

STRESS AND THE PRINCIPALSHIP: A COMPARATIVE
STUDY OF ELEMENTARY AND SECONDARY
PRINCIPALS IN VIRGINIA PUBLIC SCHOOLS

by

Jacqueline L. Cusack

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

in

Educational Administration

APPROVED:

Dennis E. Hinkle, Co-Chairman

Robert R. Richards, Co-Chairman

Houston Conley

Kenneth E. Underwood

Victoria R. Fu

May, 1982

Blacksburg, Virginia

To My Parents:

ARTHUR AND JOHNETTA CUSACK, SR.

Whose unfailing love and support
made it possible for me to realize my goal.

ACKNOWLEDGEMENTS

The writer wishes to express sincere appreciation to the committee members, Dr. Houston Conley, Dr. Victoria R. Fu, and Dr. Kenneth E. Underwood, for their assistance and support in the development of this study. Special thanks are extended to the committee co-chairmen, Dr. Dennis E. Hinkle and Dr. Robert R. Richards, for the time and effort they devoted to directing the research.

A note of gratitude is owed to Dr. Wayne M. Worner for providing the writer with support and encouragement along the way. Heartfelt thanks are extended to Vickie Carroll for her typing assistance.

TABLE OF CONTENTS

	Page
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
 CHAPTER I. INTRODUCTION	
Statement of the Problem	2
Need for the Study	2
Hypotheses	3
Definition of Terms	4
Limitations of the Study	6
Organization of the Study	6
 CHAPTER II. REVIEW OF LITERATURE	
Introduction	8
Theories On Stress	8
Physiological Stress	9
Psychological Stress	11
Social Stress	11
Other Related Theories	12
Occupational Stress	13
Stress Intrinsic to Job	14
Stress Related to Role in Organization	16
Stressors Related to Opportunity for Career Development	17
Stress Related to Relationships at Work	17
Stress Related to Organizational Structure	18
Managerial Stress	18
Sources of Managerial Stress	19
Stress and Educational Administration	21
Principals and Stress	24
The Nature of the Job	24
Stress Related to Role Pressure	27
Other Stressors	28
Responses to Stress	31
Coping Mechanisms for Stress	33
Summary	35

TABLE OF CONTENTS (Continued)

	Page
CHAPTER III. RESEARCH METHODOLOGY	
Population	36
Research Design	36
Instrumentation	37
Data Collection	39
Data Analysis	40
CHAPTER IV. FINDINGS	
Demographic Characteristics of the Respondent Groups	41
Elementary/Secondary Principal: The Primary Variable	47
Selected Demographic Variables	49
Interaction Between Elementary/Secondary Principal and Selected Demographic Variables	58
Summary	60
CHAPTER V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	
Summary	62
Findings	63
Conclusions	65
Implications	66
Elementary Principalship versus Secondary Principalship	67
Race, Age, and Length of Experience in Education	69
Percentage of White Student Enrollment in School	71
Recommendations for Further Study	74
BIBLIOGRAPHY	76
APPENDIX A: <u>Principals' Stress Inventory</u>	81
<u>Baseline Data Questionnaire</u>	85
APPENDIX B: Principals' Stress Inventory Sub-Scales	87
APPENDIX C: Letter of Introduction to Public Elementary School Principals in Virginia	91
APPENDIX D: Letter of Introduction to Public Secondary School Principals in Virginia	93
VITA	95
ABSTRACT	

LIST OF TABLES

Table	Page
1. Demographic Characteristics of the Respondent Groups	42
2. Means and Standard Deviations for Elementary and Secondary Principals on the <u>Principals' Stress Inventory</u>	48
3. Means and Standard Deviations for Elementary and Secondary Principals by Race on Scale 3 (Interpersonal Relations)	51
4. Means and Standard Deviations for Elementary and Secondary Principals by Age on Scale 3 (Interpersonal Relations) . .	52
5. Means and Standard Deviations for Elementary and Secondary Principals by Length of Experience in Education on Scale 3 (Interpersonal Relations)	54
6. Means and Standard Deviations for Elementary and Secondary Principals by Percentage of White Student Enrollment in School on Scale 1 (Administrative Constraints)	56
7. Means and Standard Deviations for Elementary and Secondary Principals by Percentage of White Student Enrollment in School on Scale 4 (Intrapersonal Conflict)	57

LIST OF FIGURES

Figure	Page
1. A Model of Stress at Work	15
2. Plot of Interaction Between Elementary/Secondary Principal and Percentage of White Student Enrollment in School on Scale 2 (Administrative Responsibilities)	59

CHAPTER I

INTRODUCTION

Stress is a reality of life, a reality of individuals responding to the challenges of survival in a changing society. Interest in the stress and strain of "modern" life and how individuals cope with them has increased in recent years. The popularity of the stress concept can be seen by the current outpouring of research studies (Appley and Trumbull, 1967; Dohrenwend and Dohrenwend, 1974; Janis, 1974; Lazarus, 1966; McGrath, 1970, to mention some of the best known), and of relevant books for the general public (Dyer, 1976; Friedman and Rosenman, 1974; Selye, 1976; Toffler, 1970).

Hans Selye, a noted authority on stress, has been quoted as saying that "...stress is the salt of life.... Stress wakes us up and makes us alive" (Miller, 1979:7). Selye (1976:6) further stated that "...life is impossible in the absence of stress...." Yet, of all the processes of human life and despite everything that has been written, stress is probably one of the least understood, the most misunderstood phenomenon (Greenwood, 1979).

There is some disagreement among investigators concerning the definition and general nature of stress (Lazarus, 1966; Mason, 1975; Selye, 1976). However, few disagree on the scope of its effects. Based on current writings and research on stress, Swent and Gmelch (1977:3) suggested the following conclusions:

- (1) Stress exists in the lives of all people and to a greater degree in people who are in people-related positions;
- (2) The same positions may create different amounts of stress in different people; and
- (3) An individual's health may be negatively affected due to excessive stress or the inability to cope with stress.

Swent and Gmelch also noted that little research has been done on the educational administrator's perception of job related stress.

Statement of the Problem

The central problem in this investigation was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events.

Need for the Study

Stress is a normal condition of living in a complex society--a condition to which elementary and secondary school administrators are not immune. Principals today are faced with more pressure, more aggression, more change, and more conflict than ever before (Gmelch, 1978). This confluence of factors is evidenced in administrators' lives while few acceptable outlets for stress reduction are to be found in their work or leisure (Landes, 1978).

The principalship has a multiplicity of roles attached to it which may contribute to additional pressures on the administrator. Since

each role involves tasks which must be accomplished, these tasks may themselves be a considerable source of stress (Landes, 1978). The demands made on principals to fulfill these tasks are often so intense that they lead to job dissatisfaction and in some cases poor health (Swent and Gmelch, 1977).

According to Landes (1978:2), "it should be glaringly obvious that the school administrator is, by the very nature of [the] job setting and the circumstances which surround it, particularly vulnerable to stressful situations and may indeed be succumbing to 'stress' itself." Thus, it is important that elementary and secondary school principals understand the positive and negative consequences of stress in their lives. It is even more important, however, for these administrators to learn how to cope with the inevitable pressures which impinge upon their positions of responsibility (Swent and Gmelch, 1977).

The purpose of this study was to examine, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events. Its findings should provide greater insight into the problems of the public school principalship in the Commonwealth of Virginia; thus enabling administrators to better maximize the benefits while minimizing the adverse effects of stress on themselves as well as the public school organization.

Hypotheses

In order to investigate the problem in this study, the following null hypotheses were formulated for testing:

(1) There is no difference between elementary and secondary principals on the degree of perceived stress.

(2) There is no difference between the various categories of selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress.

(3) There is no interaction between levels of the principalship and the selected demographic variables on the degree of perceived stress.

Definition of Terms

The following key concepts are defined in relation to stress and are provided to give focus and clarity to the study:

Stress: refers to a response syndrome of negative effects (such as anger or frustration) resulting from the elementary and secondary principals' job (Kyriacou and Sutcliffe, 1978).

Stressor: refers to demands made on elementary and secondary principals which are perceived as being disruptive to normal job functioning, resulting in stress (Appley and Trumbull, 1967).

Administrative Constraints: refers to perceived sources of stress resulting from the nature of the work activities or job situations which impinge upon the elementary and secondary school principals' positions of responsibility. These activities or situations include interaction

involving the use of the telephone, scheduled and unscheduled meetings as well as various rules and regulations imposed by both outside agencies and the organization itself (Swent, 1978).

Administrative Responsibilities: refers to perceived sources of stress resulting from the tasks for which most public sector elementary and secondary principals are responsible such as planning, staffing, reporting, and budgeting (Swent, 1978).

Interpersonal Relations: refers to perceived sources of stress resulting from contacts which elementary and secondary principals have with other people, both inside and outside the school. These people include parents, staff, students, community members, and superiors (Swent, 1978).

Intrapersonal Conflict: refers to perceived sources of stress resulting from the conflicting demands between the elementary and secondary principals' job tasks and their individual beliefs or goals (Swent, 1978).

Job event: refers to perceived sources of stress resulting from job-related activities in which the elementary and secondary principals are engaged, such as school plant facility maintenance and public relations.

Perception: refers to a continuous process of "stressor" appraisal in which the elementary and secondary principals:

- (1) Evaluate job demands (stressors) and their competence in relation to them;
- (2) Evaluate their own roles in relation to job demands; and

- (3) Evaluate the environmental constraints of job demands - reality testing (Lazarus, 1965).

Role Expectations: refers to perceived sources of stress for elementary and secondary principals which "...results from the beliefs and attitudes about the administrative role in an organization" (Swent, 1978:13).

Limitations of the Study

This study was limited to the members of the Virginia Association of Elementary School Principals for the school year 1979-80, and the secondary school principals who are listed in the Virginia Educational Directory for the school year 1980-81. The findings were based solely upon the responses provided by the subjects on the Principals' Stress Inventory. Thus, the findings of this study are generalizable only to public elementary and secondary school principals in the Commonwealth of Virginia.

Organization of the Study

Chapter I is an introduction to the study. It consists of a statement of the problem, need for the study, hypotheses, definition of terms, and limitations of the study.

Chapter II is a review of the literature on stress, particularly as it relates to school principals.

Chapter III contains the procedures used in collecting and analyzing the data. It also includes a description of the population and survey instrument.

Chapter IV is a presentation of the findings of the investigation as well as a discussion of the results.

Chapter V contains a summary of the study. Conclusions, implications, and recommendations based on the evidence generated by the study conclude this chapter.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The literature and research efforts relating to stress in general as well as stress in the industrial setting are extensive. However, very little research has been done on stress as it relates to educational management. Thus, a brief review of the major theories on stress and relevant studies which have been conducted in other fields are presented in this chapter. The main effort, however, is to present literature that is pertinent to educational administration and more specifically to the elementary and secondary principalship. This chapter is divided into the following sections: Theories on Stress, Occupational Stress, Managerial Stress, Stress and Educational Administration, and Principals and Stress.

Theories On Stress

Stress has been distinguished into three basic types: (1) systemic or physiological, (2) psychological, and (3) social. Monat and Lazarus (1977) explained systemic stress as being concerned primarily with the disturbances of tissue systems, psychological stress with cognitive factors leading to the evaluation of threat, and social stress with the disruption of a social unit or system. It is believed that the three types of stress are related, however, the nature of this relationship

is unclear. Perhaps this lack of clarity contributes to the lack of agreement on a definition of "stress" among researchers in the field.

Physiological Stress

Hans Selye has had a pioneering influence on research and thought in this field. Selye (1956) identified three stages of "nonspecific" reaction of the body to stress, called the General Adaptation Syndrome. While stress itself is a very specific physiologic state, the stress response can be produced by almost any cause at all. "It can be evoked equally by a kiss or by a slap; the body, unlike the mind and the emotions, does not distinguish between the two" (Gross, 1958:33). Since the body reacts to these totally dissimilar experiences in exactly the same way, stress is considered a "nonspecifically" caused state.

Selye suggested the name "alarm reaction" for the initial response in the General Adaptation Syndrome triad. This stage represents the bodily expression of a generalized "call to arms" of the defensive forces in the organism. Selye's experiments showed that no living organism can be maintained continuously in a state of alarm. "If the body 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 hours or days" (Selye, 1956:37). If the body is able to defend itself successfully against the forces of stress, it enters into a "stage of resistance". In this state, the organism goes on about its business relatively unconcerned by the fact that it is under stress (Gross, 1958). Finally, the body enters into a "stage of

exhaustion" where after prolonged exposure to stress it breaks down and dies. Thus, the third stage of the General Adaptation Syndrome is a once-in-a-lifetime affair; it comes only with death (Gross, 1958).

Until the last decade, Selye's work was widely accepted and virtually unchallenged. Recently, however, several researchers (Lazarus, 1974; Mason, 1971) have criticized aspects of Selye's position, particularly his total commitment to the concept of the physiological nonspecificity of the stress response. Mason and Lazarus have offered theoretical viewpoints and presented empirical evidence which strongly suggest that Selye has overstated the role of nonspecificity in the production of illness (Monat and Lazarus, 1977). Moreover, Mason (1975) suggested that the body being remarkably sensitive can discriminate between stimuli, and responds very easily to emotional stimuli.

