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Educator Stress in Terms of Selected Variables.

Jack L. St. clair

Louisiana State University and Agricultural & Mechanical College

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EDUCATOR STRESS IN TERMS OF SELECTED VARIABLES

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EDUCATOR STRESS IN TERMS OF
SELECTED VARIABLES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Education

in
The Interdepartmental Program of Education

by
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ABSTRACT

The purpose of this study was to determine if differences in the extent of educator stress were a function of the interaction between grade level taught, years experience, and level of job satisfaction. Data analysis was intended to reveal if differences in global stress scores of groups of educators assigned on the basis of selected variables were attributed to grade level taught, years of experience, and job satisfaction as a career choice. Educator responses were solicited concerning their attitudes toward stressful work related events thought to be associated with teaching. Educator responses were also obtained concerning grade level taught, years of experience in education, and whether or not they were satisfied with their careers in education.

The subjects for this study consisted of graduate students enrolled in the Graduate Division of Education at Louisiana State University and extension classes off-campus. Each subject was assigned to one of eight groups on the basis of how each responded to a series of questions. One hundred thirty-six subjects were then randomly selected from each of the eight groups to participate in the study. Each group included seventeen members.

The Sources of Stress (SOS) Inventory was prepared after a review of the literature to determine stressful work related events
which could be used to produce a global stress score. Permission of professors teaching graduate classes was obtained and educators were surveyed in thirty-one classes. Educator responses were categorized into eight groups: (1) Elementary educators with seven years or less experience who were satisfied with their careers in education, (2) elementary educators with more than seven years experience who were satisfied with their careers in education, (3) secondary educators with seven years or less experience who were satisfied with their careers in education, (4) secondary educators with more than seven years experience who were satisfied with their careers in education, (5) elementary educators with seven years or less experience who were dissatisfied with their careers in education, (6) elementary educators with more than seven years experience who were dissatisfied with their careers in education, (7) secondary educators with seven years or less experience who were dissatisfied with their careers in education, and (8) secondary educators with more than seven years experience who were dissatisfied with their careers in education.

A 2 x 2 x 2 factorial design was used. The data were analyzed by the analysis of variance method. The independent variables were grade level taught, years of experience in education, and level of job satisfaction as a career choice. There were two levels of each variable. The dependent variable was the global stress score on the SOS Inventory.
Based upon the results obtained, it was concluded that:

(1) There was no significant difference between groups of educators in extent of stress by grade level. The null hypothesis was accepted.

(2) There was no significant difference between groups of educators in extent of stress by years of experience. The null hypothesis was accepted.

(3) There was a significant difference between groups of educators in extent of stress by job satisfaction. The null hypothesis was rejected. This result indicated that level of job satisfaction in education produced a significant difference in stress scores of educators \((F = 17.94, p < .05)\).

(4) There was no significant interaction between grade level and years experience. The null hypothesis was accepted.

(5) There was no significant interaction between grade level and job satisfaction. The null hypothesis was accepted.

(6) There was no significant interaction between years of experience and job satisfaction. The null hypothesis was accepted.

(7) There was no significant interaction among grade level, years of experience, and job satisfaction. This hypothesis was accepted.
CHAPTER 1

INTRODUCTION

The twentieth century has been described as the Age of Future Shock (Toffler, 1970) and the Age of Stress (Truch, 1980). Throughout this century dramatic shifts in lifestyles, attitudes, habits, thoughts, beliefs, organizational structures, health patterns, and methods of coping have resulted. This is particularly true in the cases of stress and individual reactions to this phenomena. According to Albrecht (1979), stress for people living in industrialized nations has increased because of five major societal changes: from rural to urban living, from stationary to mobile lifestyles, from self-sufficiency to consumerism, from isolation to interconnectedness, and from physically active to sedentary work environments.

These changes have effected society's expectations of the teaching profession. Educators are called upon to implement federally mandated and funded programs such as mainstreaming special education students or such state legislated programs as competency testing. Educators are expected to deal with and solve more problems with less public support (Gallup, 1979). During the past decade these and other pressures have made occupational stress a major concern to educators.
In a meeting of nearly 8,000 delegates, the National Education Association expressed concern about teacher stress in the following resolution:

The National Education Association believes that the dynamics of our society and increased public demands on education have produced adverse and stressful classroom and school conditions. These conditions have led to increased emotional and physical disabilities among teachers and other school personnel.

