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AN ANALYSIS OF TEACHER STRESS AS PERCEIVED BY FACULTY MEMBERS FROM SELECTED SCHOOLS IN TENNESSEE

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

Margie Helton Carico

August 1985

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DEDICATIONS

IN HONOR OF

MY FATHER, Otis Helton
MY MOTHER, Mollie Asher Helton
MY DAUGHTERS, Tracy and Shelley
MY SON, Steve

AND

IN MEMORY OF

MY SISTER-IN-LAW, Emily Turner Helton
(April 19, 1935-January 20, 1978)

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M.H.C.

ABSTRACT

The purpose of this study was to determine the sources of teacher stress, to identify recommendations for dealing with this stress, and to provide information for developing guidelines to help reduce stress.

The population used in the study was faculty members from five school systems in Blount and Hamblen Counties in Tennessee. The 48 schools which were selected included a total sample of 1,165 elementary, middle school, high school, and special education teachers who were asked to complete a survey questionnaire designed to measure their perceptions of teacher stress.

An analysis of the responses of 93.5% of those surveyed produced the following major findings:

1. A major source of stress for teachers was inadequate salary.

2. A second major stress factor was insufficient time to properly perform their duties.

3. The amount of clerical work was a major stress factor.

4. Parental indifference toward school activities was an important cause of stress.

5. The actions recommended by teachers for reducing stress all included giving them more time, money, support, and control.

An analysis of the findings produced the following major conclusions:

1. Along with time-related pressures and a lack of support, a poor self-image and inadequate participation in decision-making are stressful to teachers.

2. The questionnaire used in this study could assist administrators in identifying and solving stress problems.

3. Research on teacher stress cannot be generalized across subpopulations.

Based on the findings and conclusions, the following major guidelines were developed:

1. Every attempt should be made by schools to give the maximum amount of resource support directly to teachers.

2. Teachers should be given intensive and continuing in-service concerning classroom discipline, motivation of students, teacher-community relations, and the evaluation of pupil progress.

3. The number of noninstructional activities should be reduced and should not be assigned to teachers.

4. Teachers should be invited to utilize their skills in nontraditional roles within the educational system.

Based on the findings and conclusions, the following recommendations for further research can be made:

1. Factors causing stress in other subpopulations of teachers need to be identified.

2. The extent to which teacher stress affects both teacher and pupil performance should be studied.

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CHAPTER I

INTRODUCTION

No one can live without experiencing some degree of stress most of the time. This does not necessarily imply a negative connotation, however, since normal life, especially pleasure and fulfillment, can cause some stress. In short, stress in inevitable. A productive life needs appropriate levels of stress to activate it, but they should not be so intense that they endanger or impair our mental or physical health.

Professional educators are particularly vulnerable to stress. The stress phenomenon seems to have penetrated the teaching profession, causing necessary concern among educators. Effort has been made to combat or eliminate those factors which cause stress to be an occupational hazard of teaching. This effort has often resulted from the increased concern among national organizations and teacher associations regarding teacher stress.

It is important to note national trends in teacher anxiety, but more valuable to measure levels of stress within a specific school building or school system. The literature, however, includes only a few studies which document the sources of teacher stress and the recommended actions for dealing with the phenomenon. These studies have not resulted in specific guidelines for reducing teacher stress. Thus, the limited research suggests a need for a study of teacher stress which will yield valuable information for creating and maintaining a suitable environment for reducing such stress.

Statement of the Problem

For the past thirty years, various organizations and agencies, as well as individuals, have researched anxiety, tension, and stress among teachers. As early as 1939, the National Education Association reported specific sources of teacher anxiety.

A good deal of attention has been paid by practitioners and researchers to the desirability and the possibility of attaining congruence between the needs of the individuals and the demands that organizations make on them. The problem centers around many factors which are responsible for creating this congruency without promoting undesirable levels of stress.

Educators who are responsible for managing the complexity of the school organization constantly deal with teacher stress. They must understand not only the underlying causes, but also the recommendations suggested by teachers for dealing with stress. The incidences of teacher stress and the lack of available resources for reducing stress are problems facing these educators. Much of the reduction of teacher stress within schools today tends to be trial and error or intuition, rather than based on tested principles with a research base. This situation exists partly because there is limited information about such principles. Effective means of reducing teacher stress should be based on principles and guidelines that have been developed from both research and practice. It is not generally understood, however, exactly how teacher stress occurs in the complex organization of the school environment. Specifically, the recommended actions which

teachers feel are appropriate measures for dealing with teacher stress are not clearly understood, so that educators do not have specific guidelines for effectively reducing teacher stress.

The problem, then, becomes one of identifying and defining those conditions found within the school which are sources of stress among teachers and determining the approaches recommended for correcting or eliminating persistent stress problems. It is reasonable to assume that as more educators become cognizant of the tremendous influence they have in reducing stressful situations, the incidence of job stress and pressure will decrease, thus insuring more effective teaching in the classroom.

Purpose of the Study

A timely problem exists with the increased concern regarding teacher stress. The purpose of this research was to determine those sources which cause teacher stress and to identify those recommended actions for dealing with this stress phenomenon. An additional purpose was to develop a set of guidelines which might serve to help reduce teacher stress.

The study attempted to answer the following questions:

1. Which sources of stress do teachers perceive as being the most significant and as posing the greatest problem?
2. What are the approaches recommended by teachers for eliminating or preventing the most persistent stress factors?
3. What guidelines can be recommended which could be helpful in reducing stress among teachers?

Importance of the Study

It is apparent that teachers in general are becoming exhausted from excessive demands on energy, strength, and resources. These demands have been created for a number of reasons. Miller (1979) noted that our society, our modern manner of living, and the environment in many of our schools have created a stress epidemic. The failure of many research efforts to provide guidelines for reducing teacher stress contributes to the continuation of stress among teachers.

School administrators are faced with the challenge of effectively reducing stress; therefore, they must develop a wide range of information and understanding in order to deal with the problem. One critical factor for administrators who desire a school which encourages innovation, staff involvement, and creativity in the least stressful environment is a specific plan for eliminating possible barriers to these characteristics. Teacher assessment of stress can provide information for the development of such a plan. In addition, teacher assessment of stress can indicate new problems in the school environment or document long-term ailments of the system. Both types of data are essential for the managing of long-range planning and short-range problem solving. The value of such an assessment can have potential as a device for detecting problems within the school, an instrument for better understanding the actions of faculty, and a guide for increasing teacher effectiveness in the classroom. The documentation of the

sources and corrective action of teacher stress can provide valuable data for administrators who need guidelines for planning curricula, faculty, or policy changes.

The present study added to the literature because it dealt with teacher stress factors in small-town and rural, southern school systems, which closed a major gap in the data which previously existed relative to teacher stress. The findings of this study added an additional unique contribution by having addressed recommendations which teachers cited as being the most valuable in reducing stress. Further, the study addressed groups of professional educators teaching in elementary, middle school, high school, and special education settings. In addition, the study provided concrete guidelines for reducing teacher stress instead of stress management techniques.

Assumptions

Assumptions particular to the study include:

1. Factors can be identified among educators regarding teacher stress, its sources, and recommended actions for dealing with the phenomenon.
2. Guidelines need to be developed for reducing teacher stress.
3. The present literature does not include sufficient research on teacher stress.
4. A descriptive survey, using a questionnaire, will effectively provide the necessary information to answer the research questions posed in this study.

Design and Procedures of the Study

It is appropriate to study teacher stress carefully. Analyzing data from teachers and their perceptions should help to determine the sources of stress, as well as those actions teachers recommend as appropriate procedures for dealing with teacher stress. This analysis will also provide information for developing guidelines to help reduce teacher stress.

A descriptive survey is an effective method of gathering such data; therefore a 98-item teacher-stress questionnaire was designed and utilized by the investigator (see Appendix A).

Content Validity

The content validity of the instrument was evaluated on the basis of the criteria set forth in the literature and by a field testing of the questionnaire. Subjects for this test constituted a panel of experienced teachers. Members of this panel were asked to evaluate the instrument's appropriateness. All of the items were deemed appropriate by the field test participants.

Reliability

Two-thirds of the group endorsed the questionnaire in its original form. The remainder offered suggestions for slight modifications in formatting and in word choices. These modifications were subsequently made. Thus, the form, organization, and clarity of the items was deemed to be acceptable and the general directions for completing the questionnaire clear.

The instrument was pilot tested with a group of graduate students at The University of Tennessee, Knoxville, most of whom were teachers in nearby school systems. Individuals in the pilot study were asked to complete the instrument and also to suggest additional items, editorial changes, or other modifications of the questionnaire. Feedback from the pilot testing was used in revising the instrument to increase clarity.

The revised questionnaire was used to survey faculty members from five school systems in Blount and Hamblen Counties in Tennessee. This selection yielded 31 elementary schools, 3 special education centers, 8 middle schools, and 6 high schools. A total sampling of the population yielded 1,165 teachers as participants in the study. Before the questionnaire was administered, each principal was contacted by phone for the purposes of explaining the study and scheduling a convenient time for faculty members to complete the survey instrument. A letter followed this initial contact and included a description of the study and additional information regarding the procedure to be used for data collection (see Appendix B).

The investigator delivered the questionnaires to the principals of each of the schools on specific days which had been prearranged. Each principal distributed the questionnaires to teachers, who then completed the survey instrument. This personal contact allowed the investigator to monitor the data collecting. Since greater reliability of results can be obtained by using a total sampling technique, all faculty members from these schools were used as subjects. It was expected

that the utility of such a comprehensive instrument and large pool of subjects would provide substantial data to add to the knowledge of teacher stress and to aid in identifying effective administrative practices to serve as guidelines for reducing teacher stress.

Analysis of the Data

An analysis was made of the responses to each item on the questionnaire by teachers in the elementary, middle school, high school and special education subpopulations. This analysis was done in terms of total number of responses, percentage of degree of stress assigned by the respondents to each of the stress factors, and percentage of the degree of value assigned by the respondents to each recommended action for stress reduction.

The results of this analysis were used to rank order the sources of stress which the respondents perceive as being the most significant. Additionally, these results were used to rank order the approaches which were recommended by the respondents for eliminating the most persistent stress factors.

To provide further analysis, these results were used to determine the amount of stress which teachers were experiencing in relation to their age, sex, years of teaching experience, level of schooling, and degrees held.

The results of this statistical analysis provided information for establishing guidelines which could be used in reducing teacher stress.

Delimitations

The study was limited to faculty members in public schools in Blount and Hamblen Counties who were surveyed during April, 1983.

Definitions

The following definitions were used in the study:

1. Stress is a nonspecific response of the body to any demand (Selye, 1976).

2. Teacher stress is a response resulting from aspects of the teacher's job which constitute a threat to self-esteem or well-being, resulting in situations which (a) may cause frustration and unhappiness, or (b) may require knowledge and skills which the teacher does not possess, or (c) may lead to becoming dissatisfied with the teaching position, or (d) may lead to criticism by superiors, other teachers, or parents (Kyriacou & Sutcliffe, 1979).

3. Environmental stress refers to inanimate impactors in the physical surroundings of the educator which are inherent in the school system and outside of direct teacher control (Hodge & Marker, 1978).

4. Interpersonal stress is the result of interactions with one or more individuals in the school setting which involve communications and human relations skills (Hodge & Marker, 1978).

5. Intrapersonal stress refers to impactors that affect each teacher individually and relate to education, classroom skills, self-concept, and motivation (Hodge & Marker, 1978).

Organization of the Study

Chapter I contains the statement of the problem; the purpose of the study and specific questions to be answered; the importance of the study; the assumptions; the design of the study, including methods and procedures of data collection and analysis; the delimitations, and the definitions of terms used in the study.

Chapter II consists of review of the literature, especially the research, which has provided the basis for the study.

Chapter III presents the methods and procedures used for the study.

Chapter IV included the presentation and analysis of data, and Chapter V contains a summary, findings, guidelines, conclusions, and recommendations for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter includes a review of the literature which is related to the purposes of the study. From this review, these areas of teacher stress emerge: environmental stress, interpersonal stress, and intrapersonal stress. The characteristics of each of these areas formed the context in which the research questions were answered. The review of literature also established the basis for a stress questionnaire which was developed and used for this survey research study.

This review is organized into the following sections: Major Areas, Environmental Factors Affecting Stress, Interpersonal Factors Affecting Stress, and Intrapersonal Factors Affecting Stress.

Major Areas of Teacher Stress

Stress affects teachers at all levels in rural, suburban, and urban schools. Since each teacher is a unique human being, it is impossible to list all the occurrences that cause harmful stress. Teachers are people, too, and difficulties in their personal lives may affect the level of stamina and emotional energy they bring to their classrooms. The following generalizations about job-related teacher stress can, however, be drawn from the literature.

In today's rapidly changing society, stress and change are a normal past of living (Gmelch, 1978). Classroom teachers are not immune to either one. In fact, "change is a major source of stress for teachers," as they face the need to cope with such concerns as mainstreaming, contract negotiations, alternative family lifestyles, and inflation (Sylwester, 1977). In the process of coping effectively with stress, the first step is to identify the factors which produce it. A survey of those researchers who have investigated teacher stress (Hodge & Marker, 1978; Gupta, 1981; Dunham, 1983; and Swick & Hanley, 1980) indicates that these factors can be divided into three main categories: environmental, interpersonal, and intrapersonal. Each of these categories can be further subdivided into various problem areas. Environmental factors include problems in the area of instructional responsibilities, noninstructional duties, and working conditions. Interpersonal factors include problems in the area of relationships with colleagues, and relationships with parents. Intrapersonal factors include problems in the area of self-fulfillment.

The incidence of various types of emotional maladjustment, particularly stress, among teachers has received considerable attention since early in this century. In 1938 the Department of Classroom Teachers of the National Education Association reported that 37.5% of their nationwide sample of 5,150 teachers indicated they were seriously worried and nervous. In 1951, 43% of a sample of 2,200 teachers reported that they were working under considerable stress and tension (National Education Association, 1951). Of 2,290 teachers surveyed

in 1967, 78% of the teachers indicated they experienced stress at a moderate or considerable level.

Adams (1975) highlighted three recently developed conditions contributing to teacher frustration. The first concerned conflicting values. The civil rights movement, feminism, and other social events significantly changed the moral climate in which teachers practice and also changed the personal values of many teachers. Tension is most often the result when teachers' values differ from social norms, particularly those of the local community, administrators, students, or other teachers.

A second recent resource of frustration is the increased public demands for teacher accountability. Teachers are being held responsible for producing specified results in student performance tests where the results are influenced by factors beyond the teachers' control. Even in the area where they could have an impact, which is the classroom, teachers operate under constraints concerning course content, teaching methods, and student evaluation.

The third source of frustration Adams called "the good shepherd ethic." This ethic requires teachers to insure that each student is successful in school and is embodied in the concepts of student-centered teaching and individualized instruction. The ideal of providing the best education for each individual by meeting his or her unique needs is probably impossible to attain in the context of today's mass education.

Public education has had to subordinate diversity to efficiency, with standardized curricula, group-oriented instruction, and uniform

rules and schedules. For some teachers, commitment to an ethic of individual development in a context of mass education can create a sense of inadequacy and dissatisfaction with themselves and with the system of which they are a part.

Fuller (1969, 1974) conceptualized the concerns of teachers as a developmental progression. He noted that the preteaching phase is characterized by nonconcern, the beginning-teacher phase by concerns with self, and the later teaching phase by concerns with students and their educational growth and with personal teaching performance.

Beginning teachers' self-reported stress and concerns were centered around: (1) their ability to maintain discipline in the classroom, (2) students' liking to them, (3) their knowledge of the subject matter, (4) what to do in case they made mistakes or ran out of materials, and (5) how to relate personally to other faculty members, the school system, and parents.

Experienced teachers have reported different concerns about sources of stress. Fuller (1969) hypothesized and later found partial support (Parsons & Fuller, 1972) for the contention that practicing teachers' concerns center around their "ability to understand pupils' capacities, to specify objectives for them, to assess their gain, to partial out one's own contribution to pupil difficulties and gain, and to evaluate oneself in terms of pupil gain" (Fuller, 1969, p. 221). The chief sources of stress among experienced teachers related to (1) time demands, (2) difficulties with pupils, (3) large class enrollments, (4) financial constraints, and (5) a lack of educational resources.

Fuller's conceptualization of the developmental process of teachers is further supported by Burden (1982) who identified three stages of teacher career development. He noted that in the survival stage, which occurs during the first year of teaching, the major concerns of the teacher are meeting professional responsibilities and adjusting to the school environment. The second, third, and fourth years of teaching are years of adjustment, growth in classroom techniques, and increasing confidence. At the mature stage, from the fifth year on, most teachers feel professionally secure. Stress which teachers experience in the mature stage of teaching appears to center on the teachers' abilities to keep teaching interesting for themselves and to meet changing educational expectations.

Appendix C includes an additional review of the related literature which considers teacher stress during the beginning through the later teaching phases. The reported sources of stress cited in this section cut across the three categories of Environment, Interpersonal, and Intrapersonal Factors. Each concern can be found in one of the five subcategories of Instructional Responsibilities, Noninstructional Duties, Working Conditions, Relationships with Colleagues, and Relationships with Parents, as well as the category of Intrapersonal Factors.

Environmental Factors Affecting Stress

Teachers may encounter a myriad of environmental stressors, which Hodge and Marker (1978) define as "inanimate impactors in the physical surroundings of the educator." As Sparks (1979) noted, "the

stage is set for job-related stress when involvement in the work is high as in teaching, but feelings of control or power in the work setting are limited."

The December, 1979 issue of The Massachusetts Teacher published the results of their Stress Survey in which 300 respondents (population = 450) answered questions. The top six job-related stressors for all personnel were increased paperwork, disruptive students, lack of preparation time, public pressure, limited income, lack of decision-making opportunities.

In September 1976, Instructor magazine published a questionnaire on teacher health and invited responses from its readers (Landsman, 1978). More than 9,000 teachers completed the questionnaire. It was found that 84% of the respondents believed there were health hazards in teaching, and 75% reported that at least some of the work days they lost to illness were related to stress or tension. These teachers indicated that stress was a major force affecting their health. Stressors they cited included large class size, lack of teaching materials, increasing discipline problems, public pressures on teachers, and difficulty in accepting the idea that there are limits to what schooling can achieve.

The Newark Teacher Center surveyed its district teachers and found that approximately 75% of the respondents reported teaching to be moderately stressful, with 41% indicating that their jobs were very or extremely stressful (Newark Teacher Center Newsletter, 1979). These urban teachers said that the most stressful parts of their work

had to do with student characteristics such as poor attitudes toward school work, low motivation, and behavioral problems.

Recent research at the University of Michigan (Cooke & Kornbluh, 1980) compared teachers' quality of work life with that of 2,000 workers of all kinds who were included in the university's Institute of Social Research 1977 Quality of Employment Survey. The sample population included 200 southeastern Michigan teachers from 25 schools.

It was found that, nationally, teachers were more than twice as likely as other workers to report job-related illness. Teachers reported several major sources of dissatisfaction, including health and safety hazards, an unpleasant work environment, a desire for additional fringe benefits, inadequate resources, and poor job security and mobility.

Other findings from this study were also of interest. First, teachers were found to be less satisfied with their jobs than were workers from all of the other categories included in the national sample. Second, teachers were more dissatisfied than college graduates in other professions. Third, job satisfaction among teachers varied from school to school.

Perhaps the most frequently cited research on teacher stress was conducted by the Chicago Teachers Union (1978) and Cichon and Koff (1980). In this study, more than 22,000 surveys were sent to certified teachers. Of the responding teachers, 56% had suffered a physical illness that they related to stress on the job, and 26% attributed a mental illness to stress on the job. The analysis of job-related stress

factors for these teachers showed that concerns for psychological well-being and physical safety superseded pedagogical issues. The top five stressors were involuntary transferal, managing disruptive children, notice of unsatisfactory performance, threats of personal injury, and overcrowded classrooms. The Chicago teachers perceived themselves as suffering the ill effects of stress and identified specific elements of their work that were contributing to the problem.

A similar study was conducted by the New York State United Teachers (1979). The six most salient stress producing factors were managing disruptive children, lack of administrative support, maintaining self-control when angry, overcrowded classrooms, the opening week of school, and disagreeing with the supervisor. Forty-one percent of the teachers surveyed indicated they had experienced illness related to stress they felt in the classroom.

Research conducted by Collins and Masley (1980) revealed similar findings. In this study the stress factors consistently related as highest were involuntary transfer, reduction in force, discipline, and salary.

Tacoma, Washington issued an analysis of its stress survey conducted in May, 1979. Approximately half of its staff responded (747 out of 1500). Participants were asked to rank order job factors by their perceived severity. The top six were involuntarily transfer notification of unsatisfactory performance, colleague assault in school, managing disruptive students, disagreement with supervisor, and overcrowded classrooms.

Data gathered by the National Education Association also point to major sources of teacher stress (McGuire, 1979). The NEA's 1979 nationwide teacher opinion poll revealed that approximately one teacher in 20 was physically attacked by students on school property during the 1978-79 school year. About a fourth of the respondents said that their property was damaged at school during the same school year.

Teachers often feel powerless. They may have little or no control over the choice of textbooks or the availability of instructional materials. They also perceive that they have little influence over some factors directly related to instruction, including unreasonably large class sizes, disruptive students, and an excessively wide range of abilities within classes. Sparks (1981) noted that these events or circumstances alone do not produce stress in teachers. Rather, it is a sense of responsibility for these situations, coupled with the feeling of powerlessness, that produces harmful stress. Feelings of failure and hopelessness often result from unrealistic goals or from working against the grain of a situation. To cope with stress, some teachers, perhaps consciously, have decreased their sense of caring about their work and about students. They reject the responsibility. This emotional deadening is a defense against what they perceive to be the unpleasant realities of teaching.