The disagreement among investigators is not as intense, however, concerning the physiological effects of stress. Research conducted in recent years has produced a growing body of evidence linking stress to coronary heart disease, ulcers, and even cancer (Simonton and Simonton, 1975). Holmes and Rahe (1967) found a relationship between "life stress" and the onset of illness in their investigations of the processes of health and disease in humankind. Thus, from the physiological point of view, stress has potentially lethal effects. Its effects are discussed in greater detail in subsequent sections of this chapter.

Psychological Stress

Appley and Trumbull (1967) define stress as a response state rather than an event in the environment. This refers to any bodily response that is beyond "normal or usual" such as states of anxiety or tension. Error increase, fatigue, and increased reaction time are among the indices for responses to psychological stress (Appley and Trumbull, 1967). These writers argue that, with few exceptions, no stimulus is a stressor to all people; that is, stress must be perceived or appraised as such. A similar concern for individual differences in the perception of stress, taking into consideration such factors as motivational structure and prior history has increased in psychology. This is evident in a statement made by McGrath (1977:68), "one man's stress is another man's challenge."

Lazarus (1966) defines psychological stress as threat. "When threat occurs, usually some behavior or psychological process is activated for the purpose of mitigating or eliminating the threat" (Lazarus, 1966:28). He calls this activity "coping" and explains that it is based on cognitive activity involving appraisal of the conditions of threat and the consequences of the coping behavior.

Social Stress

McGrath (1976) speaks for the social aspect of stress, as he believes that stress involves an interaction of person and environment. His perspective takes into account the individual's perception as to the stressful nature of a demand. McGrath (1976:135) describes it in this manner:

Something happens 'out there' which represents a person with a demand, or a constraint, or an opportunity for behavior. The extent to which the demand is 'stressful' depends on several things. First, it must be perceived by the 'stressee'. Second, it must be interpreted by him. Third, he must perceive the potential consequences by successfully coping with the demand as more desirable than the expected consequences of leaving the situation unaltered.

According to McGrath (1977), social interaction is a two-edged sword in the context of stress research. "There is at least scattered evidence that presence of, and communication with, other human beings acts to attenuate effects of some physical threats, as well as effects of restricted environments" (McGrath, 1977:73). Thus, the presence of others can be considered a mixed blessing; "we can't live with people, and we can't live without them" (McGrath, 1977:73).

Social interaction, then, is a kind of stimulation that has an optimal level. Stress can be caused by too little social interaction as well as too much social interaction (McGrath, 1977). McGrath (1977) further explained that the optimal zone depends on the behavior setting and varies with individuals.

Other Related Theories

After observing many hundreds of individuals, Friedman and Rosenman (1977) found that people fall into one of these two groups: (1) Type A Behavior Pattern and (2) Type B Behavior Pattern. The Type A person is action oriented and aggressively involved in an incessant struggle to achieve more and more in less and less time, while the Type B individual is the exact opposite (Friedman and Rosenman, 1977). The Type B person

may also have a considerable amount of "drive", however, it is of a steady nature. These researchers are convinced that the group of traits associated with each behavior pattern is closely linked to the pathology of coronary artery and heart disease. Moreover, Friedman and Rosenman (1977) believe that the Type A individual is prone to heart disease, since this person experiences greater stress than Type B individuals.

Swent and Gmelch (1977) proposed a four stage stress cycle beginning with a set of demands, Stage I. Stage II represents the individual's perception of whether the demand can be met adequately, if not, a discrepancy exists and the demand is perceived as a stressor. The individual's response to the stressor makes up Stage III, while Stage IV consists of the consequences or the long-range effects of stress. These writers define stress as "...any action or situation that places physical or psychological demands on people" (Swent and Gmelch, 1977:7).

Occupational Stress

A great deal of research has been conducted in the field of occupational stress, with regard to its relationship to physical and mental illness. There is a growing body of evidence from studies in experimental laboratory settings (Kahn and Quinn, 1970) and in the workplace (Margolis, Kroes and Quinn, 1974) to suggest that occupational stress is a causal factor in coronary heart disease, psychoneurotic and personality disorders, nervousness, and migraine headache. "In addition to physiological problems resulting from stress, almost every

psychosocial variable of importance is affected by stress in the workplace, including productivity, morale, and the psychological well-being of workers" (Sweetland, 1979:1).

Cooper and Marshall (1975) proposed two central features of stress at work, the interaction of which determines either coping or maladaptive behavior and stress-related disease: (1) the characteristics of the person and (2) the potential sources of stress in the work environment. They suggested five categories of sources of stress at work: (1) factors that are intrinsic to the job; (2) the individual's role in the organization; (3) opportunity for career development; (4) relationships at work; and (5) organizational structure and climate. Cooper and Marshall (1976) offered a model (Figure 1) that is useful for understanding the sources of stress and its effects on the individual.

Stress Intrinsic to Job

Much work has been done linking the working conditions of a particular job and its relationship to physical/mental health. A study by Ferguson (1973) involved a telegraphists' union in a large Australian city. The union complained of stress arising from a highly skilled, repetitive task that demanded concentration amid noise and involved machine pacing. Ferguson found that stress increased the incidence of smoking, drinking, and drug use among the workers. He concluded that work organization influenced job satisfaction, the expression of emotional instability, and indulgence in habits which were detrimental to the workers' health.

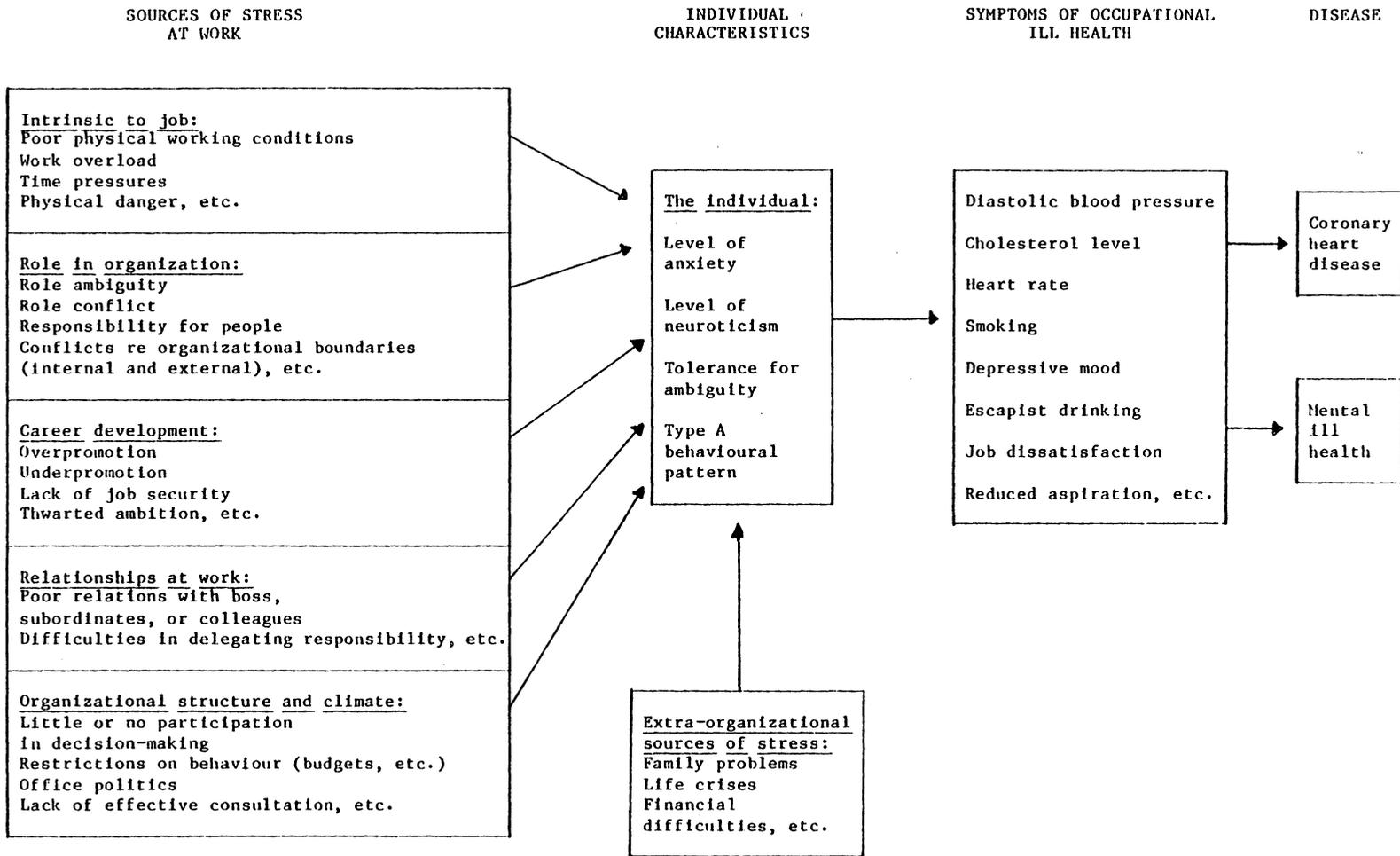


Figure 1. A Model of Stress at Work (Cooper and Marshall, 1976:12)

Caplan et al. (1975) investigated the relationship between cigarette smoking and occupational stress. They hypothesized that cessation of smoking would be greatest under conditions of low occupational stress, and also predicted that those who stopped smoking would tend to be "Type B" rather than "Type A" personalities. Data from 200 employees of the National Aeronautics and Space Administration revealed that individuals who had been unable to stop smoking, compared with those who were able to stop, appeared to have more job stress due to larger work loads, tighter deadlines, and responsibility for others. Moreover, they found as Friedman and Rosenman would have predicted, that Type A personalities were least likely to stop smoking.

Stress Related to Role in Organization

Much of the research in this area has been concentrated on role ambiguity and role conflict. "Role ambiguity exists when an individual has inadequate information about a work role" (Cooper and Marshall, 1976). Margolis et al. (1974) found a number of significant relationships between symptoms of physical and mental ill health with role ambiguity in their national sample of 1496 individuals. The stress indicators related to role ambiguity were depressed mood, lowered self-esteem, life dissatisfaction, job dissatisfaction, low motivation to work, and intention to leave job.

Role conflict occurs when an individual in a particular work role is torn by conflicting job demands (Cooper and Marshall, 1976). Kahn et al. (1964) found that men who suffered more role conflict had lower job satisfaction and greater job-related stress. They also found that the

greater the authority of the people sending the conflicting role messages, the more dissatisfaction and stress was produced by the role conflict.

Stressors Related to Opportunity for Career Development

According to Taylor (1969), "career development" stress is rooted in Freudian theory which suggests that work has value solely as a utility for individualistic motives of "getting on in the world" and the desires of fame and success. Stressors related to career development include overpromotion, underpromotion, status incongruence, lack of job security, and thwarted ambition (Cooper and Marshall, 1976). In a study of the effects of unemployment on psychosocial stress responses, Little (1973) reported that unemployed technical-professionals scored significantly higher than the employed technical-professionals on three out of five stress response measures.

Stress Related to Relationships at Work

Argyris (1964) has suggested that good relationships between members of a work group are a central factor in individual and organizational health. Stress results from poor relationships at work including low trust, low supportiveness, and low interest in listening to and trying to deal with problems that confront the organizational member (French and Caplan, 1973). Kahn (1964) conducted a study in this area and concluded that mistrust of persons the individuals worked with was positively related to high role ambiguity, which led to inadequate communications between people.

Stress Related to Organizational Structure

Stressors related to organizational structure and climate include little or no participation in the decision-making process, restrictions on budgets, and lack of effective consultation (Cooper and Marshall, 1976). The research of French and Caplan (1973) indicated that greater employee participation in the organization leads to lower staff turnover, higher productivity, and high performance improvements. However, when participation is absent, lower job satisfaction, and higher levels of physical and mental health risks result. Among a national sample of over 1400 workers, Margolis et al. (1974) found that non-participation at work was the most consistent and significant predictor of strain and job-related stress. *What's the difference?*

Managerial Stress

Defining exactly what it is that managers do has not been an easy task. (The terms "manager" and "executive" are used interchangeably in this discussion.) According to Mintzberg (1973), the answer is not really found in Henri Fayol's words of 1916, that managers plan, organize, coordinate, and control. One attempt to define a manager's job resulted in the following:

Observer: Mr. R_____, we have discussed briefly this organization and the way it operates. Will you now please tell me what you do.

Executive: What I do?

Observer: Yes.

Executive: That's not easy.