The Association urges its local affiliates, in cooperation with local school authorities, to develop stress management programs that will facilitate the recognition, prevention and treatment of stress-related problems.

The Association further urges that the harmful effects of stress and other school personnel be recognized, and it demands procedures that will ensure confidentiality and treatment without personal jeopardy. (National Education Association, 1979, p. 6).

The impact of stress on educational personnel is well supported in the literature. *Maclean's Magazine* (March, 1976) reported that between 1972 and 1976 classroom murders have increased eighteen percent, rapes forty percent, robberies thirty-seven percent and physical assaults on teachers seventy-seven percent. According to the June issue of *Newsweek* (1975), the Senate Subcommittee on Juvenile Delinquency reported that during the academic year 1975, annual destruction of school properties exceeded $600 million, and 70,000 classroom teachers reported serious injuries from physical assaults by students. After studying two hundred fifty-three classroom teachers who were referred for psychiatric evaluation because of varying degrees of psychological stress and physical trauma, Bloch (1978) concluded that these teachers suffered from environmental stress and strain and symptoms of psychological and psychophysiological
manifestations comparable to "combat neurosis." In another study conducted by Instructor Magazine (Landsman, 1978) involving more than 9,000 teachers, stress was reported as educators biggest health problem.

A recent study has documented that teaching is one of the five most stressful jobs in society, resulting in burnout, apathy and absenteeism (Fagan, 1980). Truch (1981) has estimated that the cost of this phenomena in education may exceed $3.5 billion.

A national random sample of 1,783 National Education Association members (National Education Association, 1980) addressed the issue of education as a profession. More than one-third of the teachers said they probably would not become teachers if they could return to their college days. Sparks (1979) conducted a similar study and found that forty-six percent of the teachers responding indicated they were dissatisfied with their jobs as a whole, and an identical percentage said that if they had it to do all over again, they would not choose teaching as a career.

The literature supports the concept that teachers are frustrated with teaching and desire to leave the profession. While this trend is reported in the literature in varying fashion, there appears to be a paucity of specific research that provides statistics on the number of teachers who leave the profession due to emotionally related problems. However, Stinnett and Huggett (1963) estimated that the turnover rate in the profession is between seven to ten percent. The percentage may be even higher than that reported, but as mentioned
earlier, there is little if any specific research to exactly pin-point the true turnover rate, thus the rate will vary depending on the nature of the teaching situation and location.

Significant amounts of stress may serve to undermine the basic mission of education through the inhibition of creativity, conceptual thinking, initiative, and involvement. It is therefore incumbent upon professionals in education to explore the sources of stress in such a way that the diminution of quality as well as quantity can be reversed.

Studies relating to stress in education are confounded by many factors. For example, there is no standard vocabulary of occupational stress. The terms anxiety, concerns, stress, tension, needs, problems and reactions have been defined synonymously by various authors (Erickson and Rudd, 1967; Fuller; 1969; and Coates and Thoresen, 1976).

Related to this problem in the study of stress is that there is a lack of valid measuring instruments. To date studies have been completed that utilize ranking stressful events associated with teaching (Manera and Wright, 1980; Cichon and Koff, 1980), or scales that employ a Likert-type scoring method (Kyriacou and Sutcliffe, 1978). In addition, readjustment rating scales are found in the literature (Homes and Rahe, 1967). However, there is no standardized normed instrument. Past research demonstrates an overuse of poorly controlled samples, nonexperimental research design, and
correlational data analysis (Rabkin and Struening, 1976; Coates and Thoresen, 1976).

THE PROBLEM

Statement of the problem. The purpose of this study was to determine occupational stress among educators in terms of selected variables. The study was concerned with stress as a function of the interaction between grade level, years of experience, and job satisfaction.

Questions to be answered. Based on the problem stated, the following question was formulated to guide the investigation: Are differences in the extent of educator stress as measured by a Sources of Stress Inventory a function of the interaction between grade level taught, years experience, and level of job satisfaction?

Delimitation of the problem. The instrument used in this study was adapted from instruments used in previous studies (Kyriacou and Sutcliffe, 1978; Cichon and Koff, 1980). Neither this instrument nor any other instrument described in the literature has been adequately normed and standardized. There are no validity or reliability coefficients; however, a panel of experts reviewed the instrument to determine content validity, and it was field tested by the investigator.