Other sources of stress have been identified in prior research. A review of seven studies (Coates & Thoresen, 1976) found that the chief sources of anxiety among experienced teachers related to time demands, difficulties with pupils, large class enrollments, financial

constraints, and a lack of educational resources. Another published review of the literature (Kyriacou & Sutcliffe, 1977) reported that clerical duties, negative student attitudes toward learning, inadequate teacher salaries, poor working conditions, and teaching pupils who have a wide range of abilities were common complaints among the teachers surveyed.

Instructional Responsibilities

Lack of adequate instructional materials and teaching resources produces stress in classroom teachers (Coates & Thoresen, 1976; Hodge & Marker, 1978; Landsman, 1978; Olander & Ferrell, 1970; And Sparks, 1979). Freeman (1979) noted that because today's children are accustomed to being bombarded with fast-moving, highly charged action on television programs, it is not easy to hold their attentions. Teachers need to have access to effective appropriate instructional materials and teaching resources for planning creative lessons to capture students' attentions.

Time management problems are closely related to the multiple-role conflict. Because there are so many things to do every day, time is a real commodity. Sleep may be sacrificed so that papers can be corrected or graduate classes and workshops attended. Personal interests that tend to alleviate stress, such as reading, enjoying music, or exercising, are often placed at the lowest priority and ignored because of a lack of time or energy. Time pressures are experienced in the classroom when numerous demands are made on the limited instructional time available to teachers. Teachers are expected to teach the basic

skills, address the affective concerns of students, and meet the needs of mainstreamed and gifted children. Although most teachers support special services, the classroom teacher's work is more difficult when students leave class for instrumental music, counseling, and other programs. While public insistence for accountability has increased, the actual time available for instruction has decreased significantly. Teachers are caught in a time bind.

Several studies in the literature note that, for many classroom teachers, time pressures and scheduling are a serious source of stress (Coates & Thoresen, 1976; Kyriacou & Sutcliffe, 1978; Landsman, 1978; and Olander & Ferrell, 1970). Swick and Hanley (1980) agree that these same pressures promote stress when teachers must be clerks, counselors, public relations specialists, nurses, and assume many other roles.

The work of Kyriacou and Sutcliffe (1977) also viewed scheduling as stressful. They noted that, with a daily schedule limited to approximately 6 or 7 hours, teachers must take attendance and collect various monies, write letters to parents, record students' progress, teach five to six different subjects or classes, attend to the special needs of individual children, meet with parents or other faculty members, prepare teaching materials, plan the next day's lessons, grade papers, and fill supervisory roles such as cafeteria or bus duty or monitoring study halls. In support of Kyriacou and Sutcliffe (1977), Sparks (1979) noted that many teachers report that they frequently or always leave school physically and/or emotionally exhausted from the stress encountered during the day.

As part of the scheduling problems, proliferating curricular demands also can be very stressful (Dillon, 1978). Each day elementary teachers teach five to seven basic subjects, and secondary programs include a similar number of obligatory subjects. Many states and school districts are requiring that additional courses, such as nutrition education, sex education, consumer information, and auto mechanics, be incorporated into the curriculum. The officials who mandate these extra requirements are confident that such topics are essential. It is the classroom teacher, however, who must reorganize an already full schedule in order to include these additional curricular offerings. The teacher is pressured to manage and, again, may be put under undue stress.

Hodge and Marker (1978), Kyriacou and Sutcliffe (1977), and Styles and Cavangh (1977) agree that educators at every grade level complain about the large number of interruptions during teaching time. Further, in another study by Hodge and Marker (1978), teachers ranked class interruptions first in frequency and second in bothersomeness as stress causers. Classroom work is continually interrupted or rescheduled to accommodate announcements, special assemblies, fund-raising events, athletics, sick children, visiting parents, and other events. On some days, the number of frequency of interruptions cause such teacher frustration and stress that continued teaching seems useless. Further stress results if the teacher fails to accomplish the goals or tasks set for the lesson or the day.

Another source of environmental stress relates to federal programs and regulations (Harlin, 1978). Often such programs are thrust

upon classroom teachers without adequate preparation to familiarize them with the programs' goals and purposes. Yet teachers are expected to implement them in a quality manner. Additionally, there are many federal regulations that impinge upon the public schools, and the classroom teacher is ultimately accountable for their implementation. A recent example is the implementation of Public Law 94-142 relating to mainstreaming handicapped children in regular classroom settings. Many teachers are unprepared to deal with the unique needs of these special children (Bensky, 1979). They may not understand the child's problem, and they may not have had appropriate training to enable them to plan effectively for teaching these unique children. Although local school systems are required to comply with federal regulation, they may not be financially or environmentally prepared to do so. The burden for directly implementing this federal mandate falls upon the classroom teacher who, as a result, may become frustrated and upset and, therefore, subject to tension and stress. Mainstreaming of special education students provides a concrete example of environmental stress for teachers in today's schools.

Noninstructional Duties

According to Kyriacou and Sutcliffe (1970), Sparks and Ingram (1979), and Walsh (1979) the pressure caused by paper work has become a tremendous source of stress. This work includes forms to complete; reported to write; assessments to compile; notices to compose, duplicate, and send; and curricular materials to develop and write.

Teachers also are concerned about whether or not their students like them. They feel compelled to try to reciprocate the affection of their students. Since discipline and behavior problems can be primary sources of stress, it may not always be easy for a teacher to like all students. Several researchers are in agreement with this speculation (Cichon & Koff, 1978; Coates & Thoresen, 1976; Dunham, 1977; Harlin, 1978; Landsman, 1978; Olander & Ferrell, 1970; Pratt, 1978). If students assault a teacher physically or verbally, it is extremely difficult for the teacher to remain clam and understanding (Sparks, 1979; Walsh, 1979).

Discipline and classroom control are a major source of stress for teachers at all grade levels. In many instances, they are dealing with students from varied backgrounds. Some of these students have had few personal constraints placed on them before their school experience (Dillon, 1978). Although the public, parents, and administrators demand educational accountability, educators have to contend with many discipline problems which take time away from teaching (Sparks, 1979). Some children have emotional difficulties, and some have developed a negative attitude toward learning and school (Harlin, 1978; Kyriacou & Sutcliffe, 1977; Olander & Ferrell, 1970; Sparks, 1979). When pupil misbehavior interrupts and/or interferes with the teaching-learning process, pressure and tension result which in turn add to teacher stress.

Leffingwell (1979) suggests two social factors related to classroom control and discipline over which teachers have little control:

(1) parent's unrealistic expectations of their child's ability, and (2) mores and standards of the peer group.

In the body of literature, several research efforts have concentrated on discipline and disruptive students. A recent study by Feitler and Tokar (1981) revealed that the biggest stress for teachers was the small number of problem students who chronically misbehaved. A sizeable survey, including 3,789 teachers in 60 school districts in Ohio and Pennsylvania, was conducted. The results showed that student misbehavior and overwork are the main sources of stress in American schools. A major focus of study by Schaiper and DelForge (1982) cited chronic discipline problems and frustration with poor student achievement as significant stress problems among professional educators. Results of a June 1982 survey by Milstein and Golaszewske (1983) revealed that, of stress factors unique to educational systems, a lack of materials and student motivation and the presence of discipline problems ranked highest. Other studies also have regarded student behavior as a stressor. Each arrived at the conclusion that deviant behavior of students in school is a primary source of teacher stress.

Bruner (1982) surveyed secondary teachers in the Houston Independent School District. Results revealed that the 19 highest ranked variables clustered around classroom management and administrative management. Classroom management concerns were at the top of the list for teachers. They ranked a lack of administrative support for discipline first and teaching hostile and disruptive students second.

The findings emphasize a need for less administrative paperwork, fewer interruptions over the school intercom, and smoother management of necessary changes in daily routine. There was a desire for administrative support in dealing with parents, for adequate security measures, and for control of hall traffic during classtime. The findings also indicated that racial and socioeconomic demographics of students and a teacher's personal family life did not create difficult teaching settings, but that problems were created by disruptive students, emotionally disturbed students, student absenteeism, and parents who did not value education.

Working Conditions

Procedures and policies of a school and/or school district are common sources of stress among teachers. When communication is inadequate and opportunities do not exist for resolving conflicts and solving problems, teachers may feel frustrated and tense. Unreasonable and illogical procedures can leave teachers feeling that their abilities and time are being wasted. Sparks and Hammond (1981) documented that certain structural characteristics of schools, such as top-down decision making and inadequate or poorly timed opportunities to meet with colleagues, are also likely to increase teachers' sense of isolation and powerlessness. In addition, some policies can have long-term implications for teachers. Sparks and Hammond (1981) addressed this concern by suggesting that a relatively arbitrary process for layoff and recall due to reduction in force as specified in

a union contract may cause teachers to believe that their careers and future depend on a few remote and uncaring individuals.

Many teachers belong to one or more professional organizations or educators' unions. During periods of contract negotiations, the relationship between the organization spokesperson and the school administration may become quite strained over matters of salary, rights, and responsibilities (Sylwester, 1977). This strain has an effect upon teachers who do not know if they will receive a salary increase and who may feel that the school administration, resisting the negotiations, is dissatisfied with or unappreciative of their teaching efforts. The negotiation process, whose main components include argument and disagreement, may therefore produce stress as teachers discuss the situation with peers, administrators, or parents of students.

Poor classroom working conditions are a continual source of stress (Hodges, 1976; Kyriacou & Sutcliffe, 1978). Frequently the classroom is too small, and student enrollment is too large (Coates & Thoresen, 1976; Hodge & Marker, 1978; Kyriacou & Sutcliffe, 1978; Landsman, 1973). A large number of students living and working in a very small space can produce tension and stress.

An important aspect of working conditions is the physical plant and its facilities. Stress can result from the lack of proper facilities within the school or a school which is in need of repairs or renovation. Improper facilities which can cause stress include the absence of an indoor play space for inclement weather, poor lighting

and light control, inadequate heating or cooling systems, outdated laboratory equipment and space, inaccessible media facilities, a lack of teacher work space, noise pollution, and poor room structure (Hodge & Marker, 1978; Swick & Hanley, 1980; and Sparks, 1979). Considered singly or in combination, these stress factors can develop into a definite source of aggravation. They can ultimately result in stress because such problems are visible and noticeable. Constant reminders of annoyances can mount until they become so detrimental to the smooth functioning of the classroom that they create stress for both teacher and children (Swick & Hanley, 1980).

In addition to inadequate facilities, Landsman (1978), in reporting the findings of a survey conducted by Instructor magazine, documented that more than one-third of the respondents felt that the physical environment of the school negatively affected them. Most of the comments about environment had to do with temperature control in the classroom. Many teachers mentioned lack of individually controlled thermostats in even new schools. Many old schools are drafty and poorly insulated. Some rooms in modern schools that have large expanses of glass for their outside walls become very hot when the sun strikes them or extremely cold with uncontrolled air conditioning. During cold weather teachers are forced to teach with the drapes or blinds closed in order to retain heat.

The results of this same survey showed that teachers also complained of poor lighting, flickering fluorescent lights, or too much glare; poor acoustics or too much noise from neighboring classrooms;

cold cement floors; dirty classrooms; and smoked-filled teachers' lounges.

Teachers, as well as the community, have known for a number of years that salaries for teachers in various districts have been less than comparable to the amount of energy and time which teachers are expected to give. Teachers working for less than they feel they are worth can dissolve self-esteem and can drain individual self-worth which, in turn, can create undue stress.

While professional concerns certainly plague educational professionals, personal considerations, such as inadequate salaries and other economic factors, also create great anguish for today's educators. Alley (1980) noted that many teachers are finding it financially impossible to continue in the profession. One large midwestern school system reported nearly 15% of the teachers in its secondary schools had resigned during the late spring and summer months of 1979. That same district reported that the number of teachers leaving the profession for high paying jobs elsewhere doubled from 1977-78 to 1978-79 (Gallup, 1979). New jobs outside of education, but in their local community and at salaries from $5000 to over 100% more per year than their teaching salaries accounted for a large percentage of the resignations.

Interpersonal Factors Affecting Stress

When anxiety occurs in teachers, it is usually associated with a variety of personal, social, and physical events arising from interpersonal experiences in the school setting. Situations involving

interpersonal communication and human relations skills may be subject to stress. Hodge and Marker (1978) define interpersonal stress as those situations that involve interactions with one or more individuals in the school setting. Teacher relationships with colleagues, administrators, clerical staff, and students can be considered as interpersonal situations which might cause stress. Those stresses involved when attempting to communicate with students of varying needs, interests, and abilities are interpersonal in nature. Reacting to inattentive students can be one of the most stressful interpersonal situations. Discussing discipline procedures with pupils and responding to students' personal and academic problems are also interpersonal interactions which are subject to stress. All of these situations involve interpersonal communication and human relations skills requiring the teacher to be a good listener and to be responsive to others.

Interactions with other people can greatly exaggerate the impact of interpersonal stresses. Fears and insecurities can be quickly escalated by interaction with others who threaten one or feed one's fears in some manner. Interactions with students or conflicts with colleagues can also be sources of interpersonal stress. An argument with a supervisor or principal can be particularly stressful. For teachers and administrators, interpersonal stress is often associated with school policies which are responsive to the public, but which were developed with little regard to their impact upon educators. The federally mandated policies regarding special education programs and due process requirements in personnel matters are major policy based

stress factors for professional educators. Teachers are constantly confronted with new demands on their capabilities and time.

Relationships with Colleagues

The principal plays a vital role in reducing stress in the school. His or her leadership expertise and ability to manage a school are essential. Cook (1979) addressed administrative leadership as one important area affecting the level of teacher stress. When this component of administration is not being positively perceived by teachers, the symptoms relating to low teacher morale are obvious: Teachers question the goals and objectives advanced by the administrator. They seek to disregard or completely ignore the organizational and operational structure generated. Their confidence, faith, and trust in the administrator becomes nonexistent.

Further, the principal must have insight into what stress factors are prevalent in the school, among the professional staff and within the student body. He or she has the responsibility of identifying and eliminating these stressful situations. Many of the situations causing the greatest problems can be changed based on administrative decisions.

According to Landsman (1978) teachers are placing some responsibility for their welfare with the principal. Concerned principals can do a great deal to alleviate stress problems. They can offer more positive reinforcement, help with curriculum decision, act as buffers, and aid teachers in improving school/community relations. They can help reduce class size, foster more open communication among staff

members, provide adequate in-service preparation, sign the work orders to fix drafty windows, and deal with incompetent faculty members. Lillian Bernhagen (Landsman, 1978, p. 50), past president of the American School Health Association, agrees that the role of the principal is crucial. She writes,

> You can't separate the mental and physical health problems in teaching. If teachers work in a school with a principal who creates a supportive environment, they will most likely feel positively reinforced and emotionally rewarded. But where a principal criticizes and never compliments, morale will drop and teacher absenteeism will increase. Teachers become emotionally exhausted and starved for positive reinforcement. Not long after comes some physical manifestations of frustrations and stress.

Administrative concern is vital in reducing stressful overtones. Teachers, like all other human beings, need to feel important and appreciated, along with receiving respect and personal consideration. Styles and Cavanagh (1977) agree that, in the world of ego needs, stress is produced by the need for enhanced status and respect. A similar stress can develop because of the lack of "stroking" from appropriate people in positions of authority.

Cook (1979), in a discussion of the role of the principal, suggested that, when teacher stress is a result of a perceived lack of administrative concern, the most common symptom is a reflection of the cause. Teachers may well mirror what they view as their administrator's lack of concern. In short, if teachers have felt no meaningful support, they will be reluctant to show support for the administrator. If they have felt unduly burdened, they may be unwilling to do any more than is required by their contract. If they have experienced

excessive criticism, they will have difficulty finding kind words for the administrator. Thus, considerable care should be taken by the administrator to demonstrate genuine concern for teachers' needs, whether they be large or small. Every concern or request made by a teacher should be viewed as important by the administrator. A sincerity of attitude will serve to make successful teacher-administrator relationships more likely.

Personal interaction and rapport between teacher and principal greatly influence teacher morale and negate stress. When these components are neglected or completely absent within a school, teachers will be adversely affected. The symptoms relating to a deficiency in personal interaction usually focus upon the social relationships of the individual members of the staff. The problems may be as obvious as teachers' avoiding interpersonal encounters with their administrator or their colleagues by always eating lunch alone, sitting apart at meetings, and/or exhibiting behaviors that characterize abnormal social distance. The symptoms may not always be expressed in physical terms. Instead, they may be attitudinal, such as expressing an impersonal attitude toward certain colleagues. Whether the evidences of inadequate personal interaction are obvious or obscure, the ramifications should provide a motive for action (Youngs, 1978; Cook, 1979).

Teachers frequently complain of not being listened to or respected by students, parents, administrators, and colleagues. Teachers also resent being forced to teach a curriculum or execute policies when

they do not feel significantly involved in the decision making processes that lead to development of the curriculum or policy (Zane, 1980; Bartholomew, 1974; Adams, 1975).

Teachers spend most of their work day isolated with students in classrooms. There is little or no opportunity for constructive, supportive discussions with colleagues regarding teaching problems or job-related feelings. The brief moments that teachers do have together lend themselves readily to superficial complaints about the students, the administration, or the school board. Repetitious complaining can be stressful in itself, and it tends to reinforce teachers' feelings of hopelessness about their situations.

Swick and Handley (1980) noted that colleagues can also be a source of stress. They may try to impose their own philosophies and techniques upon others, especially upon a beginning teacher.

Sometimes staff changes occurring in the middle of a school year may be stressful (Sylwester, 1977). A teacher may leave, or a principal may be absent because of illness. Temporarily, other classroom teachers may be called upon to orient a new teacher, or teachers may have to learn to deal with the policies of a different administrator. Such changes can produce tensions and result in added stress.

Adams (1975) has suggested that a major source of frustration is a prevalent view of evaluating teachers. This view, which is based on a simplistic model of causation and empirical verification, assume that particular actions by teachers directly cause particular outcomes in student performance and that this relationship between teaching and learning can be tested by looking at particular behaviors of learners.

This view of evaluation runs counter to prevailing professional practice and methods of teacher evaluation. The frustration which many teachers are experiencing comes from the demand that they reorganize their practices and submit to a different methodology of evaluation which assigns them responsibilities without accompanying authority and discretion for decision making.

Presently, professional practice is focused more on teacher and learner activities than on the learning outcomes of activities. Similarly, professional practice in schools is evaluated primarily on the basis of observers' judgments about the activities and traits of teachers, rather than on the learning consequences of those traits and activities. Zahn (1980), in support of Adams, remarked that adult educators are judge by what happens to their students. An essential part of educational evaluation is a quantity and quality of students' learning which means putting educators' fates into the hands of others over whom they may have little or no control, rather than by their own actions or motives. This lack of control contributes to feelings of powerlessness and thereby creates stress.

In being asked to write behavioral performance objectives in advance, to plan instruction around particular outcomes, and then to be prepared to show that instruction has produced specified results, many teachers are being forced into surrendering practices they feel are justifiable and into making false promises. Under this stress, teachers easily promise too little in order to be sure of fulfilling the promise, or they promise too much, thus, making the frustration of

failure inescapable. For some, these new demands, generally imposed from above, are a source of anxiety and stress.

Relationships with Parents

According to Alley (1980), interpersonal stress can be caused by societally based stressors. He further noted that, in Twentieth Century America, societal stressors are very real and the lives of most educators are increasingly significant at the present time. For teachers the toll of inflation on their earning power is a significant stressor which afflicts the majority of the profession and one which serves to illustrate societal stress very well. Other examples include the attitude of the public toward schools or toward teachers and administrators, attacks upon school programs by public officials or the media, and school board attitudes toward professional negotiations or collective bargaining.

News media often report on declining Scholastic Aptitude Test scores, functionally illiterate high school graduates, and a lack of discipline in schools. A Time magazine cover story entitled "Help! Teacher Can't Teach" (June 16, 1980) described the problems of teacher illiteracy, the low intellectual quality of individuals entering college of education programs, and the chaos that exists in many schools. The article's negative tone left many competent teachers feeling misunderstood and unappreciated while struggling in often hostile environments with little or no public recognition of their efforts and skills.

Educators today find themselves under added pressures each year, with the public continually demanding more of them through stage-legislated programs such as competency testing and Basic Skills First. Today's educational professionals also say that this same public is now less supportive of educators than it once was.

Many teachers report great difficulty in getting the support assistance of parents in solving the problems of their children. Parents may even refuse to go to the school for a parent-teacher conference when asked to do so.

Demonstrating the depth of the problem are data from a recent Gallup Poll which revealed that only 65% of the parents of youth in public schools attended a lecture, any meeting, or any social occasion in any local school building during a one-year period. Further, it was reported that 23% of the respondents think the main thing a school has to do before it can receive an "A" rating is "improve the quality of teachers." This same poll reported that 85% of adults polled would support state certification examinations for teachers or administrators. A like number of adults were supportive of periodic retesting of these professionals to see if they had kept up developments in their field.

The problem is not so much with these specific attitudes as with the trend they appear to represent, one characterized by more pressure on educators, but less public support. The majority of teachers are no different from other professionals in their respect for competent performance. Widespread publication of these negative findings, however, contributes to teacher's defensiveness about their work, undermines morale, and causes effective teachers to seek new careers.

