted	Scale variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
S01	Poorly motivated pupils	197.4869	1100.441	.359	.932
S02	Pupils' poor attitudes towards study	197.4712	1098.029	.403	.932
S03	Pupils' non acceptance of teachers' authority	197.6911	1098.341	.360	.932
S04	Pupils' general misbehavior	197.6283	1096.730	.392	.932
S05	Maintaining class discipline	197.7120	1091.817	.417	.932
S06	Pupils who continually misbehave	197.8848	1094.713	.387	.932
S07	Pupils who show a lack of interest	197.5864	1095.749	.398	.932
S08	Difficult behavior problems	197.9686	1094.052	.413	.932
S09	Constant monitoring of pupils behavior	197.8796	1102.549	.313	.933
S10	Noisy pupils	197.8482	1103.119	.289	.933
S11	Pupils' impolite behavior	197.8272	1099.375	.361	.932
S12	Lack of recognition for extra work	198.0105	1086.737	.521	.931
S13	Inadequate disciplinary policy of school	197.8115	1089.343	.471	.932
S14	Low status of the teaching profession	197.7016	1089.916	.387	.932
S15	Lack of time for further study	198.0838	1081.940	.510	.931
S16	Lack of recognition for good teaching	197.9424	1084.055	.509	.931
S17	Poor school facilities	197.8220	1088.547	.446	.932
S18	Inadequate salary	197.1099	1099.888	.346	.932
S19	Poor promotion opportunities	197.3037	1092.728	.457	.932
S20	Participation in decision making	197.9058	1088.517	.493	.932
S21	Poor career advancement	197.5864	1087.233	.488	.932
S22	Shortage of teaching materials/equipments	197.9110	1081.755	.544	.931
S23	Too many periods teaching /teaching overload/	197.5079	1085.588	.492	.931
S24	Large size of classes	197.3141	1095.301	.360	.932
S25	Supervisory duties (e.g. play ground, school meals)	198.2880	1084.848	.530	.931
S26	Too much paper work	198.1466	1094.652	.397	.932
S27	School too big	198.2147	1090.054	.408	.932
S28	Administrative work	198.1675	1084.224	.505	.931
S29	Demands after school time	198.1257	1095.374	.406	.932
S30	Pupils' general low ability	197.4869	1091.672	.266	.934
S31	Mixed ability groupings	198.0209	1104.221	.316	.933
S32	Large group variability class	197.8691	1101.567	.341	.932
S33	Accountability for pupils success in exams	197.6806	1090.082	.439	.932
S34	Lack of time to prepare lessons	198.2932	1076.787	.560	.931
S35	Too much work to do	197.7120	1081.711	.537	.931
S36	Pace of school day is too fast	198.2042	1089.605	.455	.932
S37	Not enough time to do the work	198.1204	1080.306	.558	.931
S38	Lack of time for marking	198.1571	1092.954	.445	.932
S39	No time to relax between classes	197.7801	1086.951	.477	.932
S40	Lack of time to spend with individual pupils	197.8586	1093.880	.375	.932

APPENDIX – B (cont'd)

Item Total Statistics for Stress Scores

Item Code	Stress items	Scale Mean if Item Deleted	Scale variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
S41	Covering lessons for absent teachers	198.5445	1096.176	.360	.932
S42	Trying to uphold /maintain values and standards	198.0942	1087.686	.554	.931
S43	Attitudes and behavior of some colleagues	198.2199	1092.667	.442	.932
S44	Attitudes and behavior of the head master	198.1885	1092.175	.434	.932
S45	Strict rules and regulations of the school	198.0628	1085.975	.471	.932
S46	Inadequacy of the present inspection system	198.0524	1094.018	.483	.932
S47	Evaluation is mostly used as a means of tit for tat	197.9581	1096.135	.368	.932
S48	The evaluation process sometimes fosters clique/group formation	198.0942	1092.896	.445	.932
S49	The currently used measure of teacher competency is not fair and adequate	197.6597	1092.194	.410	.932
S50	The criteria in the new teacher evaluation form are unrelated with the teaching learning process	197.6073	1095.608	.364	.932
S51	Mostly evaluation focuses on individuals instead of on work related problems	197.5393	1092.029	.433	.932
S52	Ratings of teacher effectiveness made by supervisors and administrators are not adequate	197.5916	1086.853	.490	.932
S53	I feel that teaching profession is not well valued in the society	197.3298	1097.949	.292	.933
S54	My dissatisfaction in the teaching profession	197.7225	1093.191	.339	.933
S55	My diminishing interest in teaching profession	197.8272	1096.228	.320	.933
S56	I feel unaccomplished at the end of the day	198.1728	1090.617	.424	.932
S57	Principal's ignorance of my presence/importance in school	198.2513	1079.558	.361	.933
S58	I am unjustly criticized by the principal	198.6126	1084.554	.476	.932
S59	Colleagues spread rumors about me	198.8482	1087.266	.428	.932
S60	I am excluded from social activities, like parties or informal meetings	198.9476	1085.850	.433	.932