The population of the study was limited to students enrolled in graduate classes in the Graduate Division of Education at Louisiana State University during the spring semester of 1981. Although
generalizations beyond the data cannot be made, there was no reason to suspect that this population differed greatly from the general population of educators.

DEFINITION OF TERMS USED

**Educator.** In this study, educator was interpreted as in-service teachers and administrators enrolled in graduate classes at Louisiana State University.

**Occupational Stress.** This term was used as the negative environmental factors or stressors (e.g. work overload, role conflict/ambiguity, poor working conditions) associated with the teaching profession.

**Sources of Stress (SOS) Inventory.** The SOS Inventory is a forty-six item instrument designed to measure degrees of stress among educators.

**Stress.** This term was referred to as the external forces that act on an individual in a way that presumably will influence his interpretation of reality and his behavior (Spielberger, 1971).

**Stressful Work Related Events.** This term was used to denote desirable and undesirable environmental events or stress agents which demand a response from the individual.

ORGANIZATION OF THE STUDY

Chapter 1 provided background information for the problem under investigation. Emphasis was placed upon the impact of stress
on educational personnel, and difficulties one encounters in studying stress.

Chapter 2 presented a summary of the related literature surveyed by the investigator. The review was divided into five sections, namely, the nature of attitudes, scientific approaches to the study of stress, occupational stress and its relationship to physical illness, occupational stress and its relationship to mental ill health, and occupational stress in education.

Chapter 3 presented procedure used in the study. Attention was given to the device used for obtaining information and the statistical computations utilized.

Chapter 4 presented an analysis of the data obtained from the instrument utilized in the study.

Chapter 5 was a summary and a list of concluding statements based upon the basic purpose of the study.
CHAPTER 2

REVIEW OF THE LITERATURE

This chapter contains a review of the literature related to stress. The research reviewed will be discussed under the following specific sections:

1. The Nature of Attitudes.
2. The Scientific Approaches to the Study of Stress.
3. Occupational Stress and Its Relationship to Physical Illness.
4. Occupational Stress and Its Relationship to Mental Ill Health.
5. Occupational Stress in Education.

THE NATURE OF ATTITUDES

Attitudes are the end products of socialization. They significantly influence man's responses to cultural products, to other persons, and to groups of persons (Shaw and Wright, 1967). There is a wide variation in the use and definition of this term among professionals, although most agree upon one common characteristic; attitude entails a predisposition towards actions (Triandis, 1956).

There are a number of traditional definitions of attitude that may be cited as illustrative of common usage of the term. The
present investigation will follow the general guideline of Shaw and Wright (1967) who maintain that an investigation of attitudes should limit itself to the evaluative aspects of attitudes (e.g. scores on an attitude instrument).

Shaw and Wright (1967) ascribe to predisposition toward action but recognize this action only as a response to social aspects of the environment. This is generally considered to include interactions with persons, and person-produced objects, events, and situations.

Extracting as many commonalities from the traditional theorists and attempting to relate their definition as closely as possible to the operation, Shaw and Wright (1967) define attitude as: "A relatively enduring system of evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects."

The concept of attitude advocated by Shaw and Wright (1967) accepts several of the characteristics described by the traditional theorists. That is, (1) attitudes are learned, (2) they are not temporary states, but are more or less enduring once they are formed, (3) they are formed or learned in relation to identifiable referents, (4) they vary in direction and intensity and (5) they possess varying degrees of definitiveness (Sherif and Sherif, 1967; Kiab, 1967).

To study attitudes requires that they be measured. Many different techniques have been used for the measurement of attitudes. The most widely used are exemplified by the Thurstone, Likert and
Guttman Scales. While the adequacy of some is difficult to assess, they have at least two common characteristics. They are as follows:

1. They represent an individual's response towards an object by requiring him to indicate his agreement or disagreement with a set of statements about the attitude object.

2. In almost every situation the individual is fully aware that his attitudes on the issue in question is being measured (Kiab, 1967).

Throughout the literature there is a vast amount of research related to the modification of attitudes and attitude measurement (Sherif et. al., 1965). While attitude research occupies a central position in social psychology, there appears to be a paucity of empirical research studies dealing with the attitudes of educators subjected to occupational stress as they perform their job functions.