In addition to more parental pressures and less public support, Bardo (1979) noted that teachers suffer daily assaults. Not all of these are physical, nor do they come solely from students. Parents abuse teachers by verbal disrespect, by expecting them to control children the parents have failed to discipline and control, by expecting professional educators to accomplish the impossible academically with children, and by expecting public education to solve all social problems.

Leffingwell (1979) noted that trying to meet the expectations and needs of too many people can lead to feelings of frustration and a general sense of helplessness. Teachers who try to be all things to all people are trying to achieve the impossible. In doing so, they place themselves in a very stressful lifestyle.

Intrapersonal Factors Affecting Stress

According to Hodge and Marker (1978) intrapersonal stress relates to the teacher's education, classroom skills, self-concept, and motivation. These stress factors affect each teacher individually and result from self-evaluation and feelings of personal inadequacy. These authors reported that "feelings of intrapersonal inadequacy can be the most serious stress-inducing factor for an educator, resulting in the loss of self-confidence in teaching."

Several intrapersonal stressors which apply equally to difficulties in school life include an inordinate sense of responsibility, feelings of powerlessness, an inability to set priorities, procrastination, working

against time pressures, poor time management skills, and unreasonably high expectations for oneself and for others (Gilbert, 1977; Gmelch, 1978; Landsman, 1979; Sparks, 1979; and Styles, 1977). Furthermore, concealing emotions and denying real feelings in an effort to rationalize away feelings of tension utilize much time and energy which could be better spent more constructively, rather than being spent to create more stress (Harris, 1979; Leffingwell, 1979). Human beings, by their own actions, develop much of the stress they endure. Those stressors which stem from within can be said to be intrapersonal sources of stress. This stress is that which people do to themselves--inner fears, inner drives, and ambitions. No one else need interact directly with a person for these stressors to affect their lives.

Additional intrapersonal stress which teachers may encounter in school arise from a lack of self-fulfillment and unmet ego needs, a high need for achievement, a feeling of being unappreciated, self-doubts concerning personal and professional competence, and a poor self-image (Gmelch, 1978; Styles, 1977).

One of the more prominent intrapersonal stress factors affecting teachers at school is role conflict or role ambiguity, according to research which has been reported by Dunham (1978), Hodges (1976), Kyriacou and Sutcliffe (1978), Sparks (1979), and Sparks and Ingram (1979). These authorities are in agreement that this type of stress results from a lack of clearly delineated job descriptions for most classroom teachers. Everyone seems to have a unique perception of what a teacher is expected to be and to do.

Teachers feel pulled in different directions by the competing demands of students, parents, and administrators, some of whose expectations may be unreasonable and in conflict with one another. These various roles compete for a teacher's time, particularly if he or she is a perfectionist. Teachers want to perform well in the classroom, an attitude which means taking school work home in the evenings or on weekends. If they are married and have children, they also want to be attentive and spend quality time with their families. Usually the day has too few hours in which to do all of these things, and the result is a perpetual sense of time pressure and tension. Edgerton (1977) observed that "not only do extraneous duties compete for the teacher's time . . . , but more important, many of the roles assigned to teachers are mutually exclusive. They are inherently contradictory, continually in conflict." This observation is supported by Keith (1979) and Sparks (1979) who noted that the high cost of attempts to be all things to all people may become guilt, frustration, and tension, with stress as the end result.

Along this same line, many teachers have a difficult time accepting the idea that there are limits to what they can do for a child in a school setting (Landsman, 1978). They expect to be able to overcome or override all the diversities that students have faced in the past in their home lives. Through these unrealistic expectations, they create pressure and frustration for themselves.

Many classroom teachers feel they have little or no influence in curricular or policy decisions affecting the school (Hodges, 1978;

Sparks, 1979). They feel that directives are frequently handed down from the central administration without respect for input from classroom teachers who are expected to implement the directives.

Many classroom teachers begin to feel isolated and alone, cut off from peers and from decision making (Walsh, 1979). They leave school tired and carry home so much work that they do not have time to relax, a situation which in itself is stress-producing (Leffingwell, 1979).

Within a single classroom, however, teachers do have opportunities to make decisions as to which teaching materials and procedures to use (Harlin, 1978; Olander & Ferrell, 1970). Here they must concern themselves with whether or not they have made the best choices. Teacher self-evaluation is a continuing necessity in order to improve and upgrade the educational system. When it creates self-doubt, however, intrapersonal stress may result.

Job security in teaching is becoming very poor (Harlin, 1978). The declining birthrate of the past few years has meant declining enrollments in the public schools. As a result, many teachers are either being laid off or involuntarily transferred to other schools or to different grade levels (Harlin, 1978; Sparks, 1979; Sparks & Ingram, 1979). For teachers who are laid off, stress is doubled.

According to Sparks and Ingram (1979), another intrapersonal stressor prevading the teaching profession is decreasing job mobility. Being a classroom teacher prepares one to continue being a classroom teacher. In order to move upward, to be promoted and financially

rewarded, one must obtain additional education and advanced degrees or further certification in different areas, such as administration or supervision. To remain in the classroom as a teacher means that the individuals will not rise to a higher rank or be promoted. According to Swick and Hanley (1980), the most the teacher can expect to receive is an annual incremental salary raise that is usually several percentage points below the annual cost-of-living increase. Salaries that do not keep pace with the rise in inflation result in frustration and tension for many families in the teaching profession (Coates & Thoresen, 1976; Harlin, 1978).

According to Coates and Thoresen (1976) the sources of intrapersonal stress experienced by classroom teachers are real, prevalent, and potentially harmful to both teachers and students. The time and energy wasted by stress could be better used as a source of energy for improving the educational system (Youngs, 1978).

Teachers spend a great deal of their time in positions of leadership. Historically, the most visible of these is in the classroom. Increasingly, teachers have sought to exercise their leadership in such areas as instructional planning, curriculum organization, and professional control. When they are discouraged in their attempts to exert leadership in this manner, teachers frequently display symptoms of stress. If excluded from planning, they will often find fault with the plan proposed. If ignored in organizational endeavors, they will most likely become negative toward the structure presented. If denied participation in determining measures for control, they will proably

challenge any unilateral administrative mandates advocated (Cook, 1979).

Teachers not only give considerable attention to the developmental growth of their students, they also are concerned with their own professional growth. This concern is at least partially evident in the number of teachers seeking graduate degrees, attending after-school workshops, and seeking professional advancement. Stress may well be the adverse effect if these teachers are frustrated in their quest for professional growth.

Summary

Classroom teachers are not strangers to environmental, interpersonal, or intrapersonal stress factors. Each one has been confronted with many stressful situations. Perhaps the most frustrating aspect of teacher stress is that often there is little the teacher can do to change these problems.

The teacher must accept partial responsibility for the student's attendance, adjustment, and values. The teacher also must demonstrate genuine concern for the student as another human being by conducting evaluations, preparing paperwork, modifying program objectives for each student, and planning each student's education. These tasks are achieved by studying the youngster to identify the best paths of learning to stimulate, correct, clarify, enrich, extend, and create achievement (Youngs, 1978).

The frequency of teacher's self-perceptions of being embattled, powerless, drained, oppressed, or bored suggests that time and energy are being wasted in such conditions. Many teachers probably feel a need to change but do not and cannot, since they feel powerless to change more than themselves.

Recommended Actions

The literature suggests only global strategies for dealing with stress and few studies give specific actions for eliminating or reducing the most bothersome stress problems. Only two research efforts gave respondents an opportunity to address recommended actions (Olander & Ferrell, 1970; Bartholomew, 1974). These actions were incorporated in the questionnaire, together with recommended actions generated by the pilot study and the reversing of identified stress factors.

Conclusions Drawn from the Review of Literature

The review of literature included 125 pieces of material concerning teacher stress. This review cited the following major stress-causing factors:

1. lack of money
2. lack of time
3. lack of administrative support
4. lack of power and control
5. lack of respect and recognition

Most of the literature did not contain specific recommended actions for reducing teacher stress. Those which did, emphasized helping teachers to learn stress management techniques, rather than eliminating stress-causing factors.

CHAPTER III

METHODS AND PROCEDURES

Introduction

This research was undertaken in order to identify the professional problems which may cause stress in teachers. In order to answer the research questions posed by this study, two types of data were collected: (1) teacher-identified sources of stress and (2) teacher-recommended actions for lessening or eliminating stress. These data provided important insights and facilitated the development of a set of guidelines for reducing or eliminating teacher stress. Chapter III details the methods which were used to gather and analyze the data needed to satisfy the purposes of this study.

Population

The studied population consisted of all teachers employed by the Blount and Hamblen County School Systems, and Alcoa, Maryville, and Morristown City School Systems. The total sample drawn from this population was 1,165 faculty members from 31 elementary schools, 3 special education centers, 8 middle schools, and 6 high schools. A more detailed picture of this sample is presented in Table 1.

When all elements of a population can be identified, most sampling experts recommend that simple random sampling procedures be used. For this study, however, a nonprobability or total-sampling technique involving both the school and teacher populations was used. Several

Table 1

The School Systems and Teachers Used in the Study

	Elementary		Middle school		High school	
	S	T	S	T	S	T
Alcoa City	1	35	1	22	1	32
Blount County	15	279	2	41	2	101
Maryville City	3	83	1	34	1	30
Hamblen County	9	139	2	69		
Morristown City	6	130	2	58	2	112
	34	666	8	224	6	275

Grand total: 48 schools 1165 teachers.

considerations led to the choice of this procedure. First, according to various sampling formulas, the sample size must be large enough to provide accurate information and to secure equal statistical reliability. There are, for example, nine elementary schools in Hamblen County system, and the random sampling formula developed by Cochran (1977) would have mandated the inclusion of all nine in the sample. Use of a total-sampling procedure would, of course, have produced exactly the same sample.

Second, the disadvantages of the random-sampling procedure supported the decision to employ total sampling of both the teachers and the schools. Parten (1950), for example, notes that numbering every unit before drawing a sample is a time-consuming and expensive aspect of random sampling. The possibility of drawing an uncooperative or misleading sample was also a negative consideration, as was the risk of

being unable to contact teachers selected in the sample because of such unpredictable circumstances as absenteeism and time limitations.

Third, because of the two-county area in which the population resides, the use of random sampling would have involved considerable travel in order to survey the subjects selected.

Fourth, subclassifications of teachers for which detailed tabulations were desired would be smaller in a random sample than in a total sample (Parten, 1950). The total sample procedure also provided information needed for the analysis of the composition of the total population in terms of these subclassifications.

Fifth, a review of the literature concerning random sampling indicated that total sampling was the most practical procedure for use in this study. It was expected to yield an accurate picture of the population, precise data needed for answering the research questions, and a simple and unbiased procedure for gathering this data which would not prove costly in terms of time or money.

Instrumentation

Rationale for Using a Questionnaire

The decision to use a questionnaire to collect data for this study was based on a review of the literature concerning the strengths and weaknesses of questionnaire-based research.

Berdie and Anderson (1974) suggest several advantages using questionnaires:

1. Questionnaires tend to be less expensive than other means of data collection.

2. Well-formulated questions tend to preclude contamination of the results by the researcher by assuring that the questions are presented to each subject in exactly the same form and context.
3. Since most respondents are familiar with the questionnaire format, subject confusion and/or reluctance of respond to the questions should be less than with some other forms of data collection.
4. Questionnaire responses are easily tabulated.

Some disadvantages in using questionnaires have also been identified by Berdie and Anderson (1974):

1. Should the response rate prove to be low, the reliability and validity of the instrument might be difficult to establish.
2. The researcher can never be completely certain that the intended subject actually answered the questionnaire.
3. The respondents misunderstand the questions and/or response choices.
4. In some instances, the researcher may be unable to secure additional information from valuable respondents.

For the purpose of this study, however, it was believed that careful construction and dissemination of the questionnaire could lessen or eliminated the probability of incurring any of the disadvantages cited.

Questionnaire Guidelines

Specific guidelines suggested by Babbie (1973) and Warwick and Lininger (1975) were followed in the development of the questionnaire.

These guidelines offer general recommendations for questionnaire formulations, as well as specific recommendations concerning format, item development, item sequencing, and the recording of responses.

Ten general recommendations were particularly influential in the development of the questionnaire used for this study:

1. Since the degree of effort required to complete the questionnaire will influence the respondent's willingness to participate, the questionnaire should be kept as short as is consistent with the researcher's purposes.

2. The amount of interest which the subjects have in the research topic should be as large as possible in order to encourage participation.

3. All of the items on the questionnaire should clearly rise from a need for data to answer the research questions and, thus, accomplish the purposes of the study.

4. The overall appearance of the questionnaire should be neat, uncluttered, and professional in order to encourage the interest and participation of the subjects (see Appendix D).

5. Both general and specific instructions should be clear and brief in order to avoid respondent confusion.

6. The format for recording responses should be one which is easy for the respondents to understand and for the researcher to tabulate.

7. The vocabulary used in the questionnaire should be appropriate and neither too simple nor too difficult.

8. The questions should be sufficiently clear and self-explanatory to convey the same meanings to all respondents.

9. Each question should deal with a single concept and should be couched in language which will not influence the subject's response.

10. Words to be emphasized should be underlined or boldfaced.

In keeping with these guidelines, the questionnaire developed for this study was as brief as was practical. Subject interest was expected to be high because teachers are generally concerned about the stresses to which they are subjected and ways in which these stresses may be reduced or eliminated. Each item on the questionnaire was specific developed to aid in answering one of the study's three research questions, as outlined below:

Research questions	Corresponding survey items by number	
1. Which sources of stress do teachers perceive as being the most significant and pose the greatest problem?	1-61	(Section 1)
2. What are the approaches recommended for eliminating or preventing the most persistent stress factors?	62-98	(Section 2)
3. What guidelines can be recommended which might be helpful in reducing stress among teachers?	1-98	(Sections 1,2)

A closed-response format, rather than one involving open-ended questions, was chosen for the questionnaire. The closed-response format makes it easier for the respondents to answer the questions and for the researcher to code and analyze the responses. It also limits the number of possible responses, thus, making it easier to compare

responses across the respondents. The major drawback of the closed-response format is the possibility that an important response option may be overlooked in the construction of the questionnaire (Babbie, 1975). This limitation was controlled for by basing the questionnaire's response options on an extensive and careful review of the literature and by inviting some respondent-initiated write-in responses.

Care was taken in selecting the correct vocabulary for constructing clear, unbiased items and in assuring that each item contains only one concept. Boldfaced print was used to call the attentions of the respondents to the phrases used to interpret the numerical scales provided for recording responses. The response categories were designed to be exhaustive, mutually exclusive, and balanced in relation to their format and weight factors.

An extensive review of the literature on teacher stress led to the development of three major item categories, dealing with environmental, interpersonal, and intrapersonal causes of stress. Six subcategories of these major areas of investigation provided a wide range of response choices within a manageable number of items and satisfied the need for exhaustive and mutually exclusive response categories.

Two response scales were constructed for the questionnaire. One gave the respondent an opportunity to select a number in order to indicate his or her perceptions of the degree of stress caused by each stress factor. The numbers, one through four, were respectively defined as "minor-little," "definite-moderate," "significant-considerable," and "major-serious." The other response scale gave

the respondent an opportunity to express his or her perceptions of the level of helpfulness of a number of suggestions for lessening or eliminating teacher stress. On this scale, the numbers one through four were respectively defined as "value is uncertain," "little value," "some value," and "especially valuable." The use of a four-point scale in both item categories provided balance and continuity between the scales.

Babbie (1973) has developed a set of guidelines for the sequencing of items on the questionnaires, and these guidelines were followed in the construction of the questionnaire used in this study. The guidelines require that the initial questions be interesting, non-threatening, and easy to answer. Questions of a more sensitive nature, if used, should be deferred to a later point in the questionnaire. Explanations should be provided as often as necessary in the course of the questionnaire in order to clarify a sense of continuity for the respondent. Continuity should be further enhanced by grouping together questions of a similar nature.

Questions related to environmental stress factors, which constituted more than half of the total number of items, were deemed interesting enought to be placed first. The use of only three major item categories provided enough ease in the grouping of questions of a similar nature. Such a grouping provided continuity within item categories and assisted the respondents in relating the individual questions to the overall purposes of the study. All of the relevant components of the final draft of the questionnaire were rechecked for

compliance with the guidelines' requirements for format, item construction and placement, and response category construction.

Pilot Testing

The procedures of this survey involved collecting, analyzing, understanding, and drawing conclusions from a previously specified set of data. A pilot testing of the planned data-collection procedure is intended to insure the accurate collection of uncontaminated data. Babbie (1973) and Warwick and Lininger (1975) recommend pilot testing the entire questionnaire, using respondents who are as similar as possible to the actual survey respondents.

The first draft of the questionnaire used in this study was critically reviewed by an experienced researcher and, consequently, revised and improved. The second draft was pilot tested on January 24, 1983, using a group of 32 graduate students enrolled at The University of Tennessee at Knoxville. All but one of these students were teacher from nearby school systems. Each member of the group was asked to complete the questionnaire, offer suggestions for improving its content and/or structure. The group was asked to pay particular attention to the choice of wording of items, the formatting of the instrument, and the ease with which it could be completed. After the researcher had analyzed the results of the pilot test, the questionnaire was further refined and strengthened. The wording of several items was changed to increase their clarity and to provide clearer contextual meaning. Some items were deleted in order to eliminate duplications or ambiguity. The sequencing of items was

also modified to create more appropriate categories. Minimal corrections made the directions more self-explanatory. The pilot test results, thus, resulted in a much-improved final draft of the questionnaire.

Factors Incorporated Into the Questionnaire Design

In order to fulfill the purposes of the study, answer the research questions, and follow survey research guidelines, it was necessary to develop an instrument based on the most accurate information currently available about teacher stress. A wide range of research studies and other references were reviewed to identify common problems and possible corrective actions related to teacher stress. This initial review led to the identification of three major areas which could be used to cluster the stress problems. These areas include environmental factors, interpersonal factors, and intrapersonal factors, all of which are represented in Section I of the survey instrument.

The review of research also served as a basis for listing and categorizing problems associated with these factors. The major categories are (1) Instructional Responsibilities, (2) Noninstructional Duties, (3) Working Conditions, (4) Relationships with Colleagues, (5) Relationships with Parents, and (6) Factors relating to Intrapersonal Skills. The results of this initial categorizing resulted in the preparation of a list of recommended actions for solving identified stress problems. These actions are represented in Section II of the instrument. The content of both Sections I and II offers the widest

possible range of choices within a manageable number of response items based on factors mentioned consistently in the literature and believed to affect teacher stress.

The instrument was designed to give respondents an opportunity to indicate on a scale of one to four the relative degree of stress caused by each of the stress factors and the relative degree of help each of the actions recommended for reducing stress would provide. A final section of the questionnaire allowed the collection of demographic data and responses to questions addressing the significance of teacher stress.

Procedure

Having selected the population, conducted a pilot test, developed the questionnaire, and designed a composite of related correspondence, the actual data collection was carried out.

Superintendents of each of the school systems were notified by phone regarding the project. Following this initial contact, the researcher visited each superintendent to discuss the details of the project and request permission to conduct the study. A folder containing a written explanation of the study, a prospectus summary, and a copy of the cover letter and questionnaire was left with each superintendent.

Principals of each of the participating schools were contacted by phone for the purpose of soliciting their interest and support for the project. At the time, an appointment was made for the research to

deliver the survey instrument to the school and to discuss the procedures of the study with each principal. This approach allowed the research to make an important personal contact while discussing the role of the principal in the project. Also, the personal involvement allowed for the monitoring of the data collection, thus guaranteeing a high percentage of returns. A follow-up letter was sent to each school principal after the initial phone call. The letter further explained the procedures for the project. Questionnaires were delivered to Alcoa, Maryville, and Blount County schools Wednesday and Thursday, April 6 and April 7, 1983 and to Morristown and Hamblen County schools Friday, April 8, 1983.

The principals played an important role in the project. First, they were responsible for providing each teacher with a copy of the instrument and cover letter. The method of distribution was a decision made by each principal. Second, they were responsible for distributing the questionnaires on one specific day during the week of data collecting rather than distributing some questionnaires on one day and more questionnaire another day. They were asked to encourage their staff to complete the survey while at school rather than taking it home.

The week of April 11-15, 1983 was the target dates for data collecting. The researcher returned to each school the following week of April 18-22, 1983 to collect the completed questionnaires. Follow-up mailings to nonparticipants was not considered necessary due to the high percentage of returns which was 93.5%. Table 2 gives a detailed

Table 2

Response Rate of Respondents by School Systems

School number	School name	Number of teachers	Number of completed questionnaires	%
	Blount County			
1	Binfield	15	14	
2	Bungalow	28	24	
3	Eagleton Elementary	26	26	
4	Everett Sp. Ed.	12	11	
5	Fairview	26	22	
6	Forest Hill	19	17	
7	Friendsville Elementary	20	19	
8	Hubbard	9	9	
9	Lanier Elementary	25	23	
10	Middlesettlements	25	25	
11	Porter Elementary	25	25	
12	Rockford	24	21	
13	Rocky Branck	8	8	
14	Townsend	8	8	
15	Union	9	9	
16	Eagleton Middle	22	18	
17	Walland Middle	19	17	
18	Heritage High	49	46	
19	William Blount High	52	50	
		421	392	93.1
	Alcoa			
20	Alcoa Elementary	35	35	
21	Alcoa Middle	22	18	
22	Alcoa High	32	30	
		89	83	93.3
	Maryville			
23	Fort Craig	22	19	
24	John Sever	31	27	
25	Sam Houston	30	29	
26	Maryville Jr.	34	32	
27	Maryville High	30	30	
		147	137	93.2

Table 2 (continued).