- Observer: Go ahead, anyway.
- Executive: As president, I am naturally responsible for many things.
- Observer: Yes, I realize that. But just what do you do?
- Executive: Well, I must see that things go all right.
- Observer: Can you give me an example?
- Executive: I must see that our financial position is sound.
- Observer: But just what do you do about it?
- Executive: Now, that is hard to say.
- Observer: Let's take another tack. What did you do yesterday? (Shartle, 1956:82)

Sources of Managerial Stress

There are certain aspects of a manager's job that have been considered as sources of stress, some of which are found in the nature of the job. Mintzberg (1973) described the nature of managerial work as being open-ended; characterized by brevity, variety, and fragmentation; and superficial. Moreover, Mintzberg (1973) believes that the manager prefers brevity and interruption in his work. "He is conditioned by his workload; he develops an appreciation for the opportunity cost of his own time; and he lives continuously with an awareness of what else might or must be done at any time" (Mintzberg, 1973:51).

The work of managers of all types has been described in terms of ten observable roles: (1) figure-head, (2) liaison, (3) leader, (4) monitor, (5) disseminator, (6) spokesperson, (7) entrepreneur,

(8) disturbance handler, (9) resource allocator, and (10) negotiator (Mintzberg, 1973). The performance of these roles causes different amounts of stress for individual managers. Overbeke (1975), a consulting psychologist, discussed the stress that is associated with having to lay off workers from the point of view of the manager who must do the actual firing. He found that younger managers have more difficulty coping with this type of problem.

In a discussion on stress and management, Landes (1978) postulated that Herzberg's theory of work motivation has implications for managerial stress. According to Herzberg's (1966) "motivation-hygiene" theory, the prevention of job dissatisfaction is a function of "hygiene factors". Hygiene factors pertain to the job environment, while "motivators" relating directly to the job itself, cause people to feel good about their jobs. Landes (1978:47) drew the following implication: "In recollecting the sources of stress, it is reasonable to assume that potential job stressors would more likely center on hygiene factors, but that the motivators could also produce job-related strain."

"With the increasing rate of social, technological, and political change, many workers are enjoying benefits or suffering losses that are not contingent on their performance" (Williams, 1970:42). In a study of executive stress, Williams (1970) found that this is often a major source of stress, causing executives to react in one of three ways: (1) withdrawal from the work situation, (2) aggression, or (3) seeking satisfaction from areas of life other than work. Toffler would suggest that these reactions are a result of "future shock", "...the shattering

stress and disorientation that we induce in individuals by subjecting them to too much change in too short a time" (Toffler, 1970:2).

Williams (1970) proposed job enrichment, career counseling and planning, and trial periods as possible solutions to these potential problems.

Kiev and Kohn (1979) conducted a survey of approximately 2,500 vice-presidents, treasurers, and managers. They reported that the most stress-producing factors for managers were work and time pressures, disagreement with the organization's goals, the political climate of the organization, and lack of feedback on job performance. However, the researchers noted in their study that the managers did not report experiencing much stress. Thus, the results were contrary to the popular image of the "harried" executive (Kiev and Kohn, 1979).

Stress and Educational Administration

While there are many similarities between the nature of the business executive's job and that of the executive educator, Shank (1979) contended that their situations are not comparable. He proposed several sets of circumstances or factors which help explain the special isolation and anxiety of the educational administrator's job. One factor is the extra pressure that is created by the typical executive's basic values. "Whereas the senior business executive is primarily a pragmatist committed to getting the job done and producing results, the school head is primarily an idealist committed to human values and to people, not necessarily to results..." (Shank, 1979:14).

Shank (1979) cited another set of circumstances that differentiate educational administrators from presidents of companies, the uncertainty that results from lack of preparation for the job. He explained that most presidents have training or degrees in management and administration. Their careers progress through a series of jobs that involve the same kinds of variables that they deal with at the top: "...first they manage a product, then a division, then a subsidiary, and eventually the whole thing" (Shank, 1979:14). In contrast, the educational administrator's formal education is mainly in liberal arts or sciences, with the career having started in teaching. The typical educational administrator tends to move up the ladder by the instructional rather than the administrative route--teacher, then department head, then head of a division of a school, then principal, then superintendent (Shank, 1979). As Shank (1979:14) explained,

...This person gets to be a school [administrator] and discovers that the key factors for success in the job are largely unrelated to prior experience: personnel skills (hiring and firing), political skills (balancing constituencies that never really seem to be in agreement), motivational skills (keeping large numbers of sensitive, complex people happy), financial skills (budgeting, cost control, financial analysis and planning)....

A third factor distinguishing the educational administrator from the company president is the extra pressure from the constituencies who consider themselves the predominant force in the school: trustees, teachers, parents, influential alumni, and patrons (Shank, 1979). In business, the predominant force is the board of directors, which Shank (1979) explained does not run a business the same way that teachers run

a school system for parents, alumni, and patrons. Finally, the fourth factor which Shank (1979) regarded as complicating the job of the educational administrator is the extra uncertainty caused by the fundamentally "fuzzy" nature of a school's mission or basic purpose.

Thus, personal stress arises from the special nature of the educational administrator's job and the special problems of carrying it out. Switzer (1979) interviewed school superintendents on this subject. One interviewee compared his superintendency to previously held jobs such as being a civil rights investigator in the South in the early days of desegregation, and being chief of day-to-day operations in a city school system where the day-to-day operations included knifings and rapes. Another superintendent stated that "...the whole business is a source of stress" (Switzer, 1979:27). He blamed it on "...national trends, lack of dollars, the hue and cry for better accountability, for more integration, for better test scores, for more this and better that" (Switzer, 1979:27).

Few educational administrators would deny that stress is a real problem. At a conference held in Washington, D.C., educators tackled the problem of stress or what Howard University's dean of education, Joseph T. Durham, called "the Western way of dying" (Education U.S.A., 1974). James Comer, a guest speaker at the conference, noted that the problems of administrative stress are even more intense for blacks. He explained that "...the stresses of society are magnified in the microcosm of the school, which is expected to solve society's racial problems" (Education U.S.A., 1974). In addition, often the black

administrator is not taken seriously. This factor contributes to administrative stress because "...in these days of affirmative action, blacks must live with the not too subtle suggestions that they are only there because they are black" (Education U.S.A., 1974).

Regardless of the racial implications, however, stress is not a new phenomenon for school administrators at any level of educational management. It is a part of their professional lives and can simply be considered an "occupational hazard" (Giammatteo and Giammatteo, 1980). As Kierman explained further, educational administrators are subject to all the trials and tribulations that surface in the lives of executives throughout the world (Giammatteo and Giammatteo, 1980).

Principals and Stress

Little research has been conducted on stress in the occupation of the school principal. However, an attempt is made here to highlight the literature that does exist, as this topic is the focal point of the study.

The Nature of the Job

Gmelch (1977:3) depicted a typical morning in the life of a principal as follows:

A hurried breakfast...;
 A harried push-and-shove commute to the office just
 in time to arrive prior to the staff and students;
 Planning time abruptly interrupted by urgent calls,
 crises, and calendar changes...;
 Teacher drop-ins...;
 Two irate parents...; and
 A call from the superintendent.

The afternoon and evening consist of more meetings, emergencies, and interruptions. Thus, Monday through Friday in the life of a principal is typically spent reacting to the urgent demands of parents, teachers, students, and the central office (Gmelch, 1977).

The preceding scenario provided by Gmelch (1977) corresponds with Mintzberg's (1973) research on managerial activities. Managerial work was characterized by brevity, variety, fragmentation, and an unrelenting pace (Mintzberg, 1973). Shank (1979) would hardly argue the point that this similarity exists between the jobs of the company president and the principal.

Koff et al. (1979) conducted a study of administrators from the membership of the National Associations of Secondary and Elementary School Principals. Their objectives were twofold: (1) to assess the relative magnitude of stress induced by events associated with the management of elementary and secondary schools, and (2) to ascertain the differential reactions to administrative events by administrators in different situations (elementary or secondary principal, rural, suburban or urban community) (Koff et al., 1979). The researchers constructed an instrument, the Administrative Events Stress Inventory, to assess the relative magnitude of stress which was experienced by the principals. The Administrative Events Stress Inventory consisted of forty-eight items including such events as: dealing with parents, relationships with non-teaching personnel, matters concerning promotion, supervision of professional staff, management of discipline problems, preparing reports, and involuntary transfer.

Among the events included in the instrument, presentations to the board, closing of schools, parental complaints about teachers, and evaluating teachers were relatively more stressful for elementary school principals. Secondary school principals indicated that vandalism, the last week of school, managing the budget, and meeting with rebellious students were relatively more stressful. Koff et al. (1979) factor analyzed the Administrative Events Stress Inventory and drew the following conclusions after statistical analyses of the instrument responses:

1. Administrative events associated with conflict between administrators and teachers were perceived by administrators as most stressful.
2. Administrative events associated with a threat to job/physical security and status were perceived as highly stressful.
3. Events perceived as associated with low amounts of stress were routine, expected, and accepted duties of administration in schools.
4. The aspects of security/status and routine management of tasks were perceived similarly by elementary, middle and high school administrators.
5. Conflicts between administrators and teachers were perceived as more stressful as one moves from high schools to middle to elementary schools.
6. Conflicts among students and student problems were perceived as more stressful by high school than elementary principals.
7. Events discriminating best between elementary and secondary administrators and perceived to be most stressful for elementary administrators included parental complaints about teachers and evaluations of teachers by principals.

8. Events discriminating best between elementary and secondary administrators and perceived as more highly stressful by the secondary administrators included vandalism and having to deal with rebellious students (Koff et al., 1979:13-14).

Stress Related to Role Pressure

Vetter (1976) attributed the stress which many principals experience to "role pressure". A principal's behavior is shaped by two forces: (1) the "role demands" imposed by persons either internal or external to the school, and (2) by the administrator's personal ideas as to how a principal should behave (Vetter, 1976:12). The PTA president calling a principal to request a report on the money spent on the school band for uniforms, travel, and equipment, as well as the money spent on academically oriented activities such as the science and Spanish clubs is an example of "role pressure" (Vetter, 1976:16).

According to Vetter (1976), this kind of role pressure produces psychological stress. "When added to the stress generated from other aspects of ... life, the principal faces possible emotional and physical health problems" (Vetter, 1976:16). He cited frustration, impatience, anxiety, lower tolerance, ambivalence, and hostility as signs of emotional strain. Headaches, fatigue, high blood pressure, and stomach disorders can also result from stress due to role pressure (Vetter, 1976).

The role of the principal continues to evolve, leaving some dissatisfied with their jobs. Stress factors and their relationship to job satisfaction of elementary and secondary principals has been investigated by Peterson (1977) and Anton (1974) respectively. Peterson

(1977) found that the greatest amount of stress reported by elementary principals came from two areas: (1) overworking and being prevented from doing things properly, and (2) personal finance (not feeling financially secure). Overall, the scores indicated that the elementary principals in this study did not have a high degree of stress, but rather had a high degree of job satisfaction.

Blood and Miller (1978) reported that a great deal of job dissatisfaction was associated with the role of principals in New Mexico. They noted that the role of the school principal was evolving from "instructional leader" to school executive manager due to five factors: (1) increasing size of student population; (2) professionalization of education; (3) program complexity; (4) diversification of control; and (5) bifurcation of the profession (Blood and Miller, 1978:4). In this study, Blood and Miller (1978) called for a reduction in the ambiguity of the principal's role, and suggested that educators reconsider the value of simplicity. Gmelch (1977:4) provided more insight on the plight of the principal in this statement:

The problem with being a principal is that often too many responsibilities are accepted and allowed to grow and evolve into over-demanding roles--of controller, disciplinarian, motivator, persuader, fire-fighter, preserver of the culture, curriculum specialist, or parent surrogate--and the principal becomes a role prisoner rather than a person.

Other Stressors

Harris (1978) conducted a study on emotional stress in secondary school principals. She reported that the principals experienced the greatest amount of stress from the following: communicating with

parents, teachers, and teachers' union representatives in associations with decision-making, personnel problems, collective bargaining, and conflict resolution (Harris, 1978:185). Larson (1977) studied elementary principals in Iowa and found that a high degree of stress was associated with job responsibilities in the following areas: finance-administration of funds, records and reports, interpersonal relations with staff, decision-making, curriculum and instruction, student discipline, interpersonal relations with central office, teacher-collective negotiations, interpersonal relations with parents and community, and staff evaluation-supervision.

Roesch (1980) conducted a study to ascertain the relationships among individual reactions to stress, coping preferences, and demographic variables of elementary school principals in the state of Virginia. Among the findings, she reported that the more experienced principals exhibited less stress than the less experienced principals in the study. Roesch (1980) also found that there were significant relationships between anxiety scores of male and female respondents as well as anxiety scores and chronological age. No significant differences were found in the relationship of anxiety to the size of the school system.

