

**' STRESS AND THE TEACHER: A COMPARATIVE
STUDY OF ELEMENTARY AND SECONDARY
TEACHERS IN THE PRINCE WILLIAM COUNTY, VIRGINIA
PUBLIC SCHOOL SYSTEM'**

by

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(ABSTRACT)

The purpose of this research was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William County School System.

The sample for this survey was composed of members in the Prince William Education Association for the 1983-84 school year. Of the Association's 1,530 members, 511 teachers were randomly sampled systematically school by school. Two hundred sixty-nine were secondary teachers while 242 were elementary teachers. A 94% response was received.

The survey instrument consisted of 48 job-related events to which the sample respondents were asked to indicate the degree of stress they associated with each event. A 48-item demographic questionnaire was used to collect personal and situational information about the respondents. These items were identified as the variables which could be related to the stress experienced by the teachers.

The findings of the study indicated that even though a moderately high level of stress was reported, the respondents at the secondary school level did not appear to differ from those at the elementary school level, sex was a significant predictor of perceived

stress level, and that there are differential levels of stress across selected levels of key demographic variables, such as--sex, age, marital status, race, degree, tenured, and percentage of total family income. Additionally, the study examined internalized manifestations of stress experienced by the respondents.

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To her mother, _____, who always encouraged her daughter to reach a little higher for worthwhile goals.

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In the interest of a smoother flow of ideas and less cumbersome manner of writing, the researcher has confined her writing to the masculine singular pronoun wishing, however, that the English language provided a more satisfactory method of incorporating both sexes.

Chapter I

INTRODUCTION

"Rule No. 1 is, don't sweat the small stuff.

Rule No. 2 is, it's all small stuff. And if you can't fight and you can't flee, flow."

--University of Nebraska Cardiologist

Robert Eliot, on how to cope with stress

(Wallis, 1983, p. 48).

Stress is a threat to the quality of life, and to the physical and psychological well-being of the human organism. The stress experienced by man today must be very different from that experienced in the past. In the past, men were mainly concerned for their physical survival; they worried about the source of their next meal, about shelter, and about not being killed. Their most basic wants were basic physical needs. In some societies this changed with development, and today, for some, physical needs are not a day-to-day concern. Today's man worries about problems of a more psychosocial nature, problems which are higher in his hierarchy of needs (Maslow, 1954).

Medical and psychological sciences have long been interested in a wide range of phenomena bearing the common label of stress; and if the substance of this topic was suddenly removed from the literature relating to the quality of life, there would be a most drastic reduction in its volume. The amount of time and effort expended in

the pursuit of this elusive concept bears solemn witness to its importance.

Approaches to the study of stress which embrace a response-based definition tend to be concerned with the particular response or pattern of responses which may be taken as evidence that a person is, or has been, under pressure from a "disturbing" environment. That response or pattern of response is either actually treated as the stress or as its defining parameter. Occurrences of the response syndrome thus are, or represent, the simultaneous occurrence of stress. Such a response, however, may in turn act as a stimulus for the production of further responses.

This particular view of stress appears to have received its initial impetus from the writings of Hans Selye. In 1956 he wrote, 'stress is the non-specific physiological response of the body to any demand made upon it' (Selye, 1956, p. 54). Stress he saw as the person's response to the demands of his environment. Selye's primary concern was for the physiological mechanism. This has led to a close association between response-based and physiological models of stress. Selye's idea of non-specificity became enormously influential and held sway for many years (Selye, 1956).

At the Clinical Stress Research Center in Stockholm, Levi and Kagan constructed a theoretical model which describes psychological factors in the mediation of physical diseases. Their major hypothesis was that psychosocial stimuli can and do cause physical disorders. They suggested that most life changes evoked a psychological stress

response which prepared a person for the physical activity of coping. This response, at least if prolonged, intense, or often repeated, is accompanied by an increase in wear and tear on the person and produces structural as well as functional damage. External influences identified as psychosocial stimuli interact with genetic factors and with the influence of earlier environment.

As more and more research has been done in the area of stress, the enthusiasm for Selye's non-specific physiological response, and the reliance placed on it has waned. Present research on the stress response is increasingly adopting a multi-dimensional approach.

In 1970, Weitz reviewed and classified the different types of situations which have been treated in stress research. They included:

- . Speeded information processing
- . Noxious environmental stimuli
- . Perceived threat
- . Disrupted physiological function
- . Isolation and confinement
- . Blocking
- . Group pressure
- . Frustration
- . Lack of control
- . Threat to a person's important values and goals

(McGrew, 1978, p. 49)

"In the past 30 years, doctors and health officials have come to realize how heavy a toll stress is taking on the nation's well-being. According to the American Academy of Family Physicians, two-thirds of office visits to family doctors are promoted by stress-related symptoms. Particularly affected is the teaching profession and other helping professions" (Wallis, 1983, p. 48).

Teachers are leaving their profession at an accelerated pace. In a recent poll, one-third of the teachers contacted said they would not re-enter the teaching field if they had the chance to do it again. Only 60 percent of those polled said they plan to teach until retirement. The number of teachers with 20 years or more experience has dropped by half in the last 15 years (Truck, 1980).

Younger teachers are leaving within the first five years of teaching (in most cases because they have a chance to be retrained in another field) and older teachers are retiring earlier (Kyriacou and Sutcliffe, 1978).

More medical insurance claims are being filed by teachers than by those from other professions. The number of teachers qualifying for a "breakdown" pension has tripled. Results of a recent study indicated that the life expectancy of a teacher is four years lower than the national average (Truck, 1980).

Some surveys indicate that 90 percent of all teachers feel some stress and 95 percent indicate the need for stress management courses (Wilson, 1979).

For the major part of the school day teachers are isolated from other adults, a working condition shared by few other professions. It is not possible to work consistently on an in-depth basis with as many as 150 students who have unique learning histories, personalities, problems, and potentials without feeling stress. Deadlines, bells, excessive paperwork, and inadequate supplies are common in most schools. Free periods are "free" in name only. Rest and recuperation must take second place to preparation and grading. In addition to these normal demands, teachers are harassed, more or less, in every class. Student-caused distractions take many forms: talking, whispering, lipreading, note passing, asking plausible but diverting questions, insulting the teacher, complaining about assignments, etc. As many as 30 to 60 such incidents each period require the momentary diversion of the teacher's attention. When P.A. announcements, tardy students, and roll-taking are added in this list, it is found that typically less than 50% of class time is spent on learning during a period in which teachers are expected to teach from bell to bell. *

Attacks on teachers' personal property cost as much as \$590 million annually, including increased insurance costs, security guards, sophisticated electronic surveillance equipment and the expense of repairs and replacements. The human toll is equally staggering. Each year over 52,000 (5%) of the nation's 1 million secondary school teachers are attacked; 60,000 (6%) teachers are robbed and every month 120,000 (12%) have something stolen (Fletcher, 1982).

As if these internal pressures from the workload and students were not enough to cause stress, numerous external pressures are exerted upon schools: to mainstream students with special needs; to provide multicultural and bilingual education; to reduce expenses in a period of rapid inflation; to respond to the questions of parents, the concerns of supervisors and the achievement objectives of school boards and administrators (Serrin, 1979).

Beyond such pressures felt by all teachers, there are usually one or more intense stresses in teachers' personal lives: death, accident, illness of a family member, divorce, debts, trouble with in-laws, changes in living conditions, and personal habits. Not surprisingly, then, the combination of these job-related and personal pressures makes stress the number one health problem of teachers.

Alienation, isolation, a sense of powerlessness, and self-estrangement help to create a climate of great dissatisfaction and frustration with teaching (Cherniss, 1980).

Declining enrollment, role conflicts, time pressures, inadequate administrative support, lack of self-control in children, unrealistic and political public pressure, and the idea that education must be "all things to all people" have greatly increased teacher stress. Teachers have also been trapped in the malaise of rapidly changing conditions (Truck, 1980).

Some authorities consider teacher stress "the biggest problem in education today" (Swick and Hanley, 1980). Teacher stress includes physical, 'otional, and attitudinal exhaustion. The symptoms include being tired all the time, sleeplessness, and being

physically run down. Teachers experiencing stress often have minor physical maladies such as frequent colds, headaches, dizziness, or diarrhea. If unchecked, these ailments may turn into ulcers, colitis or asthma, or they may cause loss of appetite and loss of sexual interest (Kyriacou and Sutcliffe, 1978).

The emotional, psychological and behavioral signs of stress include: depression, discontent, detachment, dehumanization or robot-like behavior, negativity or cynicism, angry outburst, self abasement, rigidity, suspiciousness, silence or withdrawal, the attitude of just putting in time, making more mistakes on the job, leaving the job, low morale, and absenteeism (Kyriacou and Sutcliffe, 1978).

Researchers have shown that responsibility for people always causes more stress than responsibility for things. Thus, people involved in teaching are particularly susceptible to this kind of occupational stress.

"Teacher stress . . . has reached epidemic proportions in some school districts" and it is rapidly increasing in others (Sparks and Dennis, 1979). Teaching has become such a stressful profession that many educators are experiencing physical and/or emotional health problems (McGrew, 1978, p. 96).

STRESS STATEMENT

In looking at the problem of teacher stress, the Researcher found that this area had not been adequately addressed. Therefore:

- . The Researcher perceived that there is a significant problem of stress among teachers at this time.

- . The Researcher was interested in collecting information about job-related events which teachers perceived as causing stress.
- . The Researcher's interest was based on personal observations and a review of literature which indicates that stress is a matter of growing concern to teachers.
- . The Researcher perceived that there are different kinds and sources of stress which affect elementary and secondary teachers.
- . The Researcher found that there was not much in the literature which spoke to the issue of types of differences in kinds, sources, and nature of stress experienced by groups (elementary and secondary teachers).

The first step in solving any problem is to seek its causes. Understanding the causes opens the way to solutions. In thinking about the causes of stress in teaching, teacher perceived stress as related to specific job events was a logical starting point. Because the jobs of elementary and secondary teachers are quite different, a comparative analysis across these levels was needed.

PURPOSE OF THE STUDY

The purpose of this research was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William County School System. The teachers who comprised the sample were members of the Prince William Education Association. The reported degree of stress was

measured in reference to selected job events and was associated with an array of demographic variables.

SIGNIFICANCE OF THE STUDY

. By identifying job related events which prompt teacher stress, it was felt school systems would be better able to work toward identifying and implementing solutions to problems concerning job related events before they have reached crisis proportions.

. A tool that measures stress with a high degree of reliability was developed by the Researcher. It should prove useful to future investigators in this field.

. Particular types of people (i.e., blacks, females, etc.) may exhibit measurably higher degrees of stress than others. If this is found to be so, management should be made aware so that working conditions can be adjusted accordingly.

. Job events which cause teacher stress were identified.

. The findings of this study contributed to the literature relating to teacher stress.

. Baseline data in Prince William County, Virginia, which can provide impetus to improvement of the quality of life for those employed by the school system, were identified.

. Should the data indicate a high stress level among the respondents, the study can be used as a management tool to provide in-service training on the management of stress, for counseling, referrals, and as the basis for awarding various types of leaves for teachers.