APPENDIX - C

Item -Total Statistics for Coping Items

Item Code	Coping items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CS01	Get rid of the tension by expressing some irritability and frustration to yourself	112.9118	281.135	.290	.878
CS02	Let people know exactly where you stand	112.6078	280.417	.382	.876
CS03	Express your irritation to colleagues at work just to be able to let off steam	112.7500	280.602	.352	.876
CS04	Try to relax after work	112.5441	278.170	.419	.875
CS05	Think objectively about the situation and keep your feelings under control	112.1275	280.003	.415	.875
CS06	Try to get advice and suggestions from someone at work	112.5000	272.015	.567	.872
CS07	Try to see the humor of the situation	112.6618	274.658	.533	.873
CS08	Make a concerted effort to enjoy your self with some pleasurable activity after work	112.5343	272.122	.583	.872
CS09	Try to avoid confrontations	112.3284	281.384	.338	.877
CS10	Do nothing and carry on as usual	113.2794	279.591	.310	.878
CS11	Try to reduce the tension by after work physical activity	113.0980	274.493	.452	.874
CS12	Talk about problems with spouse or some one else after work	112.7206	276.055	.483	.874
CS13	Make sure people are aware you are doing your best	112.5049	275.502	.517	.873
CS14	Try to reassure yourself every thing is going to workout alright	112.3873	275.174	.545	.873
CS15	Express your feelings and frustrations to others so that you can think rationally about the problems	112.3480	280.435	.404	.875
CS16	Take a day off to recover	113.0294	274.117	.457	.874
CS17	Talk about the situation with someone at work	112.4167	280.451	.396	.876
CS18	Try to forget work when the day is finished	113.5539	282.889	.209	.880
CS19	Just let the feeling wear off	112.9559	277.303	.485	.874
CS20	Leave the problem and try to solve it later by taking it through at home	112.7059	274.465	.525	.873
CS21	Consider a range of plans for handling the sources of stress -set priorities	112.6078	273.639	.556	.872
CS22	Try to find out more about the sources of stress- seek out additional information	112.4314	278.788	.227	.882
CS23	Try to keep things in perspective	112.3873	274.780	.607	.872
CS24	Try to nip potential sources of stress in the bud	112.7990	280.211	.439	.875
CS25	Stand back and rationalize the situation	112.4706	278.930	.453	.875
CS26	Don't let the problem go until you solved it or reconciled it satisfactorily	112.4608	280.072	.400	.875
CS27	Through yourself into work and work harder and longer	112.1324	280.943	.384	.876
CS28	Become more involved in life at home	112.2549	279.137	.422	.875
CS29	Become more involved in after work activity outside home	112.7108	278.423	.427	.875
CS30	Think of good things in the future	111.7745	282.905	.324	.877
CS31	Try not to worry or think about it	112.2353	276.545	.160	.890
CS32	Take some extra work home and work on it	112.5049	278.892	.407	.875
CS33	Try to take some immediate action on the basis of your present understanding of the situation	112.2451	275.989	.509	.873

DECLARATION

I, the undersigned, declare that this thesis entitled "A study of Job Stress and Coping Strategies Among North Shoa Zone High School Teachers in Relation to Selected Demographic Variables" is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

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Date of Submission July, 2007

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