Swent and Gmelch (1977) sampled the membership of the Confederation of Oregon School Administrators to determine what aspects of their jobs were most stressful. The stressors were categorized into five factors: (1) constraints intrinsic to administration; (2) administrative responsibilities; (3) interpersonal relations; (4) intrapersonal

conflict; and (5) role expectations. Generally, secondary principals in the study were more bothered by all stress categories than the elementary principals. Upon examining the specific stressor items within each stress category, the researchers found that the top ten stressors were:

Rank	Item
1	Complying with state, federal, and organizational rules and policies.
2	Feeling that meetings take up too much time.
3	Trying to complete reports and other paper work on time.
4	Trying to gain public approval and/or financial support for school programs.
5	Trying to resolve parent/school conflicts.
6	Evaluating staff members' performance.
7	Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.).
8	Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day.
9	Imposing excessively high expectations on myself.
10	Being interrupted frequently by telephone calls. (Swent and Gmelch, 1977:19)

Swent and Gmelch (1977) noted that five of the top ten individual stressors appeared in the "administrative constraint" factor. Both

"interpersonal relations" and "intrapersonal conflict" had two of the top ten stressors, while the "administrative responsibility" factor had only one. None of the top stressors were found in the "role expectations" category. In addition, the researchers reported a significant difference between the years of administrative experience and the degree to which the respondents were troubled by complying with policies. Their analysis indicated that the greater the administrative experience, the more stress was associated with "compliance with rules" (Swent and Gmelch, 1977). Moreover, Swent (1978) found that male administrators perceived more stress from "compliance with rules" than female administrators.

Responses to Stress

Since it is not acceptable for the principal to strike, attack or roar in response to stress, Gmelch (1977:8) explained that they "...are forced to keep their natural responses bottled up inside until they can later go out and kick the dog, or 'kick the bucket' as the actual case may be." According to Gmelch (1977), there are two categories of responses to stress: (1) psychological and (2) physiological. The physiological response is based upon Selye's (1976) "non-specific" reaction theory which has been discussed previously. There are basically four ways in which individuals respond psychologically to stress: (1) fight like a lion; (2) flee like a deer; (3) freeze like a pheasant; or (4) learn like a child (Gmelch, 1977). While these are all valid ways of reducing stress, some are more appropriate for the principal than others.

The "fight" response is power-oriented. Here the principal is mainly interested in defending a position and winning. These situations include bargaining at the table and debating alternative courses of action. The "flee" response is in operation when the principal rationalizes away a problem. Staff turnover, sick leave, and unfinished projects are indications of this response. As Gmelch (1977:10) explained, this response must be used with care:

In some situations, this may be very functional and productive. However, in other situations the flight behavior may be highly inappropriate and may only serve to aggravate the problem.

He cited the habit of putting off budget reports week after week as an example of how this can lead to even greater stress.

The third psychological response to stress is to "freeze". This reaction causes the principal to draw a complete blank, as the mind is preoccupied with the stress agent (a speech to the P.T.A. or a presentation to the board of education). According to Gmelch (1977), the stressor produces a mental "paralysis by analysis".

The first three responses are used by all principals to some degree (Gmelch, 1977). However, Gmelch (1977) suggested that they be used only on a short-term basis to allow principals to develop more productive mechanisms for coping. The fourth psychological response is considered an appropriate mechanism for coping with stress. The "learning" response is preventive rather than remedial, enabling principals to control the outcome of a stress-producing situation in an effective and constructive manner (Gmelch, 1977).

Response is a highly personal matter, depending on how each principal perceives the stressor. One principal may thrive on activities such as writing reports, while another may lose nights of sleep in anticipation of the task (Gmelch, 1977). Thus, "...however equal men may be before God and the Law, in their reactions to stress they are not the same..." (Welford, 1973:579).

Coping Mechanisms for Stress

Suggestions to principals on coping with stress range from learning to become more "Type B" (Friedman and Rosenman, 1974) to building mini-vacations into the day (Gmelch, 1978). However, most researchers agree that there are no simple solutions to the problems created by stress. The situation is further complicated by the fact that what works best for some principals may not be the answer for all principals (Gmelch, 1978).

Giammatteo and Giammatteo (1980) developed a model for dealing with stress that includes stress awareness, tolerance, reduction, and management. They also provided a number of exercises to help principals identify specific "sources of overload" connected with major changes, impulsive behavior, lack of role clarity, overwork, and unchallenging work. Kiev and Kohn (1979) reported that managers in their study found that delegating responsibility helped to prevent stress from building up. Another popular method of coping with stress was to analyze the stress-producing situation and decide what was and what was not worth worrying about.

Manuso (1979) suggested a "quieting response" when a stressful situation comes up. The principal would simply take "...two deliberate deep breaths, paying attention to relaxing the jaw, the shoulders and tongue, while telling himself not to get involved in the stress" (Manuso, 1979:25). This physiological coping strategy is similar in nature to those used by Oregon School Administrators. Swent and Boyd (1977) found that the most common coping mechanisms among these administrators were physical work, exercise and relaxation activities such as yoga, meditation, and hobbies. They also used cognitive activities including "establishing realistic goals," "learning to know one's self," and "maintaining a sense of humor".

Vetter (1976) recommended that the principal take a "proactive" posture, taking command of the role relationship in order to achieve better job results and to reduce role stress. He suggested cutting down the number of role demands by arranging the physical office space to limit the principal's accessibility. "Metraprescriptions" or self-devised rules for governing one's own behavior, and priority setting are other techniques Vetter (1976) discussed for dealing with stress proactively.

In conclusion, the words of Welford (1973:579) seem appropriate here:

[Principals] can undoubtedly adapt to stress, but probably only within limits. The problem of stress cannot therefore be brushed aside as something that will solve itself if we wait long enough. Rather it seems to grow more urgent as life becomes more organized.

Thus, it was the purpose of this study to examine the problem of stress among public elementary and secondary school principals in Virginia.

Summary

A review of the literature on stress has been presented in this chapter. Three basic types of stress were distinguished: (1) physiological; (2) psychological; and (3) social. The chapter was divided into five sections including Theories on Stress, Occupational Stress, Managerial Stress, Stress and Educational Administration, and Principals and Stress. These areas were discussed in order to provide an overall perspective for viewing and understanding stress and the principalship.

CHAPTER III

RESEARCH METHODOLOGY

This chapter contains a description of the methodology and procedures utilized in the study. The first section deals with the selection and characteristics of the respondents who participated in the study. The second section consists of a description of the research design and the third is a discussion of the instrumentation. In the fourth section, the process used to gather the data is described. A discussion of the methods used in the analysis of the data are presented in the final section.

Population

The population in this study consisted of the 692 members of the Virginia Association of Elementary School Principals for the school year 1979-80, and the 511 secondary principals who are listed in the Virginia Educational Directory for the school year 1980-81. The position designated as elementary school principal included those administrators who work in schools with grade levels K-6, while the position designated as secondary school principal included those administrators working in schools with grade levels 7-12.

Research Design

The design of this study was that of a research survey. Kerlinger (1973:421) states that "...survey research is a useful tool for

educational fact-finding." He further explains that "survey research is probably best adapted to obtaining personal and social facts, beliefs, and attitudes" (Kerlinger, 1973:422).

The problem in this study was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events. The study was designed to test the following null hypotheses:

(1) There is no difference between elementary and secondary principals on the degree of perceived stress.

(2) There is no difference between the various categories of selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress.

(3) There is no interaction between levels of the principalship and the selected demographic variables on the degree of perceived stress.

Instrumentation

The Principals' Stress Inventory (Appendix A) was used to survey Virginia principals in this study. The instrument was developed by Conley and Hinkle in 1979 to measure the relative magnitude of stress related to various job events which are associated with the elementary and secondary school principalship. The items in the survey instrument

were based on the following: (1) a national survey of school principals conducted by Koff, Laffey, Olson, and Cichon (1979); (2) input from practitioners in the field; (3) data from the Virginia Journal of Education (November and December, 1979); (4) a review of the literature on stress; and (5) the practical experience of the researchers. The first draft of the Principals' Stress Inventory was reviewed by the Executive Secretary of the Virginia Association of Elementary School Principals as well as several elementary school principals. According to Conley and Hinkle (1980:2), "this review resulted in reducing the number of items from 61 to 39 and in minor revision of several other items."

The instrument consisted of 39 events (stressors) which elementary and secondary principals were asked to indicate on a Likert-type scale the degree of stress they associated with each event. The events or stressors were categorized by the researcher into five sub-scales (Appendix B): (1) Administrative Constraints; (2) Administrative Responsibilities; (3) Interpersonal Relations; (4) Intrapersonal Conflict; and (5) Role Expectations (Swent, 1978). This allowed elementary and secondary principals in the study to be compared on the basis of the sub-scale scores as well as the total stress score.

As part of the Principals' Stress Inventory, a 15 item demographic questionnaire was used to collect personal and situational information about the respondents. These items were identified as possible variables which could be related to the stress experienced by elementary and secondary principals. They included sex, race, age, length of

experience in education, length of experience as an elementary or secondary principal, school district pupil enrollment, and racial composition of the school's student body.

The 39 events listed in the Principals' Stress Inventory were factor analyzed for both elementary and secondary principals in this study. The purpose of the factor analysis was to determine the number and nature of the variables within the scale. The results of the analysis (SPSS-Release 9.0; Subprogram-Factor; Type-PA2) indicated that the 39 items represent a unidimensional scale. Before and after the quartimax rotation, all items, with the exception of item 2 and item 3, had substantial loadings (.730) on the first factor extracted. The loadings for these two items were .291 and .283, respectively. To further check on the unidimensionality of the Principals' Stress Inventory, Cronbach's α -coefficient was computed (SPSS-Release 9.0; Subprogram-Reliability) and found to be .914. Thus, even though the items were initially categorized into five sub-scales, the items collectively measure a common construct, job related stress.

Data Collection

On October 1, 1979, a letter of introduction (Appendix C) along with the Principals' Stress Inventory, and a return envelope were mailed to the 692 members of the Virginia Association of Elementary School Principals. Of the 692 instruments mailed, 350 usable surveys were returned for analysis. This represented a 51 percent rate of return.

Similarly, a letter of introduction (Appendix D) along with the Principals' Stress Inventory, and a return envelope were mailed to the 511 secondary principals who were listed in the Virginia Educational Directory on June 11, 1981. Of the 511 instruments mailed, 267 usable surveys were returned. This represented a 52 percent rate of return.

Data Analysis

A series of two-way Analysis of Variance procedures were used to analyze the data in this study. The primary variable, elementary/secondary principal, was crossed with eight demographic variables: (1) sex; (2) race, white and nonwhite; (3) age; (4) educator, length of experience; (5) principal, length of experience; (6) enrollment, school district pupil enrollment; (7) black, percentage of black student enrollment in school; and (8) white, percentage of white student enrollment in school. Thus, it was possible to examine the combined effect of the elementary and secondary principalship with each selected demographic variable on the total Principals' Stress Inventory score as well as the five sub-scale scores.

CHAPTER IV

FINDINGS

This chapter contains the findings of the study based on the following null hypotheses which were tested, using a series of two-way Analysis of Variance procedures at the .05 level of significance:

(1) There is no difference between elementary and secondary principals on the degree of perceived stress.

(2) There is no difference between the various categories of selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress.

(3) There is no interaction between levels of the principalship and the selected demographic variables on the degree of perceived stress.

Demographic Characteristics of the Respondent Groups

Responses for the study were obtained from 350 elementary school principals and 267 secondary school principals in the Commonwealth of Virginia (Table 1). The principals were predominantly male, representing 77.7 percent of the population. Thus, female principals made up only 22.3 percent of the population, and as indicated in Table

Table 1

Demographic Characteristics of the Respondent Groups

<u>Characteristic</u>	<u>Number Reporting</u>	<u>Adjusted Frequency</u>
<u>Level of Principalship</u>		
Elementary	350	56.7
Secondary	267	43.3
TOTAL	617	100.0
<u>Sex</u>		
Elementary Principals		
Male	219	35.7
Female	128	20.8
	347	56.5
Missing	3	
TOTAL	350	
Secondary Principals		
Male	258	42.0
Female	9	1.5
TOTAL	267	43.5
<u>Race</u>		
Elementary Principals		
White	290	47.9
Nonwhite	50	8.3
	340	56.1
Missing	10	
TOTAL	350	
Secondary Principals		
White	225	37.1
Nonwhite	41	6.8
	266	43.9
Missing	1	
TOTAL	267	

Table 1 (continued)

Characteristic	Number Reporting	Adjusted Frequency
<u>Age</u>		
Elementary Principals		
< 30	10	1.6
31 - 40	119	19.5
41 - 50	121	19.9
51 - 60	75	12.3
> 61	18	3.0
	<u>343</u>	<u>56.3</u>
Missing	7	
TOTAL	<u>350</u>	
Mean: 44.71		
Secondary Principals		
< 30	5	0.8
31 - 40	96	15.8
41 - 50	107	17.6
51 - 60	51	8.4
> 61	7	1.1
	<u>266</u>	<u>43.7</u>
Missing	1	
TOTAL	<u>267</u>	
Mean: 44.18		
<u>Length of Experience in Education</u>		
Elementary Principals		
< 10	36	5.8
11 - 15	86	13.9
16 - 20	89	14.4
21 - 25	66	10.7
> 26	73	11.8
	<u>350</u>	<u>56.7</u>
TOTAL		
Mean: 19.50		
Secondary Principals		
< 10	25	4.1
11 - 15	56	9.1
16 - 20	73	11.8
21 - 25	55	8.9
> 26	58	9.4
	<u>267</u>	<u>43.3</u>
TOTAL		
Mean: 19.69		

Table 1 (continued)