RESEARCH HYPOTHESES:

The three research hypotheses tested are as follows:

1. There is no significant ($p < .05$) difference between elementary and secondary teachers in degree of perceived stress.
2. There is no significant ($p < .05$) difference in response based on selected demographic variables (sex, race, age, length of experience in education, length of experience as a teacher, marital status, educational attainment, tenured or non-tenured, and percentage of income) in degree of perceived stress.
3. There are differential levels of stress across selected levels of key demographic variables (sex, age, marital status, race, degree, tenured, and percentage of total family income earned).

DEFINITION OF TERMS:

STRESS: The non-specific response of the body to any demand made upon it (Selye, 1974). The occurrence of perceived negative situations that result in adverse teacher response or behaviors (Swick and Hanley, 1980).

STRESSORS: Refers to a response syndrome composed of negative effects (such as anger or frustration) resulting from the elementary or secondary teacher's job (Kyriacou and Sutcliffe, 1978).

Stressors can be:

. **ENVIRONMENTAL STRESSORS:** Inanimate impactors in the physical surroundings of the educator (Swick and Hanley, 1980).

. **INTERPERSONAL STRESSORS:** Stressors arising from interpersonal communication and human relations skills (Hodge and Marker, 1978).

INTRAPERSONAL CONFLICT: Refers to perceived sources of stress resulting from the conflicting demands between the elementary or secondary teacher's job tasks and individual beliefs and goals (Swent, 1978).

JOB EVENT: Refers to perceived sources of stress resulting from job-related activities in which the elementary and secondary teacher are engaged (Cusack, 1982).

ROLE EXPECTATIONS: Refers to perceived sources of stress for elementary and secondary teachers which ". . . result from the beliefs and attitudes about the teacher's role in an organization" (Swent, 1978 and Cusack, 1982).

BURNOUT: A process that begins with excessive and prolonged levels of job stress. The process is completed when elementary or secondary teachers defensively cope with job stress by psychologically detaching themselves from the job and becoming apathetic, cynical or rigid (Cherniss, 1980).

DISTRESS: Stress response which is unfavorable and potentially disease producing (Morse, 1979).

EUSTRESS: Stress response which is favorable and results in improvement in physical and/or mental functioning (Morse, 1979).

LIMITATIONS OF THE STUDY

This study was limited to the members of the Prince William Education Association for the school year 1983-84. The membership of the PWEA is comprised of 85% of the total teaching staff in the Prince William County School System. The findings were based solely upon responses provided by subjects, selected through systematic

random sampling procedures, to the Teachers' Stress Inventory. Consequently, the findings of this study are generalizable only to the elementary and secondary school teachers who were members of the Prince William Education Association for the 1983-84 school term.

People who generally suffer from stress normally cannot or do not identify the actual cause of the stress, but tend rather to blame their stressful condition on something entirely unrelated.

Data received in the study are based upon self-report of respondents.

- . The anomaly of the Prince William County School System teaching staff in regard to age, teaching experience, income level and educational level renders total generalizability impractical.
- . The presence of stress often triggers a total non-discriminating response (i.e., "everything bothers me"). In contrast, non stressed people feel the opposite (i.e., "nothing bothers me"). The aforementioned problems should be recognized.

Data were collected at a single point in time, which renders total generalizability impractical.

OVERVIEW OF THE STUDY

Chapter one provides a framework for an investigation of the degrees of stress perceived by public elementary and secondary school teachers in the Prince William County School System. It consists of background information on the topic of stress; a statement

of the need for such a study; a current tie to existing research; the hypotheses to be tested; definition of terms and limitation of the study; and an outline of the remainder of the study.

Chapter two is a review of the literature on stress, particularly as it relates to public school teachers.

Chapter three contains a discussion of the research design and methodology used in this study as well as a description of the population and survey instrumentation.

Chapter four presents an analysis of the data as well as a discussion of the results.

Chapter five contains the summary, findings, conclusions and recommendations based on the analysis of the data generated by the study.

Chapter II

REVIEW OF LITERATURE AND RESEARCH

INTRODUCTION

Every era has had its own unique set of problems which the inhabitants of the time have had to conquer in order to flourish or even survive. Throughout history, men and women have had to struggle against starvation and fear of the unknown. They tried to survive plagues against which there was no defense; and they were terrified by mental illness which was only understood in mystical or religious terms.

Twentieth-century science and technology pierced the veil of ignorance surrounding mental illness; antibiotics and vaccinations eliminated the threat of runaway epidemics; and fear of starvation gave way to a concern with self-actualization. This has been an era of achievers and seekers--not satisfied to rest on its intellectual and technological laurels. There has been a continuous search for challenge, growth, and positive change. Out of this national ambition has arisen a new epidemic--runaway stress problems (Allen, 1979).

The mental, physical and social manifestations of stress abound and preoccupy our society--not as deterrents to achievement but as an accepted part of life. It has been taken for granted that hard-working people will inevitably have heart attacks or ulcers; overly tense people rely on tranquilizers in growing numbers that

are indicative of the major scope of the stress epidemic; and industries are beginning to arise specifically to help high achievers survive the onslaught of overwhelming stress induced by twentieth century culture (Morse and Furst, 1979).

The literature and research relating to the "stress syndrome" in general, as well as that concerning many industrial and helping professions (i.e., nurses, doctors, social workers, etc.), are plentiful. However, very little research has been done on stress as it relates to the teaching profession. Consequently, a review of the major theories relating to stress and relevant studies which have been conducted in other fields, as well as those conducted with teachers, is presented in this chapter.

This chapter is divided into the following sections:

- . Theories on Stress
- . Occupational Stress
- . Teacher Stress
- . Coping with Teacher Stress
- . Summary

Theories on Stress

There are three kinds of stressors: physical, psychological, and social. In addition, the "make-up" of the individual is determined by hereditary and environmental factors. Stress (or the "stress response") results from the interaction between the stressors and the individual, modified by the person's state at the time. Consequently, to expect that stress takes only one form is unreasonable. According

to Morse and Furst (1979), there are three kinds of stress:

- . If the stress response is necessary for the day-to-day adaptability of man to his environment and results in the maintenance of an internal steady state (homeostasis), it is designated neustress. One produces neustress in order to breathe, walk, and perform the bodily functions.
- . If the stress response is unfavorable and potentially disease producing, it is labeled distress. For example, a person who constantly worries is susceptible to ulcers.
- . If the stress response is favorable and results in improvement in physical and/or mental functioning, it is called eustress. Vigorous physical activity such as exercise can improve the individual's capacity for positive mental responses.

Physical Stressors

Physical stressors are external factors, including drugs, chemicals, foods, pollutants, infectious microbes, shock therapy, radiation, temperature, humidity, noise, exercise, and trauma. The resistance of the individual modifies the stress response, but if the agents are sufficiently intense and enduring, distress will result in virtually any person. Physical stressors are often related to a person's occupation, and with certain occupations the stressors are intense (Allen, 1979).

The late Hans Selye, director of the University of Montreal's Institute of Experimental Medicine and an internationally recognized authority on stress said, ".... Stress is the salt of life.... Stress

wakes us up and makes us alive" (Selye, 1976, p. 42). His years of in-depth research on the subject have shown that stress causes a wide variety of physical problems and that stress can kill. Selye discussed the stress response as a three stage process called the General Adaptation Syndrome (GAS). The General Adaptation Syndrome is composed of three distinct components:

- . The alarm reaction constitutes a physiological alerting of the body's defenses, "the fight or flight" reaction first identified by Cannon around the turn of the century. This response occurs whenever the organism encounters a stimulus of sufficient strength to require an immediate adaptive response.
- . Following an adjustment period which varies in length from seconds to minutes, the stage of resistance is reached, in which the organism settles temporarily into a coping mode allowing relatively normal functioning.
- . Sooner or later, the organism tires and enters the final, or exhaustion stage (Selye, 1976, p. 31). "If the organism is confronted with an agent so damaging that continuous exposure to it is incompatible with life, then death ensues during the alarm reaction within the first few hours or days" (Goldberger, 1982, p. 10).

For years, Selye's work was widely accepted and unchallenged. However, in the last decade researchers have begun to question Selye's physiological nonspecificity theory and his total commitment to it. Researchers such as Mason (1975) and Lazarus (1974) have offered

theoretical viewpoints and presented empirical evidence which suggests that the organism, being remarkably sensitive, can discriminate between stimuli, and thus responds easily to emotional stimuli (Goldberger, 1982). Through the works of Holmes and Rahe (1967), a relationship between "life stress" and the onset of illness such as ulcers, coronary heart disease, and cancer has been identified.

Other researchers have argued that there may exist varying degrees of specificity in the response pattern after stimulation. Such patterns may be a function of stimulus and an individual organ's predisposition (Everly, 1980). Concerning this point, the issue remains unresolved. What has been determined, however, is that from a physical point of view, stress can be lethal!

Psychological Stress

Swick and Hanley (1980) defined stress as "the state of an organism where he perceives that his well being or integrity is endangered and that he must divert all of his energies to its protection." Swick and Hanley (1980) defined stress as a response state and indicated that its induction depends on the mediation of some appraising, perceiving, or interpreting mechanism.

It is important to emphasize the personal equation in assessing reactions to stress. These reactions vary in intensity from person to person under exposure to the same event. "One man's stress is another man's challenge" (McGrath, 1982, p. 68). This statement emphasizes the concern for individual differences in the perception of stress, taking into account factors such as motivational

structure and previous history of the individual's psychological disposition.

Also importantly, Lazarus (1970) has suggested that the essential mediator of the Selye GAS may be psychological. He postulated that the psychological recognition of man's plight must occur before it is possible for the General Adaptation Syndrome to go into effect. Cognitive appraisal of one's situation needs to be in effect in order for the body to respond and eliminate the threat. He called this activity "coping."

Social Stress

Social demands placed on an individual cause stress. Whether the demands placed on an individual come from a loved one, boss, work environment, whiners and complainers, interrupters, bores, guilt merchants, resenters, etc., social pressure is a very strong factor in an individual's stress. Dyer in her book, Pulling Your Own Strings, speaks of the social aspects of stress and how an individual can take charge of the situation to eliminate or modify the causes of stress.

McGrath (1982, p. 135) described social stress as an event which must first be perceived by the stessee and then interpreted. Finally, perception of the potential consequences must be internalized.

Social stress can be caused by too much or too little interaction with other human beings. Thus, the presence of others can be considered a two-edged knife; "we can't live with people, and we can't live without them" (McGrath, 1982, p. 73).

It is mandatory for individuals to realize the importance of setting boundaries, or parameters, in dealing with and surviving social stress.

Other Related Stress Theories

After studying numerous individuals, Friedman and Rosenman developed the concept that personality type had an important influence on stress as it relates to a person's well-being.

. The Type-A personality is seen as a competitive achiever who is continually striving. He has feelings of time urgency, hostility and aggressiveness. He is also a compulsive, hard-driving individual who often sets deadlines and quotas. He is impatient with delay. He suppresses fatigue and tries to control his environment. When unsuccessful, he tends to become helpless (Goldberger, 1982, p. 307).