School number	School name	Number of teachers	Number of completed questionnaires	%
	Hamblen County			
28	Alpha	18	16	
29	Alpha Primary	18	17	
30	Fairview Marguerite	20	19	
31	Manley	19	16	
32	Russellville	20	18	
33	Southern Heights	9	9	
34	Union Heights	15	12	
35	Whitesbury	10	10	
36	Witt	10	9	
37	East Ridge Middle	35	35	
38	West View Middle	34	33	
		208	194	93.3
	Morristown			
39	Carriger Center	11	11	
40	Hillcrest	31	27	
41	John Hay School	16	15	
42	Lincoln Hts. Elementary	28	28	
43	Lincoln Hts. Learning	10	9	
44	West Elementary	34	32	
45	Lincoln Hts. Middle	30	28	
46	Meadowview Middle	28	23	
47	Morristown High (East)	57	57	
48	Morristown High (West)	55	53	
		300	283	94.3
	Grand totals	1165	1089	93.5

breakdown of the number and percentage of returns by schools. Further, due to the duration of time for data collecting, it was not likely that any teacher would not have been back in their respective schools before the deadline or before the questionnaires were picked up. Any teacher who might have been absent or unable to complete the questionnaire on the day of distribution could have responded to the questionnaire on any number of days during the designated week of data collection. The principal assumed the responsibility of providing each teacher with a questionnaire and guaranteed the researcher that all teachers would have an opportunity to participate in the study. Therefore, the very low percentage of unreturned questionnaires (6.5%) was assumed to be due to individual choice since involvement in the study was purely voluntary and not due to the lack of an opportunity to participate. This assumption eliminated the need for follow-up.

Following the major activity of collecting the data, a letter of appreciation was sent to each school assuring them that they would be presented a summary of the findings of the study.

Summary

Chapter III dealt with the selection of the population, instrumentation, and procedures for data collection. The population used in the study included all classroom teachers form schools in Blount and Hamblen Counties. Total sampling of the population was felt to be necessary for this particular study, resulting in a population size of 48 schools and 1,165 teachers.

The use of a questionnaire was felt to be the most appropriate means of gathering data to fulfill the purposes of the study and answer the research questions.

This decision was based on the advantages of such an instrument which were weighed against the disadvantages. There were four main reasons for adopting the questionnaire. First, questionnaires are less expensive. Second, they tend to be more convenient and easier to complete. Third, most respondents are familiar with the questionnaire format. Fourth, the information gathered through questionnaire research is easier to tabulate.

Several suggestions by various authors provided a basis for developing the questions and their response categories. Consideration was given to questionnaire format, questions and response composition, and the sequence of the questions.

The initial draft of the instrument was critiqued by the researcher's advisor. Feedback from this activity provided a basis for revisions and resulted in a final draft which was pilot tested with graduate students at The University of Tennessee, Knoxville. This pilot test allowed the investigator to make several important changes in the instrument before the actual data collection began.

Letters were written to the superintendents and principals following the initial contacts by phone. The questionnaires, which followed generally accepted guidelines and included a cover letter, were delivered by the investigator to the principals of each of the 48 schools. The principals distributed the material to each teacher in the school who then completed the survey instrument.

After the week of data collecting from April 11-15, 1983, the researcher returned to each school to collect the completed questionnaires. The high percentage of completed questionnaires eliminated the need for follow-up mailings. Letters of appreciation were sent to each principal after the data were collected. A summary of the findings of the study was sent to each school as an acknowledgement for their participation in the project.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The literature was reviewed in an effort to find the most prevalent stress factors. Those identified were the basis for the 98-item questionnaire that was developed for the study.

Sixty-one of these items were stress problems which were classified in the following three areas: (1) Environmental Factors, including Instructional Responsibilities, Noninstructional Duties, and Working Conditions; (2) Interpersonal Factors, including Relationships with Colleagues and Relationships with Parents; and (3) Intrapersonal Factors, including items related to self-fulfillment. The respondents indicated on a scale of one to four the degree of stress each problem presented. The degrees ranged from "little" to "serious." The remaining 37 items gave respondents an opportunity to react to suggestions which could help in reducing these stress problems. Teachers could indicate on a scale of one to four the degree of value each recommended action presented. The degrees ranged from "value is uncertain" to "especially valuable."

A study population was defined, and data were gathered by means of the questionnaire. Professional educators from public schools in Blount and Hamblen County schools and Maryville, Alcoa, and Morristown City schools in Tennessee were used as subjects. This selection resulted in a total sampling of 1,165 teachers from 31

elementary schools, 3 special education centers, 8 middle schools, and 6 high schools.

An attempt was made to gain an overall view of the professional problems of teachers by arranging the stress problems in rank order from the most stressful to the least stressful and by grouping the recommended actions in the same manner from the most valuable to the least valuable.

In any list determined by rank order, it is difficult to choose a point above which the problems or recommendations deserve special attention and below which they may be given less consideration. For this reason, an arbitrary decision was made to select only the top ten stress factors and recommended actions for analysis. Problems of high rank appear to be causing teachers the most difficulty and should be studied carefully. Problems lower on the list, while perhaps not causes of major difficulty, are still sources of some stress and need remedial action.

Generally speaking, problems in the lowest group are not considered as important as those in other groups. However, this fact does not mean that they can be dismissed completely. While they have been ranked in the lowest category, they may still be causes of serious concern to individual teachers. Furthermore, there are many reasons why these problems may appear in the lowest group. For example, the respondents may not have experienced them, or the problems may exist in the classroom, but simply have not been recognized as problems. Additionally, some problems may be classified as

sources of little or no difficulty because they already have been corrected.

The most important reason for addressing the least stressful factors cited is the fact that the results of this study revealed some surprising information about this particular group of teachers. Stress factors which have been generalized or assumed to be causing most teachers a great deal of trouble were found to be of little or not concern to these teachers. For example, it has been reported that considerable stress exists among teachers when the principal or supervisor recommends specific plans or methods to be carried out in the classroom by the teacher. Such was not the case, however, for teachers in this study. Due to these contrasting findings, some discussion has been given to the problems in the lowest category.

The discussion of the data in relation to the three research questions is discussed below.

Research Question 1

Research Question 1: Which sources of stress do teachers perceive as being the most significant and as posing the greatest problem?

The 61 stress items were placed in rank order from the most stressful to the least stressful. Using this process, the ten most serious sources of teacher stress were identified. This identification was based on the frequency with which items were scored either as a significant problem, causing considerable stress, or as a major problem, causing serious stress. Individual analyses were made for

each population, including elementary, middle school, high school, and special education teachers.

Responses of Elementary Teachers

Elementary teachers cited several factors as being particularly stressful. Table 3 presents the results of the analysis for this population's responses.

The lack of time for individual and remedial work was mentioned by 69.3% of the elementary group as the single most stressful factor. It ranked first due to the frequency of responses.

Required clerical work was a concern to the elementary group and was cited by 64% of these teachers. The consistent frequency of responses ranked it as the second most stressful factor. Similar findings were noted among this population regarding inadequate salary. Inadequate salaries were found to be among the ten greatest problems by 61.6% of the elementary teachers. The frequency of responses ranked it in third place.

Time pressure was considered by more than half (56.4%) of the elementary teachers to be causing a serious problem. Due to its frequency, it ranked fourth. Of equal concern to 53.4% of these teachers was a lack of time for creative teaching and/or experimentation. The frequency rank placed this factor fifth.

Similar concerns were noted among the elementary population regarding federal controls, expectancies, and demands. Slightly over half (51.9%) of the elementary teachers found this factor to be among the most serious problems. Due to the frequency of responses this

Table 3

The Ten Most Stressful Factors for Elementary Teachers

Rank	Item #	Stress factor	Frequency	%
1	9	Time for individual and remedial work	366	69.3
2	16	Required clerical work	338	64.0
3	28	Inadequate salary	325	61.6
4	5	Time pressures	298	56.4
5	10	Time for creative teaching and/or experimentation	282	53.4
6	4	Federal controls, expectancies, and demands	274	51.9
7	3	No planning period	272	51.5
8	7	Meeting pupils' abilities, needs and interests	271	51.3
9	17	Duties outside the classroom	246	46.6
10	52	Parental indifference toward school activities	243	46.0
10	11	Evaluating pupil progress in academic, personal, and social growth	243	46.0

factor ranked sixth. The lack of a planning period posed a significant problem for 51.5% of the elementary population. The number of responses which this factor received gave it a ranking of seventh. A similar number of responses (51.3%) were noted among the elementary teachers regarding the factor of meeting pupils' abilities, needs, and interests. It ranked eighth. Slightly less than half (46.6%) of the elementary teachers in this study found duties outside the classroom to be a major problem. The frequency of responses ranked it ninth.

The frequency of responses resulted in a tie between the factors ranked tenth. Forty-six percent of the elementary teachers cited (1) parental indifference toward school activities, and (2) evaluating pupil progress in academic, personal, and social growth to be among the most stressful factors. They were each ranked tenth.

Other factors which were closely associated with the ten most stressful factors also need to be considered (see Appendix E, Table E-2). For example, disrespectful conduct form students was judged to be a factor by 42.8% of the elementary population. Motivating students was cited as a cause of concern by 40.5% of this population. Class size was an additional factor which was judged to be causing problems for 39.6% of the elementary teachers. Counseling students with personal problems and working with students who have health and nutritional problems, physical handicaps, and/or emotional problems were also among the factors which caused elementary teachers great concern. Many of these teachers (38.3%) considered these two factors as stressful.

Some of the least important factors among elementary teachers were in the category of Intrapersonal Factors (see Appendix E, Table E-2). Opportunities to serve on curricular or professional committees as well as to attend professional conferences or conventions were least stressful.

It has been reported that teachers often have feelings of inadequacy when they are not able to pursue additional education or training. Elementary teachers in this study did not find this lack of opportunity to be a problem, an indication that they have been able to find time for added professional training or, simply are not motivated to receive additional training.

Plans and methods recommended by the principal or supervisor have been known to create a great deal of stress among teachers. The respondents, however, did not feel that such recommendations posed a stress problem to them. Conflict with other teachers apparently was negligible in this group since this stress factor did not seem to create any concern.

Responses of Middle School Teachers

Middle school teachers responding to the questionnaire chose stress items reflecting the type of stress which is generally found in a middle school setting. Table 4 presents the results of an analysis of their responses.

Inadequate salary was the single most frequently mentioned stress factor and was cited by 63.1% of the middle school group.

Table 4

The Ten Most Stressful Factors for Middle School Teachers

Rank	Item #	Stress factor	Frequency	%
1	28	Inadequate salary	125	63.1
2	9	Time for individual and remedial work	120	60.6
3	16	Required clerical work	108	54.5
4	23	Disrespectful conduct from students	103	52.0
5	1	Class size	102	51.5
6	52	Parental indifference toward school activities	85	42.9
7	5	Time pressures	84	42.4
8	19	Motivating students	80	40.4
10	17	Duties outside the classroom	78	39.4
10	13	Number of classroom interruptions	78	39.4
10	53	Acceptance by the school community and respect for professional status	78	39.4

Time for individual and remedial work was identified by 60.6% of the middle school group as creating serious stress. The high percentage or responses gave it a ranking of second. Clerical work was found to be causing stress by 54.5% of these teachers. The frequency of responses ranked it third.

Disrespectful conduct from students was considered by 52% of the middle school teachers to be one of the most serious stress factors. The frequency of responses ranked it fourth. Of great concern to 51.5% of these teachers was class size. It was the fifth most frequently mentioned stress factor.

Similar concerns were noted among the middle school population regarding parental indifference toward school activities. This factor was judge by 42.9% of middle school teachers to be among the most serious problems. Due to the frequency of responses, it ranked sixth.

Time pressures represented a significant problem for 42.4% of this group. The number of responses which this factor received gave it a ranking of seventh. Nearly half (40.4%) of the middle school teachers also regarded the factor of motivating students as stressful. Due to the frequency of responses, this item earned a rank of eighth.

Three other factors tied for the next two ranks and accounted for 39.4% of this group. They were:

1. Duties outside the classroom.
2. Number of classroom interruptions.
3. Acceptance by the school community and respect for the professional status.

Some other factors to be considered were closely associated with the ten most stressful (see Appendix E, Table E-3). These included sufficient funds for extra classroom materials, which was judged to be a significant factor by 34.3% of middle school teachers. Noise pollution was cited as causing concern by 34.4% of this population.

In addition, some other factors were among those causing the greatest concern to more than a third of the middle school teachers. These included: (1) a lack of time for creative teaching and/or experimentation (33.3%); (2) counseling students with personal problems (32.3%); (3) meeting pupils' abilities, needs, and interests (31.8%); (4) improper climate control within the school building (31.8%); and (5) time to take graduate courses (30.3%).

When considering some of the least important factors, a striking contrast was revealed with what is generally thought to be causing stress among middle school teachers (see Appendix E, Table E-3).

The lack of opportunity to serve on curricular or professional committees has been a common complaint among teachers. This factor was the least stressful of all, however, to the middle school group. Conflict with the principal or supervisor has been documented in other studies as a significant source of stress. It was of little or no concern to middle school respondents in this study.

Stress of an intrapersonal nature has plagued teachers. Many feel the amount of education they have is not adequate for their teaching positions. Others feel that their training is either insufficient or inappropriate for the type of teaching assignment they

have. The middle school group did not find either of these fears to be causing stress.

Findings in other studies have suggested that teachers may encounter some levels of stress when goals and objectives are not stated or duties and responsibilities are unclear. Middle school teachers did not perceive either of these factors as creating stressful situations. These two factors were among those causing the very least concern.

Responses of High School Teachers

Stress found among high school teachers was similar to the type of stress experienced by the middle school group. Table 5 contains an analysis of the data for the high school population.

Inadequate salary was the single most frequently mentioned stress factor and was cited by 60.7% of the high school group. Based on this frequency, it ranked first.

Time pressures were judged by 52.1% of the high school group to be among the most serious stress factors. The frequency of responses ranked it second. Similar findings were noted among this population regarding motivating students. Nearly half (48.2%) of high school teachers found the task of motivating students to be among the ten greatest problems. Due to the frequency of responses, this factor ranked third. The fourth most frequently cited stress factor which was cited by 46.7% of this group, was a lack of time for individual and remedial work with students.

Table 5

The Ten Most Stressful Factors for High School Teachers

Rank	Item #	Stress factor	Frequency	%
1	28	Inadequate salary	156	60.7
2	5	Time pressures	134	52.1
3	19	Motivating students	124	48.2
4	9	Time for individual and remedial work	120	46.7
5	16	Reuqired clerical work	119	46.3
6	7	Meeting pupils' abilities, needs and interest	112	43.6
7	52	Parental indiffernce toward school activities	96	37.4
8	10	Time for creative teaching and/or experimentation	95	37.0
9	13	Number of classroom interruptions	93	36.2
10	53	Acceptance by the school community and respect for professional status	92	35.8
10	15	Sufficient funds for extra classroom materials	92	35.8

Of almost equal concern to these teachers was required clerical work. It was the fifth most frequently identified stress factor, and was cited by 46.3% of this population.

Concern also was noted among the high school population regarding meeting pupils' abilities, needs, and interests. This factor was considered by 43.6% of the high school teachers to be a serious problem. It ranked sixth because of the frequency of response.

Parental indifference toward school activities posed an additional stress problem for 37.4% of the high school population. The frequency of response gave it a rank of seventh.

A lack of time among high school teachers for creative teaching and/or experimentation ranked as the eighth most significant problem. The frequency of response was 37%.

The number of classroom interruptions was judged by 36.2% of the high school teachers to be one of the ten major problems. Due to the frequency of responses, it ranked ninth.

These same teachers identified two other factors as stressful concerns which accounted for 35.8% of this population. These were (1) a lack of acceptance by the community and a lack of the respect associated with professional status and (2) a lack of sufficient funds for extra classroom materials. Based on the frequency of responses, these two factors were each ranked tenth.

Other factors which were closely associated with the ten most stressful need to be considered. The complete list can be found in Appendix E, Table E-4. More than 30% of the high school teacher judged the following factors to be causing an important level of stress:

1. Improper climate control within the school building (33.5%).

2. Negotiations (32.7%).

3. Class size (31.1%).

4. Evaluating pupil progress in academic, personal, and social growth (30.4%).

5. Inconsistent school policies and rules (30.4%).

In addressing some of the least important factors, interesting findings were noted (see Appendix E, Table E-4).

Often teachers, especially at the high school level, have a difficult time establishing working relationships with parents, having parent conferences, or explaining student progress. High school teachers in this study considered these three factors as insignificant concerns and ones which were not causing stress.

The level of their education has been known to create some stress among teachers. Such was not the case with these high school teachers nor did this high school population consider the lack of opportunity to serve on curricular or professional committees as a stress factor.

Responses of Special Education Teachers

Many of the same stress factors which were identified by elementary, middle school, and high school teachers as problems were also considered sources of stress among special education teachers. Several new stress factors were cited among this group, however. Table 6 presents the results of an analysis of the responses of the special education group.

Table 6

The Ten Most Stressful Factors for Special Education Teachers

Rank	Item #	Stress factor	Frequency	%
1	16	Required clerical work	68	64.2
2	28	Inadequate salary	59	55.7
2	4	Federal controls, expectancies, and demands	59	55.7
4	5	Time pressures	56	52.8
5	9	Time for individual and remedial work	53	50.0
6	7	Meeting pupils' abilities, needs and interests	52	49.1
7	15	Sufficient funds for extra classroom materials	47	44.3
8	11	Evaluating pupil progress in academic, personal, and social growth	43	40.6
8	3	No planning period	43	40.6
11	50	Getting parents to visit school	42	39.6
11	22	Lack of counseling and guidance services for students	42	39.6
11	20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	42	39.6

Required clerical work was cited by 64.2% of the special education group to be the single most stressful factor. Inadequate salary was mentioned by 55.7% of these teachers as a serious stress factor. Due to the frequency of responses, it ranked second.

Of equal concern was the federal controls, expectancies, and demands. This factor also ranked as the second greatest problem. The frequency of responses accounted for 55.7% of this population.

Time pressure was a source of stress for 52.8% of these teachers. It was the fourth most frequently cited stress factor. Exactly half (50%) of these teacher found lack of time for individual and remedial work to be a major source of stress, thus, ranking it fifth.

Of almost equal concern to 49.1% of this group was meeting pupils' abilities, needs, and interests. The frequency of responses gave it a ranking of sixth.

A lack of sufficient funds for extra classroom materials posed a problem for 44.3% of this population. The number of responses which this factor received gave it a ranking as the seventh greatest source of stress.

A similar number of responses (40.6%) were found among special education teachers regarding the next two factors. Evaluating pupil progress in academic, personal, and social growth and not having a planning period created a great deal of stress for these teacher. They created equal amounts of stress and tied for the rank of eighth.

Slightly less than 40% (39.6%) of the teachers found the next three factors to be among the most stressful. These factors were

considered to be creating equal amounts of stress and ranked eleventh. They included:

1. Getting parents to visit school.

2. Lack of counseling and guidance services for students.

3. Working with students who have health and nutritional problems, physical handicaps, and/or emotional problems.

There were other factors closely associated with the ten most stressful (see Appendix E, Table E-5). Some of these which need to be mentioned are:

1. Parental indifference toward school activities and a lack of appropriate instructional materials for the grade or subject, which were among those factors which were thought to be stressful by 37.7% of the special education teachers.

2. Class size, which was cited as a cause of concern by 35.8% of this population.

3. Motivating students and having time for creative teaching and/or experimentation, which were additional factors judged to be causing significant problems by 34.9% of the special education group.

4. Time to take graduate courses and to counsel students with personal problems, two factors which were considered by 32.1% of this group to be among those causing concern.

Many of the least stressful factors for the special education teachers were the same ones found to be causing the least stress for the elementary, middle school, and high school teachers as well (see

Appendix E, Table E-5). These findings were in contrast with other research efforts which have been documented.

Traditionally, teachers feel the teacher-principal relationship is one which places the teacher in a subordinate role that gives rise to tension and anxiety in establishing lines of communication. Having conferences with the principal or supervisor or simply trying to establish a rapport with the principal can be extremely stressful for some teachers. This was not the case, however, with special education teachers in this study. In fact, a lack of rapport with the principal was the single least stressful factor.

Consistency was noted between the special education population and the other groups of teachers regarding nonstressful factors such as having the opportunity to serve on curricular or professional committees and using plans or methods which have been recommended by the principal or supervisor.

Parents of special education students tend to be hesitant to participate in their child's academic program, therefore, making it difficult to establish working relations with parents and teachers. It is interesting to note that the special education group in this study judged this factor to be the second least stressful concern.

With increased enrollment, accelerated curriculums and demands for accountability, teachers rarely escape the stress of a school day. This stress, in turn, can perpetuate interpersonal anxiety; therefore, conflict with other teachers can be a source of stress. Special

education teachers in this study did not find this factor to be significant as a problem. They judged it to be the third least stressful concern.

Research Question 2

Research Question 2: What are the approaches recommended by teachers for eliminating or preventing the most persistent stress factors?

Teachers in the study also responded to 37 recommendations which could be used to prevent or eliminate stress factors among professional educators. These recommended actions were placed in rank order from the most valuable to the least valuable. Using this process, ten factors judged to be especially valuable were identified, and certain factors whose value was uncertain were noted.

The recommendations of highest rank are the ones teachers consider to be the most important means of preventing or eliminating many of the stress factors. Recommendations lower on the list, however, may still be valuable to some and should be mentioned.