THE SCIENTIFIC APPROACHES TO THE STUDY OF STRESS

Studies of stress are couched in the medical and psychological sciences. Stress as a research interest is an elusive concept and is extremely difficult to define. No single agreed upon definition exists in the literature, and this accounts for much of the problem in studying stress (Cox, 1978). Stress is derived from the Latin word stringere, to draw tight (Pearson and Joseph, 1963). An example would be the stretching of a rubber band. The second meaning assumes a more apathetic definition. Using the same example cited above, repeatedly stretching a rubber band would
result in the rubber band losing its original shape. In this sense of the word, stress is viewed in a more general sense of hardship as a reaction to a stimulus.

Three approaches represent the main thrust to the problem of a definition of stress. The first approach describes stress in terms of the stimulus characteristics of environments which are recognized as disturbing or disruptive in some way. In this model external stresses give rise to a stress reaction within the individual. In other words stress is that which happens to a person, not what happens in him; it is a set of causes and is usually treated as an independent variable (Symonds, 1947; Ruff and Korchin, 1964; Levine, 1867; Frankenhauser, 1975; Lazarus, 1976).

The second approach views a concept of stress as a uniform arousal response involving the Central Nervous System and the Autonomic Nervous System. This theory implies that measures taken of any physiological index will reflect the physiological state of arousal of the subject, and that the magnitude of the response is a good indication of the intensity of the stressor (Lacey, 1966). Many of the experimental studies utilizing this approach have involved the physiological reactions of rats to shock treatments.

The third approach to the study of stress adheres to a response-based definition. This theory treats stress as a dependent variable; it views stress as a particular response or pattern of responses to a stressor agent which is taken as evidence that the person is under pressure from a disturbing environment (Kagen
and Levi, 1971; Levi, 1974). Researchers suggest that most life changes evoke a physiological stress response which prepares the person for the physical activity of coping. They hypothesize that physical disease is mediated by one's psychological and genetic makeup and by experiences in life.

In medicine, Selye (1956) equated stress with the response-based theory of stress. He saw a variety of events or "stressors" as all producing a single specific pattern of bodily reaction. During the reaction stage, there is an internal lowering of bodily resistance during which a variety of infectious diseases may develop, that under normal circumstances would be successfully resisted. An activation of bodily defense mechanisms then occurs increasing heart rate, blood pressure, muscle tone, and digestive secretion. If this defensive bodily state is prolonged, it can initiate what Selye termed "diseases of adaptation."

Selye suggested that all individuals have the same basic defense reaction to stress. He also believed that the defense reaction to stress progresses through three identifiable stages which represent his General Adaptation Syndrome. During the first stage, the alarm reaction, the body shows the changes characteristic of initial exposure to the stressor agent, and at the same time its level of resistance is lowered. The second stage, that of resistance, follows if continued exposure to the stress agent is compatible with adaptation. At this stage, the individual adapts to the situation by "fight" or "flight." The bodily changes characteristic of the
alarm reaction disappear and are replaced by the changes marking the individual's adaptation to the situation. Resistance rises above normal. The final stage is that of exhaustion. Long term exposure to the same stressor agent may deplete one's energy for adaptation, and collapse occurs.

OCCUPATIONAL STRESS
AND ITS RELATIONSHIP TO PHYSICAL ILLNESS

A great deal of research has been conducted over recent years in the field of occupational stress and its relationship to physical illness. A number of degenerative diseases are believed to be triggered by stress. Coronary thrombosis, rheumatoid arthritis, peripheral vascular disease, essential hypertension, and cancer represent a few of the stress-related organic disturbances (Cooper and Marshall, 1976; Pelletier, 1977). 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 these diseases.

Although these studies have discovered many possibly pathogenic effects of stressful life events, they have raised questions, as yet unanswered, about the process whereby these effects are produced. A number of critics have argued that further progress toward answering these questions depends on solving numerous methodological problems that are common in research on stressful life events (Brown,
OCCUPATIONAL STRESS
AND ITS RELATIONSHIP TO MENTAL ILL HEALTH

Research has also been conducted in the field of occupational stress and its relationship to mental ill health. Kornhauser (1965) found, for example, that poor mental health was directly related to unpleasant work conditions, the necessity to work fast and to expend a lot of physical effort, and to excessive and inconvenient hours. Work overload was found to be significantly related to a number of indicators of stress: escapist drinking, absenteeism from work, low motivation to work, lowered self-esteem, and an absence of suggestions to employers (Porter and Lawler, 1965; Quinn, Seashore and Mangione, 1971; and Margolis, Kroes and Quinn, 1974). Several researchers have reported stress indicators related to role ambiguity: low job satisfaction, high job-related tension, greater futility, lower self-confidence, depressed mood, and intention to leave job (Kahn et. al., 1964; French and Caplan, 1970; and Margolis et. al., 1974).