. A more relaxed lifestyle is characteristic of Type-B individuals (Goldberger, 1982, p. 307). The Type-B personality is described as passive, restrained, not overly ambitious and not prone to develop stress-related diseases such as coronary artery disease.

Of the two above personalities, individuals who possess the characteristics of the Type-A personality are more prone to coronary artery and heart disease (Friedman and Rosenman, 1974).

McGrath (1982) proposed a six theme cycle, all of which have received some empirical support through research and social-psychological factors in stress.

- . Cognitive Appraisal - Subjectively experienced stress depends on the person's perception and interpretation of the "objective" or external stress situation.
- . Experience - An individual's familiarity with the situation and/or prior practice or training in responses designed to deal with the situation can influence his level of subjectively experienced stress.
- . Reinforcement - An individual's past successes and failures in a given type of situation can operate to reduce or enhance, respectively, the level of subjectively experienced stress for that individual in that type of situation.
- . The Inverted U - At low levels of subjectively experienced stress (arousal), task performance is poor. Increase in stress up to some level (a level that is optimal for a particular task) enhances task performance. Further increases in stress beyond that optimal level lead to performance decrements.
- . Task Differences - The relationship among subjectivity experienced stress, task performance, and ensuing consequences depends on type of task and how that task relates to the stressor conditions being investigated.
- . Interpersonal Effects - Presence and activities of other persons in the situation may influence the subjective experience of stress and responses to stress and the consequences of these responses.

Lazarus (1970) set forth the four stage stress cycle as such--a stress situation begins with some set circumstances in the sociophysical environment. It becomes a stress situation for a given individual if he perceives it as leading to some undesirable state of affairs if left unmodified. The individual then "chooses" some response alternative and executes that response with the intention of changing his relation to the situation in a favorable direction. The response does, in fact, have some consequences both for the individual and for the situation, though not necessarily the intended one.

Research into Stress as it Relates to Occupations

Much research has been conducted in the area of occupational stress. This is especially true in regard to its effect upon physical and mental illness. In fact, the work-a-day world is one of the most universal and intense kinds of stress experience. It is, in fact, the one source of stress with which most individuals are familiar. Occupational stress can be defined as a lack of harmony between the individual and his work environment.

Such stress may stem from any number of sources including supervisor conflict, conflict with co-workers, job dissatisfaction, responsibility overload, lack of support, unclear job expectations, and time pressure. In Russek's study (1965), it was found that emotional strain associated with job responsibility preceded heart attacks in 91 percent of a group of coronary heart disease patients, while among a normal control group only 20 percent reported similar strain on the job. The effects of time pressure and work overload

upon the individual also have been substantiated through the research of Friedman, Rosenman and Carroll (1978).

Cooper and Marshall (1978) identified stress producing categories intrinsic to the work environment.

- . Factors that are inherent to the job.
- . The individual's role in the organization.
- . The individual's opportunity and capability for career advancement.
- . Interpersonal work relationships.
- . The organizational structure and climate.

The following response correlates have been found to be associated with occupational stress:

- . Somatic - headaches, dizziness, abdominal pain, sleeplessness, and fatigue.
- . Psychological - job dissatisfaction, anxiety, tension, irritability, and depression.
- . Behavioral responses - use of medication, alcohol, cigarettes, and appetite changes.

Persistent, intense, or frequent stress responses can influence personal health. Correlations between occupational stressors, coronary heart disease, mental illness, and alcoholism have been substantiated (Needle, 1980, p. 98).

Job stress is such a problem for employee health and absenteeism that business is beginning to take the lead in finding a solution. General Motors found that it was spending more on health benefits than on steel. Wellness programs are spreading

with the increasing recognition that stress effects work performance, and that the workplace is the easiest place to intervene in the stress cycle for the vast majority (Eliot, 1984, p. 213).

When the environment is stable, most individuals are able to cope effectively. When the environment changes at a rapid pace, even the healthiest individual finds it difficult to avoid stress. Since one of the most meaningful elements in an individual's environment is the place in which he works, it is logical that attempts to manage stress should be an integral part of the work setting.

Teacher Stress

The educational occupation is finally becoming recognized as an organizational setting in which many workers complain of high stress. Since the mid 1970's, numerous teacher stress articles have been published in educational journals. Most articles have been primarily concerned with the provision of coping skills. Attempts to merely cope with stress have not been sufficient since the causes have not been addressed (Mersky, 1983).

Sources and consequences of teacher stress and strategies to prevent, eliminate, or reduce workplace environmental stressors should become a major focus of the educational systems throughout the country. Teaching today is one of the highest stress occupations. Psychological stress is a serious occupational hazard. Consequently, adverse implications for the teacher's health, well being, and career have become a matter of great concern.

Teacher stress negatively and substantially affects the classroom environment, the teaching-learning process, as well as the attainment of educational goals and objectives (Needle, 1980).

Studies indicate that people involved in prolonged, constant, intensive interaction with people in an emotionally charged atmosphere are susceptible to stress. This atmosphere is characteristic of the teaching profession. Maslack and Jackson (1981) classified three distinct aspects of the stress syndrome--emotional exhaustion, negative attitudes towards clients, and loss of feeling of accomplishment in the job. Studies by Anderson (1980); Crane (1981); Ivancevick and Schwab (1981); McIntyre (1981); Schwab (1980); Schwab and Ivancevick (1982) have applied the research of Maslack to the teaching profession (Goldberger, 1982).

Teaching is an emotionally charged and taxing profession. A teacher's day is constantly filled with intense interaction with people. Jackson (1968) indicated in his study that teachers can interact with students more than 1000 times during an average day. Teachers not only work with students, but administrators, other teachers, parents, school board members, and community members. These constituents constantly make demands on the energies of teachers. All teachers are involved with such interactions, but all do not exhibit or feel stress.

In building upon the work of Maslack and colleagues, Schwab and Ivancevick (1982) found in their study of 469 randomly selected Massachusetts teachers that certain personal and background

variables were related to levels of teacher stress. Their results were as follows:

- . Teachers did not differ in their levels of stress as far as number of years taught or if they were married or single, if they held a bachelor's degree, master's degree or above a master's degree.
- . Teachers did differ when grouped according to age, sex, and grade level taught.
 - Younger teachers had more intense feeling than their older counterparts concerning emotional exhaustion and fatigue (Schwab and Ivancevick, 1982).
 - Sex and grade level taught were related to teacher's feelings of depersonalization. Male teachers were found to have more negative attitudes toward their students than female teachers. Secondary teachers had more negative attitudes toward their students than did elementary teachers (Schwab and Ivancevick, 1982). Elementary teachers were found to have more frequent feelings of accomplishment than high school teachers.
- . Role ambiguity, the lack of clear, consistent information regarding the rights, duties, and responsibilities of teaching, also have an effect on teacher stress in regard

to feelings of accomplishment (Schwab and Ivancevick, 1982).

Since individual teachers are affected by and respond to stress differently, it is important to be cognizant of the societal, organizational and role-related sources which contribute to the profession's potential demise.

- . In 1974 Campbell noted that the political strength of public education had declined. A decade later, one can see that Campbell's prediction was valid. The poor image of education indicative of societal sources of stress is a major source of teacher distress for two reasons:
 - It has led to a diminished personal esteem level among those in the teaching profession.
 - It has prompted demands for increased productivity at a time when the financial support for education is being curtailed.
- . Organizational Sources of Stress - The failure of schools to organize properly to meet the needs of the students and teachers is another major source of stress among educators. Cichon and Koff's 1980 study indicated that stress occurs when teachers are required to implement educational programs within organizational constraints over which they have no control.
- . Role-Related Sources of Stress - Sources of role-related distress are classroom discipline problems, the

difficulty in the development of appropriate instructional programs for students with special needs, sufficient time for professional development, the development of positive relations with administrators, peers, and parents.

The three sources of the above mentioned stress are inter-related. Each in turn influences the other. All have a direct impact upon the teacher.

Recent research indicates that the most highly ranked task-based stressors which are associated with teaching are closely linked with management practices. In Chicago, Cichon and Koff (1980) employed a modified version of the Holmes and Rahe (1967) social Readjustment Rating Scale. It was determined that management practices are associated with highly ranked task-based stressors found among teachers. Pettegrew and Wolf supported Cichon and Koff's findings in a metropolitan area in the Southeastern part of the country (Mersky, 1983). Mersky expanded the research on task-based stress to teachers in rural settings and found that events which are controlled by management practices seem to cause a high degree of stress. Consequently, he postulated that a logical point of intervention in reducing the degree of stressful teaching conditions is in the improvement of management practices.

Again, following the Holmes and Rahe (1967) methodology, the Chicago Teachers Union in Chicago, Illinois, conducted a research study of its 22,000 members. The fact that over one-fifth of the teachers employed by the Chicago Board of Education responded indicated that if an event is perceived to be stressful, it is a

matter of no small concern. The questionnaire was designed to determine to what extent professional educators perceived work-related activities as stressful.

There were no significant differences between the subgroups compared in this study. This finding was consistent with Holmes and Rahe (1967) regarding life events.

In the analysis of the 36 rank-ordered teaching events, four general themes appeared to be of "priority concern." The priority concern events were as follows: managing 'disruptive' children; being threatened with personal injury; having a colleague assaulted in school; and being the target of verbal abuse by students. Violence and student discipline were the dominant themes within the priority concern category. These themes have received considerable attention from federal and state governmental agencies. The other cluster of concerns involved the following themes:

- . Management tension which includes such events as involuntary transfer, overcrowded classrooms, notice of unsatisfactory performance, lack of books and supplies, reorganization of programs and classes, implementation of Board of Education goals, denial of promotion or advancement, and disagreement with supervisors. These events represent stress which is "imposed" upon the teacher in the form of action constraints.

- . The theme of "doing a good job" characterizes the next category. The items that best characterize this cluster are maintaining self control when angry and teaching students who are below average in achievement level. These both are important professional responsibilities.
- . "Pedagogical functions" ranked the lowest of the events listed. This cluster of events included teacher-parent conferences, dealing with bilingual students, discussion of children's problems with their parents, taking additional coursework for promotion, attending in-service meetings, evaluating students, conferences with the principal and doing lesson plans. These are functions over which they have direct control.

One might infer from these data that teachers find less stressful those events (i.e., pedagogical functions) over which they have direct control. Conversely, stress induced by central administrative mandates (and inefficiencies) and by state and federal regulations over which teachers have little control, interferes with their optimal performance is the most critical aspect of their roles (Cichon, 1978).

Coping with Teacher Stress

Stress is a fact of life. All individuals operate under some sort of stress. The only stressless state is death! Consequently, each individual teacher, in this particular case, must learn to cope effectively with stress on a daily basis. Understanding

stress, using it to advantage, and controlling it is the key to a successful, healthy individual.