The most important reason for addressing the least valuable recommendations is that the results revealed information about the group of teachers which is not in agreement with information that has been reported in other studies. For example, it has been reported that teachers are leaving the profession as a means of avoiding the stress involved in teaching (McGuire, 1979). Teachers in this study did not consider this action as being valuable or worthwhile. Other

recommendations which have been found to be helpful were of little value to these teachers.

Individual analyses were made of each population's responses, including the elementary, middle school, high school, and special education groups.

Responses of Elementary Teachers

Elementary teachers responded to several recommendations as being valuable for eliminating stressful situations. Table 7 presents the results of the analysis of this population's responses.

Providing release time for teachers to be away from students was considered by 95.6% of these teachers to be the most valuable recommendation for eliminating or preventing stress problems. It ranked first due to the frequency of responses. Providing adequate planning time for teachers was the second most valued action among elementary teachers, with a frequency of response of 94.9%.

Similar findings were noted among these teachers regarding the action of increasing salaries. It ranked as the third most valuable recommendation due to a frequency of responses of 94.7% of the respondents. Ninety percent of the elementary teachers felt that appropriate and meaningful in-service training could be helpful in eliminating stress problems which they were experiencing in their schools. It ranked fourth in value.

The fifth most valuable recommendation for the elementary population was providing counseling services for students, an action which accounted for 88.6% of these teachers.

Table 7

The Ten Most Valuable Recommended Actions for Elementary Teachers

Rank	Item #	Recommended action	Frequency	%
1	88	Provide release time for teachers away from students	505	95.6
2	87	Provide adequate planning time for teachers	501	94.9
3	94	Increase salaries	500	94.7
4	80	Appropriate and meaningful in-service training	475	90.0
5	93	Provide counseling services for students	468	88.6
6	75	Principal and supervisor who listen with empathy and understanding	461	87.3
7	89	Have broader curriculum to include are, P.E. and music	458	86.7
8	92	Reduce pupil-teacher ratio	453	85.8
9	67	Problems to the entire staff be studied and resolved by staff	452	85.6
10	66	Teacher input in determining and evaluating polices and practices	450	85.2

Having a principal and supervisor who listen with empathy and understanding was considered by 87.3% of the elementary teachers to be a valuable recommendation. The frequency of responses which this recommendation received gave it a ranking of sixth.

Having a broader curriculum to include art, physical education, and music was considered by 86.7% of these same teachers to be another valuable recommendation for reducing stressful situations. Due to the frequency of responses, it ranked seventh.

Reducing the pupil-teacher ratio was mentioned by 85.8% of the elementary population as being an especially valuable recommendation. It ranked eighth. Similar data suggested that 85.6% of the elementary teachers considered the action that problems of general concern to the entire staff be studied and resolved by the staff to be among the most important recommendations for reducing stress. This action ranked ninth.

The tenth most valuable action, according to the elementary group, regarded teachers' having input in determining and evaluating school policies and practices. Of this group, 85.2% cited it as significant and valuable for eliminating some stress problems.

Other factors which were closely associated with the ten most valuable recommendations need to be considered (see Appendix F, Table F-2). These factors included:

1. Help with discipline problems, which was judged to be very valuable by 83.1% of the elementary population.

2. Providing teaching assistants, which was considered to be a valuable recommendation by 82.8% of these teachers.

3. Having access to a curricular and instructional center, a recommendation which 82% of the elementary teachers felt would be of value in reducing some stress factors which they had encountered.

4. Having staff conferences involving all school personnel to deal with students who have specific problems, which was among those recommendations which 79.7% of the elementary teachers considered very valuable.

Two other recommendations need to be recognized for their value as judged by approximately 78% of the elementary population. They are:

1. to provide the school system with the results of this study, followed by the formation of a task force to follow up with recommended actions (77.7%), and

2. to have a written definition of the policies and procedures to be followed in the school (77.3%).

The rank order of the 37 recommended actions provided results which were used to identify some of the least valuable actions or those whose values were uncertain (see Appendix F, Table F-2).

It was interesting to find that many of the items of least value have been found to be very valuable in other studies. For example, other research has pointed out that teachers are leaving the profession in an effort to eliminate stress (McGuire, 1979). Elementary teachers in this study did not rate such an action as worthwhile. They considered it the least valuable, along with the action of taking a sabbatical or changing school, grade, or system. Teacher dismissal was not a strong recommendation either.

Prior research has suggested that teachers have expressed a desire to evaluate each other as a means of reducing stress. This action was not considered by this group as being especially valuable in eliminating stressful situations.

Responses of Middle School Teachers

Middle school teachers identified several actions which could serve to eliminate or reduce stressful situations in their school environment. Table 8 presents the results of an analysis of their responses.

Increasing salaries was considered by 96% of the middle school population to be the most valuable recommendation. Due to the frequency of responses (93.4%), the action of providing release time for teachers away from students was the second most valuable action noted by this group.

A similar level of approval was accorded by 88.4% of these teachers to the action of providing adequate planning time for teachers. The frequency of responses ranked it as the third most important action.

Of these teacher, 85.9% felt that appropriate and meaningful in-service training could be helpful in eliminating stress problems which they had encountered. It ranked fourth as an important action.

The fifth most valuable recommendation for this group was reducing the pupil-teacher ratio which accounted for 84.4% of these teachers. Having a principal or supervisor who listens with empathy and understanding was considered by 82.8% of the middle school teachers to be a valuable recommendation and ranked sixth.

Table 8

The Ten Most Valuable Recommended Actions for Middle School Teachers

Rank	Item #	Recommended action	Frequency	%
1	94	Increase salaries	190	96.0
2	88	Provide release time for teachers away from students	185	93.4
3	87	Provide adequate planning time for teachers	175	88.4
4	80	Appropriate and meaningful in-service training	170	85.9
5	92	Reduce pupil-teacher ratio	168	84.4
6	75	Principal and supervisor who listen with empathy and understanding	164	82.8
7	93	Provide counseling services for students	163	82.3
8	66	Teacher input in determining and evaluating polices and practices	162	81.8
9	76	Help with discipline problems	161	81.3
9	97	Provide the school system with the results of this study	161	81.3

Middle school teachers considered providing counseling services for students as one of the ten most valuable actions. Due to the frequency of responses from 82.3% of these teachers, it ranked seventh.

Teacher input in determining and evaluating policies and practices was considered by 81.8% of these same teachers to be an additional recommendation of importance. It was deemed the eighth most valuable action.

Similar data suggested that 81.3% of middle school teachers considered two factors as equally valuable in reducing stress. Help with discipline problems and providing the school system with the results of this study tied in the ranking as the ninth most frequently cited actions.

Other factors which were closely associated with the ten most valuable recommendations need to be considered (see Appendix F, Table F-3). These included:

1. Providing teaching assistants, which was found to be very valuable by 79.8% of middle school teachers.

2. Reducing the number of classroom interruptions, which was considered to be a valuable recommendation by 79.3%.

3. Total staff involvement for studying and resolving school problems, a recommendation which 78.8% of middle school teachers felt would be of value in reducing some stress factors which they had encountered.

4. Having staff conferences involving all school personnel to deal with students who have specific problems, was cited by 72.7% of these teachers as a very valuable strategy.

Some of the least valuable recommendations cited by the middle school group deserve mentioning since they revealed findings which are contrary to what is generally known (see Appendix F, Table F-3).

The four least valuable recommendations in the opinion of middle school teachers were identical to the four least valuable actions which were identified by the elementary teachers. These included:

1. Terminating the position and/or leaving the profession (20.2%).

2. Changing school, grade, or system (20.2%).

3. Teacher dismissal (26.8%).

4. Opportunity for teachers to evaluate each other (33.3%).

In addition, the action of renovating or building a new school was not considered by middle school teachers as being especially valuable in eliminating stressful situations. Similarly, the recommendation of having more visitations by the supervisor was not one these teachers found to be helpful in reducing stress.

Responses of High School Teachers

Eight of the ten most valuable recommendation listed by high school teachers were the same ones found to be valuable to the middle school group. Table 9 presents the results of an analysis of the response of the high school teachers.

Table 9

The Ten Most Valuable Recommended Actions for High School Teachers

Rank	Item #	Recommended action	Frequency	%
1	94	Increase salaries	240	93.4
2	88	Provide release time for teachers away from students	231	89.9
3	87	Provide adequate planning time for teachers	227	88.3
3	75	Principal and supervisor who listen with empathy and understanding	227	88.3
5	80	Appropriate and meaningful in-service training	218	84.8
6	76	Help with discipline problems	208	80.9
7	66	Teacher input in determining and evaluating policies and practices	207	80.5
8	92	Reduce pupil-teacher ratio	206	80.1
9	68	Reduce number of classroom interruptions	202	78.6
10	97	Provide school system with the results of the study	198	77.0
10	67	Problems to the entire staff by studied and resolved by staff	198	77.0

Increasing salaries was considered by 93.4% of the high school population to be the single most valuable recommendation for eliminating or preventing stress problems. It ranked first. Providing release time for teachers to be away from students was the second most valuable action and was cited by 89.9% of this population.

Two recommendations ranked equally as important as a means of reducing stress. Providing adequate planning time for teachers and having a principal or supervisor who listens with empathy and understanding were identified by 88.3% of high school teachers to be the next most valuable actions and ranked third.

The fifth most valuable recommendation for the high school population was being able to participate in appropriate and meaningful in-service training, accounting 84.8% of the total responses for this group.

A marginal difference in the number of responses existed between the next three recommended actions and accounted for slightly over 80% of the high school population. Due to the frequency of responses (80.9%), help with discipline problems ranked sixth, teacher input in determining and evaluating policies and practices ranked seventh (80.5%), and reducing the pupil-teacher ratio ranked eighth (80.1%).

Reducing the number of classroom interruptions was considered by 78.6% of these same teachers to be a valuable recommendation. The frequency placed it ninth.

Two final recommendations ranked equal in importance in reducing stress. Due to the frequency of responses, providing the school

system with the results of the study and the recommendation to include the entire staff in studying and resolving school problems were identified by 77% of the high school population to be among the ten most valuable strategies. They ranked tenth.

Other recommendations deserve mentioning (see Appendix F, Table F-4). These included:

1. Better scheduling practices, which were judged to be especially valuable by 75.9% of high school teachers.

2. Providing counseling services for students, which was considered to be a valuable recommendation by 73.9% of these teachers.

3. Having access to a curricular and instruction center was an additional recommendation which 73.2% of high school teachers felt would be valuable.

4. Having a written definition of policies and procedures to be followed was considered of value by 72.4% of the high school group.

Some of the least valuable recommendations for high school teachers were similar to the findings noted with the elementary and middle school teachers (see Appendix F, Table F-4). McGuire (1979) documented that teachers are leaving the profession in an effort to escape the stress of teaching. Two recommendations addressed this issue, including the action of changing school, grade, or system and terminating and/or leaving the profession. The high school teachers, however, did not feel either of these to be valuable in counteracting stress within the profession.

Dismissal of teachers has been considered a strategy in eliminating certain types of stress in schools. These high school teachers, however, did not respond favorably to this recommendation.

The findings in other studies have indicated that social interaction among school administrators and teachers had served to establish better rapport and communication (Schaiper & DelForge, 1980; Kyriacou, 1981). The high school group did not find this action as significant in reducing stress.

Responses of the Special Education Teachers

Special education teachers, in response to the questionnaire, were consistent with the other groups in considering several of the same recommended actions as being the most valuable. Table 10 provides and analysis of their responses.

Providing release time for teachers to be away from students was cited by 95.3% of this group to be an especially valuable recommendation. The frequency of responses ranked it first. Providing adequate planning time for teachers was the second most valuable action noted among special education teachers, drawing a response from 93.4% of this population.

Similar findings were cited among these teachers regarding two additional actions. Increasing salaries and having a principal and supervisor who listen with empathy and understanding were frequently mentioned as being equally as important in reducing stress, and accounted for 91.5% of these teachers. This frequency ranked them as the third most valuable recommendations.

Table 10

The Ten Most Valuable Recommended Actions for Special Education Teachers

Rank	Item #	Recommended action	Frequency	%
1	88	Provide release time for teachers away from students	101	95.3
2	87	Provide adequate planning time for teachers	99	93.4
3	94	Increase salaries	97	91.5
3	94	Principal and supervisor who listen with empathy and understanding	97	91.5
5	80	Appropriate and meaningful in-service training	95	89.6
6	93	Provide counseling services for students	93	87.7
7	74	Staff conferences involving all professional staff to deal with students who have specific problems	90	84.9
8	64	Provide teaching assistants	88	83.0
9	66	Teacher input in determining and evaluating policies and practices	87	82.1
9	63	Access to a curriculum and instructional center to go to for help	87	82.1

Of the special education teachers, 89.6% felt that appropriate and meaningful in-service training could be helpful in eliminating stress problems which they were experiencing. This action ranked fifth in value.

The sixth most frequently mentioned recommendation, cited by 87.7% of the special education population, was providing counseling services for students.

Making provisions to have staff conferences which involve all the professional staff when dealing with problem students was considered by 84.9% of these teachers to be one of the most valuable recommendations. It was the seventh most frequently mentioned action for reducing stress.

Providing teaching assistants was cited by 83% of these same teachers to be one of the top recommendations for reducing stressful situations. The frequency of responses ranked it eighth.

Similar data suggested that the following two actions were of equal importance to 82.1% of these teachers. The number of responses provided a rank of ninth for the use of: (1) teacher input in determining and evaluating policies and practices, and (2) providing teachers with access to a curricular and instructional center.

Other factors closely associated with the ten most valuable were (see Appendix F, Table F-5):

1. Reducing the pupil-teacher ratio, which was judged to be very valuable by 81.1% of the special education population.

2. Providing the school system with the results of this study, which was considered to be a valuable recommendation by 76.4%.

3. Having the opportunity to schedule more parent-teacher conferences during school was an additional recommendation which an equal number of special education teacher felt would benefit in reducing some of the stress which they had encountered.

4. Having a written definition of policies and procedures to be followed, which was among those recommendations which 75.5% of special education teachers considered as valuable.

Several other recommendations were judged to be valuable and are noted in Appendix F, Table F-5.

Some of the least valuable recommendations cited by special education teachers deserve mentioning and are identical to the ones cited by the other groups (see Appendix F, Table F-5). These were:

1. terminating the teaching position and/or leaving the profession (17.9%).

2. teacher dismissal (26.4%).

3. change school, grade, or system (29.2%).

4. opportunity for teachers to evaluate each other (36.8%).

Relationship Between the Ten Most Stressful Factors and the Ten Most Valuable Recommended Actions

There was a relationship between the ten most stressful factors and the ten most valuable recommendations for each of the population groups, including the elementary, middle school, high school, and special education groups. These relationships are found in Appendices E and F.

Elementary Teachers

The recommended actions cited by the elementary teachers as being especially valuable for reducing stress closely paralleled the stress factors which these teachers considered to be causing the greatest problems. The most common and overriding recommendations were: (1) having a principal and supervisor who listen with empathy and understanding, (2) planning appropriate and meaningful in-service training, and (3) reducing the pupil-teacher ratio. Any of these factors could be useful as an approach for solving any one of the stress factors cited by this group.

Three other recommendations matched up with three of the stress factors. Increasing teacher salaries was a strategy for reducing the stress of inadequate salary. Providing adequate planning time matched up with the stress factor of the lack of a planning period. Providing release time for teachers to be away from students was an action to be used to reduce the stress factor of being assigned duties outside the classroom.

The recommendation of providing a broader curriculum to include are, physical education, and music closely paralleled the stress factor of meeting pupil's abilities, needs, and interests.

Other stress factors dealt with time (as expressed in items 5, 9, 10, and 16 of the questionnaire) and had to do with those actions dealing with providing teachers with planning time, limiting the pupil-teacher ratio, and providing release time for teachers.

Evaluating pupil progress in academic, personal, and social growth was a stress factor which coincided with the actions of giving

teachers input in determining and evaluating policies and practices and in solving school and pupil-related problems.

Middle School Teachers

Middle school teachers cited recommendations which were closely related to the stress factors which were of greatest concern to them. Three of the most common and overriding recommendations for reducing stress among these teachers were: (1) having a principal and supervisor who listen with empathy and understanding, (2) providing the school system with the results of this study, and (3) offering appropriate and meaningful in-service training. These three recommendations could probably have been matched with all of the ten most stressful factors.

Four other recommended actions matched up with four of the ten top stress factors. Increasing teacher salaries was a strategy for eliminating the stress which inadequate salary created. Receiving help with discipline problems matched up with the stress factor of disrespectful conduct from students. Reducing the pupil-teacher ratio was a recommendation which matched the stress factor of class size. The recommendation of providing release time for teachers to be away from students matched with the stress factor of assuming duties outside the classroom.

The recommendation of providing counseling services for students closely paralleled the stress factor of motivating students. A relationship existed between the recommendation of teacher input in

determining and evaluating policies and practices and the stress created by the number of classroom interruptions.

Other stress factors dealt with time (as shown in items 5, 9, and 16 of the questionnaire) and had to do with those actions dealing with planning time and release time for teachers.

High School Teachers

Several of the recommendations and stress-related factors cited by the high school population were identical to those mentioned by the middle school group. Further, there was a relationship between the recommended actions and the most frequently mentioned stress factors.

The most common and overriding recommendations were (1) having a principal and supervisor who listen with empathy and understanding, (2) providing the school system with the results of this study, and (3) offering appropriate and meaningful in-service training. These recommendations would be used successfully when attempting to solve any one of the most stressful problems among these teachers.

Two other recommendations matched two of the stress factors. Increasing salaries matched the stress factor of inadequate salaries. Reducing the number of classroom interruptions matched the stress factor of the number of classroom interruptions.

There was a relationship between the recommendation for the entire staff to be involved in studying and resolving problems and the stress factor of having limited funds for extra classroom materials. The recommendation of reducing the pupil-teacher ratio closely

paralleled the stress factor of meeting pupils' abilities, needs, and interests.

Other stress factors dealt with time (as reflected in items 5, 9, 10, and 16 of the questionnaire) and motivating students (reflected in item 19) and had to do with those actions dealing with providing planning time, reducing the pupil-teacher ratio, and providing release time for teachers.

Stress factors, including parental indifference toward school activities and a lack of acceptance of teachers by the school community related to those actions dealing with giving teachers input in determining and evaluating policies and practices, as well as the action which dealt with total staff involvement in solving school and community-related problems as reflected in item 67 of the questionnaire.

Special Education Teachers

Special education teachers considered several recommendations which matched up with the stress factors that were causing their greatest problems. Three recommendations which were the most common and overriding for reducing stress among these teachers were: (1) having a principal and supervisor who listen with empathy and understanding, (2) offering appropriate and meaningful in-service training, and (3) providing teaching assistants.

The special education population had a greater percentage of matches between factors and actions than did the other three groups. Half of the recommended actions which they considered were related to

six identically paralleled stress factors. Increasing teacher salaries matched stress due to an inadequate salary. Providing adequate planning time for teachers matched the lack of a planning period. Providing counseling services for students matched the lack of counseling and guidance services for students. The recommendation for staff conferences with all professional staff to deal with students who have specific problems matched two of the most significant stress factors which were (1) students who have health problems, physical handicaps, and/or emotional problems, and (2) evaluating pupil progress in academic, personal, and social growth. Having access to a curricular and instructional center was a recommendation which matched the stress factor of lacking sufficient funds for extra classroom materials.

The recommendation of giving teachers input in determining and evaluating policies and practices closely paralleled the stress factor of getting parents to visit the school.

Other stress factors dealt with time (as reflected in items 7, 9, and 16 of the questionnaire) and meeting pupils' abilities, needs, and interests reflected in item 7 related to those actions dealing with providing teachers with a planning time, teaching assistants, and release time.

Demographic Findings

Demographic findings of the sample are shown in Tables 11-15.

The most stressed teachers according to this study were females in the elementary setting between the ages of 26-35 years, holding a

Table 11

Degree of Stress According to Sex

Sex	Total # of respondents	Stress values 1 & 2		Stress values 1 & 2	
		Total responses	% of responses	Total responses	% of responses
Male	265	12755	79	3301	21
Female	795	35207	73	12945	27
No response	29				
Grand total	1089				

Table 12

Degree of Stress According to Level of Schooling and Special Education

Level of school	Total # of respondents	Stress values 1 & 2		Stress values 3 & 4	
		Total responses	% of responses	Total responses	% of responses
Elementary	528	22980	72	9049	28
Middle school	198	9374	78	2613	22
High school	257	12070	78	3444	22
Special education	106	4840	76	1590	24
Grand total	1089				

Table 13

Degree of Stress According to Age

Age	Total # of respondents	Stress values 1 & 2		Stress values 3 & 4	
		Total responses	% of responses	Total responses	% of responses
20-25	68	3162	76	972	24
26-35	444	19372	72	7560	28
36-45	314	14375	75	4663	25
46 or over	254	11921	77	3394	23
No response	8				
Grand total	1089				

Table 14

Degree of Stress According to Degrees Held

Degree held	Total # of respondents	Stress values 1 & 2		Stress values 3 & 4	
		Total responses	% of responses	Total responses	% of responses
Less than B.S.	10	504	83	100	17
B.S.	214	9464	73	3519	27
B.S.+	397	18040	75	6018	25
M.S.	255	11500	75	3929	25
M.S.+	183	8342	75	2734	25
Ed.S.	19	942	82	211	18
Ed.D.	3*				
Ph.D.	1*				
No response	7				
Grand total	1089				

*The sample size was too small to consider.