<u>Characteristic</u>	<u>Number Reporting</u>	<u>Adjusted Frequency</u>
<u>Length of Experience as a Principal</u>		
Elementary Principals		
< 5	128	20.7
6 - 10	104	16.9
11 - 15	63	10.2
16 - 20	34	5.5
> 21	21	3.4
TOTAL	<u>350</u>	<u>56.7</u>
Mean: 8.95		
Secondary Principals		
< 5	115	18.6
6 - 10	84	13.6
11 - 15	43	7.0
16 - 20	19	3.1
> 21	6	1.0
TOTAL	<u>267</u>	<u>43.3</u>
Mean: 7.58		
<u>School District Pupil Enrollment</u>		
Elementary Principals		
< 5000	124	20.1
5001 - 10000	79	12.8
10001 - 50000	94	15.2
> 50001	53	8.6
TOTAL	<u>350</u>	<u>56.7</u>
Secondary Principals		
< 5000	85	13.8
5001 - 10000	67	10.9
10001 - 50000	94	15.2
> 50001	21	3.4
TOTAL	<u>267</u>	<u>43.3</u>

Table 1 (continued)

<u>Characteristic</u>	<u>Number Reporting</u>	<u>Adjusted Frequency</u>
<u>Percentage of Black Student Enrollment in School</u>		
Elementary Principals		
< 1	66	10.7
2 - 25	164	26.6
26 - 50	63	10.2
> 51	57	9.2
TOTAL	350	56.7
Secondary Principals		
< 1	32	5.2
2 - 25	137	22.2
26 - 50	57	9.2
> 51	41	6.6
TOTAL	267	43.3
<u>Percentage of White Student Enrollment in School</u>		
Elementary Principals		
< 25	26	4.2
26 - 50	55	8.9
51 - 75	78	12.6
> 76	191	31.0
TOTAL	350	56.7
Secondary Principals		
< 25	17	2.8
26 - 50	36	5.8
51 - 75	56	9.1
> 76	158	25.6
TOTAL	267	43.3

1, were concentrated at the elementary level. Table 1 also notes that 85.0 percent of the respondents were white, while 15.0 percent were in the nonwhite classification.

The mean age of elementary school principals was 44.71, while the mean for secondary school principals was 44.18. As noted in Table 1, the largest percentage of both elementary and secondary principals was represented by the 41-50 years age classification. Elementary school principals had been in education an average of 19.50 years, while the average for secondary school principals was 19.69 years. Five years or less experience as a principal represented the highest percentage of both respondent groups, with the mean being 8.95 and 7.58 for elementary and secondary principals respectively.

School district pupil enrollment figures were relatively similar for both groups. The largest percentages were represented by two classifications: (1) less than 5000 pupils and (2) 10001 - 50000 pupils. Individual school student enrollment for elementary and secondary principals was predominantly white. Elementary school principals with over 76 percent white student enrollment made up 31 percent of this respondent group. Those having more than 51 percent black student enrollment represented only 9.2 percent of the group.

Secondary school principals with over 76 percent white student enrollment made up 25.6 percent of the respondent group, while those having more than 51 percent black student enrollment represented 6.6 percent of the group. The largest percentage of both elementary and

secondary school principals fell into the 2-25 percent black student enrollment category.

Elementary/Secondary Principal: The Primary Variable

It was hypothesized that there would be no difference between elementary and secondary principals on the degree of perceived stress. The results of the Analysis of Variance procedures indicated that on the primary variable, elementary/secondary principal, the difference between elementary and secondary principals on the total Principals' Stress Inventory score as well as the scores on Scale 3 (Interpersonal Relations) and Scale 4 (Intrapersonal Conflict) was statistically significant. The respective means for elementary principals on the total score, Scale 3, and Scale 4 were 110.17, 19.92, and 4.89, while the means for secondary principals on the total score, Scale 3, and Scale 4 were 113.58, 22.22, and 5.22 respectively (Table 2). The difference between the respective means for the two groups was too great to attribute to random sampling fluctuation if the null hypothesis were true; thus, the null hypothesis was rejected for the total score as well as Scale 3 and Scale 4.

The higher means for secondary principals support previous research conducted by Swent and Gmelch (1977) on Oregon School Administrators. Using categories similar to the subscales in the present study, they found that secondary principals perceived greater stress among all stress categories than elementary principals. Swent (1978) noted that this reinforces the popular belief that secondary administration is more stressful than elementary administration. He attributed the higher

Table 2
Means and Standard Deviations for Elementary
and Secondary Principals on the
Principals' Stress Inventory

SCORE	ELEMENTARY PRINCIPALS		SECONDARY PRINCIPALS	
	Mean	Standard Deviation	Mean	Standard Deviation
TOTAL*	110.17	20.77	113.58	18.40
SCALE 1	21.10	4.62	21.57	4.02
SCALE 2	52.15	9.86	52.63	8.62
SCALE 3*	19.92	5.51	22.22	5.39
SCALE 4*	4.89	1.87	5.22	1.79
SCALE 5	12.10	2.96	11.93	2.81

*Significant differences existed between elementary and secondary principals on these sub-scales.

stress scores of the secondary administrators to "more severe discipline problems, a longer work week due to extensive activity programs and more of a diversified relationship among staff members..." (Swent, 1978: 132-133).

Swent (1978) also found that the categories "interpersonal relations" (Scale 3 in this study) and "intrapersonal conflict" (Scale 4) contained two of the top ten stressors for Oregon School Administrators. Overall, however, those stressors which were included in the "administrative constraints" category (Scale 1), were perceived by administrators in his study to be the greatest sources of stress among the five categories.

Selected Demographic Variables

The second hypothesis in this study was that there would be no difference between the various categories of selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress. The results of the Analysis of Variance procedures indicated that there was a statistically significant difference among the categories of three selected demographic variables on Scale 3 (Interpersonal Relations): (1) race, (2) age, and (3) length of experience in education. A statistically significant difference was also found among the categories of the variable, percentage of white student enrollment in school, on

Scale 1 (Administrative Constraints) and Scale 4 (Intrapersonal Conflict).

The variable race was divided into two categories: (1) white and (2) nonwhite. The mean for the white principals on Scale 3 (Interpersonal Relations) was 21.18, while the mean for the nonwhites was 19.33 (Table 3). Thus, the white principals perceived greater stress on Scale 3 (Interpersonal Relations) than the nonwhites in the study, making the difference between the means for the two categories of race too great to attribute to random sampling fluctuation if the null hypothesis were true. Therefore, the null hypothesis was rejected. This finding differed from the results of research conducted by Conley and Hinkle (1981) on elementary principals. Using the same stress inventory, they found that the white principals in their study indicated more stress than the nonwhite principals relative to selected events from Scale 2 (Administrative Responsibilities), rather than Scale 3 (Interpersonal Relations).

Results of the Analysis of Variance procedures indicated that there was a statistically significant difference among the five age categories on Scale 3 (Interpersonal Relations). However, when the Tukey post hoc multiple comparisons procedure was applied, no statistically significant differences were found. This indicated that no pair-wise comparisons were different; rather, a more complex contrast which was not investigated in the study was significant. Inspection of Table 4, however, indicates that principals in the youngest age category (30 years old or less) perceived the greatest amount of stress, while those

Table 3

Means and Standard Deviations for Elementary
and Secondary Principals by Race on
Scale 3 (Interpersonal Relations)

RACE	SCALE 3 (INTERPERSONAL RELATIONS)	
	Mean	Standard Deviation
WHITE	21.18	5.57
NONWHITE	19.33	5.39

Table 4
Means and Standard Deviations for Elementary
and Secondary Principals by Age on
Scale 3 (Interpersonal Relations)

AGE	SCALE 3 (INTERPERSONAL RELATIONS)	
	Mean	Standard Deviation
< 30	22.86	5.55
31 - 40	21.85	5.66
41 - 50	20.68	5.21
51 - 60	19.68	5.93
> 61	20.63	5.01

in the fourth category (51-60 years old) perceived the least amount of stress on Scale 3 (Interpersonal Relations). In a study of the relationship between stress scores of elementary principals and chronological age, Roesch (1980) also found that older principals experienced less stress than younger principals.

There was a statistically significant difference among the five classifications of the variable, length of experience in education, on Scale 3 (Interpersonal Relations). The results of the Tukey post hoc multiple comparisons procedure indicated that there was a statistically significant difference between principals in the fifth classification (more than 26 years), and those in the first classification (10 years or less). The means for the five classifications of elementary and secondary school principals by length of experience in education are found in Table 5. As noted in the table, those principals with 10 years or less experience in education perceived the greatest stress among the respondents in the study, relative to Scale 3 (Interpersonal Relations). Using different classifications, Swent (1978) found that administrators with 3-5 years' experience perceived more stress from interpersonal relations than did administrators with over 21 years' experience.

Results of the Analysis of Variance procedures indicated that there was a statistically significant difference among the four classifications of the variable, percentage of white student enrollment in school, on Scale 1 (Administrative Constraints) as well as Scale 4 (Intrapersonal Conflict). When the Tukey post hoc multiple comparisons procedure was applied, however, no statistically significant differences

Table 5

Means and Standard Deviations for Elementary and Secondary
Principals by Length of Experience in Education on
Scale 3 (Interpersonal Relations)

LENGTH OF EXPERIENCE IN EDUCATION	SCALE 3 (INTERPERSONAL RELATIONS)	
	Mean	Standard Deviation
< 10	22.37	5.14
11 - 15	21.31	5.64
16 - 20	21.04	5.46
21 - 25	21.22	5.79
> 26	19.38	5.36

were found among the classifications on Scale 1 (Administrative Constraints). This indicated that no pair-wise comparisons were different; rather, a more complex contrast which was not investigated in the study was significant (Table 6).

Conley and Hinkle (1981) found that elementary principals in school districts with high percentages of blacks in the school population perceived greater stress relative to selected events from Scale 1 (Administrative Constraints), than those with low percentages of blacks in the school population. Inspection of the data in Table 6 indicates that principals in the present study having the lowest percentage of white student enrollment in school, perceived the greatest stress among the four classifications of the variable relative to Scale 1 (Administrative Constraints). Thus, this finding supports the research conducted by Conley and Hinkle (1981).

The Tukey post hoc multiple comparisons procedure indicated that there was a statistically significant difference between principals in the lowest classification (25 percent or less) of the variable, percentage of white student enrollment in school, and those in the next highest classification (26-50 percent) on Scale 4 (Intrapersonal Conflict). As indicated in Table 7, principals in the study perceived greater stress relative to Scale 4 (Intrapersonal Conflict), the lower the percentage of white students in the school population. Conley and Hinkle (1981) had similar findings; that is, the higher the percentage of white students in the school population, the less stressful administrative events were for the elementary principal. Those events,

Table 6

Means and Standard Deviations for Elementary and Secondary Principals by Percentage of White Student Enrollment in School on Scale 1 (Administrative Constraints)

PERCENTAGE OF WHITE STUDENT ENROLLMENT IN SCHOOL	SCALE 1 (ADMINISTRATIVE CONSTRAINTS)	
	Mean	Standard Deviation
< 25	21.98	3.78
26 - 50	21.92	3.87
51 - 75	21.76	4.57
> 76	20.89	4.46

Table 7

Means and Standard Deviations for Elementary and Secondary Principals by Percentage of White Student Enrollment in School on Scale 4 (Intrapersonal Conflict)

PERCENTAGE OF WHITE STUDENT ENROLLMENT IN SCHOOL	SCALE 4 (INTRAPERSONAL CONFLICT)	
	Mean	Standard Deviation
< 25	5.51	1.70
26 - 50	4.75	1.88
51 - 75	5.36	1.87
> 76	4.93	1.82

however, pertained to activities from Scale 2 (Administrative Responsibilities).

Interaction Between Elementary/Secondary Principal
and Selected Demographic Variables

The third and final hypothesis which was tested in this study indicated that there would be no interaction between levels of the principalship (elementary, secondary) and the selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress. Results from the Analysis of Variance procedures indicated, however, that there was a statistically significant interaction between the variables, elementary/secondary principal and percentage of white student enrollment in school, on Scale 2 (Administrative Responsibilities).