Frederiksen and Peterson emphasize that seven strategies can be employed to combat the ravages of teacher stress:

- . Awareness - Understanding reasons for stress. Recognition of early warning signs.
- . Variety - Diversification of tasks. Balanced student contact. Variety and new challenges--whether in job or extracurricular activities.
- . Time-Out-Ability to "get-away from work" during the day. Utilization of techniques of detachment to a moderate, healthy degree. Use of breaks to relax.
- . Perceptive - Setting realistic goals. Humor and recognition of self-defeating beliefs. Reasonable staff/student ratio. Feedback on accomplishment especially from supervisors.
- . Priorities - Maximize resource utilization.
- . Support - Informal social support. Mutual concerned interest and understanding.
- . Stress Management - Relaxation, Regular exercise, Taking off from work, Taking a vacation!

Individuals have optimal stress levels. Consequently, an appropriate strategy for coping with stress would incorporate:

- . The right amount and kind of stress.
- . An appropriate time frame for dealing with a stressful situation.

- . Utilization of the types of circumstances which are likely to result in acceptable levels of stress.
- . Proper nutrition.
- . Awareness of stress limits.
- . Relaxation response, the utilization of mind and body control (Carlton and Brown, 1982).

The need to improve public education should be evident to all. Stress intervention will have to become a major focal point of the educational systems throughout the country. In an extensive recent research study (PGTA, 1985) conducted in Prince Georges County, Maryland, nearly half of the public school educators cited low pay, high stress, large classes, and disciplinary problems as the reason they are considering leaving the teaching profession. Twenty-two percent of the seventy percent responding have received professional counseling or medical attention because of job related stress during the 1984-85 school year.

Teacher stress is a serious problem with devastating ramifications for the educational profession and the public at large. Intervention tactics should become a major consideration of school systems nationwide. Stress management seminars, workshops, physical activity, and individual counseling are effective intervention methods.

Interestingly enough, many people who conduct stress workshops are of the opinion that teachers can do very little on the job to reduce stress significantly. What they advocate instead is

a program that can be implemented off the job, which emphasizes diet and exercise.

Doctoral dissertations completed at Ohio State University by Blough (1980) and Nusbaum (1983) indicated a strong relationship between concept of self and perceived stress in the educational situation. Educators who had a positive self-image perceived less stress in the work situation than did educators who had less positive concepts of self.

Swick and Hanley (1980) emphasized the following critical elements for the alleviation of teacher stress on the job.

. Realistic Expectations - Teachers should be trained for 'what is' rather than for what ought to be. Teacher education should deal as realistically as possible with what is acceptable performance in today's classroom.

Freudenberger (1980) suggested, in his book on burnout among members of the helping professions, that stress is the result of differences between expectations and objective reality in the work setting.

According to the Ohio reports released by the State Teachers Retirement System, more than thirty percent of the retiring teachers in Ohio are placed on retirement for reasons of mental health. If teachers could be helped to establish realistic expectations for themselves, a great deal of mental illness could be prevented from

occurring among dedicated teachers.

- Conflict Avoidance - Another element for coping with the stresses of teaching is to avoid conflict with peers and administrators as often as possible. Needless engagement in conflict with teaching colleagues, administrators, or students creates potential stressors in the environment.
- Depersonalization - Teachers should avoid taking personally events occurring in the work environment that were not intended to be taken personally. Educators appear to be suffering from a chronic case of mild paranoia. It is self-destructive to attribute harmful intent when none is present.
- Energy Patterns - Persons in stressful professions should be aware of the ebb and flow of their energy patterns. More challenging and important tasks should be scheduled for individual peak work times.
- Colleague Support Systems - Sharing frustrations with colleagues is therapeutic for those in a stressful job situation. It can also reduce the likelihood that a stressful day at school will be followed by an even more stressful evening at home.
- Home Support Systems - A person with a stressful position needs a mate who gives unconditional positive support. He does not need objective inquiry.
- Psychological Diversity - Teachers who make their identity coterminus with their career are asking for trouble.

A teacher must have some interest beyond work in which he becomes an expert. Such activities should require thought and result in the exhilaration that follows significant achievement. Such activities become psychological stimulants and add a meaningful dimension to self-concept.

- . Time Management - Learning to avoid unnecessary fatigue by the use of effective time management is a useful and necessary tool that should be utilized by educational professionals.
- . Dealing with Criticism - Anyone whose salary is paid through public funds comes in for a great deal of criticism. Redefinition of critical statements in positive terms is a useful tool in such situations.
- . Recognizing Stages - Understanding the psychological need structures and stages of development of educational colleagues can reduce significantly the distress resulting from difficult or strained relationship with peers.

Individual intervention is an important aspect of dealing with stress. Ryerson (1981) indicated that training school staff in stress-reduction techniques often has a short-term effect. Long-term results can be achieved by alleviating or reducing those sources of organizational stress contributing to the accumulation of teacher stress.

Matthew Miles (1965) identified the ten characteristics of a healthy school organization, which are summarized below:

- . Goal Focus - The organization's goals are clear and accepted by the staff. These goals must be achievable with existing resources and congruent with the community's demands.
- . Communication Adequacy - Staff receives the information they need without exerting undue effort.
- . Optimal Power Equalization - Staff at all levels have an influence on how the organization is run. Collaboration rather than coercion typifies the relationship among staff.
- . Cohesiveness - The staff is pleased to be a part of the organization. A desire to remain with the organization and contribute further to its development is evident.
- . Morale - The staff has a sense of well being and satisfaction.
- . Innovativeness - New approaches are developed to meet the organization's goals. Procedures are not routine or standardized.
- . Autonomy - The organization actively determines its direction. It responds neither passively nor destructively to perceived demands.
- . Adaptation - The organization can restructure its operation to meet changing community demands. It

possesses sufficient stability to manage the difficulties encountered during the adaptation process.

- . Problem-Solving Adequacy - The organization has well-developed procedures for sensing problems, devising solutions, implementing them, and evaluating their effectiveness. Such problems can be solved with minimum energy.

Organizational development efforts in the areas of major sources of teacher stress, as outlined above, can improve the health and productivity of a school organization by reducing the sources of stress affecting its teachers.

Summary

Stress has important implications for the teaching profession. In summarizing the cited research, it should be state that there is a need for special training and preparation for working closely with people. Such teacher training should focus on the personal stress involved in the work. Professionals need to be made aware of the importance and relevance of their psychological state to their work with other people.

The fact that stress is also a sociological phenomenon should not be overlooked. How society views this phenomenon will greatly influence its prevalence and visibility.

Teacher stress has serious ramifications for the educational profession and public at large.

Factors causing stress in the educational profession will always abound. Teachers need to learn how to handle distress and to prevent excess stress. Failure to meet this challenge can have a detrimental effect on teacher health and reduce the effectiveness of the education provided by the public school system.

Chapter III

RESEARCH METHODOLOGY

The five sections of this chapter explain the use of accepted methods and procedures for sampling the population of elementary and secondary school teachers in the Prince William County School System, who are members of the Prince William Education Association, concerning the perceived degree of stress engendered by specific job events. Section one identifies the selection procedure and characteristics of the respondents who participated in the study. The second section consists of a description of the research design. The third section embodies a discussion of the instrumentation. The process used to gather the data is described in section four. Methods used to analyze the data are presented in the final section of the chapter.

SAMPLE AND POPULATION

The population about which this Researcher wished to draw conclusions was composed of elementary and secondary school teachers in the Prince William County, Virginia School System. The teachers who comprised the sample were members in the Prince William Education Association for the 1983-84 school year. The Prince William Education Association had 1,530 members. Eight hundred seventy-two members were secondary teachers. Six hundred fifty-eight members were elementary teachers. By using the Krejcie and Morgan Table for Determining Sample Size for Research Activities (Krejcie and Morgan, 1970), it was

ascertained that two hundred sixty-nine secondary (N = 269) and two hundred forty-two elementary teachers (N = 242) comprised a statistically defensible sample.

The position designated as elementary school teacher included those who work in schools with grade K-5, while the position designated as secondary school teacher included those who work in schools including grades 6-8 or 9-12 because of local school system considerations.

A systematic random sampling procedure was employed in the selection of respondents. All PWEA members in the defined population were placed on a list in random order, school by school, in which they were employed (Borg and Gall, 1983). This sampling method assured that a representative number of respondents were selected from throughout the school system (Dry, Jacobs, Rozavick, 1972).

RESEARCH DESIGN

This study employed sample survey technique. Borg and Gall (1983) state that survey research is a distinctive research Methodology for systematic data collection. This contribution of twentieth-century sociologists such as Lazarsfeld, Hyman and Stoffer was to link instruments of data collection (questionnaires and interviews) to a logical and statistical procedure for analyzing educational data. Kerlinger (1973, p. 421) stated that ". . . survey research is a useful tool for educational fact-finding."

The central problem of this research was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William County School System. The teachers who comprised the sample were members of the Prince William

Education Association. Respondent stress scores were calculated and used as the basis of comparison between and among a variety of demographic variables. These demographic variables included:

- . Sex
- . Age
- . Marital Status
- . Race
- . Level of teaching assignment
- . Educational attainment
- . Years of service in education
- . Years of service in building
- . Years of service in teaching
- . Tenured/Non-tenured
- . Percentage of income provided by respondent's salary
- . Measure of stress

The study was designed to test the following hypotheses:

- . There is no significant ($p < .05$) difference between elementary and secondary teachers in degree of perceived stress.
- . There is no significant ($p < .05$) difference in response based on selected demographic variables (sex, race, age, length of experience in education, length of experience as a teacher, marital status, educational attainment, tenured or non-tenured, and percentage of income) in degree of perceived stress.
- . There are differential levels of stress across selected levels of key demographic variables (sex, age, marital status, race, degree, tenured or non-tenured, and percentage of total family income earned).

INSTRUMENTATION

The Teacher Stress Inventory (Appendix A) was used to survey the sample of elementary and secondary teachers from the Prince William Education Association. The instrument was developed by the Researcher in 1983 to measure the relative magnitude of stress related to various job events which were associated with the elementary and secondary teacher. The items in the survey instrument were based on the following:

- . The Principals' Stress Inventory developed by Conley and Hinkle in 1979.
- . A review of the literature on stress.
- . Input from research practitioners in the field.
- . The practical experience of the Researcher.

The survey instrument consisted of 48 job-related events to which the sample respondents (elementary/secondary teachers) were asked to respond on a Likert-type scale, indicating the degree of stress they associated with each event.

A 48-item demographic questionnaire was used to collect personal and situational information about the respondents. These items were identified as the variables which could be related to the stress experienced by elementary and secondary teachers.

The instrumentation was field-tested with a group of teachers attending classes at the Northern Virginia Center of Virginia Polytechnic Institute and State University. The survey instrument was developed in an Op-Scan machine scoreable format. The V.P.I.-S.U. testing service ran the reliability test on the field tested instrument.

Crombach's - coefficient was computed (SPSS - Release 9.0; Subprogram Reliability) and found to be 0.9484. This exceptionally high reliability result indicated that substantial confidence in the quality of the instrumentation was justified.