Table 15

Degree of Stress According to Years of Experience

Years of experience	Total # of respondents	Stress values 1 & 2		Stress values 3 & 4	
		Total responses	% of responses	Total responses	% of responses
1-3	91	4322	78	1190	22
4-6	167	7436	73	2700	27
7-10	271	11928	72	4523	28
11-15	253	11122	72	4198	28
Over 15	300	14115	77	4008	23
No response	7				
Grand total	1089				

B.S. degree, and having 7 to 15 years experience. There was about the same amount of stress reported by the other age groups with the exception of teachers with 4 to 6 years experience who reported nearly the same amount of stress as did teachers who had 7 to 15 years experience. Beginning teachers and those with less than 4 years experience did not appear to be as affected by the stress phenomenon.

Special education teachers were affected by levels of stress which closely approximated those of the elementary teachers. In contrast, middle school and high school teachers were considerably less stressed than the other subpopulations.

The degrees held by teachers did not seem to be a factor in stress since there was not a significant difference in stress levels experienced by groups having different types of degrees.

Age. Approximately one-third (28%) of all teachers between the ages of 26 and 35 years experienced the greatest amount of stress. All other age groups were less stressed and accounted for 25% or less of each of these different groups.

Sex. Approximately one-third (27%) of all females were affected by stress, as opposed to only one-fourth (21%) of all males.

Level of schooling. Approximately one-third (28%) of all elementary teachers were affected by the stress factors cited in the study, as compared to the special education group where approximately one-fourth (24%) of the teachers were stressed. In contrast, approximately one-fourth (22%) of all middle school and high school teachers were stressed.

Years of experience. Nearly one-fourth (28%) of all teachers with between 7 to 10 and 11 to 15 years of experience were in the most stressed groups. Teachers with less experience, between 4 and 6 years, were affected similarly. Approximately one-fourth (27%) of these teachers were stressed. In contrast, beginning teachers with 1 to 3 years' experience and teachers with more than 15 years were less stressed. Approximately one-fourth (22% and 23%, respectively) of these two groups were stressed.

Degrees held. Teachers holding various degrees were equally as stressed, with the exception of those having an Ed.S. degree. Approximately one-fourth (25%-27%) of the teachers with degrees experienced some levels of stress. Less than one-fifth (18%) of the teachers with an Ed.S. were stressed. The sample size for Ed.D. and Ph.D. holders was too small to consider.

Teachers responded to 5 questions as a final step on the questionnaire (see Appendix A).

When asked how school stress compares with stress 10 years ago, 48% (485) of all teachers felt it was a "much greater problem." Thirty-four percent (350) felt it was a "much greater problem." Twelve percent (117) reported stress to be "about the same." Only 6% (63) reported it to be "considerably improved."

When asked about job satisfaction, 33% (367) of all teachers were "very satisfied." Half of these teachers (538) were "fairly satisfied," and 12% (126) reported being "fairly dissatisfied." In contrast, only 5% (50) were "very dissatisfied."

In response to the question, "Will you be teaching in ten year's time?", 36% (391) of the teachers reported that they "very likely" would be an educator. A similar number of teachers representing 37% (400) indicated they would "most likely" still be teaching. Twelve percent (127) reported teaching would be "fairly unlikely" for them a decade from now. A relatively high percentage of teachers indicated that they would be leaving the profession. Fifteen percent (165) indicated that teaching would be "very unlikely" for them in ten years' time.

In responding to the question of how much help teachers had received in reducing their stress problems, only 13% (144) reported receiving "a sufficient amount of help." However, 34% (361) reported receiving "some help." In contrast, 28% (296) reported receiving "little help," while a high 25% (264) reported receiving "no help."

When asked for an opinion of the person(s) responsible for this help, 66% (717) felt it was the principal's duty, 45% (493) suggested the teachers in the school, 33% (361) chose the supervisor, 24% (261) found it the responsibility of the superintendent, and 21% (231) felt it was the school board's job. Only 7% (77) reported it to be the responsibility of the coordinator. Seventeen (183) reported others as responsible. Some respondents listed names of these other people. There was a 5% (51) no response category.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER STUDY

Introduction

This chapter contains a summary of the findings of the study. It also presents the major conclusions which were drawn from these findings. Recommendations for the reduction or elimination of teacher stress are made based on these conclusions. These recommendations include a set of guidelines for reducing teacher stress. Recommendations are also made for further research.

The Problem

Pressures are quite apparent in the teaching profession. The work of a teacher continually demands life changes, and at times these changes are greater than the coping ability of an individual. Newspapers and magazines regularly feature stories about education. This creates a good deal of exposure to the variety of views about teaching. As a result, the professional world of teaching is not a private world. It comes as no surprise that the lifestyle of the teacher is a matter of concern to others. This is one important factor contributing to the pressure and stress on those in the teaching profession.

The demands are brought about from conditions related to the teaching profession and are dependent upon a number of factors. In addition, many teachers also experience stress from conditions outside

their teaching roles. It is quite possible that teachers, and those associated with the teaching profession, have experienced more job stress than other occupational groups due to the fact that teachers tend to be more aware of human feelings and behavior (Alley, 1980).

The problem becomes one of identifying and defining those conditions found within the school which are sources of stress among teachers and to determine approaches for correcting or eliminating persistent stress problems.

The Purpose

The purpose of this study was to determine those sources which cause teacher stress and to identify those recommended actions for dealing with this stress phenomenon. An additional purpose was to develop a set of guidelines which might serve to help reduce teacher stress. Specifically, the study attempted to answer the following questions:

1. Which sources of stress do teachers perceive as being the most significant and as posing the greatest problems?
2. What are the approaches recommended by teachers for eliminating or preventing the most persistent stress factors?
3. What guidelines can be recommended which could be helpful in reducing stress among teachers?

Procedures

A descriptive study was conducted by means of a survey using a 98-item questionnaire. The questionnaire was designed by the

investigator and used to determine the sources of teacher stress, to identify recommendations for dealing with this stress, and to provide information for developing guidelines to help reduce stress.

The population used in the study was faculty members from five schools systems in Blount and Hamblen Counties in Tennessee. The schools which were selected included 31 elementary schools, 3 special education centers, 8 middle schools, and 6 high schools. Total sampling resulted in the selection of 1,165 teachers.

Each principal was contacted by phone for the purpose of explaining the study and discussing the role of the principal in carrying out the study. A follow-up letter was sent to each school principal after the initial phone call which further explained the procedures for the project.

The investigator delivered the questionnaires to each principal who assumed the responsibility of providing each teacher with a copy. A week after distribution the investigator returned to each school to collect the completed questionnaires.

Data generated by the questionnaires were analyzed in order to answer the three research questions posed in the study.

Findings

The findings of the study answer research questions one and two and form a basis for the guidelines required by research question three as set forth in this section.

Research Question 1: Which sources of stress do teachers perceive as being the most significant and as posing the greatest problem?

Four of the ten most frequently mentioned stress factors were found to be causing high levels of stress among all teachers. One of these factors was the shortage of money. The other three dealt with the resource of time. The most frequently cited of the major stress-related factors involving time concerned the teacher's inability to provide the pupils with individual and remedial work. Another frequently cited, time-related stress factor was simply termed "time pressures." A third time-related stress factor cited was the amount of clerical work required of teachers. One additional factor which was cited by every group except special education was parental indifference toward school activities.

Other findings were related specifically to either elementary, middle school, high school, or special education teachers, but not the total population collectively.

Factors Cited by Elementary and High School Respondents

Respondents from the elementary and high school groups cited only one major stress factor which middle school and special education groups did not. This factor was a lack of time for creative teaching and/or experimentation.

Factors Cited by Elementary and Special Education Respondents

Respondents from the elementary and special education groups agreed on three important stress factors: (1) federal controls, expectancies, and demands; (2) the lack of a planning period; and

(3) evaluating pupil progress in academic, personal, and social growth.

Factors Cited by Elementary and Middle School Respondents

Elementary and middle school respondents strongly agreed that duties outside the classroom were a source of stress. This factor was the only one of the ten most stressful factors which was cited by both groups.

Factors Cited by Middle School Respondents Only

The two major stress-related factors cited by middle school respondents only were disrespectful conduct from students and excessive class size.

Factors Cited by Middle School and High School Respondents

The three important stress-related factors cited by middle school and high school respondents were the number of classroom interruptions, the difficulty of motivating students, and a lack of acceptance by the school community and respect for the teacher's professional status.

Factors Cited by High School and Special Education Respondents

The single factor cited by both high school and special education respondents as stressful was a lack of sufficient funds for extra classroom materials.

Factors Cited by Special Education Respondents Only

Three of the ten most stressful factors were cited by special education respondents. They were: (1) getting parents to visit the school; (2) obtaining counseling and guidance services for students; and (3) working with students whose problems are multifaceted in nature.

Research Question 2: What are the approaches recommended by teachers for eliminating or preventing the most persistent stress factors?

In addition to findings based on the stress factors, other findings were drawn from the recommended actions.

Approaches Strongly Recommended by All of the Respondents

All of the groups of respondents highly valued the following recommendations for eliminating or preventing stress:

1. Providing release time for teachers away from students.
2. Providing adequate planning time for teachers.
3. Increasing salaries.
4. Developing appropriate and meaningful in-service training.
5. Having a principal and supervisor who listen with empathy and understanding.
6. Providing teachers with the opportunity for input in determining and evaluating policies and practices.

Approaches Strongly Recommended by Elementary and High School Respondents

Only one recommendation was uniquely valued by both of these respondent groups: involving the total staff in the study and resolution of problems relevant to the entire staff.

Approaches Strongly Recommended by Elementary, Middle School and High School Respondents

All of the respondents except those in special education placed a high value on recommending a reduction in pupil-teacher ratio.

Approaches Strongly Recommended by Elementary, Middle School, and Special Education Respondents

The one recommendation most favored by elementary, middle school, and special education respondents was the provision of counseling services for students.

Approaches Strongly Recommended by Elementary Respondents Only

The one recommendation most favored by elementary respondents was the development of a broader curriculum which would include art, physical education, and music.

Approaches Strongly Recommended by Middle School and High School Respondents

Respondents in these two groups strongly supported two recommendations: (1) providing teachers with help in dealing with discipline problems, and (2) providing school systems with the results of this study.

Approaches Strongly Recommended by High School Respondents Only

The single recommendation which appears to be valued by high school teacher more than by those in the other respondent groups is a reduction in the number of classroom interruptions.

Approaches Strongly Recommended by Special Education Respondents Only

Three recommendations were strongly supported by the special education respondents:

1. Provision for teaching assistants.

2. Staff conferences involving all professional staff in dealing with students who have specific problems.

3. Access to a curriculum and instructional center.

Research Question 3

Research Question 3: What guidelines can be recommended which could be helpful in reducing stress among teachers?

Guidelines

1. Pupil-teacher ratios should never be permitted to exceed state standards and whenever possible, should be kept well below state standards.

2. Every attempt should be made by schools to give the maximum amount of resource support directly to teachers. These resources include salaries, money for the purchase of instructional materials,

access to professional support teams and curriculum and instructional centers, and teaching assistants.

3. Such support should also include appropriate and meaningful in-service training, as well as instructional and emotional support from principals and supervisors who have a basic understanding of human behavior.

4. Teachers should be given intensive and continuing in-service concerning the management of classroom discipline.

5. Teachers should also receive in-service assistance which will help them to better motivate their students.

6. Teachers should receive in-service training designed to help them gain greater acceptance and respect within their communities by accurately assessing and complying with community standards.

7. Particular attention should be paid to assisting teachers in evaluating pupil progress.

8. Noninstructional duties should be assigned to aides.

9. The elementary school curriculum should be broaden to include art, music, and physical education classes which are not taught by the regular classroom teacher.

10. Every teacher should have a daily planning period.

11. Teachers should be invited to utilize their skills in nontraditional roles within the educational system.

12. Teachers should be encouraged to refer serious discipline problems to their supervisor, and each school should be assigned capable professionals who can deal with the more serious discipline problems.

13. Each school should also have access to the services of professionals who specialize in student motivation.

14. The building-level supervisor should make every effort to keep classroom interruptions at a minimum.

15. Each school system should maintain an effective public information program to promote a positive image for its teachers.

Organizational Implications Related to the Guidelines

When considering the administrative level at which each of the above guidelines can best be implemented, it becomes clear that building level administrators lack the authority and fiscal control to implement many of these guidelines. Thus, a majority of the guidelines must be implemented at the central office level. Many of them, however, are within the authority structure of building level principals and do not necessarily require additional funding. These are: (1) the provision of instructional and emotional support by the principal; (2) the provision of help with classroom discipline, student motivation, and evaluation of pupil progress; (3) the assistance to teachers in gaining community acceptance and respect; (4) the encouragement of teachers to fully utilize aides for noninstructional duties; (5) the provision of a planning period for every teacher; (6) the encouragement of teachers to participate in the decision-making process; (7) the limiting of classroom interruptions; and (8) the implementation of an effective public information program to promote a positive image for the school's teachers.

All other guidelines would have to be dealt with at the central office level.

Generalizability

The guidelines of this study are presented to others to assist in their efforts to reduce teacher stress. It must be recognized that the population of this study consisted of five small city and rural school districts in Tennessee. The reader is cautioned to use care in applying these guidelines to school situations which differ greatly from the description of these schools and circumstances.

Conclusions

Based on the ten most stressful factors and the ten most valuable recommendations cited by the respondents, the following conclusions can be drawn:

1. Time pressures are a major cause of stress and teachers believe that they have insufficient time to perform their duties.

2. Teachers need more instructional and administrative support.

3. Appropriate measures need to be taken to improve the poor self-image of teachers as reflected in inadequate salaries and a lack of community support.

4. Input in the decision-making process is important to teachers.

5. Information about stress-related problems needs to be provided to supervisors and administrators. Therefore, the questionnaire used in this study could assist administrators and professional leaders

in identifying and solving some of the greatest stress problems within the school setting.

6. Research on teacher stress cannot be generalized across subpopulations.

Thus, the stress of teachers appears to be caused primarily by their perception that they are receiving inadequate time, support, money, and power to be able to fulfill their professional responsibilities effectively.

Recommendations

The findings and conclusion of this study generated the following recommendations for further research:

1. Factors causing stress in other subpopulations of teachers need to be identified.

2. Strategies should be developed and evaluated for implementing the recommended guidelines.

3. The extent to which teacher stress affects both teacher and pupil performance should be studied.

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APPENDICES

APPENDIX A

THE RESEARCH QUESTIONNAIRE

To The Classroom Teacher,

Although there are numerous demands on your time, will you take ten minutes for a task which you alone are best qualified to perform?

As a colleague of yours, I have undertaken a doctoral research study to determine the current professional problems of teachers which may cause stress. By obtaining reactions from teachers to the stress problems submitted on the following questionnaire, valuable information should result which could be useful as a basis for creating and maintaining a suitable environment for teacher effectiveness.

This study is being conducted under the direction of Dr. Jerry Bellon at the University of Tennessee. It has been approved by your Superintendent and all findings will be presented there.

Your careful consideration and prompt response will be greatly appreciated. Under no circumstances will your responses be revealed during the analysis or reporting of the results.

Involvement in this research project is purely voluntary. You can choose not to participate.

Sincerely,
Margie Helton Carico
Margie Helton Carico

DO NOT SIGN YOUR NAME
AFTER COMPLETING THIS SURVEY, PLEASE RETURN IT TO THE BOX WHICH HAS BEEN PLACED IN THE SCHOOL OFFICE FOR YOUR CONVENIENCE.

A QUESTIONNAIRE TO IDENTIFY PROBLEMS WHICH MAY CAUSE TEACHER STRESS

Please circle one of the four numbers which best indicates the amount of stress the problem presents to you. Feel free to add any problems which have not been included. Space has been provided at the end of each section.

KEY:
A ***major*** problem causing ***serious*** stress ---- 4
A ***significant*** problem causing ***considerable stress*** ---- 3
A ***definite*** problem causing ***moderate*** stress ---- 2
A ***minor*** problem causing ***little*** stress ---- 1

ENVIRONMENTAL FACTORS

INSTRUCTIONAL RESPONSIBILITIES

1. Class size	1	2	3	4
2. Inflexible schedule	1	2	3	4
3. No planning period	1	2	3	4
4. Federal controls, expectancies, and demands	1	2	3	4
5. Time pressures	1	2	3	4
6. Inadequate pre-service for courses you teach	1	2	3	4
7. Meeting pupils' abilities, needs and interests	1	2	3	4
8. Appropriate instructional material for your grade or subject	1	2	3	4
9. Time for individual and remedial work	1	2	3	4
10. Time for creative teaching and/or experimentation	1	2	3	4
11. Evaluating pupil progress in academic, personal, and social growth areas	1	2	3	4
12. Counseling students with personal problems	1	2	3	4
13. Number of classroom interruptions	1	2	3	4
14. Inconsistent progress reporting of students	1	2	3	4
15. Sufficient funds for extra classroom materials	1	2	3	4
Others (list)	1	2	3	4
_____	1	2	3	4

serious stress
considerable stress
moderate stress
little stress

	1	2	3	4
NON-INSTRUCTIONAL DUTIES				
16. Required clerical work (reports, records, etc.)	1	2	3	4
17. Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	1	2	3	4
18. Classroom control	1	2	3	4
19. Motivating students	1	2	3	4
20. Students who have health and nutritional problems, physical handicaps, and/or emotional problems	1	2	3	4
21. Lack of administrative support relative to disciplinary problems	1	2	3	4
22. Lack of counseling and guidance services for students	1	2	3	4
23. Disrespectful conduct from students	1	2	3	4
Others (list)	1	2	3	4
_____	1	2	3	4
WORKING CONDITIONS				
24. Noise pollution	1	2	3	4
25. Improper climate control within the school building	1	2	3	4
26. Inadequate facilities and equipment	1	2	3	4
27. Ineffective Teacher Evaluation procedures	1	2	3	4
28. Inadequate salary	1	2	3	4
29. Inconsistent school policies and rules	1	2	3	4
30. Poor school standards	1	2	3	4
31. Poor professional ethics of colleagues	1	2	3	4
32. Unclear or unstated school goals and objectives	1	2	3	4
33. Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	1	2	3	4
34. Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	1	2	3	4
Others (list)	1	2	3	4
_____	1	2	3	4
INTERPERSONAL FACTORS				
RELATIONSHIPS WITH COLLEAGUES				
35. Conflict with other teachers	1	2	3	4
36. Incompetent faculty members	1	2	3	4
37. Rapport with principal	1	2	3	4
38. Lack of recognition and/or personal consideration	1	2	3	4
39. Type of support from principal in relations with parents	1	2	3	4
40. Support from principal in relations with students, teachers, or other school officials	1	2	3	4
41. Poor leadership from principal or supervisor	1	2	3	4
42. Lack of response to requests	1	2	3	4
43. Evaluation process	1	2	3	4
44. Individual conference with principal or supervisor	1	2	3	4
45. Plans and methods recommended by principal or supervisor	1	2	3	4
46. Conflict with principal or supervisor	1	2	3	4
47. Negotiations	1	2	3	4
Others (list)	1	2	3	4
_____	1	2	3	4

RELATIONSHIP WITH PARENTS

48. Working relations with parents ____ 1 2 3 4
49. Parent conferences ____ 1 2 3 4
50. Explaining student's progress to parents ____ 1 2 3 4
51. Getting parents to visit school ____ 1 2 3 4
52. Pressures and expectations of parents ____ 1 2 3 4
53. Parental indifference toward school activities ____ 1 2 3 4
54. Acceptance by the school community and respect for your professional status ____ 1 2 3 4
Others (list) ____ 1 2 3 4
____ 1 2 3 4

INTRAPERSONAL FACTORS

55. Developing adequate classroom skills ____ 1 2 3 4
56. Education and training ____ 1 2 3 4
57. Opportunity to serve on curricular or professional committees ____ 1 2 3 4
58. Opportunity to attend professional conferences or conventions ____ 1 2 3 4
59. Time to take Graduate courses ____ 1 2 3 4
60. Role conflict or role ambiguity ____ 1 2 3 4
61. Decreasing job mobility ____ 1 2 3 4
Others (list) ____ 1 2 3 4
____ 1 2 3 4

In this section an attempt is made to propose various means of preventing or reducing stressful problems. Please react to each item below by circling one of the four numbers which best indicates the amount of value this practice would have for you. Add any other items which you feel are important.