OCCUPATIONAL STRESS IN EDUCATION

The relationship between job stress and performance may be viewed as a curvilinear progression (Ivancevich and Matteson, 1979). Most people think of stress as something to be avoided. Yet too
little stress can be very harmful. As stress increases, so does performance, up to an optimal point. This point may vary between individuals because of different personality patterns, levels of physical condition, or capacities to cope with ambiguity or risk. With a further increase in stress, individual performance begins to dissipate.

There are fewer empirical studies on the nature of occupational stress in education than there are in other areas. Dunham (1976) concluded from a study of six hundred fifty-eight teachers in England that more teachers are experiencing stress, and that severe stress is being experienced by more teachers.

Identifying the sources of occupational stressful events is extremely difficult to ascertain among individuals. Stress affects each educator differently. What is stressful for one person may not be stressful for another. Although few studies of the reliability and validity of work related events have been published, available evidence suggests weaknesses in both these respects (Rahe, 1972; Sarason, et al., 1975; Rabkin and Struening, 1976). Yet, the accumulation of stressful work related events has been shown to be positively correlated to self-reported tension and diseases of adaptation such as depression and alcoholism (Paykel, et al., 1969; Vinokur and Selzer, 1975).

The majority of research concerned with life event stress has made use of the Social Readjustment Rating Scale (SRRS) developed by Holmes and Rahe (1967). Their method employed the use of weighted
items which represent common life events that require change in social adjustment. These life events are rated by subjects as to their relative degree of necessary adjustment. For example, death of a spouse is weighted at one hundred (the highest point on the scale), marriage at fifty, change in recreation at nineteen. These researchers have shown that if an individual accumulates a number of such changes in a relatively short period of time, the physiological system is affected and illness is more likely to occur. Numerous other studies have similarly shown associations between number and intensity of life events and the probability of specific illnesses in the near future (Rahe, 1972; Homes and Masuda, 1974). However, the vast majority of life events and work-related events studies including those in education, have relied on statistical methods of the most rudimentary nature. Between group differences have often been reported only in percentages. Given the very large sample sizes characteristic of most life events research, even very small correlations of no practical use have passed tests of statistical significance (Rabkin and Struening, 1976).

Cichon and Koff (1980) recently surveyed 4,934 teachers in Chicago using the procedure employed by Holmes and Rahe. Using thirty-six items thought to be associated with teaching, they asked subjects to rank each event as to whether it was indicative of more or less stress than the first week of school. The conclusion drawn from the results of the analysis was that there were no significant differences between the subgroups compared. Two explanations may
account for these findings: large sample size and their use of stress as an independent variable.

Another issue in life events research that has not been investigated is the possibility of interaction between work-related events and other factors, such as availability of social support systems to serve as protective buffers for the affected individual (Caplan, 1974). For example, what impact does job satisfaction have on stress? It may be that when the work-related event score and the social support score are considered jointly, significant findings will emerge. This combination is yet to be reported in the literature, and thus clearly documents the need for more analytical approaches (Rabkin and Struening, 1976). These investigators recommend that future researchers concern themselves with better sample selection, seek appropriate and relevant items in their checklists, try to refine criteria, and use multivariate statistical methods in their data analyses. Spielberger and Sarason (1978) suggest that the next step in the progressive development of this field entails examination of the circumstances under which such effects occur and do not occur.

To date only two studies in education appear in the literature relative to some of the issues discussed earlier. Kyriacou and Sutcliffe (1978) investigated the prevalence, sources and symptoms of stress among two hundred fifty-seven school teachers in England. They reported that there appeared to be little association between self-reported stress and sex, qualification, age, length of teaching experience, or position held in school. These researchers reported
that they were unable to perform two-way analyses of variance due to too few teachers for adequate comparison.