REASON FOR APPROACH

The Researcher designed the TEACHER STRESS INVENTORY and the BASELINE DATA QUESTIONNAIRE in their respective formats for the following reasons:

- . Individuals are willing to answer a questionnaire which is not personally threatening.
- . The questionnaire was designed to be non-threatening to the respondents so they were encouraged to be more candid.
- . There were limitations on the Researcher's personal resources.
- . The Researcher encountered the usual limitations to access to certain kinds of confidential data (i.e., medical records).
- . Medical records do not link directly with job events.
- . The Researcher was interested in teacher perceptions that link stress with job events.
- . The Researcher saw a need for the development of a highly reliable research instrument which could be used by researchers in a wide variety of contexts.

DATA COLLECTION PROCEDURE

The following procedure was followed in the data collection:

. In November 1983 an article was published in the PWEA Advocate announcing the study. This publication was sent to all members of the organization.

. One week following the mailing of the PWEA Advocate, a letter of introduction, along with the TEACHER STRESS INVENTORY AND BASELINE DATA QUESTIONNAIRE, and a No. 2 pencil were mailed to the sample members. A return envelope was included. The interschool mailing system was utilized for distribution.

. Each questionnaire was previously coded by the Researcher so that non-respondents could be subsequently contacted.

. Three weeks after the initial questionnaire was mailed, a follow-up letter, along with another copy of the questionnaire, was sent to non-respondents.

. Letter reminders were mailed within two weeks after the second questionnaire had been distributed.

. Follow-up phone calls were made to a sample of the final non-respondents by the Researcher to determine if there were particular characteristics or common interests within the non-responding group. However, since the non-respondents represented less than 20% of the total participants sampled, it was determined that this was not a large enough number to determine if there were particular characteristics or common interest within the group.

DATA ANALYSIS

In this study, the Researcher was interested in both the determination of association between two or more variables and the discernment of differences of a variable across two intact groups. The following statistical analyses were employed:

. A correlation coefficient was used in order to determine if there were association between certain conditions (i.e., family problems, absenteeism, illness, etc.) and measured stress.

. A t-test was utilized to test for significant ($p < .05$) differences between elementary and secondary teachers.

. A step-wise multiple regression was used to determine if underlying demographic variables help explain levels of stress. This procedure assisted in the determination of the variables which contributed in largest measure to perceived stress.

. A breakdown analysis was used to investigate the differential levels of stress across selected key demographic variables.

Chapter IV

ANALYSIS AND DISCUSSION OF DATA

The detailed findings of this study were based on an analysis of data collected by mail from a systematic random sampling of five hundred eleven (511) public elementary and secondary school teachers who were members of the Prince William Education Association. The instrumentation utilized included Teacher's Stress Inventory and Personal Data Forms.

The purpose of the study was to compare the degree of stress perceived by the sample members with their level of teaching assignments and a number of other demographic variables. The following hypotheses were tested:

1. There is no significant ($p < .05$) difference between elementary and secondary teachers in degree of perceived stress.
2. There is no significant ($p < .05$) difference in response based on selected demographic variables (sex, race, age, length of experience in education, length of experience as a teacher, marital status, educational attainment, tenured or non-tenured, and percentage of income) in degree of perceived stress.
3. There are differential levels of stress across selected levels of key demographic variables (sex, age, marital status, race, degree, tenured or non-tenured, and percentage of total family income earned).

DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

When the total sample of 511 public school teachers of the Prince William Education Association was surveyed, the following data emerged. (See Table 4.I) Primary descriptive characteristics of the sample appear in the following statements:

- . Of the 473 respondents, 112 (24%) were males and 361 (76%) were females.
- . Thirty-five percent of those surveyed were 35 years of age or younger. Sixty-four percent surveyed were under the age of 40.
- . Seventy-two percent of the respondents were married.
- . The majority of teachers were white (90%) as compared to 10% percent non-white population.
- . One hundred eighty-four (39%) of the teachers had completed between 11 and 17 years of service in education and service as a teacher, while only 18 respondents (4%) had completed fewer than three years of service.
- . Eighty-six percent of the teachers were tenured.
- . Forty-six percent of those responding indicated that their income constituted 25-50% of the total family income. Thirty-one percent said that their salary constituted 75% or more of total family income.
- . Fifty-three percent of the respondents were secondary teachers while 47% were elementary level teachers.

- . Thirty-six percent of the population reported an acidic stomach which 65% indicated bothered them during both school contracted days as well as vacation time.

TABLE 4.1

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

DEMOGRAPHIC CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Sex		
Male	112	23.7
Female	361	76.3
Age		
Under 35	165	34.9
36-40	139	29.4
41-45	77	16.3
46-55	64	13.5
Over 55	28	5.9
Marital Status		
Single/Never Married	86	18.2
Single/Divorced, Widowed	43	9.1
Married	344	72.7
Race		
White	425	89.9
Black	40	8.5
Other	8	1.6
Teaching Level		
Elementary	224	47.4
Secondary	249	52.6
Degree		
Bachelors	236	49.9
Masters	219	46.3
6th Year	14	3.0
Doctoral	4	0.8
Years of Service in Education		
Under 3	18	3.8
4-10	155	32.8
11-17	184	38.9
18-25	89	18.8
Over 25	27	5.7

TABLE 4.1 (Continued)

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

DEMOGRAPHIC CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Years in School		
Under 3	122	25.8
4-10	219	46.3
11-17	105	22.2
18-25	34	5.1
Over 25	3	0.6
Years as a Teacher		
Under 3	22	4.7
4-10	152	32.1
11-17	185	39.1
18-25	86	18.2
Over 25	28	5.9
Tenured		
Yes	405	85.6
No	64	13.5
N/A	4	.9
Percentage of Family's Income Present Salary Constitutes		
Under 25%	30	6.3
25-50%	216	45.7
51-75%	81	17.1
Over 75%	146	30.9

HEALTH CHARACTERISTICS OF THE RESPONDENT GROUP

Analysis of that portion of the questionnaire dealing with the respondents' health characteristics yielded the following data (See Table 4.II).

- . Of the 473 respondents, 42% indicated that they had experienced physical illness which they felt was related to stress.
- . Forty-three percent of the respondents had experienced serious emotional anxiety which they felt was related to stress in their work.
- . Twenty-three percent of those sampled had missed over six days of work due to illness during the previous school year.
- . Fifty-eight percent indicated that they experienced moderate to severe stress in their family life.
- . Sixty-five percent noted moderate to severe stress in their financial situation.
- . Fifty-one percent felt that stress was moderate to severe in other activities, such as schooling and second employment.

TABLE 4.II

HEALTH CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Physical Illness		
Yes	200	42.3
No	273	57.7
Emotional Anxiety		
Yes	203	42.9
No	269	56.9
Days of School Missed		
0-6	365	77.2
7-12	86	18.2
Over 13	22	4.6
Stress in Family Life		
Little	200	42.3
Moderate	235	49.7
Severe	38	8.0
Stress in Financial Situation		
Little	166	35.1
Moderate	229	48.4
Severe	78	16.5
Stress in Other Activities (Schooling, Second Employment)		
Little	233	49.3
Moderate	204	43.1
Severe	36	7.6

PHYSICAL CHARACTERISTICS OF THE RESPONDENT GROUP

Certain physical characteristics and/or manifestations are good indicators of whether an individual is actually suffering from stress. Data analysis yielded the following information:

- . Twenty-five percent of the sample population had experienced a weight change in a twelve-month period of time.
- . Forty-two percent of the teachers reported that they experienced frequent headaches. They did not feel, however, that the headaches were particularly symptomatic during either the vacation or school periods since 59% reported the time of headaches was non-applicable to either of the aforementioned groups.
- . Seventy-seven percent of the teachers responding indicated that they experienced a loss of energy (pep, vitality) and 54% indicated that this loss occurred during school contracted days.
- . Fifty percent of the teachers indicated that they had trouble getting up in the morning, but that it didn't seem to make a difference if it were a school contracted day as opposed to a vacation day (50% response).
- . Thirty-six percent of the population reported an acidic stomach which 63% indicated bothered them during both school contracted days as well as vacation time.

- . Sixty-five percent of the sample population indicated that they drank more than two caffeine beverages daily.
- . One third (35%) of the respondents reported that they drink alcoholic beverages on a daily basis.
- . One-third (28%) of the teachers indicated that they had paid more than four visits to the doctor within 12 months.
- . Of the respondents, two-thirds indicated that they were not involved in any type of stress therapy (i.e., seminars, workshops, physical activities or individual counseling).

TABLE 4.III

PHYSICAL CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Weight Change	120	25.4
Frequent Headaches	198	41.9
Time of Frequent Headaches		
School	124	26.2
Vacation	3	0.6
Both	67	14.2
N/A	279	59.0
Energy Loss	365	77.2
Time of Energy Loss		
School	254	53.7
Vacation	8	1.7
Both	95	20.1
Chest Pain	90	19.0
Time of Chest Pain		
School	53	11.2
Vacation	3	0.6
Both	31	6.6
Trouble Getting Up in Morning	234	49.5
Time of Trouble Getting Up		
School	167	35.3
Vacation	2	0.4
Both	66	14.0
N/A	238	50.3
Acidic Stomach	172	36.4

TABLE 4.III (Continued)

PHYSICAL CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Time of Acidic Stomach		
School	98	20.7
Vacation	4	0.8
Both	63	13.3
N/A	308	65.1
High Blood Pressure	74	15.6
How Often Drink a Caffeine Drink		
Never	42	8.9
One	119	25.2
2-3	197	41.6
Over 3	109	23.6
Time Drink Caffeine Beverages		
School	167	35.3
Vacation	29	6.1
Both	215	45.5
Drink Alcoholic Beverages		
None	284	60.0
One	113	23.9
2 or 3	44	9.3
Over 3	7	1.5
Time Drink Alcoholic Beverages		
School	32	6.8
Vacation	113	23.9
Both	75	15.9
N/A	253	53.5
Use Sleep Medications, Sedatives		
Yes	37	7.8
No	432	91.3
N/A	4	0.9

TABLE 4.III (Continued)

PHYSICAL CHARACTERISTICS OF THE RESPONDENT GROUP
(N = 473)

CHARACTERISTICS	ABSOLUTE FREQUENCY	PERCENT
Time Use Medications		
School	21	4.4
Vacation	14	3.0
Both	438	92.6
N/A	---	----
Doctor's Visits		
0-3	340	71.9
4-7	99	20.9
8-12	25	5.3
Over 12	9	1.9
Stress Therapy - Seminars		
Yes	87	18.4
No	385	81.4
N/A	1	0.2
Stress Therapy - Workshops		
Yes	98	20.7
No	373	78.9
N/A	2	0.4
Stress Therapy - Physical Activity		
Yes	183	38.7
No	288	60.9
N/A	2	0.4
Stress Therapy - Individual Counseling		
Yes	61	12.9
No	410	86.7
N/A	2	0.4

ANALYSIS OF DATA BY HYPOTHESIS

Hypothesis 1 -- There is no significant ($p < .05$) difference between elementary and secondary teachers in degree of perceived stress.