KEY:

This item is ***especially valuable*** 4
This item has ***some value*** 3
This item is of ***little value*** 2
The ***value*** of this item ***is uncertain*** 1

62. Individual conferences with principal to evaluate work and seek assistance ____ 1 2 3 4
63. More detailed sequential curriculum outlines and courses of study K-12 ____ 1 2 3 4
64. Access to a curriculum and instructional center to which you may go for help ____ 1 2 3 4
65. Provide teaching assistants ____ 1 2 3 4
66. Written definition of the policies and procedures to be followed in your school ____ 1 2 3 4
67. Teacher input in determining and evaluating these policies and practices ____ 1 2 3 4
68. Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole ____ 1 2 3 4
69. Reduction of the number of classroom interruptions ____ 1 2 3 4
70. Better scheduling practices ____ 1 2 3 4
71. Staff manual explaining the limits within which you can make decisions, take action, and experiment ____ 1 2 3 4
72. Demonstration lessons by principal and/or other teachers ____ 1 2 3 4
73. More classroom visitations by the principal ____ 1 2 3 4
74. More classroom visitations by the supervisor ____ 1 2 3 4
75. Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems ____ 1 2 3 4
76. Principal and supervisor who listen with empathy and understanding ____ 1 2 3 4
77. Help with discipline problems ____ 1 2 3 4
78. Opportunity for more parent-teacher conferences during school time ____ 1 2 3 4
79. Opportunity to attend local colleges ____ 1 2 3 4
80. Improve Teacher Evaluation process ____ 1 2 3 4
81. Appropriate and meaningful In-Service Training ____ 1 2 3 4
82. Terminate your position and/or leave the profession ____ 1 2 3 4
83. Change school, grade, or system ____ 1 2 3 4

	value of this item *is uncertain*	*little value*	*some value*	*especially valuable*
84. Attend a school sponsored Stress Management Seminar	1	2	3	4
85. Take a leave of absence or sabbatical	1	2	3	4
86. Opportunity for teachers to evaluate each other	1	2	3	4
87. Opportunity for teachers to evaluate principal and supervisor	1	2	3	4
88. Provide adequate planning time for teachers	1	2	3	4
89. Provide release time for teachers away from students (lunch, play, etc.)	1	2	3	4
90. Have broader curriculum to include art, P.E., and music	1	2	3	4
91. Teacher dismissal	1	2	3	4
92. Provide counseling services for teachers.	1	2	3	4
93. Reduce pupil-teacher ratio	1	2	3	4
94. Provide counseling services for students	1	2	3	4
95. Increase salaries	1	2	3	4
96. Renovate or build new school	1	2	3	4
97. Engage in social activitles with colleagues and principal away from school	1	2	3	4
98. Provide your school system with the results of this study followed by the formation of a Task Force to follow up with recommended actions	1	2	3	4
Others (list)	1	2	3	4
	1	2	3	4

DEMOGRAPHIC DATA

Please respond to the following items:

1. Circle grade level(s) currently taught:
   K 1 2 3 4 5 6 7 8 9 10 11 12 Special Ed.
2. Years of teaching experience:
   1-3 ____ 4-6 ____ 7-10 ____ 11-15 ____ Over 15 ____
3. Level of education attained:
   Less than Bachelor's ____ Bachelor's ____ Bachelor's plus ____ Master's ____ Master's plus ____
   Ed. S. ____ Ed.D. ____ Ph.D. ____
4. Age level:
   20-25 ____ 26-35 ____ 36-45 ____ 46 or over ____
5. Sex: Male ____ Female ____

As a final step, please respond to the following items:

6. As a teacher, how does school stress today compare with ten years ago?
   Considerably improved ____ About the same ____ More of a problem ____ A much greater problem ____
7. How satisfied are you with teaching as a job?
   Very dissatisfied ____ Fairly dissatisfied ____ Fairly satisfied ____ Very satisfied
8. Will you be teaching in ten years' time?
   Very unlikely ____ Fairly unlikely ____ Fairly likely ____ Very likely ____
9. How much help have you received in reducing your problems of stress?
   No help ____ Little help ____ Some help ____ A sufficient amount of help ____
10. In your opinion, who is the person(s) responsible for this help?
    Principal ____ Supervisor ____ Teachers in school ____ Coordinator ____ Superintendent ____ School Board ____ Others (list) _____

APPENDIX B

THE FOLLOW-UP LETTER TO PRINCIPALS

March 31, 1983

Dear Mr. :

As a follow-up to our recent phone conversation, I am looking forward to meeting you when I deliver the questionnaires to your school. I plan to be at your school Friday, April 8, 1983. I have chosen the following week of April 11-15 as the week for collecting the data. Can I count on you to choose any time during that week to distribute these questionnaires to your teachers? I am only asking that you give out all of the questionnaires on the same day. Perhaps you may choose a faculty meeting or any other way which is most convenient for you and your staff.

It would be most helpful to me if teachers could complete the questionnaire while at school rather than taking it home. I will return to your school either Friday, April 15 or Monday, April 18 to collect these.

I am looking forward to meeting you Friday. Thank you for your interest and support for my research efforts.

Sincerely,

Ms. Margie Helton Carico

Ms. Margie Helton Carico

APPENDIX C

OTHER RELATED LITERATURE

Study	Reported Sources of Stress
National Education Association (1939)	class interruptions such as bulletins, announcements, errands, special events adaptation of class program to individual differences in ability, interests, need Adaptation of promotion standards to meet a "no-failure" ideal without neglecting "minimum essentials" expected by the school or without endangering future school adjustment and progress of pupils clerical activites such as mimeographing class materials and work sheets, transcribing records, and test results for central files, etc. total number of pupils assigned size of individual class
National Education Association (1951)	number or type of pupils inadequacy of school facilities extracurricular responsibilities clerical and administrative work instructional planning
Wey (1951)	problems of pupil control and discipline deficiencies in school equipment, physical conditions, materials adjusting to teaching assignment adapting to needs, interests, and abilities of pupils motivating pupil interest and response
Travers, et al. (153)	discipline pupil-teacher relationship
Gabriel (1957)	class control evaluation
Anderson (1960)	bring about learning maintaining classroom control complying with contractual stipulations orienting to the school system developing faculty relations

McLaughlin and Shea (1960)	excessive clerical work supervisory duties at school inadequate salary negative student attitude toward learning
Ahlering (1963)	grading papers arguing over test answers coping with restlessness of students handling discipline problems introducing new ideas to stimulate discussion dealing with cheating students
Dropkin & Taylor (1963)	discipline relations with parents methods of evaluating teaching planning materials and resources classroom routines
Erickson & Rudd (1967)	gaining knowledge of the unit to be taught being evaluated developing a relationship with supervising teacher
National Education Associaton (1967)	insufficient time for rest and preparation in school day large class size insufficent clerical help inadequate salary inadequate fringe benefits
Sorenson & Halpert (1968)	disagreement about what and how to teach personality conflicts with other teachers difficult relations with students
York (1968)	discipline academic organization individual differences planning
Fuller (1969)	concerns with self
Valencia (1971)	method of providing feedback about teaching performance

Fuller & Manning (1973)	viewing teaching performance on videotape microteaching practice in area teacher is not concerned about
Campbell & Williamson (1974)	adjusting to deficiencies in school equipment budgeting time keeping reports and records using special school services maintaining poise evaluating student achievement lacking command over subject matter planning and organizaing learning activities presenting lessons
Lortie (1975)	clerical duties interruptions time pressures troublesome students
Kyriacou & Sutcliffe (1977)	role conflict or role ambiguity meeting demands poor working conditions new or unfamiliar demands stress from sources outside the role as a teacher
Styles & Cavanagh (1977)	expectations self-fulfillment needs ego needs student-teacher relations personal competency self-relationship conflicting values social approval professional constraints
Zahn (1980)	ambiguity conflicts of values inadequate resources no voice in decisions affecting teachers large classes monotony lack of recognition from the organization or community lack of preparation evaluation

Dedrick, Charles (1981)	lack of time disruptive students
Feitler & Tokar (1981)	student misbehavior overwork
Fimian, Michael (1981)	inadequate salary lack of time for individual students poor attitutes and behaviors of the administration
Ginsberg, Rick & Bennett, Albert (1981)	security--safety from loss of job or income, from bodily harm, and from criticism of one's values sociability--giving and receiving affection, and compatability status--feelings of self-esteem, social worth, and prestige and standing in the profession
Gupta, N. (1981)	role conflict role ambiguity role overload role insufficiency
Gupta, N. & Jenkins, D. (1981)	the job other teachers discipline issues characteristics of the school admimistration
Johanson, M. (1981)	lack of peer support accountability discipline problems types of assignments type of communication
Schwab, R. (1981)	role conflict role ambiguity
Anderson, G. & Watson, H. (1982)	teacher accountability "meddling" parents teacher transfer reduction in force lack of support from superiors responsibility for student achievement student violence evaluation outside pressure groups

Blase, J. J. (1982)	decreases in teacher's job involvement
Borthwick, P. et al. (1982)	working with adolescents in a high school environment
Bruner, A. L. (1982)	lack of administrative support for discipline hostile and disruptive students administrative paperwork interruptions changes in the daily routine lack of administrative support in dealing with parents lack of adequate security measures control of hall traffic during class-time disruptive students, emotionally disturbed students, student absenteeism parents who do not value education
Farber, B. (1982)	lack of administrative and parental support for teachers
Farber, B. (1982)	excessive paperwork unsuccessful administrative meetings lack of advancement opportunities
Feitler, F. & Toker, E. (1982)	problem students who chronically misbehave
Fielding, M. A. & Gall, M. D. (1982)	interpersonal situations new situations
Freedman, S. (1982)	accepted goals of public education conflicting standards conflicting demands on teachers divisions within the staff pressures and expectations teachers' positions within the school system
Freedman, S. et al. (1982)	conflicts inherent in the accepted goals of public education conflicting standards demands on teachers divisions within the school staff pressures and expectations

	teachers' positions within the school system conflicts inherent in the teachers' roles
Galloway, D. (1982)	time management disagreements with colleagues
Meinke, D. (1982)	behavior of students teachers' relationships in the school union activities
Saunders, R. & Watkins, J. (1982)	inadequate planning/preparation time feeling of "never catching up"
Schaiper, L. & DelForge, C. (1982)	real role and ego ideal of teacher chronic discipline problems frustration with poor student achievement
Alexander, L. (1983)	personal/professional threat interpersonal relationships racial issues noncontact teaching tasks changes in normal routine
Bruno, J. (1983)	ethical stressors such as racial tension among faculty falsifying of school records sexual harassment by school officials
Dunham, J. (1983)	lack of administrative support need for counseling students need for teacher involvement in decision making
Grant, G. (1983)	increased responsibility loss of authority
Hawkes, R. R. & Dedrick, C. V. (1983)	finances professional support
Hudson, F. & Meagher, K. (1983)	lack of administrator support cooperation with other teachers discipline and behavior problems
Milstein, M. & Golaszewski, T. J. (1983)	lack of materials student motivation discipline problems

Schwartz, H. (1983)	security governance/leadership budget cuts staff relations student issues
Welch, F. (1983)	notification of unsatisfactory performance last week of school overcrowded classrooms disruptive students planning for instruction attending meetings conferring with parents and the principal evaluating students' performance
Barter, R. (1984)	school effectiveness teacher stress teacher shortage classroom organization professional growth job satisfaction

APPENDIX D

COMMERCIALLY PREPARED QUESTIONNAIRE

Figure D-1. Commercially Prepared Questionnaire.

APPENDIX E

RANK ORDER OF STRESS FACTORS

Table E-1

Rank Order of the Stress Factors Based on the Frequency of Responses by the Total Population

Rank	Item #	Stress Factors	Frequency	%
1	E28	Inadequate salary	665	61.1
2	E9	Time for individual and remedial work	659	60.5
3	E16	Required clerical work (reports, records, etc.)	633	58.1
4	E5	Time pressures	572	52.5
5	E7	Meeting pupils' abilities, needs and interests	498	45.7
6	E10	Time for creative teaching and/or experimentation	480	44.1
7	Inter53	Parental indifference toward school activities	464	42.6
8	E4	Federal controls, expectancies, and demands	458	42.1
9	E19	Motivating students	455	41.8
10	E1	Class size	429	39.4
11	E3	No planning period	424	38.9
12	E17	Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	418	38.4
12	E23	Disrespectful conduct from students	418	38.4
14	E11	Evaluating pupil progress in academic, personal, and social growth areas	408	37.5
15	E15	Sufficient funds for extra classroom materials	404	37.1
16	E13	Number of classroom interruptions	388	35.6
17	Inter54	Acceptance by the school community and respect for your professional status	382	35.1
18	E12	Counseling students with personal problems	363	33.3
19	Inter47	Negotiations	354	32.5
20	E22	Lack of counseling and guidance services for students	348	32.0
21	E25	Improper climate control within the school building	339	31.1
22	Intra59	Time to take graduate courses	327	30.0
23	E20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	324	29.8
24	Inter51	Getting parents to visit school	304	27.9
25	E24	Noise pollution	297	27.3
26	E29	Inconsistent school policies and rules	292	26.8
27	E8	Appropriate instructional material for your grade or subject	270	24.8
28	Inter52	Pressures and expectations of parents	267	24.5
29	E18	Classroom control	247	22.7
30	E26	Inadequate facilities and equipment	236	21.7
31	E2	Inflexible schedule	235	21.6
32	Intra61	Decreasing job mobility	232	21.3
33	E27	Ineffective teacher evaluation procedures	223	20.5
34	Inter38	Lack of recognition and/or personal consideration	207	19.0
35	E14	Inconsistent progress reporting of students	195	17.9
36	Inter43	Evaluation process	190	17.4
37	E21	Lack of administrative support relative to disciplinary problems	184	16.9
38	Inter41	Poor leadership from principal or supervisor	179	16.4
39	E31	Poor professional ethics of colleagues	173	15.9
40	Inter36	Incompetent faculty members	169	15.5
41	Inter42	Lack of response to requests	167	15.3
42	E6	Inadequate pre-service for courses you teach	166	15.2
43	E32	Unclear or unstated school goals and objectives	162	14.9
44	Intra60	Role conflict or role ambiguity	145	13.3
45	Inter49	Parent conferences	138	12.7
46	Inter39	Type of support from principal in relations with parents	136	12.5
47	Intra55	Developing adequate classroom skills	133	12.2
48	Inter37	Rapport with principal	131	12.0
48	Inter40	Type of support from principal in relations with students, teachers, or other school officials	131	12.0
50	E30	Poor school standards	128	11.8
51	E33	Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	119	10.9
52	Inter50	Explaining student's progress to parents	118	10.8
53	Intra58	Opportunity to attend professional conferences or conventions	115	10.6
54	E34	Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	113	10.4
55	Inter46	Conflict with principal or supervisor	112	10.3
55	Inter48	Working relations with parents	112	10.3
57	Inter35	Conflict with other teachers	103	9.5
58	Inter44	Individual conference with principal or supervisor	100	9.2
59	Inter45	Plans and methods recommended by principal or supervisor	97	8.9
60	Intra56	Education and training	88	8.1
61	Intra57	Opportunity to serve on curricular or professional committees	72	6.6

(N = 1089)

E = Environmental; Inter = Interpersonal; Intra = Intrapersonal

Table E-2

Rank Order of the Stress Factors Based on the Frequency of Responses by the Elementary Teachers

Rank	Item #	Stress Factors	Frequency	%
1	E9	Time for individual and remedial work	366	69.3
2	E16	Required clerical work (reports, records, etc.)	338	64.0
3	E28	Inadequate salary	325	61.6
4	E5	Time pressures	298	46.4
5	E10	Time for creative teaching and/or experimentation	282	53.4
6	E4	Federal controls, expectancies, and demands	274	51.9
7	E3	No planning period	272	51.5
8	E7	Meeting pupils' abilities, needs and interests	271	51.3
9	E17	Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	246	46.6
10	Inter53	Parental indifference toward school activities	243	46.0
10	E11	Evaluating pupil progress in academic, personal, and social growth areas	243	46.0
12	E23	Disrespectful conduct from students	226	42.8
13	E19	Motivating students	214	40.5
14	E1	Class size	209	39.6
15	E12	Counseling students with personal problems	202	38.3
15	E20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	202	38.3
17	Inter47	Negotiations	199	37.7
18	E15	Sufficient funds for extra classroom materials	197	37.3
18	E22	Lack of counseling and guidance services for students	197	37.3
20	E13	Number of classroom interruptions	189	35.8
21	Inter54	Acceptance by the school community and respect for your professional status	183	34.7
22	E25	Improper climate control within the school building	163	30.9
23	Inter52	Pressures and expectations of parents	159	30.1
24	Intra59	Time to take graduate courses	157	29.7
25	E24	Noise pollution	156	29.6
26	Inter51	Getting parents to visit school	146	27.7
26	E8	Appropriate instructional material for your grade or subject	146	27.7
28	E29	Inconsistent school policies and rules	144	27.3
29	E18	Classroom control	140	26.5
30	E2	Inflexible schedule	131	24.8
31	E26	Inadequate facilities and equipment	129	24.4
32	E14	Inconsistent progress reporting of students	127	24.1
33	E27	Ineffective teacher evaluation procedures	126	23.9
34	Intra61	Decreasing job mobility	111	21.0
35	E21	Lack of administrative support relative to disciplinary problems	108	20.5
36	Inter43	Evaluation process	105	20.0
37	E32	Unclear or unstated school goals and objectives	103	19.5
38	Inter41	Poor leadership from principal or supervisor	99	18.8
39	Inter42	Lack of response to requests	95	18.0
40	E31	Poor professional ethics of colleagues	94	17.8
41	Inter38	Lack of recognition and/or personal consideration	90	17.0
42	Inter36	Incompetent faculty members	86	16.3
43	Inter49	Parent conferences	80	15.2
44	E30	Poor school standards	79	15.0
45	Intra55	Developing adequate classroom skills	78	14.8
48	E6	Inadequate pre-service for courses you teach	77	14.6
48	Intra60	Role conflict or role ambiguity	77	14.6
48	Inter39	Type of support from principal in relations with parents	77	14.6
48	E33	Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	77	14.6
48	Inter50	Explaining student's progress to parents	77	14.6
51	Inter40	Type of support from principal in relations with students, teachers, or other school officials	72	13.6
52	Inter48	Working relations with parents	71	13.5
53	Inter37	Rapport with principal	67	12.7
54	E34	Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	65	12.3
54	Inter46	Conflict with principal or supervisor	65	12.3
56	Inter44	Individual conference with principal or supervisor	56	10.6
57	Inter35	Conflict with other teachers	55	10.4
57	Inter45	Plans and methods recommended by principal or supervisor	55	10.4
59	Intra56	Education and training	50	9.5
60	Intra58	Opportunity to attend professional conferences or conventions	45	8.5
61	Intra57	Opportunity to serve on curricular or professional committees	35	6.6

(N = 528)

Table E-3

Rank Order of the Stress Factors Based on the Frequency of Responses by the Middle School Teachers

Rank	Item #	Stress Factors	Frequency	%
1	E28	Inadequate salary	125	63.1
2	E9	Time for individual and remedial work	120	60.6
3	E16	Required clerical work (reports, records, etc.)	108	54.5
4	E23	Disrespectful conduct from students	103	52.0
5	E1	Class size	102	51.5
6	Inter53	Parental indifference toward school activities	85	42.9
7	E5	Time pressures	84	42.4
8	E19	Motivating students	80	40.4
10	E17	Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	78	39.4
10	E13	Number of classroom interruptions	78	39.4
10	Inter54	Acceptance by the school community and respect for your professional status	78	39.4
12	E15	Sufficient funds for extra classroom materials	68	34.3
12	E24	Noise pollution	68	34.3
14	E10	Time for creative teaching and/or experimentation	66	33.3
15	E12	Counseling students with personal problems	64	32.3
16	E7	Meeting pupils' abilities, needs and interests	63	31.8
16	E25	Improper climate control within the school building	63	31.8
18	Intra59	Time to take graduate courses	60	30.3
19	E22	Lack of counseling and guidance services for students	58	29.3
20	E18	Classroom control	56	28.3
21	Intra61	Decreasing job mobility	55	27.8
22	Inter51	Getting parents to visit school	54	27.3
23	E4	Federal controls, expectancies, and demands	49	24.7
24	E3	No planning period	46	23.2
25	Inter47	Negotiations	45	22.7
26	E11	Evaluating pupil progress in academic, personal, and social growth areas	44	22.2
27	Inter52	Pressures and expectations of parents	41	20.7
27	Inter38	Lack of recognition and/or personal consideration	41	20.7
29	E29	Inconsistent school policies and rules	40	20.2
30	E2	Inflexible schedule	39	19.7
31	E8	Appropriate instructional material for your grade or subject	33	16.7
32	Inter36	Incompetent faculty members	32	16.2
33	E26	Inadequate facilities and equipment	31	15.7
34	E20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	30	15.2
35	Inter43	Evaluation process	29	14.6
36	Inter37	Rapport with principal	27	13.6
37	E6	Inadequate pre-service for courses you teach	23	11.6
38	E21	Lack of administrative support relative to disciplinary problems	22	11.1
38	Inter49	Parent conferences	22	11.1
40	Intra60	Role conflict or role ambiguity	21	10.6
41	E27	Ineffective teacher evaluation procedures	20	10.1
41	Intra58	Opportunity to attend professional conferences or conventions	20	10.1
43	E31	Poor professional ethics of colleagues	19	9.6
44	Inter41	Poor leadership from principal or supervisor	18	9.1
45	Inter48	Working relations with parents	17	8.6
46	E14	Inconsistent progress reporting of students	16	8.1
46	Inter50	Explaining student's progress to parents	16	8.1
48	Intra55	Developing adequate classroom skills	15	7.6
48	Inter39	Type of support from principal in relations with parents	15	7.6
50	E34	Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	14	7.1
51	Inter40	Type of support from principal in relations with students, teachers, or other school officials	13	6.6
52	E30	Poor school standards	12	6.1
52	Inter44	Individual conference with principal or supervisor	12	6.1
54	Inter42	Lack of response to requests	11	5.6
54	Inter35	Conflict with other teachers	11	5.6
56	Inter45	Plans and methods recommended by principal or supervisor	10	5.1
58	E32	Unclear or unstated school goals and objectives	9	4.5
58	E33	Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	9	4.5
58	Intra56	Education and training	9	4.5
60	Inter46	Conflict with principal or supervisor	8	4.1
60	Intra57	Opportunity to serve on curricular or professional committees	8	4.1

(N = 198)

Table E-4

Rank Order of the Stress Factors Based on the Frequency of Responses by the High School Teachers