The plot of the first two points of the interaction for both elementary and secondary school principals is particularly noteworthy. Figure 2 indicates that on the first point, principals of elementary schools with a low percentage of white students enrolled (less than 25 percent) perceived greater stress on Scale 2 (Administrative Responsibilities) than secondary school principals with comparable enrollment. However, the next point in Figure 2 indicates that there was a reversal in the principals' perceptions. Principals of secondary schools with 26-50 percent white students enrolled, perceived greater stress on Scale 2 (Administrative Responsibilities) than elementary

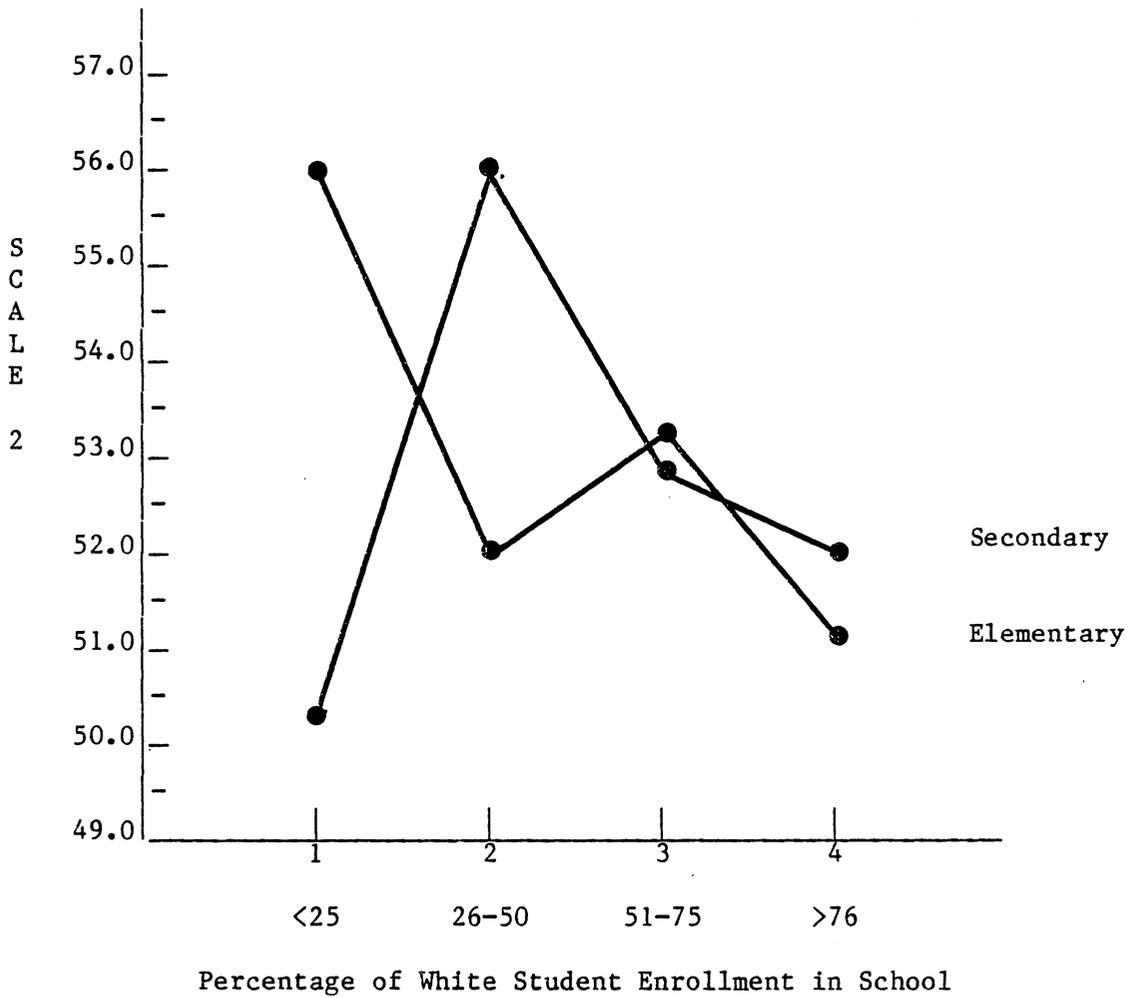


Figure 2

Plot of Interaction Between Elementary/Secondary Principal
and Percentage of White Student Enrollment in School
on Scale 2 (Administrative Responsibilities)

school principals with comparable enrollment. Note that on the remaining two points, there was very little difference between elementary and secondary principals.

Summary

Findings of the study which were based on tests of three null hypotheses have been presented in this chapter. Analysis of the data yielded the following results:

1. There was a statistically significant difference between elementary and secondary principals on the total Principals' Stress Inventory score as well as the scores on Scale 3 (Interpersonal Relations) and Scale 4 (Intrapersonal Conflict). Moreover, secondary principals consistently scored higher than elementary principals on Scales 1 through 4, indicating a greater degree of perceived stress relative to: (1) administrative constraints, (2) administrative responsibilities, (3) interpersonal relations, and (4) intrapersonal conflict.

2. A statistically significant difference was found among the classifications of three selected demographic variables on Scale 3 (Interpersonal Relations):

- (1) Race - The white principals perceived greater stress than the nonwhite principals;
- (2) Age - Principals in the youngest age classification (30 years old or less) perceived the greatest amount of stress, while those in the 51-60 years classification perceived the least amount of stress; and

- (3) Length of Experience in Education - Those principals with 10 years or less experience in education perceived the greatest stress among the respondents in the study.

There was a statistically significant difference among the categories of the variable, percentage of white student enrollment in school, on Scale 1 (Administrative Constraints) and Scale 4 (Intrapersonal Conflict). Principals with higher percentages of white student enrollment in the school population tended to have a lower degree of perceived stress, relative to administrative constraints and intrapersonal conflict.

3. A statistically significant interaction was found between the variables, elementary/secondary principal and percentage of white student enrollment in school, on Scale 2 (Administrative Responsibilities). Those principals of elementary schools with less than 25 percent white students enrolled, perceived greater stress than secondary school principals with comparable enrollment. There was a reversal in the principals' perceptions, however, in the next classification (26-50 percent). At this point, principals of secondary schools perceived greater stress than elementary principals with comparable enrollment, relative to Scale 2 (Administrative Responsibilities).

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The negative impact of excessive stress on public school principals poses a most urgent problem, as the pressures which impinge upon their positions of responsibility continue to evolve. This phenomenon has caused many principals to become less satisfied with their professional lives, and in some cases, has contributed to physical illness. The purpose of this study was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events.

It was hypothesized that there would be no difference between elementary and secondary principals on the degree of perceived stress. Moreover, it was hypothesized that there would be no difference between the various categories of selected demographic variables (sex, race, age, length of experience in education, length of experience as a principal, school district pupil enrollment, percentage of black student enrollment in school, and percentage of white student enrollment in school) on the degree of perceived stress. It was further hypothesized that there would be no interaction between levels of the principalship and the selected demographic variables on the degree of perceived stress.

The hypotheses were tested using data from a survey instrument, the Principals' Stress Inventory. It consisted of 39 administrative events or stressors which were categorized by the researcher into five sub-scales: (1) Administrative Constraints; (2) Administrative Responsibilities; (3) Interpersonal Relations; (4) Intrapersonal Conflict; and (5) Role Expectations (Swent, 1978). The inventory was used to measure the relative magnitude of stress related to various job events which are associated with the elementary and secondary school principalship. Respondents in the study consisted of 350 elementary principals and 267 secondary principals in the Commonwealth of Virginia.

A series of two-way Analysis of Variance procedures were used to analyze the data in this study. The primary variable, elementary/secondary principal, was crossed with eight demographic variables: (1) sex; (2) race, white and nonwhite; (3) age; (4) educator, length of experience; (5) principal, length of experience; (6) enrollment, school district pupil enrollment; (7) black, percentage of black student enrollment in school; and (8) white, percentage of white student enrollment in school.

Findings

It was found that there was a statistically significant difference between elementary and secondary principals on the total Principals' Stress Inventory score as well as the scores on Scale 3 (Interpersonal Relations) and Scale 4 (Intrapersonal Conflict). Moreover, secondary principals consistently scored higher than elementary principals on

Scales 1 through 4, indicating that they perceived a greater degree of stress relative to: (1) administrative constraints, (2) administrative responsibilities, (3) interpersonal relations, and (4) intrapersonal conflict.

There were statistically significant differences among the classifications of three selected demographic variables on Scale 3 (Interpersonal Relations): (1) race, (2) age, and (3) length of experience in education. The white principals perceived greater stress than the nonwhite principals in the study. Among the five age classifications, principals in the youngest age category (30 years old or less) perceived the greatest amount of stress. Those principals in the 51-60 years age classification perceived the least amount of stress. Among the five classifications of the variable, length of experience in education, principals in the lowest category (10 years or less) perceived the greatest stress relative to Scale 3 (Interpersonal Relations).

A statistically significant difference was also found among the categories of the variable, percentage of white student enrollment in school, on Scale 1 (Administrative Constraints) and Scale 4 (Intrapersonal Conflict). Principals with high percentages of white student enrollment in the school population tended to have a lower degree of perceived stress, relative to administrative constraints and intrapersonal conflict.

There was a statistically significant interaction between the variables, elementary/secondary principal and percentage of white

student enrollment in school, on Scale 2 (Administrative Responsibilities). Elementary principals with a low percentage of white students enrolled in school (less than 25 percent) perceived greater stress than secondary principals with comparable enrollment. However, in the next classification (26-50 percent) of the variable, percentage of white student enrollment in school, secondary principals perceived greater stress than elementary principals with comparable enrollment relative to Scale 2 (Administrative Responsibilities).

Conclusions

Based upon the findings in the study, it can be concluded that the principalship in the Commonwealth of Virginia was more stressful for secondary school principals than elementary school principals. More specifically, "interpersonal relations" and "intrapersonal conflict" were sources of particular stress to secondary school principals. Job events related to "administrative constraints" and "administrative responsibilities" were also more stressful to the secondary principal than the elementary principal.

The demographic variables, race, age, and length of experience in education influenced the degree of stress perceived by principals in the Commonwealth. The white elementary and secondary principals experienced greater stress than the nonwhite principals when performing activities which were related to "interpersonal relations". Such activities included resolving social problems among students, working with school racial issues, and conferencing with dissatisfied parents.

Younger principals (30 years old or less) experienced greater stress than older principals when engaging in "interpersonal relations" with parents, staff, students, and others concerned with school affairs. Moreover, those principals with the least experience in education (10 years or less) found job events associated with "interpersonal relations" particularly stressful.

Principals of schools in Virginia with high percentages of white students enrolled generally had a lower degree of perceived stress during events which were related to "administrative constraints" and "intrapersonal conflict". Events which were associated with "administrative constraints" included excessive paperwork and time required for the administration of special education programs, while "intrapersonal conflict" included maintaining self-control when angry and involuntary transfer.

Events associated with "administrative responsibilities" such as the first and last week of the school year, were more stressful for elementary principals with low percentages (less than 25 percent) of white students enrolled in the school population. It is interesting to note, however, that when the school population had 26-50 percent white students enrolled, events related to "administrative responsibilities" were more stressful for secondary principals.

Implications

The findings of this study are descriptive of the stressful nature of selected job events which are associated with the principalship in

the Commonwealth of Virginia. The conclusions which were drawn from the findings have implications for elementary and secondary principals relative to their training and responses to stress, as well as their coping with stress.

Elementary Principalship versus Secondary Principalship

The principalship was generally more stressful for secondary school principals than for elementary school principals, particularly in the areas of "interpersonal relations" and "intrapersonal conflict". Perhaps the differences between the elementary and secondary school settings contributed to the different perceptions of the school administrators. Secondary principals have larger institutions and greater numbers of people to manage; thus, the likelihood of having to deal with interpersonal as well as intrapersonal conflict situations is increased (Koff et al., 1979).

Given a relatively smaller institution and fewer numbers of individuals to manage, it may be more feasible for the elementary principal to deal with such events as resolving social problems among students and conferencing with dissatisfied parents in a less stressful manner. In considering student conflict, elementary school students are generally easier to control than secondary school students. "Secondary students are older, more independent, and more able to influence the classroom and school environment" (Koff et al., 1979:21). This might have been a contributing factor in the higher degree of perceived stress which was indicated by secondary principals in the study.

Differences between the elementary and secondary school settings should be taken into consideration when training prospective administrators. Given the larger size of the secondary school and the complexity of the responsibilities which are inherent in secondary school administration, prospective secondary principals may need more intensive training in conflict management, human relations, as well as school-community relations than prospective elementary principals. This training could be given through formal coursework and internship experiences in an educational administration degree program.

Practicing secondary school administrators may need to update their skills in conflict management and human relations through either in-service training within the school district, or formal coursework at an institution of higher education. Improved communication skills would also help reduce tensions related to stress-inducing job events. Gmelch (1978) would suggest that the secondary principal re-discover latent talents as well as limitations through introspection, and then concentrate on capabilities while delegating limitations to those more qualified. Providing secondary principals with a larger ancillary staff may also be helpful in mitigating stress, as it would reduce the number of publics with whom the principal must interact.

The delegation of responsibility is part of the "proactive" posture recommended by Vetter (1976) to principals in handling stress. Using this approach, the secondary school administrator would find workable solutions to pressures and stress by: (1) attempting to change the expectations and demands of others; and (2) sharing responsibility for

fulfilling demands with others. Gmelch (1977:11) would have the secondary principal "learn" to master stress "...[as] a process for managing future stress rather than inappropriately responding to the present."

Race, Age, and Length of Experience in Education

It was concluded that the white elementary and secondary principals experienced greater stress than the nonwhite principals when performing activities which were related to "interpersonal relations". The perceptual differences between the two racial classifications may be due to many factors, including: (1) the racial composition of the school and/or community; (2) greater expectations from the various "publics" because the administrator is white; and/or (3) differences in the cultural backgrounds of the administrators. Although this study was not designed to ascertain such underlying factors, it is not unreasonable to propose that the higher degree of perceived stress indicated by the white principals might have been related to the fact that they worked in a desegregated school environment. The problem would then be associated with their ability to maintain good "interpersonal relations" with individuals of minority races.