A t-test for independent samples was used to test Hypothesis 1. In this t-test, elementary teachers reported an average stress level associated with job related work activities of 56.4 with a standard deviation of 23.13. On the same scale, secondary respondents reported a mean of 53.7 with a standard deviation of 21.27. The resulting t-value was 1.34 (509) which failed to reach significance at the ($p < .05$) level of significance. Hence, although a moderately low level of stress was reported, teachers in the Prince William County public secondary school level did not appear to differ from teachers at the elementary school level. This low level of stress should be interpreted with caution in that they reported physical symptoms indicating a higher level of stress (see Tables 4.IV and 4.V).

Hypothesis 2 -- There is no significant ($p < .05$) difference in response based on selected demographic variables (sex, race, age, length of experience in education, length of experience as a teacher, marital status, educational attainment, tenured or non-tenured, and percentage of income) in degree of perceived stress.

The variables were entered into a stepwise multiple regression in order to identify the best set of correlates of stress as a test of the second hypothesis. A significance level of ($p < .05$) was set, requiring a $F(1,500)$ level 3.86.

Of the variables included, only sex was a significant predictor with a $F(1,500)$ level of 22.031. However, several of the set of variables dealing with physical symptoms entered the equation. The following variables, in order of significance, were significant in contributing to stress at the .05 level (Table 4.VII). Table 4.VI shows the variables not entered in the equation whereas, Table 4.VII shows variables entered in the equation with B and Beta Weights. Table 4.VIII shows R^2 Scores for variables in the equation. Table 4.IX gives the Beta In and F of the variables hypothesized.

Hypothesis 3 -- There are differential levels of stress across selected levels of key demographic variables (sex, age, marital status, race, degree, tenured, and percentage of total family income earned).

The statistical procedure BREAKDOWN was used to test Hypothesis 3. Key demographic variables (sex, age, marital status, race, degree, tenured, and salary as percentage of total family income) were entered into the BREAKDOWN procedure. (See Table 4.X) The following data emerged:

- . Of the teachers surveyed, the females showed a higher level of anxiety than did the males.
- . As the age bracket of the teachers increased, the stress level decreased.
- . Single teachers in both categories were more anxious than teachers who were married.
- . There was no significant difference in stress level based on race.
- . Only those teachers who held a doctoral degree showed a lower level of stress. There was no significant difference in level of stress in the remaining three categories (Bachelors, Masters, and 6th year).
- . Tenured teachers indicated that they were less stressed than those who were non-tenured.
- . As the percentage of the teachers' present salary constituting family income increased, the level of stress increased.

TABLE 4. IV

ANALYSIS OF VARIANCE FOR STEPWISE REGRESSION
OF DEMOGRAPHIC VARIABLES

ANALYSIS OF VARIANCE	DF	SUM OF SQUARE	MEAN SQUARE	F
Regression	9.	68035.05301	7559.45033	21.29935
Residual	463.	164325.47130	354.91462	

TABLE 4.V

MULTIPLE CORRELATION

Multiple R	0.54111
R Square	0.29280
Adjusted R Square	0.27208
Standard Error	18.83918

TABLE 4.VI
STEPWISE REGRESSION ANALYSIS
VARIABLES NOT IN THE EQUATION

VARIABLES	BETA IN	F
SC4	0.02851	0.467
ID	-0.00948	0.052
AGE	-0.07619	3.591
MS	0.00568	0.019
RACE	-0.00185	0.002
TL	-0.02842	0.457
DEG	0.01677	0.175
YSE	-0.00797	0.040
YIS	-0.06514	2.630
YAT	-0.02269	0.327
TEN	0.02635	0.443
FI	-0.01625	0.144
EA	-0.00121	0.001
DAS	0.04071	1.044
SIF	0.04899	1.253
PW	0.01576	0.155
RPW	0.03482	0.763
JC	0.00632	0.026
PWP	-0.04220	1.490
MW	-0.03050	0.603
WC	-0.01432	0.126
FH	-0.02526	0.360
TFH	-0.05523	1.667
EL	-0.03559	0.371
CP	0.01845	0.205
TCD	-0.05292	1.619
TUP	-0.03814	0.319
AST	-0.00853	0.042
TAS	-0.00534	0.016
HBP	-0.05507	1.931
DCB	-0.06040	2.327
TDC	0.02918	0.518
DAB	-0.00790	0.040
TDA	-0.04451	1.200

TABLE 4.VII
STEPWISE REGRESSION
B AND BETA WEIGHT
VARIABLES IN THE EQUATION

VARIABLES	B	BETA	F
TEL	-3.473004	-0.20400	23.691
FIS	5.291565	0.16805	15.055
SEX	9.701169	0.18607	22.031
UPM	-6.507217	-0.15517	14.174
PI	-5.842065	-0.13021	9.880
SIS	4.454622	0.12764	8.548
P	-4.670803	-0.10592	6.347
C	5.985341	0.09528	5.110
TP	7.101149	0.07686	3.766

TABLE 4.VIII

STEPWISE REGRESSION
VARIABLES IN THE EQUATION (R²)

VARIABLE	R ²
Time of energy loss - TEL	.1095
Financial situation - FIS	.1676
Sex - SEX	.2110
Trouble getting up in morning - UPM	.2392
Physical illness - PI	.2600
Stress in schooling - SIS	.2729
Physical activity - P	.2799
Counseling - C	.2870
Teaching plan - TP	.2928

TABLE 4. IX

VARIABLES HYPOTHESIZED

VARIABLES	BETA IN	F
SEX	9.701169	22.031
RACE	-0.00185	0.002
AGE	-0.07619	3.591
YSE	-0.00797	0.040
YAT	-0.02269	0.327
MS	0.00568	0.019
DEG	0.01677	0.175
TEN	0.02635	0.443
FI	-0.01625	0.144

TABLE 4.X

BREAKDOWN-KEY DEMOGRAPHIC VARIABLES
(N = 473)

DEMOGRAPHIC	MEAN	STANDARD DEVIATION
Sex		
Male	47.11	21.22
Female	57.40	21.94
Age		
Under 35	58.15	21.83
36-40	56.78	22.81
41-45	53.39	20.22
46-55	47.95	20.88
Over 55	47.57	24.99
Marital Status		
Single/Never Married	57.88	21.24
Single/Divorced, Widowed	60.23	25.87
Married	53.58	21.81
Race		
White	54.89	22.09
Black	55.85	23.69
Other	57.85	21.44
Degree		
Bachelors	54.81	21.93
Masters	55.15	22.33
6th Year	56.50	24.39
Doctoral	48.75	29.81
Tenured		
Yes	54.38	21.85
No	58.39	24.39
N/A	69.33	4.50

TABLE 4.X (Continued)

BREAKDOWN-KEY DEMOGRAPHIC VARIABLES
(N = 473)

DEMOGRAPHIC	MEAN	STANDARD DEVIATION
<hr/>		
Percentage of Family's Income Present Salary Constitutes		
Under 25%	51.03	21.60
25-50%	54.25	23.15
51-75%	55.26	19.52
Over 75%	56.67	22.30

Chapter V

SUMMARY, CONCLUSIONS, RECOMMENDATION AND FUTURE IMPLICATIONS

INTRODUCTION

Stress is becoming a recognized occupational hazard within the teaching profession. Recent accounts in the news media, concern expressed by professional teachers' associations, and a proliferation of stress management seminars all underscore a high level of nationwide interest in teacher stress. Empirical research on teacher stress is still scarce. Consequently, the phenomenon remains largely unexplained.

The subject of work-related stress has continued to receive increasing attention. Federal and state policymakers are recognizing the negative effects of work stress on human resources. Counselors and therapists are reorienting their practices to accommodate an increasing client load composed of individuals who report negative effects from work stress. Researchers in the areas of organizational behavior and social psychology are amassing a credible amount of empirical research which has begun to uncover major factors in work-related stress and their effect on the organization, worker output, and the physical and emotional well being of the worker.

Teacher stress has been viewed from the perspective of three conceptually distinct vantage points: task-based stress, role-related stress, and work events stress.

- . Task-based stress concerns problems which are associated with a variety of specific tasks that the teacher must

perform in his teaching role.

- . Work events stress is associated with specific circumstances or events that may befall a teacher during the course of his professional career.
- . Role-related stress concerns the degree of fit between a teacher's expectations of his teaching role and the actual work-related experience of fulfilling that role.

SUMMARY OF RESULTS

The present study was designed to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William County School System. A systematic random sample, school by school, was taken from the 1,530 persons who were members of the Prince William Education Association during the 1983-84 school year. Of the Association members, two hundred sixty-nine secondary (N = 269) and two hundred forty-two (N = 242) elementary teachers comprised the statistically defensible sample. The sampling method assured that a representative number of respondents was selected from throughout the school system. A ninety-four percent (94%) response was received from those comprising the sample.

THE TEACHER STRESS INVENTORY and the BASELINE DATA QUESTIONNAIRE (Appendix A) were used to collect personal and situational information about the respondents. The survey was first sent to the sample in November of 1983 after being announced and underwritten

in the Advocate, a membership publication. Three waves of mailing were done in order to obtain as large a rate of return as possible. Follow-up phone calls were made to all of the final non-respondents by the Researcher in order to ascertain if there were particular characteristics or common interests within the non-responding group. However, since the non-respondents represented only 6% of the total sample, it was determined that there was not a large enough number to ascertain statistically if there were particular characteristics or common interests within the group. Time was the common element mentioned most frequently by those not responding.

The results of this study revealed that even though a moderately high level of stress was indicated through reports of physical manifestations being experienced, a moderately low level of stress was reported concerning job events. The perceived stress reported on the Likert Scale for Prince William County public secondary school level teachers did not appear to differ from teachers at the elementary level. A t-test for independent samples was used to determine the average stress level associated with the job-related work activities. Elementary teachers reported an average stress level of 56.4 (on a scale ranging from low stress 48 to a high stress of 192) with a standard deviation of 23.13. On the same scale, secondary respondents reported a mean of 53.7 with a standard deviation of 21.27. The resulting t-value of 1.34 failed to reach significance at the ($p < .05$) level. Even though the responsibilities and characteristics of secondary teachers and elementary teachers differ, the teachers

sampled did not perceive a significant difference in stress being experienced. This finding generally conflicted with the findings of Schwab and Ivancevick (1982) which stated that secondary teachers had more negative attitudes toward their students than did elementary teachers. Elementary teachers were also found to have more frequent feelings of accomplishment than secondary teachers. Neither of these factors was relevant to this study.

The only demographic variable found related to stress was sex. This supported the findings of Schwab and Ivancevick (1982) in their study of 469 randomly sampled Massachusetts teachers that sex contributed to feelings of stress. However, in their study, male teachers were found to have more negative attitudes toward their students than did females. The physical indicators that were related to stress were:

- . Weight change (greater than 10%)
- . Frequent headaches
- . Energy loss (pep, vitality)
- . Trouble getting up in the morning
- . Acidic stomach
- . How often one drinks a caffeine drink
- . Drinking alcoholic beverages
- . Frequency of doctor's visits

A stepwise regression analysis was run to see if selected variables in the data could be used to predict stress level. The multiple R found for this regression was 0.54111 and the variables

entered into the prediction equation were:

- . Time of energy loss
- . Financial situation
- . Sex
- . Trouble getting up in the morning
- . Physical illness
- . Stress in schooling
- . Physical activity
- . Counseling
- . Teaching plan

CONCLUSIONS

The application of these findings to the problem statement and research hypotheses led to the following conclusions:

- . Stress in the Prince William County School System is not perceived differently by elementary or secondary teachers.
- . Stress, as measured by the Likert Scale, is lower in the teacher self reports than one might expect from prior research (i.e., Chicago Study).
- . No specific school job activity was related to stress.
- . Sex was the only demographic variable related to stress. In this study, females reported higher degrees of stress.
- . Physical stress was at a moderately high level.