Rank	Item #	Stress Factors	Frequency	%
1	E28	Inadequate salary	156	60.7
2	E5	Time pressures	134	52.1
3	E19	Motivating students	124	48.2
4	E9	Time for individual and remedial work	120	46.7
5	E16	Required clerical work (reports, records, etc.)	119	46.3
6	E7	Meeting pupils' abilities, needs and interests	112	43.6
7	Inter53	Parental indifference toward school activities	96	37.4
8	E10	Time for creative teaching and/or experimentation	95	37.0
9	E13	Number of classroom interruptions	93	36.2
10	Inter54	Acceptance by the school community and respect for your professional status	92	35.8
10	E15	Sufficient funds for extra classroom materials	92	35.8
12	E25	Improper climate control within the school building	86	33.5
13	Inter47	Negotiations	84	32.7
14	E1	Class size	80	31.1
15	E11	Evaluating pupil progress in academic, personal, and social growth areas	78	30.4
15	E29	Inconsistent school policies and rules	78	30.4
17	Intra59	Time to take graduate courses	76	29.6
17	E4	Federal controls, expectancies, and demands	76	29.6
19	E17	Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	73	28.4
20	E12	Counseling students with personal problems	63	24.5
20	E3	No planning period	63	24.5
22	Inter51	Getting parents to visit school	62	24.1
23	E23	Disrespectful conduct from students	60	23.3
24	Inter38	Lack of recognition and/or personal consideration	56	21.9
24	E27	Ineffective teacher evaluation procedures	56	21.9
26	E22	Lack of counseling and guidance services for students	51	19.8
26	E8	Appropriate instructional material for your grade or subject	51	19.8
28	E20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	50	19.5
29	E24	Noise pollution	49	19.1
30	Intra61	Decreasing job mobility	48	18.7
30	E6	Inadequate pre-service for courses you teach	48	18.7
32	E31	Poor professional ethics of colleagues	46	17.9
33	Inter42	Lack of response to requests	45	17.5
34	E26	Inadequate facilities and equipment	44	17.1
35	Inter52	Pressures and expectations of parents	43	16.7
35	E2	Inflexible schedule	43	16.7
37	Inter41	Poor leadership from principal or supervisor	41	16.0
38	E21	Lack of administrative support relative to disciplinary problems	40	15.6
39	Inter36	Incompetent faculty members	39	15.2
40	Inter43	Evaluation process	38	14.9
41	E14	Inconsistent progress reporting of students	34	13.6
41	E32	Unclear or unstated school goals and objectives	34	13.6
43	E18	Classroom control	33	12.8
44	Inter37	Rapport with principal	32	12.5
44	Intra60	Role conflict or role ambiguity	32	12.5
46	Inter39	Type of support from principal in relations with parents	30	11.7
46	Inter35	Conflict with other teachers	30	11.7
48	Inter40	Type of support from principal in relations with students, teachers, or other school officials	29	11.3
49	Inter46	Conflict with principal or supervisor	27	10.5
51	Intra58	Opportunity to attend professional conferences or conventions	26	10.1
51	Intra55	Developing adequate classroom skills	26	10.1
51	E30	Poor school standards	26	10.1
53	E34	Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	24	9.3
55	Inter44	Individual conference with principal or supervisor	23	8.9
55	Inter45	Plans and methods recommended by principal or supervisor	23	8.9
55	E33	Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	23	8.9
57	Intra57	Opportunity to serve on curricular or professional committees	21	8.2
58	Inter49	Parent conferences	20	7.8
59	Intra56	Education and training	18	7.0
60	Inter48	Working relations with parents	17	6.6
61	Inter50	Explaining student's progress to parents	14	5.4

(N = 257)

Table E-5

Rank Order of the Stress Factors Based on the Frequency of Responses by the Special Education Teachers

Rank	Item #	Stress Factors	Frequency	%
			68	64.2
1	E16	Required clerical work (reports, records, etc.)	59	55.7
2	E28	Inadequate salary	59	55.7
2	E4	Federal controls, expectancies, and demands	56	52.8
4	E5	Time pressures	53	50.0
5	E9	Time for individual and remedial work	52	49.1
6	E7	Meeting pupils' abilities, needs and interests	47	44.3
7	E15	Sufficient funds for extra classroom materials	43	40.6
8	E11	Evaluating pupil progress in academic, personal, and social growth areas	43	40.6
8	E3	No planning period	42	39.6
11	Inter51	Getting parents to visit school	42	39.6
11	E22	Lack of counseling and guidance services for students	42	39.6
11	E20	Students who have health and nutritional problems, physical handicaps, and/or emotional problems	40	37.7
13	Inter53	Parental indifference toward school activities	40	37.7
13	E8	Appropriate instructional material for your grade or subject	38	35.8
15	E1	Class size	37	34.9
16	E19	Motivating students	37	34.9
16	E10	Time for creative teaching and/or experimentation	34	32.1
18	Intra59	Time to take graduate courses	34	32.1
18	E12	Counseling students with personal problems	32	30.2
20	E26	Inadequate facilities and equipment	30	28.3
21	E29	Inconsistent school policies and rules	29	27.4
22	Inter54	Acceptance by the school community and respect for your professional status	29	27.4
22	E23	Disrespectful conduct from students	28	26.4
24	E13	Number of classroom interruptions	27	25.5
25	E25	Improper climate control within the school building	26	24.5
26	Inter47	Negotiations	24	22.6
28	E24	Noise pollution	24	22.6
28	Inter52	Pressures and expectations of parents	24	22.6
28	Intra58	Opportunity to attend professional conferences or conventions	22	20.8
30	E2	Inflexible schedule	21	19.8
32	E17	Duties outside the classroom (playground, halls, restrooms, bus loading and unloading, cafeteria, etc.)	21	19.8
32	E27	Ineffective teacher evaluation procedures	21	19.8
32	Inter41	Poor leadership from principal or supervisor	20	18.9
34	Inter38	Lack of recognition and/or personal consideration	18	17.0
36	Intra61	Decreasing job mobility	18	17.0
36	E6	Inadequate pre-service for courses you teach	18	17.0
36	Inter43	Evaluation process	18	17.0
36	E18	Classroom control	17	16.0
39	E14	Inconsistent progress reporting of students	17	16.0
39	Inter40	Type of support from principal in relations with students, teachers, or other school officials	16	15.1
41	Inter42	Lack of response to requests	16	15.1
41	Inter49	Parent conferences	15	14.2
43	E32	Unclear or unstated school goals and objectives	15	14.2
43	Intra60	Role conflict or role ambiguity	14	13.2
46	E31	Poor professional ethics of colleagues	14	13.2
46	E21	Lack of administrative support relative to disciplinary problems	14	13.2
46	Inter39	Type of support from principal in relations with parents	14	13.2
46	Intra55	Developing adequate classroom skills	12	11.3
49	Inter36	Incompetent faculty members	12	11.3
49	Inter46	Conflict with principal or supervisor	11	10.4
52	E30	Poor school standards	11	10.4
52	Intra56	Education and training	11	10.4
52	Inter50	Explaining student's progress to parents	10	9.4
54	E34	Not having a specific understanding of your duties, obligations, and responsibilities outside of the classroom	10	9.4
54	E33	Not having a clear-cut definition of building procedures, duties, and responsibilities in the classroom	9	8.5
56	Inter44	Individual conference with principal or supervisor	9	8.5
56	Inter45	Plans and methods recommended by principal or supervisor	8	7.5
58	Intra57	Opportunity to serve on curricular or professional committees	7	6.6
59	Inter35	Conflict with other teachers	7	6.6
59	Inter48	Working relations with parents	5	4.7
61	Inter37	Rapport with principal		

(N = 106)

APPENDIX F

RANK ORDER OF THE RECOMMENDED ACTIONS

Table F-1

Rank Order of the Recommended Actions Based on the Frequency of Responses by the Total Population

Rank	Item #	Recommended Actions	Frequency	%
1	RA95	Increase salaries	1027	94.3
2	RA89	Provide release time for teachers away from students (lunch, play, etc.)	1022	93.8
3	RA88	Provide adequate planning time for teachers	1002	92.0
4	RA81	Appropriate and meaningful in-service training	958	88.0
5	RA76	Principal and supervisor who listen with empathy and understanding	949	87.1
6	RA94	Provide counseling services for students	914	83.9
7	RA93	Reduce pupil-teacher ratio	913	83.8
8	RA67	Teacher input in determining and evaluating these policies and practices	906	83.2
9	RA77	Help with discipline problems	885	81.3
10	RA68	Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole	884	81.2
11	RA65	Provide teaching assistants	856	78.6
12	RA90	Have broader curriculum to include art, P.E., and music	842	78.2
13	RA98	Provide your school system with the results of this study followed by the formation of a task force to follow up with recommended actions	850	78.1
14	RA64	Access to a curriculum and instructional center to which you may go for help	844	77.5
15	RA75	Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems	838	77.0
16	RA69	Reduction of the number of classroom interruptions	817	75.0
17	RA66	Written definition of the policies and procedures to be followed in your school	816	74.9
18	RA62	Individual conferences with principal to evaluate work and seek assistance	782	71.8
19	RA70	Better scheduling practices	774	71.1
20	RA80	Improve teacher evaluation process	739	67.9
21	RA63	More detailed sequential curriculum outlines and courses of study K-12	723	66.4
22	RA79	Opportunity to attend local colleges	721	66.2
23	RA78	Opportunity for more parent-teacher conferences during school time	710	65.2
24	RA71	Staff manual explaining the limits within which you can make decisions, take action, and experiment	703	64.6
25	RA84	Attend a school sponsored stress management seminar	676	62.1
26	RA87	Opportunity for teachers to evaluate principal and supervisor	674	62.0
27	RA92	Provide counseling services for teachers	615	56.5
28	RA72	Demonstration lessons by principal and/or other teachers	583	53.5
29	RA96	Rennovate or build new school	540	49.6
30	RA73	More classroom visitations by the principal	529	48.6
31	RA97	Engage in social activities with colleagues and principal away from school	482	44.3
32	RA74	More classroom visitations by the supervisor	479	44.0
33	RA85	Take a leave of absence or sabbatical	478	43.9
34	RA86	Opportunity for teachers to evaluate each other	393	36.1
35	RA91	Teacher dismissal	326	29.9
36	RA83	Change school, grade, or system	258	23.7
37	RA82	Terminate your position and/or leave the profession	233	21.4

(N = 1089)

RA = Recommended actions

Table F-2

Rank Order of the Recommended Actions Based on the Frequency of Responses by the Elementary Teachers

Rank	Item #	Recommended Actions	Frequency	%
1	RA89	Provide release time for teachers away from students (lunch, play, etc.)	505	95.6
2	RA88	Provide adequate planning time for teachers	501	94.9
3	RA95	Increase salaries	500	94.7
4	RA81	Appropriate and meaningful in-service training	475	90.0
5	RA94	Provide counseling services for students	468	88.6
6	RA76	Principal and supervisor who listen with empathy and understanding	461	87.3
7	RA90	Have broader curriculum to include art, P.E., and music	458	86.7
8	RA93	Reduce pupil-teacher ratio	453	85.8
9	RA68	Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole	452	85.6
10	RA67	Teacher input in determining and evaluating these policies and practices	450	85.2
11	RA77	Help with discipline problems	439	83.1
12	RA65	Provide teaching assistants	437	82.8
13	RA64	Access to a curriculum and instructional center to which you may go for help	433	82.0
14	RA75	Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems	421	79.7
15	RA98	Provide your school system with the results of this study followed by the formation of a task force to follow up with recommended actions	410	77.7
16	RA66	Written definition of the policies and procedures to be followed in your school	408	77.3
17	RA69	Reduction of the number of classroom interruptions	392	74.2
18	RA62	Individual conferences with principal to evaluate work and seek assistance	385	72.9
19	RA70	Better scheduling practices	378	71.6
20	RA80	Improve teacher evaluation process	372	70.5
21	RA63	More detailed sequential curriculum outlines and courses of study K-12	360	68.2
22	RA79	Opportunity to attend local colleges	354	67.0
23	RA71	Staff manual explaining the limits within which you can make decisions, take action, and experiment	353	66.9
24	RA78	Opportunity for more parent-teacher conferences during school time	349	66.1
25	RA84	Attend a school sponsored stress management seminar	348	65.9
26	RA87	Opportunity for teachers to evaluate principal and supervisor	335	63.4
27	RA92	Provide counseling services for teachers	322	61.0
28	RA72	Demonstration lessons by principal and/or other teachers	286	54.2
29	RA96	Rennovate or build new school	276	52.3
30	RA73	More classroom visitations by the principal	260	49.2
31	RA97	Engage in social activities with colleagues and principal away from school	233	44.1
32	RA85	Take a leave of absence or sabbatical	216	40.9
33	RA74	More classroom visitations by the supervisor	215	40.7
34	RA86	Opportunity for teachers to evaluate each other	183	34.7
35	RA91	Teacher dismissal	150	28.4
36	RA83	Change school, grade, or system	141	26.7
37	RA82	Terminate your position and/or leave the profession	113	21.4

(N = 528)

Table F-3

Rank Order of the Recommended Actions Based on the Frequency of Responses by the Middle School Teachers

Rank	Item #	Recommended Actions	Frequency	%
1	RA95	Increase salaries	190	96.0
2	RA89	Provide release time for teachers away from students (lunch, play, etc.)	185	93.4
3	RA88	Provide adequate planning time for teachers	175	88.4
4	RA81	Appropriate and meaningful in-service training	170	85.9
5	RA94	Reduce pupil-teacher ratio	168	84.8
6	RA76	Principal and supervisor who listen with empathy and understanding	164	82.8
7	RA94	Provide counseling services for students	163	82.3
8	RA67	Teacher input in determining and evaluating these policies and practices	162	81.8
9	RA77	Help with discipline problems	161	81.3
9	RA98	Provide your school system with the results of this study followed by the formation of a task force to follow up with recommended actions	161	81.3
11	RA65	Provide teaching assistants	158	79.8
12	RA69	Reduction of the number of classroom interruptions	157	79.3
13	RA68	Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole	156	78.8
14	RA75	Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems	143	72.2
15	RA66	Written definition of the policies and procedures to be followed in your school	142	71.7
16	RA90	Have broader curriculum to include art, P.E., and music	139	70.2
16	RA79	Opportunity to attend local colleges	139	70.2
18	RA62	Individual conferences with principal to evaluate work and seek assistance	137	69.2
19	RA64	Access to a curriculum and instructional center to which you may go for help	136	68.7
20	RA78	Opportunity for more parent-teacher conferences during school time	135	68.2
21	RA80	Improve teacher evaluation process	127	64.1
22	RA70	Better scheduling practices	126	63.6
23	RA63	More detailed sequential curriculum outlines and courses of study K-12	124	62.6
24	RA84	Attend a school sponsored stress management seminar	118	59.6
25	RA87	Opportunity for teachers to evaluate principal and supervisor	112	56.6
26	RA72	Demonstration lessons by principal and/or other teachers	109	55.1
27	RA85	Take a leave of absence or sabbatical	105	53.0
28	RA71	Staff manual explaining the limits within which you can make decisions, take action, and experiment	103	52.0
29	RA97	Engage in social activities with colleagues and principal away from school	98	49.5
30	RA73	More classroom visitations by the supervisor	96	48.5
31	RA92	Provide counseling services for teachers	94	47.5
32	RA74	More classroom visitations by the principal	89	44.9
33	RA96	Renovate or build new school	78	39.4
34	RA86	Opportunity for teachers to evaluate each other	66	33.3
35	RA91	Teacher dismissal	53	26.8
36	RA83	Change school, grade, or system	40	20.2
36	RA82	Terminate your position and/or leave the profession	40	20.2

(N = 198)

Table F-4

Rank Order of the Recommended Actions Based on the Frequency of Responses by the High School Teachers

Rank	Item #	Recommended Actions	Frequency	%
1	RA95	Increase salaries	240	93.4
2	RA89	Provide release time for teachers away from students (lunch, play, etc.)	231	89.9
3	RA88	Provide adequate planning time for teachers	227	88.3
3	RA76	Principal and supervisor who listen with empathy and understanding	227	88.3
5	RA81	Appropriate and meaningful in-service training	218	84.8
6	RA77	Help with discipline problems	208	80.9
7	RA67	Teacher input in determining and evaluating these policies and practices	207	80.5
8	RA93	Reduce pupil-teacher ratio	206	80.1
9	RA69	Reduction of the number of classroom interruptions	202	78.6
10	RA98	Provide your school system with the results of this study followed by the formation of a task force to follow up with recommended actions	198	77.0
10	RA68	Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole	198	77.0
12	RA70	Better scheduling practices	195	75.9
13	RA94	Provide counseling services for students	190	73.9
14	RA64	Access to a curriculum and instructional center to which you may go for help	188	73.2
15	RA66	Written definition of the policies and procedures to be followed in your school	186	72.4
16	RA75	Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems	184	71.6
16	RA62	Individual conferences with principal to evaluate work and seek assistance	184	71.6
18	RA71	Staff manual explaining the limits within which you can make decisions, take action, and experiment	180	70.0
19	RA90	Have broader curriculum to include art, P.E., and music	176	68.5
20	RA65	Provide teaching assistants	173	67.3
21	RA80	Improve teacher evaluation process	167	65.0
22	RA63	More detailed sequential curriculum outlines and courses of study K-12	163	63.4
23	RA87	Opportunity for teachers to evaluate principal and supervisor	162	63.0
24	RA79	Opportunity to attend local colleges	158	61.5
25	RA84	Attend a school sponsored stress management seminar	162	59.1
26	RA78	Opportunity for more parent-teacher conferences during school time	145	56.4
27	RA92	Provide counseling services for teachers	136	52.9
28	RA72	Demonstration lessons by principal and/or other teachers	125	48.6
29	RA73	More classroom visitations by the principal	123	47.9
30	RA96	Rennovate or build new school	121	47.1
31	RA74	More classroom visitations by the supervisor	120	46.7
32	RA85	Take a leave of absence or sabbatical	109	42.4
33	RA86	Opportunity for teachers to evaluate each other	105	40.9
34	RA97	Engage in social activities with colleagues and principal away from school	101	39.3
35	RA91	Teacher dismissal	95	37.0
36	RA82	Terminate your position and/or leave the profession	61	23.7
37	RA83	Change school, grade, or system	46	17.9

(N = 257)

Table F-5

Rank Order of the Recommended Actions Based on the Frequency of Responses by the Special Education Teachers

Rank	Item #	Recommended Actions	Frequency	%
1	RA89	Provide release time for teachers away from students (lunch, play, etc.)	101	95.3
2	RA88	Provide adequate planning time for teachers	99	93.4
3	RA95	Increase salaries	97	91.5
3	RA76	Principal and supervisor who listen with empathy and understanding	97	91.5
5	RA81	Appropriate and meaningful in-service training	95	89.6
6	RA94	Provide counseling services for students	93	87.7
7	RA75	Staff conferences involving principal, psychologist, school nurse, counselor, and teacher to deal with students who have specific problems	90	84.9
8	RA65	Provide teaching assistants	88	83.0
9	RA67	Teacher input in determining and evaluating these policies and practices	87	82.0
9	RA64	Access to a curriculum and instructional center to which you may go for help	87	82.1
11	RA93	Reduce pupil-teacher ratio	86	81.1
12	RA98	Provide your school system with the results of this study followed by the formation of a task force to follow up with recommended actions	81	76.4
12	RA78	Opportunity for more parent-teacher conferences during school time	81	76.4
14	RA65	Written definition of the policies and procedures to be followed in your school	80	75.5
15	RA90	Have broader curriculum to include art, P.E., and music	79	74.5
16	RA68	Problems of general concern to the entire building staff to be studied and resolved by the staff as a whole	78	73.6
17	RA77	Help with discipline problems	77	72.6
18	RA62	Individual conferences with principal to evaluate work and seek assistance	76	71.7
18	RA63	More detailed sequential curriculum outlines and courses of study K-12	76	71.7
20	RA70	Better scheduling practices	75	70.8
21	RA80	Improve teacher evaluation process	73	68.9
22	RA79	Opportunity to attend local colleges	70	66.0
23	RA71	Staff manual explaining the limits within which you can make decisions, take action, and experiment	67	63.2
24	RA69	Reduction of the number of classroom interruptions	66	62.3
25	RA87	Opportunity for teachers to evaluate principal and supervisor	65	61.3
25	RA96	Rennovate or build new school	65	61.3
27	RA92	Provide counseling services for teachers	63	59.4
27	RA72	Demonstration lessons by principal and/or other teachers	63	59.4
29	RA84	Attend a school sponsored stress management seminar	58	54.7
30	RA74	More classroom visitations by the supervisor	55	51.9
31	RA73	More classroom visitations by the principal	50	47.2
31	RA97	Engage in social activities with colleagues and principal away from school	50	47.2
33	RA85	Take a leave of absence or sabbatical	48	45.3
34	RA86	Opportunity for teachers to evaluate each other	39	36.8
35	RA83	Change school, grade, or system	31	29.2
36	RA91	Teacher dismissal	28	26.4
37	RA82	Terminate your position and/or leave the profession	19	17.9

(N = 106)

VITA

Margie Helton Carico was born on June 18, 1938 in Benham, Kentucky. She attended public school in Knoxville, Tennessee, and was graduated from Bearden High School in 1956. The author attended The University of Tennessee at Knoxville where she received the Bachelor of Science degree in June 1960 with a major in secondary education and in speech and hearing. Her graduate work was also at The University of Tennessee at Knoxville. She graduated with highest honors and received a Master of Science degree in August 1964 with a major in deaf education. She received a Master's plus 45 in August 1978 with a major emphasis in the field of curriculum and instruction. The author was graduated with highest honors from The University of Tennessee in August 1985 where she earned the Doctor of Education degree. Her major field of study was curriculum and instruction with collateral emphasis in educational leadership and in educational and counseling psychology.

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