The implications for the white elementary and secondary principals in the study are very clear. There is a need for these administrators to do some introspective thinking to determine exactly what it is about "interpersonal relations" that causes them stress. This would involve defining the problem, deciding what to do about it, and then assessing how well the problem was solved. Principals may want to consider doing

this kind of activity on their own in the privacy of the office, or they may wish to participate in a workshop in which self-assessment is encouraged. The method that the principals choose to deal with the problem is not as important as their recognizing that "interpersonal relations" is an integral part of the principalship and that they can learn to combat the stress that is associated with it.

Younger principals (30 years old or less) perceived greater stress relative to "interpersonal relations" than older principals (51-60 years old) in the study. This confirmed prior research conducted by Roesch (1980) on elementary principals. It was also concluded that those principals with the least experience in education (10 years or less) perceived the greatest stress relative to "interpersonal relations".

The two conclusions can be linked together, as a young individual is usually expected to have less experience than an older individual holding the same position. Thus, having less experience on the job might very well contribute to the greater stress perceived by younger principals. It may also be that the older principals perceived less stress relative to "interpersonal relations" simply because of the greater number of years of involvement in the activities which are related to this area. This problem could possibly be addressed through in-service training conducted by the older and more experienced principals in the school system. Younger principals would no doubt enjoy and benefit from the "war" stories told by the more seasoned administrators on managing conflict in the area of "interpersonal relations".

Percentage of White Student Enrollment in School

Principals who worked in schools with high percentages of white students enrolled indicated a lower degree of perceived stress relative to "administrative constraints" and "intrapersonal conflict". McGrath's (1977) theory on stress and social-interaction has some implications here. As discussed earlier, McGrath (1977) suggested that social interaction has an optimal level that varies with individuals and changes or adapts over time for the same individual. Stress can be caused by too little social interaction as well as too much social interaction (McGrath, 1977). Perhaps the high percentages of white student enrollment indicated by the principals were within their "optimal" levels, so that a high degree of perceived stress would not be associated with "administrative constraints" and "intrapersonal conflict".

Job events which are associated with "administrative responsibilities" were more stressful for elementary principals with low percentages of white students enrolled in the school population. When the enrollment of white students was slightly higher, "administrative responsibilities" became more stressful for secondary principals. Here again, McGrath's (1977) "optimal" zone theory is applicable. For these elementary and secondary principals, the high nonwhite enrollment might have induced stress because the racial composition of the schools was not within their "optimal" zone.

The fact that principals in the Commonwealth perceived greater stress in a majority nonwhite school enrollment situation and less

stress when there were high percentages of white students enrolled, indicates that there may be a need for improved racial awareness and understanding. Deep introspective thinking may again be necessary to determine why a certain percentage of nonwhite and white student enrollment falls within or outside the principal's "optimal" zone. Principals may also need to be better sensitized to the thinking and feelings of the racial, ethnic, and social groupings in the school student body as well as the community (Conley et al., 1977).

It was not very long ago that the implementation of school desegregation plans brought about institutional change in many school systems. In going through this process, there was much fear and resistance to change (Conley et al., 1977). The perceived stress which was revealed by principals may be related to the fact that some have not yet overcome the fear and resentment which many principals previously associated with school desegregation. As McGrath (1977:75) explained, "stress, and responses to stress, ... vary as a function of experience--both experience with the situation or conditions giving rise to stress, and practice in behaviors to cope with or avoid the consequences of stressor conditions." Experiences which may be related to the stress indicated by the principals, however, were not ascertained in this study. The perceived stress could be due to a number of factors including: (1) an unpleasant childhood experience with a black or hispanic individual; (2) feelings of intimidation by the overwhelming presence of minorities; (3) misconceptions about minority cultures; and/or (4) feelings that the school is expected to solve society's racial problems.

In each of the above examples, it is reasonable to propose that increased awareness of the general disposition among principals about racial relations could create greater interest in defining ways to make the school's racial composition less stressful. This could involve the training of practicing administrators in group dynamics or participation in human relations programs.

Swent and Gmelch (1977) suggested that the present educational administration programs be scrutinized to determine where the voids are in program requirements. They recognized that administrative certification programs are not placing enough emphasis on skills in human relations as well as the other stressful areas which were indicated by the principals in this study. Prospective and practicing administrators must be exposed to the resources and/or given appropriate training which will enable them to deal with stressful job events related to racial imbalances in the school population.

For prospective principals, this problem could be addressed through internship experiences in nonwhite schools or participation in an interracial workshop which aims to improve racial understanding. Similarly, practicing administrators could benefit from externship experiences and workshops for the same purpose. Another strategy which could be used with practicing administrators is to rotate their job assignments periodically to a school which has a different racial composition, so that they would have to confront the stressful situation. They could then decide how to respond to it; that is,

"fight", "flee", "freeze", or "learn" valid ways of reducing the perceived stress (Gmelch, 1977).

In conclusion, the implications which were discussed in this section pose important problems for future investigation. It is hoped that the implications as well as the recommendations which follow, provide some insight on the problems and nature of the principalship in the Commonwealth of Virginia.

Recommendations for Further Study

There is a need for more research on stress and the school principal in order to increase understanding of the multifaceted nature of the problem. The purpose of this study was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events. Suggestions for further study are listed below:

1. Further study is needed to examine the problem of stress perceived by principals as being related to their own racial attitudes toward the ethnic composition of the staff, student body, and/or community.
2. Since the findings of this study confirmed previous research which indicates that secondary school administration is more stressful than elementary school administration, further research should take a comparative approach and examine the relationship between stress and the roles of elementary and secondary school principals.

3. Replication of the study should be conducted in a different geographical location, perhaps incorporating personal interviews as part of the research methodology. This would not only contribute to the body of literature on stress and the principalship, but would also be useful in validating the findings of this research.
4. Future research should evaluate attempts to reduce the degree of stress perceived by principals as being related to job events, in terms of actual levels of stress reduction achieved.

BIBLIOGRAPHY

- Anton, Kenneth O. "Identification and Analysis of Pressures on the Secondary School Principal Relative to Job Satisfaction." Doctoral dissertation, Iowa State University, 1974.
- Appley, Mortimer H., and Richard Trumbull. "On the Concept of Psychological Stress." Psychological Stress, Mortimer H. Appley, and Richard Trumbull, eds. New York: Appleton-Century-Crofts, 1967.
- Argyris, C. Integrating the Individual and the Organization. New York: Wiley, 1964.
- Blood, Ronald E., and James P. Miller, Jr. "The New Mexico Principalship Study, Part I: Factors Affecting the Principalship Yesterday and Today." Paper presented at the meeting of the American Educational Research Association in San Francisco, California, April, 1979.
- Caplan, Robert D., Shirley Cobb, and John R. P. French, Jr. "Relationships of Cessation of Smoking with Job Stress, Personality, and Social Support." Journal of Applied Psychology, 60:211-19. April, 1975.
- Conley, Houston, and Dennis E. Hinkle. "Stress Inventory Findings." VAESP Communique/Capsule, 3:3:5. December, 1980.
- Conley, Houston, and Dennis E. Hinkle. "Stress Related to Elementary Principals." VAESP Communique/Capsule, 4:10,12. Fall, 1981.
- Conley, Houston, and Dennis E. Hinkle. "Stress Related to the Elementary Principalship." Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1980. (Mimeographed.)
- Conley, Houston, et al. Contingency Planning for a Unitary School System: A Process Guide for School Desegregation, Book 1. Nashville: McQuiddy Printing Company, 1977.
- Cooper, Cary, and Judi Marshall. "The Management of Stress." Personnel Review, 4 (1975), 27-31.
- Cooper, Cary, and Judi Marshall. "Occupational Sources of Stress: A Review of the Literature Relating to Coronary Heart Disease and Mental Health." Journal of Occupational Psychology, 49:11-28. April, 1976.

- Dohrenwend, B. A., and B. P. Dohrenwend, eds. Stressful Life Events: Their Nature and Effects. New York: John Wiley and Sons, 1974.
- Dyer, Wayne. Your Erroneous Zones. New York: Funk and Wagnalls Co., 1976.
- Ferguson, D. "A Study of Occupational Stress and Health." Ergonomics, 16:649-64. September, 1973.
- French, J. R. P., and R. D. Caplan. "Organizational Stress and Strain." The Failure of Success, A. J. Marrow, ed. New York: AMACOM (1973), 30-66.
- Friedman, Meyer, and Ray H. Rosenman. "The Key Cause--Type A Behavior Pattern." Stress and Coping: An Anthology, Alan Monat, and Richard S. Lazarus, eds. New York: Columbia University Press, 1977.
- Friedman, M., and R. H. Rosenman. Type A Behavior and Your Heart. New York: Alfred Knopf, 1974.
- Giammatteo, Michael C., and Dolores M. Giammatteo. Executive Well-Being: Stress and Administrators. Reston, Va.: National Association of Secondary School Principals, 1980.
- Gmelch, Walter H. "Beyond Stress to Effective Management." Oregon School Study Council Bulletin, 20:9&10:1-64. May-June, 1977.
- Gmelch, Walter H. "The Principal's Next Challenge: The Twentieth Century Art of Managing Stress." NASSP Bulletin, 62:5-12. February, 1978.
- Greenwood, James W., III, and James W. Greenwood, Jr. Managing Executive Stress: A Systems Approach. New York: John Wiley and Sons, Inc., 1979.
- Gross, Nancy E. Living with Stress. McGraw-Hill, 1958.
- Harris, Patricia. "Emotional Stress in Secondary School Principals." Doctoral dissertation, University of Michigan, 1978.
- Herzberg, Frederick. Work and the Nature of Man. New York: World Publishing Company, 1966.
- Holmes, Thomas H., and Richard H. Rahe. "The Social Readjustment Rating Scale." Journal of Psychosomatic Research, 11:213-18. Fall, 1967.

- Janis, I. L. Psychological Stress: Psychoanalytic and Behavioral Studies of Surgical Patients. New York: Academic Press, 1974.
- Kahn, R. L., and R. P. Quinn. "Role Stress." Mental Health and Work Organization, McLean, ed. Chicago: Rand McNally, 1970.
- Kahn, R. L., et al. Organizational Stress. New York: Wiley, 1964.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.
- Kiev, Ari, and Vera Kohn. "Executive Stress: An AMA Survey Report." New York: AMACOM, American Management Association, 1979.
- Koff, Robert H., James Laffey, George Olson, and Don Cichon. "Stress and the School Administrator." Paper presented at the meeting of the American Educational Research Association in San Francisco, California, April, 1979.
- Kyriacou, Chris, and John Sutcliffe. "Teacher Stress: A Review." Educational Review, 29:299-306. November, 1977.
- Landes, Samuel Martin. "Stress and the School Administrator: An Analysis of the Interrelationships Among Personality Characteristics, Organizational Stressors and Selected Stress Reduction Techniques." Doctoral dissertation, University of Southern California, 1978.
- Larson, P. "An Analysis of Selected Sources of Stress Among Elementary School Administrators in Iowa Public Schools." Doctoral dissertation, University of Iowa, 1977.
- Lazarus, Richard S. "Psychological Stress and Coping in Adaptation and Illness." International Journal of Psychiatry in Medicine, 5 (1974), 321-33.
- Lazarus, Richard S. "Cognitive and Personality Factors Underlying Threat and Coping." Psychological Stress, Mortimer H. Appley, and Richard Trumbull, eds. New York: Appleton-Century-Crofts, 1967.
- Lazarus, Richard S. Psychological Stress and the Coping Process. New York: McGraw-Hill, 1966.
- Little, Craig B. "Stress Responses Among Unemployed Technical-Professionals." Doctoral dissertation, University of New Hampshire, 1973.
- Margolis, Bruce L., William H. Kroes, and Robert P. Quinn. "Job Stress: An Unlisted Occupational Hazard." Journal of Occupational Medicine, 16:10:654-61. October, 1974.