- . Despite the occurrence of physical symptoms, the teachers visited doctors' offices infrequently, and were absent from work infrequently; they are the walking wounded. This indicates that more stress exists than was shown by the Likert Scale.

There appears to be an inconsistency between responses on the Likert Scale and indications of the reported physical symptoms. In fact, symptoms which are commonly associated with depression (i.e., energy loss, weight change, and trouble getting up in the morning) occurred in great frequency. Further, despite low Likert Scale Scores, the teachers recognized stress and attempted to help themselves in seminars, workshops, physical activity and counseling..

RECOMMENDATIONS

The recommendations for further study in the area of teacher stress are as follows:

- . It appears that teachers either have lower stress than has been found in other studies, that teachers are responding to the Likert Scale as they think they should, or they are misinterpreting their physical symptoms.
- . If stress exists, it is equally likely to be in elementary teachers as in secondary teachers. It is suggested that stress should be considered a general administrative concern.
- . In-service training programs should be developed to heighten individual teacher awareness of stress symptoms.
- . School administration should encourage staff to engage in

- physical activities as a method of stress control.
- . Teaching staff should be encouraged to learn relaxation techniques, as well as other autogenic techniques for stress reduction.
 - . No job aspect was identified as being a primary stressor.

FUTURE IMPLICATIONS

Future implications of research in the area of teacher stress include:

- . A need to explore more closely the relationship of physical symptoms to reported stress.
- . A need to explore more closely the discordance of finding low levels of reported stress and high levels of physical symptoms (i.e., teacher education, denial, or fear of responding honestly to questionnaires).
- . A need to determine through empirical research whether those individuals with high stress have common relationships (i.e., same school, same work, and/or same assignment).
- . A need to explore whether the reported level of stress was representative of the time period during which the study was done. Consideration should be given to the development of a longitudinal study to be administered throughout the school year. Stress in the schools may occur differentially across the time periods in the academic year.

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APPENDIX A

TEACHERS' STRESS INVENTORY

This instrument is designed to determine the relative degree of stress imposed on school teachers by their various job events. It is being administered to a sample of Prince William County Public School Teachers who are members of the Prince William County Education Association. Results will be reported by the Prince William County Education Association to its members. All individual responses will be held in strict confidence.

DIRECTIONS: Darken in the number 1 through 4 that best reflects the degree of stress you associate with each event listed below. Number 1 indicates the least stress, number 4 the greatest stress. Rate all events whether or not you have experienced them. Please respond to all statements.

1 = Very Little
 2 = Somewhat
 3 = High
 4 = Severe

DEFINITIONS:

VERY LITTLE - Insignificant or of little consequence.
SOMEWHAT - A thing of consequence in some degree.
HIGH - Intensified; of great degree, greatly elevated.
SEVERE - Trying to one's powers or endurance; hard to bear. (Extreme, anguish, pain, etc.)

***** PLEASE RETURN ALL SHEETS TO THE PWEA OFFICE IN THE ENCLOSED ADDRESSED COURIER ENVELOPE.**

4068-CDF-54321

V P I & S U LEARNING RESOURCES CENTER

NAME Baseline Data Questionnaire	COURSE Survey - PWEA	DATE 1983-84
INCORRECT MARKS O • X ✓	CORRECT MARK T • ● 4	USE NO. 2 PENCIL

ID NUMBER	FORM	SEAT NO	GROUP
0 0 0 0 0 0 0 0 0 0	A		
1 1 1 1 1 1 1 1 1 1	B	1 1 1 1	1
2 2 2 2 2 2 2 2 2 2	C	2 2 2 2	2
3 3 3 3 3 3 3 3 3 3	D	3 3 3 3	3
4 4 4 4 4 4 4 4 4 4	E	4 4 4 4	4
5 5 5 5 5 5 5 5 5 5	F	5 5 5 5	5
6 6 6 6 6 6 6 6 6 6	G	6 6 6 6	6
7 7 7 7 7 7 7 7 7 7	H	7 7 7 7	7
8 8 8 8 8 8 8 8 8 8	I	8 8 8 8	8
9 9 9 9 9 9 9 9 9 9	J	9 9 9 9	9

Please complete this Baseline Data Questionnaire and return it along with the Teachers Stress Inventory in the enclosed envelope. This questionnaire is designed to aid in classification and interpretation of information received from the Teachers Stress Inventory.
DIRECTIONS: Complete this questionnaire by marking in the appropriate space. Response will be held in strict confidence.

- 1) 1. Male 2. Female 1 1 2 3 4 5 6 7 8 9 10
- 2) AGE: 1. Under 35 2. 36-40 3. 41-45 4. 46-55 5. 56 and Over 2 1 2 3 4 5 6 7 8 9 10
- 3) MARITAL STATUS: 1. Single/Never Married 2. Single/Divorced 3. Married Widowed, etc. 3 1 2 3 4 5 6 7 8 9 10
- 4) ORIGIN/RACE: 1. White 2. Black 3. Other (Spanish Surname, Indian, Asian, etc.) 4 1 2 3 4 5 6 7 8 9 10
- 5) LEVEL OF MAJOR TEACHING ASSIGNMENT: 1. Elementary 2. Secondary (Middle or High) 5 1 2 3 4 5 6 7 8 9 10
- 6) HIGHEST DEGREE YOU HOLD: 1. Bachelor 2. Master 3. 6th Year 4. Doctorate 6 1 2 3 4 5 6 7 8 9 10
- 7) Including this year, how many years of service have you had in education?
1. Under 3 2. 4-10 3. 11-17 4. 18-25 5. Over 25 7 1 2 3 4 5 6 7 8 9 10
- 8) Including this year, how many years have you worked in your school?
1. Under 3 2. 4-10 3. 11-17 4. 18-25 5. Over 25 8 1 2 3 4 5 6 7 8 9 10
- 9) Including this year, how many years have you been a teacher?
1. Under 3 2. 4-10 3. 11-17 4. 18-25 5. Over 25 9 1 2 3 4 5 6 7 8 9 10
- 10) Are you tenured? 1. Yes 2. No 10 1 2 3 4 5 6 7 8 9 10
- 11) What percentage of your family's income does your present salary constitute?
1. Less than 25% 2. 25-50% 3. 51-75% 4. Over 75% 11 1 2 3 4 5 6 7 8 9 10
- 12) Have you experienced any physical illness in the last two years that you feel is related to stress in your work? 1. Yes 2. No 12 1 2 3 4 5 6 7 8 9 10
- 13) Have you experienced any serious emotional anxiety in the last two years that you feel is related to stress in your work? 1. Yes 2. No 13 1 2 3 4 5 6 7 8 9 10
- 14) How many days of school did you miss during the previous school year due to illness? 1. 0-6 2. 7-12 3. 13-19 4. 20 or Over 14 1 2 3 4 5 6 7 8 9 10
- 15) To what extent do you have stress in your family life?
1. Little 2. Moderate 3. Severe 15 1 2 3 4 5 6 7 8 9 10
- 16) To what extent do you have stress in your financial situation?
1. Little 2. Moderate 3. Severe 16 1 2 3 4 5 6 7 8 9 10
- 17) To what extent do you feel stress in other activities such as schooling, second employment, avocations, etc? 1. Little 2. Moderate 3. Severe 17 1 2 3 4 5 6 7 8 9 10
- 18) How long have you belonged to PWEA?
1. 0-5 2. 6-10 3. 11-15 4. 16-20 5. Over 20 years 18 1 2 3 4 5 6 7 8 9 10
- 19) Would you rank your involvement in PWEA as 1. Low 2. Moderate 3. High? 19 1 2 3 4 5 6 7 8 9 10
- 20) If you should get into a job-related conflict with the County, would you expect PWEA to give you aid? 1. Yes 2. No 20 1 2 3 4 5 6 7 8 9 10
- 21) Do you feel you have input into PWEA Platform or Policies? 1. Yes 2. No 21 1 2 3 4 5 6 7 8 9 10
- 22) Do you feel that you get your money's worth out of PWEA dues? 1. Yes 2. No 22 1 2 3 4 5 6 7 8 9 10
- 23) Do you plan to go back into teaching next year? 1. Yes 2. No 23 1 2 3 4 5 6 7 8 9 10
- 24) Have you had a weight change in the last 12 months? (Greater than 10%)
1. Yes 2. No 24 1 2 3 4 5 6 7 8 9 10

- 24) Do you experience frequent headaches? 1. Yes 2. No
- 25) If you have frequent headaches, when do they usually occur?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 26) Do you experience a loss of energy (i.e., vitality)? 1. Yes 2. No
- 27) If you experience a loss of energy (i.e., vitality), when does it usually occur?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 28) Do you experience chest pain? 1. Yes 2. No
- 29) If you experience chest pain, when does it usually occur?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 30) Do you have trouble getting up in the morning? 1. Yes 2. No
- 31) If you have trouble getting up in the morning, when does it most frequently occur?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 32) Do you have an acidic stomach? 1. Yes 2. No
- 33) If you have an acidic stomach, when does it cause the most distress?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 34) Do you have high-blood pressure? 1. Yes 2. No
- 35) How often do you drink a caffeine-containing beverage (coffee, tea, soft drink)?
1. Never 2. Once a day 3. Two or three times a day 4. More than 3 times a day 5. No response
- 36) If you drink caffeine drinks, when do you consume the most?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 37) How many alcoholic beverages (beer, cocktails) do you have in a day?
1. None 2. One 3. Two or three 4. More than three 5. No response
- 38) If you drink alcoholic beverages, when do you imbibe most often?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 39) Do you use sleep medications, sedatives, etc.? 1. Yes 2. No
- 40) If you use sleep medications, sedatives, etc., when do you use them most often?
1. School contracted days 2. Vacation days 3. Both 4. Does not apply
- 41) How many doctor's visits have you had in the last 12 months? (Non CYN/OS)
1. (0-3) 2. (4-7) 3. (8-12) 4. (13 or more)
- 42) What types of stress therapies have you participated?
- 43) Seminars 1. Yes 2. No
- 44) Workshops 1. Yes 2. No
- 45) Physical Activity 1. Yes 2. No
- 46) Individual Counseling 1. Yes 2. No

THANK YOU!