Following a similar procedure employed by Holmes and Rahe, Cichon and Koff (1980) developed an instrument to provide a quantitative basis for studying stress associated with teaching. Analyzing the responses to the Teaching Events Stress Inventory of 4875 certified teachers in Chicago, they found few significant differences existed among the subgroups of teachers (elementary vs. secondary; male vs. female; new vs. experienced; white vs. minority) compared in the study. However, they did obtain some evidence that indicated that stressful work related events tend to cluster around major themes (e.g. management tension, pedagogical functions). They also reported that intercorrelations across items for the total sample were all positive, and ranged between .015 and .690. The work related events served as independent variables. Their conclusions drawn from the results of the discriminant analysis were that there were no significant differences between the type of school or grade level taught and that teachers share common perceptions of stress associated with teaching.

These and other findings lend themselves to further study. For example, would these same results be reported using some variation of instruments, employing different procedures and methodologies, or applying different data analysis?

Rather than allow competent teachers to leave the profession, or even worse allow good teachers to become nonfunctional or
incapacitated within the profession, it seems appropriate to establish the necessary provisions for helping educators adapt to those stressful agents or events which appear to frequent the profession. The first step in such an approach is to identify the sources of those stressful events which have the potential for impairing performance, using an instrument which is sensitive enough to differentiate sources of stress among different groups of teachers.

SUMMARY

The concept of stress in its present sense has evolved in the last forty years, and is still in the process of development and refinement. In this study stress in the teaching profession was described in terms of the nature of attitudes as a predisposition toward action, as a response to social aspects of action, and as a response to social aspects of the environment. Few empirical research studies were found dealing with the attitudes of educators subjected to occupational stress.

The difficulties associated with studying stress were revealed in a description of the various scientific approaches employed in the study of stress. These included the problems of definition, poor reliability and validity of instruments, and the use of various methodologies.

The impact of stress on physical and mental health was described. Degenerative diseases and poor mental health were found to be associated with stress.
Studies on the nature of occupational stress revealed that stress in education is on the rise, and that severe stress is being experienced by more teachers. There is the need for additional studies which will help educators to better understand and cope with the phenomenon of stress.
CHAPTER 3

PROCEDURES USED IN THE STUDY

The purpose of this study was to determine if differences in the extent of educator stress were a function of the interaction between grade level taught, years experience, and level of job satisfaction. The research format developed for this study was a $2 \times 2 \times 2$ factorial design. The methodology is presented under the following headings: (1) subjects, (2) procedures, (3) hypotheses, (4) research design, and (5) statistical application.

SUBJECTS

The subjects consisted of one hundred thirty-six students enrolled in graduate classes in the Graduate Division of Education at Louisiana State University and extension classes off-campus during the spring semester of 1981. This category consisted of more than three hundred students. Each subject was assigned to one of eight groups on the basis of the manner in which each responded to a series of questions. One hundred thirty-six subjects were then randomly selected from each of the eight groups to participate in the study. Each group included seventeen members.
PROCEDURES

A forty-six item instrument was developed which utilized a self-report measure of stress to collect data for this study. The instrument was formulated after extensive review of the literature to determine which work related events should be used to obtain educator attitudes toward stress. An instrument used by Cichon and Koff (1980) in a study to assess stress among more than four thousand teachers in Chicago, and one used by Kyriacou and Sutcliffe (1978) in a study of teachers in sixteen schools in England, as well as information from a literature review, served as the basis of the development of the instrument for this study.

The Sources of Stress (SOS) Inventory was administered during a two-week period in the spring semester of 1981. More than twenty professors in the College of Education agreed to participate and administer the SOS Inventory to their graduate classes. Packets containing (1) a combination information and identification form, and (2) copies of the SOS Inventory were prepared and given to each professor for administration to each of his/her class(es).

The SOS Inventory consisted of forty-six items. The items of the instrument required only one response. The items were designed to obtain a global score which could be used in the analysis of variance statistical technique. Following general Likert procedures, subjects were asked to respond to each item based on a five-point scale ranging from 5 (extremely stressful) to 1 (not
stressful at all). Individuals were asked to respond to each item based on his/her own actual experiences or how he/she would perceive the event if he/she experienced it in the future.

Administrators and faculty of Louisiana State University were asked to review the proposed instrument and suggest alternatives or additions. As a result some items were deleted and some were added. Other items were reworded for clarity. The instrument used in the study was validated in several classes other than those under study. Undergraduate classes in the College of Education and teachers and administrators taking graduate extension courses provided valuable feedback. Respondents were asked to correct any procedural difficulties that existed in administering and scoring the instrument. Consequently, several changes were made which clarified the instructions, and made reading and scoring the instrument easier, thereby decreasing the possibility of scoring errors.