- Manuso, James S. "Executive Stress Management." Personnel Administrator, 24:11:23-6. November, 1979.
- Mason, J. W. "A Historical View of the Stress Field, Part II." Journal of Human Stress, 1 (1975), 22-36.
- Mason, J. W. "A Re-Evaluation of the Concept of 'Non-Specificity' in Stress Theory." Journal of Psychiatric Research, 8 (1971), 323-33.
- McGrath, Joseph E., ed. Social and Psychological Factors in Stress. New York: Holt, Rinehart, and Winston, 1970.
- McGrath, Joseph E. "Stress and Behavior in Organizations." Handbook of Industrial and Organizational Psychology. Chicago: Rand-McNally, 1976.
- McGrath, Joseph E. "Settings, Measures, and Themes: An Integrative Review of Some Research on Social-Psychological Factors in Stress." Stress and Coping: An Anthology, Alan Monat, and Richard A. Lazarus, eds. New York: Columbia University Press, 1977.
- Miller, William C. Dealing with Stress: A Challenge for Educators. Indiana: Phi Delta Kappa Educational Foundation, 1979.
- Mintzberg, H. The Nature of Managerial Work. San Francisco: Harper and Row, 1973.
- Monat, Alan, and Richard S. Lazarus. Stress and Coping: An Anthology. New York: Columbia University Press, 1977.
- Nie, Norman H., et al. Statistical Package for the Social Sciences. New York: McGraw-Hill, 1975.
- Overbeke, J. E. "Pressures Build on Today's Manager." Industry Week, 176:21-4. December, 1975.
- Peterson, Frederick O. "Stress Factors and Their Relationship to Job Satisfaction of Elementary Principals." Doctoral dissertation, University of Northern Colorado, 1977.
- Roesch, Maryanne B. "A Study of the Relationship Between Degree of Stress and Coping Preferences Among Elementary School Principals." Doctoral dissertation, George Peabody College for Teachers, 1979.
- Selye, Hans. Stress Without Distress. New York: Signet Books, 1975.
- Selye, Hans. The Stress of Life. New York: McGraw-Hill, 1956, 1976.

- Shank, John K. "The Job at the Top: Beloved, Beleaguered, and Too Often Beheaded." Independent School, October, 1979, pp. 13-18.
- Shartle, C. L. Executive Performance and Leadership. Englewood Cliffs: Prentice-Hall, 1956.
- Simonton, O. Carl, and Stephanie S. Simonton. "Belief Systems and Management of the Emotional Aspects of Malignancy." Journal of Transpersonal Psychology, 7 (1975), 29-47.
- "Stress: A School Administrator's No. 1 Problem." Education U.S.A., October, 1974, p. 33.
- Sweetland, John. Occupational Stress and Productivity. New York: Work in America Institute, Inc., 1979.
- Swent, Boyd. "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress." Doctoral dissertation, University of Oregon, 1978.
- Swent, Boyd, and Walter H. Gmelch. "Stress at the Desk and How to Creatively Cope." Oregon School Study Council Bulletin, 21:4:1-45. December, 1977.
- Switzer, Lucigrace. "Gelusil, Jogging and Gin: How Executive Educators Deal with Stress." The Executive Educator, January, 1979, pp. 27-9.
- Taylor, G. C. "Executive Stress." International Psychiatry Clinics, 6:4:307-16, 1969.
- Toffler, Alvin. Future Shock. New York: Bantam, 1970.
- Vetter, Eric W. "Role Pressure and the School Principal." NASSP Bulletin, November, 1976, pp. 11-23.
- Virginia Education Association. Virginia Journal of Education, 73:3. November, 1979.
- Virginia Education Association. Virginia Journal of Education, 73:4. December, 1979.
- Virginia State Department of Education. Virginia Educational Directory 1980-81. Richmond, Virginia.
- Welford, A. T. "Stress and Performance." Ergonomics, 16:5:567-80, 1973.
- Williams, Roger. "Stress in the Wake of Change." Personnel Management, 2:42-5. November, 1970.

APPENDIX A

APPENDIX A

PRINCIPALS' STRESS INVENTORY

This instrument is designed to determine the relative degrees of stress imposed on school principals by their various job events. It is being administered to all public school principals in the Commonwealth of Virginia. Results will be reported at the State Principals' Conference.

DIRECTIONS: Circle the number 1-5 that best reflects the degree of stress you associate with each event listed below. Five indicates the greatest stress, one the least. Rate all events whether or not you have experienced them. Do not put your name on this inventory.	5 = Always
	4 = Usually
	3 = Occasionally
	2 = Hardly Ever
	1 = Never

EVENTS

1. The first week of the school year	5	4	3	2	1
2. Inadequate salary for effort expended	5	4	3	2	1
3. Inservice meetings for administrators	5	4	3	2	1
4. High pupil teacher ratio	5	4	3	2	1
5. Implementing board of education curriculum policies and priorities	5	4	3	2	1
6. Time required for administration of special education programs	5	4	3	2	1
7. Threatened with physical injury	5	4	3	2	1
8. Maintaining self-control when angry	5	4	3	2	1
9. Verbal abuse from students	5	4	3	2	1
10. Lack of instructional materials	5	4	3	2	1
11. Public relations	5	4	3	2	1
12. Working with problems of underachieving students	5	4	3	2	1
13. Excessive paperwork	5	4	3	2	1

5 = Always
 4 = Usually
 3 = Occasionally
 2 = Hardly Ever
 1 = Never

14. Resolving social problems among students	5	4	3	2	1
15. Lack of leadership and direction from top	5	4	3	2	1
16. Dealing with teacher grievances	5	4	3	2	1
17. Lunchroom supervision	5	4	3	2	1
18. Selecting new staff member(s)	5	4	3	2	1
19. Legal action against your school	5	4	3	2	1
20. Developing student discipline techniques that are effective yet not prohibiting	5	4	3	2	1
21. Lack of personnel to carry out mandated special programs	5	4	3	2	1
22. Vandalism	5	4	3	2	1
23. Forcing the resignation or dismissal of a teacher	5	4	3	2	1
24. Dealing with pupil enrollment fluctuations	5	4	3	2	1
25. Simultaneous pacification of various factions (central office, staff, parents...)	5	4	3	2	1
26. Reorganization of educational program	5	4	3	2	1
27. Meeting minimum competency standards mandated for students	5	4	3	2	1
28. Evaluation by superior(s)	5	4	3	2	1
29. Working with school racial issues	5	4	3	2	1
30. Conferencing with dissatisfied parents	5	4	3	2	1
31. Administering programs for students whose primary language is not English	5	4	3	2	1
32. Teacher performance evaluations	5	4	3	2	1

5 = Always
 4 = Usually
 3 = Occasionally
 2 = Hardly Ever
 1 = Never

33. Plant facility maintenance	5	4	3	2	1
34. Involuntary transfer or denial of personal promotion or advancement	5	4	3	2	1
35. Conflict among staff members	5	4	3	2	1
36. Managing school budget	5	4	3	2	1
37. Last week of school year	5	4	3	2	1
38. Reduction in force	5	4	3	2	1
39. Making a presentation to the board of education	5	4	3	2	1

BASELINE DATA QUESTIONNAIRE

to accompany

PRINCIPALS' STRESS INVENTORY

Please complete this baseline data questionnaire and return it along with the Principals' Stress Inventory in the enclosed envelope. This questionnaire is designed to aid in classification and interpretation of information gained from the Principals' Stress Inventory.

Directions:

Complete this questionnaire by placing an "X" in the appropriate space or by writing the requested information in the space provided. Do not put your name on this questionnaire.

1. (1) Male
(2) Female
2. (1) Single
(2) Married
(3) Divorced
(4) Widowed
3. Age _____
4. Origin (1) Asian
or
Race (2) Black
(3) Caucasian
(4) American Indian
(5) Spanish surname
(6) Other
5. How long have you been an educator? _____
6. How long have you been a school principal? _____
7. What is the enrollment of your school? _____
8. What is the enrollment of your school district? _____
9. Estimate the school's student body who are: (Figures will total 100%)
- | | |
|--|--|
| (1) <input type="checkbox"/> % Asian | (4) <input type="checkbox"/> % American Indian |
| (2) <input type="checkbox"/> % Black | (5) <input type="checkbox"/> % Spanish surname |
| (3) <input type="checkbox"/> % Caucasian | (6) <input type="checkbox"/> % Other |

Questionnaire (continued)

10. By percent, what was the average daily attendance of students enrolled in your school during the previous school year? _____%
11. What is the approximate population of your city, town, or community?
- (1) __ City of 500,000 or more (3) __ City of 100,000-499,999
- (2) __ Suburb adjacent to a city (4) __ City of 10,000-99,999
- (5) __ City of 9,999 - under
12. In which geographic area of Virginia is your school located?
- (1) __ Eastern (5) __ Southwestern
- (2) __ Northern (6) __ Tidewater
- (3) __ Piedmont (7) __ Roanoke Valley
- (4) __ South-Central
13. 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
14. 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
15. How many days of school did you miss during the previous school year due to illness? _____

APPENDIX B

APPENDIX B

Principals' Stress Inventory Sub-ScalesScale 1: Administrative Constraints

1. Time required for administration of special education programs
2. Lack of instructional materials
3. Excessive paperwork
4. Lack of personnel to carry out mandated special programs
5. High pupil teacher ratio
6. Vandalism
7. Reduction in force

Scale 2: Administrative Responsibilities

1. The first week of the school year
2. Inservice meetings for administrators
3. Implementing board of education curriculum policies and priorities
4. Public relations
5. Working with problems of underachieving students
6. Dealing with teacher grievances
7. Lunchroom supervision
8. Selecting new staff member(s)
9. Developing student discipline techniques that are effective yet not prohibiting
10. Dealing with pupil enrollment fluctuations
11. Reorganization of educational program

12. Meeting minimum competency standards mandated for students
13. Administering programs for students whose primary language is not English
14. Teacher performance evaluations
15. Plant facility maintenance
16. Managing school budget
17. Last week of school year
18. Making a presentation to the board of education

Scale 3: Interpersonal Relations

1. Resolving social problems among students
2. Conflict among staff members
3. Working with school racial issues
4. Conferencing with dissatisfied parents
5. Threatened with physical injury
6. Verbal abuse from students
7. Legal action against your school
8. Forcing the resignation or dismissal of a teacher

Scale 4: Intrapersonal Conflict

1. Maintaining self-control when angry
2. Involuntary transfer or denial of personal promotion or advancement

Scale 5: Role Expectations

1. Inadequate salary for effort expended
2. Lack of leadership and direction from top
3. Evaluation by superior(s)
4. Simultaneous pacification of various factions (central office, staff, parents...)

APPENDIX C



COLLEGE OF EDUCATION
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

October 1, 1979

Dear Elementary Principal:

I am a professor at Virginia Tech, Blacksburg, Virginia, and I am asking you to participate in a research study. The purpose of the study is to determine the level of stress, in selected areas, on Virginia elementary principals.

It is anticipated that the results of this study will assist in gaining additional insight on the effects particular factors have on elementary principals in the state.

I wish to thank you for your cooperation and if there are any questions, please feel free to call me at this number,

Sincerely yours,

Houston Conley
Professor
College of Education

HC/ntm

P.S. We'll share the results of the study with you at the Virginia Elementary Principals' Conference in the Spring of 1980.

APPENDIX D



COLLEGE OF EDUCATION
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

June 1, 1981

Dear Secondary Principal:

I am a professor at Virginia Tech, Blacksburg, Virginia, and I am asking you to participate in a research study. The purpose of the study is to determine the level of stress, in selected areas, on secondary principals in Virginia Public Schools. It is anticipated that the results of this study will assist in gaining additional insight on the effects particular factors have on secondary principals in the state.

I wish to thank you for your cooperation. If there are any questions, please feel free to call me.

Sincerely yours,

Houston Conley
Professor
College of Education
Telephone:

ger

Enclosure

P.S. We'll share the results of the study with you at the State Principals' Conference.

**The two page vita has been
removed from the scanned
document. Page 1 of 2**

**The two page vita has been
removed from the scanned
document. Page 2 of 2**

STRESS AND THE PRINCIPALSHIP: A COMPARATIVE STUDY OF
ELEMENTARY AND SECONDARY PRINCIPALS IN
VIRGINIA PUBLIC SCHOOLS

by

Jacqueline L. Cusack

(ABSTRACT)

Principals today are faced with more pressure, more change, and more conflict than ever before (Gmelch, 1978). The principal is, by the nature of the job setting and the circumstances which surround it, particularly vulnerable to stress (Landes, 1978). The purpose of this study was to measure, analyze, and compare the degree of stress perceived by public elementary and secondary school principals in Virginia as being related to selected job events. It was hypothesized that: (1) There would be no difference between elementary and secondary principals on the degree of perceived stress; (2) There would be no difference between the various categories of selected demographic variables on the degree of perceived stress; and (3) There would be no interaction between levels of the principalship and the selected demographic variables on the degree of perceived stress. A series of two-way Analysis of Variance procedures were used to test the hypotheses. Data for the study was obtained from 350 elementary and 267

secondary principals in Virginia using the Principals' Stress Inventory (Conley and Hinkle, 1979). It consisted of 39 administrative events which were categorized by the researcher into five sub-scales: (1) Administrative Constraints; (2) Administrative Responsibilities; (3) Interpersonal Relations; (4) Intrapersonal Conflict; and (5) Role Expectations (Swent, 1978). The following conclusions were made based upon the findings: (1) The principalship was more stressful for secondary principals than elementary principals relative to Scales 1 through 4; (2) The demographic variables, race, age, and length of experience in education influenced the degree of stress perceived by principals. It was found that the white, youngest, and least experienced principals in education perceived greater stress relative to Scale 3; (3) The variable, percentage of white student enrollment in school, also influenced the degree of perceived stress. Principals of schools with high percentages of white students enrolled had a low degree of perceived stress relative to Scales 1 and 4; and (4) Events associated with Scale 2 were more stressful for elementary principals with low percentages of white students enrolled in school than for secondary principals with comparable enrollment.