24) 1 2

25) 1 2 3 4

26) 1 2 3 4

27) 1 2

28) 1 2 3 4

29) 1 2 3 4

30) 1 2 3 4

31) 1 2 3 4

32) 1 2 3 4

33) 1 2

34) 1 2 3 4

35) 1 2 3 4 5

36) 1 2 3 4 5

37) 1 2 3 4

38) 1 2 3 4 5

39) 1 2 3 4

40) 1 2

41) 1 2 3 4

42) 1 2 3 4

43) 1 2

44) 1 2

45) 1 2

46) 1 2

47) 1 2 3 4 5

48) 1 2 3 4 5

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VPI & SU LEARNING RESOURCES CENTER

NAME Teachers Stress Inventory	COURSE Survey - PWEA	DATE 1983-84
INCORRECT MARKS O X ✓	CORRECT MARK 1 2 3 4	USE NO. 2 PENCIL

ID NUMBER	FORM	INSERT NO.	GROUP
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10

Please use a No.2 pencil to answer the questions below. The following scale applies to questions 1-48:

1. Very Little--Insignificant or of little consequence
2. Somewhat--A thing of consequence in some degree
3. High--Intensified, of great degree, greatly elevated
4. Severe--Trying to one's powers or endurance; hard to bear. (Extreme, anguish, pain, etc.)

EVENTS

- | | | | | | | | | | | | |
|---|----|---|---|---|---|---|---|---|---|---|----|
| 1. The first week of school | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2. Inadequate money for expenses | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 3. In-Service meetings for teachers | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 4. Too many students in class | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 5. Instructing students with special needs | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 6. Threats of physical injury by students | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 7. Maintaining self-control when angry | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8. Verbal abuse from students | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 9. Lack of instructional materials | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10. Conferencing with parents | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11. Excessive paperwork | 11 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 12. Determining student's individual academic needs | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13. Student exam time | 13 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 14. Responding to a call from the principal's office | 14 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 15. Resolving social problems among students | 15 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 16. Lack of leadership and directions from administrators | 16 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 17. Dealing with student grievances | 17 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 18. Dealing with other teachers' grievances | 18 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 19. Outside of classroom supervision | 19 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 20. Orienting new teachers | 20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 21. Legal action against teachers | 21 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 22. Lack of time to carry out mandated special program | 22 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 23. Vandalism or substance abuse by students | 23 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 24. Being transferred involuntarily. (Continue on back of page) | 24 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

- 25. Keeping everybody happy (administrators, staff, parents...)
- 26. Testifying in a student suspension case
- 27. Dealing with student transfers
- 28. Development of curriculum guides
- 29. Meeting minimum competency standards mandated for students
- 30. Being evaluated by Superior(s)
- 31. Performance evaluation of students by teacher
- 32. Classroom housekeeping
- 33. Failing a student
- 34. The lack of career advancement or promotion
- 35. Staying within the instructional budget
- 36. Last week of school year
- 37. Concern about being rified
- 38. Making a presentation to peers, parents, or students
- 39. Completing legal papers (Special Education forms, etc.)
- 40. Responsibility for nonmastered curriculum
- 41. Lack of adequate planning time
- 42. Unable to keep an appointed time schedule
- 43. Negative public opinion
- 44. Change of school-level administrator
- 45. Token decision-making input
- 46. Rigidity of administration in regard to teaching styles
- 47. Involuntary transfer of another teacher
- 48. Developing student discipline techniques that are effective yet not rigid

25	1	2	3	4	5	6	7	8	9	10
26	1	2	3	4	5	6	7	8	9	10
27	1	2	3	4	5	6	7	8	9	10
28	1	2	3	4	5	6	7	8	9	10
29	1	2	3	4	5	6	7	8	9	10
30	1	2	3	4	5	6	7	8	9	10
31	1	2	3	4	5	6	7	8	9	10
32	1	2	3	4	5	6	7	8	9	10
33	1	2	3	4	5	6	7	8	9	10
34	1	2	3	4	5	6	7	8	9	10
35	1	2	3	4	5	6	7	8	9	10
36	1	2	3	4	5	6	7	8	9	10
37	1	2	3	4	5	6	7	8	9	10
38	1	2	3	4	5	6	7	8	9	10
39	1	2	3	4	5	6	7	8	9	10
40	1	2	3	4	5	6	7	8	9	10
41	1	2	3	4	5	6	7	8	9	10
42	1	2	3	4	5	6	7	8	9	10
43	1	2	3	4	5	6	7	8	9	10
44	1	2	3	4	5	6	7	8	9	10
45	1	2	3	4	5	6	7	8	9	10
46	1	2	3	4	5	6	7	8	9	10
47	1	2	3	4	5	6	7	8	9	10
48	1	2	3	4	5	6	7	8	9	10

SCALE

- 1. Very Little--Insignificant or of little consequence
- 2. Somewhat--A thing of consequence in some degree
- 3. High--Intensified, of great degree, greatly elevated
- 4. Severe--Trying to one's powers or endurance; hard to bear. (Extreme, anguish, pain, etc.)

THANK YOU!

APPENDIX B

PWEA advocate

Volume 3, Number 4

Prince William Education Association

November 1983

PWEA UNDERWRITES ON TEACHER STRESS

PWEA is facilitating a research project on a problem the Association has hailed for several years as one of the major detractors in the professions -- TEACHER STRESS

In cooperation with Virginia Tech doctoral candidate, Vikki Tupes, the Association is distributing the survey to a random sampling of 500 PWEA members this month. The study is designed to determine the relative degrees of stress experienced by teachers in various job assignments. The responses will be statistically analyzed with an array of demographic data.

To give an accurate picture of the problem of teacher stress in Prince William, participants should take the ten minutes necessary to fill out the SCAN-TRON sheets and return them promptly to the PWEA Office. All responses will be confidential.

Cumulative results will be reported to PWEA, VEA and NEA at the conclusion of the study. The University faculty working on this project have called it a landmark study that can be a stepping stone for similar studies throughout the country.

APPENDIX C

PWEA

PRINCE WILLIAM EDUCATION ASSOCIATION
8510 Bucyrus Court
Manassas, Virginia 22110
Tel.: (703) 361-2444



Clarence N. Leggett
President

E. Joy Arnold
UniServ Director

Nettie Attkisson
Office Secretary

November 17, 1983

Dear PWEA Member,

The Prince William Education Association is conducting a research study dealing with teacher stress. The purpose of the research is to measure, analyze and compare the degree of stress perceived by public elementary and secondary school teachers in the Prince William School System.

Those of you who have heard Reggie Smith speak, know that the way we perceive a situation determines how we react. Medical studies indicate that individuals who are exposed to prolonged periods of stress in their work develop physical manifestations such as headaches, stiff muscles, acidic stomach, etc.

The cumulative results of this study will be shared with the PWEA membership. All individual responses will be strictly confidential.

The association wishes to thank you for your cooperation in filling out this questionnaire. Please respond - your input really counts!

Sincerely,

Clarence N. Leggett
P.W.E.A. President

E. Joy Arnold
UniServ Director

Enclosures

PWEA

PRINCE WILLIAM EDUCATION ASSOCIATION
8510 Bucyrus Court
Manassas, Virginia 22110
Tel.: (703) 361-2444



Clarence N. Leggett
President
E. Joy Arnold
UniServ Director
Nettie Attkisson
Office Secretary

Dear PWEA Member,

As you are aware PWEA is conducting a survey which will identify specific job related events that Prince William County teacher perceive as causing stress.

As of this time, we have not received your questionnaire. As you well know, it is extremely important that our membership respond to our survey so we can generate an accurate picture of Prince William County teaching force as a whole.

Enclosed is another copy of the questionnaire and directions. Your response is very important to our study. Please take a few minutes to fill out the op-scan machine scoreable sheet. Your input counts!

All responses will be strictly confidential!

Sincerely,

Clarence N. Leggett
P.W.E.A. President

E. Joy Arnold
UniServ Director

PWEA

PRINCE WILLIAM EDUCATION ASSOCIATION
8510 Bucyrus Court
Manassas, Virginia 22110
Tel: (703) 361-2444



Clarence N. Leggett
President

E. Joy Arnold
UniServ Director

Nettie Attkisson
Office Secretary

Dear PWEA Member,

Just a reminder about our Stress Survey - We hope that you will take time to mail yours to the PWEA Office today.

Your input is so important in order to give us an accurate picture of our teaching force as a whole. Please respond!

All responses are confidential. Thank you for your help in making our study a success!

Sincerely,

Clarence N. Leggett
P.W.E.A. President

E. Joy Arnold
UniServ Director

APPENDIX D

P.W.E.A. CHARACTERISTICS OF RESPONDENT GROUP
(N = 473)

CHARACTERISTIC	ABSOLUTE FREQUENCY (N)	ADJUSTED FREQUENCY (%)
Belong to PWEA Length:		
0-5	158	33.4
6-10	120	25.4
11-15	115	24.3
16-20	63	13.3
Over 20	17	3.6
Rank Involvement in PWEA:		
Low	353	74.6
Moderate	106	22.4
High	14	3.0
Job Related Conflict Aid:		
Yes	454	96.0
No	19	4.0
PWEA Platform and Policies Input:		
Yes	365	77.2
No	108	22.8

APPENDIX E

NON-RESPONDENT FOLLOW-UP REMARKS

In order to determine whether there was a common overriding element which would be important in analyzing the results of the research project, the researcher telephoned the non-respondents to ascertain the reason they failed to answer the survey.

The number of non-respondents was so small that it was not necessary to statistically analyze the responses. However, the curiosity of the researcher was satisfied through the procedure.

The following comments were made by the non-respondents concerning the survey:

Elementary Non-Respondents

- . Forgot. Has large family. Has too much to do.
- . Holiday season. Lost in shuffle of massive paperwork.
- . Too much paperwork. Didn't have time. Two surveys out which were very much alike.
- . Two surveys in mail. Deluged with paperwork. Not a priority. Too many job responsibilities.
- . Didn't have a chance to fill out because of job obligations. Principal demands a great deal out of teachers.
- . Belonged to P.W.E.A. but doesn't have a real good feeling about the organization. Getting things from the organization causes her stress.
- . Many questions not related to a librarian specialist. If in that position would have to indicate a lot of stress when in actuality not applicable to actual job she holds.

Secondary

- . Over 59 years old. Didn't remember getting the survey, but vaguely remembered many papers crossed her desk.
- . Just didn't get it in the mail.
- . Forgot about it.
- . Felt she wasn't a good subject for the study. Is under physician's care for chemical imbalance which causes her stress. Did not feel it (stress) was related to her job. Has been to bio-feedback clinics. Scored high on questions asked.
- . Didn't remember getting it. Too much paperwork coming across desk.
- . Looked it over. Lack of time to fill it out. Put it aside and lost it in the shuffle.
- . Too busy. Basketball Coach. Not enough time.
- . Anytime a survey is coded, it is not anonymous. Explained confidentiality. Fear of confidentiality because of list of members stolen from P.W.E.A. office.
- . Not enough time.
- . Time element. In order to control stress, priorities must be set. Eliminates things he doesn't have to do.
- . Lack of time.

The lack of time seemed to be a common theme with the non-respondents. Excessive paperwork was another common element mentioned.

**The vita has been removed from
the scanned document**