**HYPOTHESES**

For the purpose of statistical analysis, the following hypotheses tested the main effects of grade level (A), years of experience (B), and job satisfaction (C).

H01: There is no significant difference between groups of teachers in extent of stress by grade level.

H02: There is no significant difference between groups of teachers in extent of stress by years of experience.
Ho3: There is no significant difference between groups of teachers in extent of stress by job satisfaction.

The following four hypotheses determined second and third order interaction:

Ho4: There is no significant interaction between grade level and years of experience.

Ho5: There is no significant interaction between grade level and job satisfaction.

Ho6: There is no significant interaction between years of experience and job satisfaction.

Ho7: There is no significant interaction among grade level, years of experience and job satisfaction.

Each hypothesis was tested for significance at the .05 level of confidence.

RESEARCH DESIGN

A 2 x 2 x 2 factorial design was used in this study. The independent variables were grade level of employment, years of experience in education, and job satisfaction as a career choice. There were two levels of each variable. The dependent variable was the global score on the SOS Inventory, with a possible range of forty-six to two hundred thirty.
STATISTICAL APPLICATION

The responses to the items on the instruments were compiled into global stress scores by the investigator. The responses for each group were summarized and the results were presented in Table 1. Means and standard deviations were computed for each group of educators, and the results of the computations were reported in Table 2. The data were subjected to the analysis of variance procedure. The results were reported in Table 3. The methods for combining the means of the various groups to test the main effects of grade level, years experience, and job satisfaction were presented in Tables 4, 5, and 6. The conclusions and recommendations contained in the final chapter of this study were made based upon that information.
CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to determine if there was a difference in the total variability among educator stress scores attributed to certain educator variables. Material presented in this chapter was organized into four sections based upon one hundred thirty-six respondents' attitude toward stress and three teacher variables. These variables provided the basis of presentation of the findings and the sections of this chapter were presentation of data, analysis of data, main effects, and interaction effects. Seventeen respondents' instruments were not used in the study and were discarded prior to analysis for various reasons: departures from instructions, teachers on sabbatical, graduate students without teaching experience and instructors in vocational schools. Global stress scores which were used for analysis were presented in tabular form. The data in all tables were analyzed.

PRESENTATION OF DATA

The data were generated from responses to the Sources of Stress Inventory. From the three hundred thirty-two subjects who volunteered to complete the SOS Inventory, one hundred thirty-six were randomly selected for participation. Respondents were asked to
rate each of the forty-six items on the SOS Inventory from 5 (extremely stressful) to 1 (not stressful at all). The scoring which was completed by the investigator involved adding all the common responses in each column and multiplying the number of column responses by the column value. The sum of these values resulted in a global stress score for each respondent, and allowed the investigator to analyze the data. The possible range of scores for each participant was from forty-six to two hundred thirty, and the actual range was from fifty-six to two hundred five.

ANALYSIS OF DATA

Data presented in Table 1 represented the global stress scores for groups of educators assigned on the basis of selected variables. Data reported in Column 1 represented elementary educators with seven years or less experience who were satisfied with their careers in education. The data showed that the global stress scores ranged between seventy-four and one hundred ninety-seven.

Data reported in Column 2 showed stress scores for elementary educators with more than seven years experience who were satisfied with an educational career. Stress scores for this group ranged between fifty-six and one hundred eighty-three.

The data revealed in Column 3 characterized secondary educators with seven years or less experience who were satisfied with their jobs in education. This group's stress scores ranged between sixty-nine and one hundred seventy-eight.
Table 1

Stress Scores for Groups of Educators Assigned on the Basis of Selected Variables

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Elementary Educators</th>
<th>Secondary Educators</th>
<th>Elementary Educators</th>
<th>Secondary Educators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seven Years or Less Experience</td>
<td>More than Seven Years Experience</td>
<td>Satisfied</td>
<td>Satisfied</td>
</tr>
<tr>
<td>S(1)</td>
<td>149</td>
<td>139</td>
<td>139</td>
<td>140</td>
</tr>
<tr>
<td>S(2)</td>
<td>129</td>
<td>174</td>
<td>69</td>
<td>85</td>
</tr>
<tr>
<td>S(3)</td>
<td>130</td>
<td>56</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>S(4)</td>
<td>162</td>
<td>152</td>
<td>82</td>
<td>132</td>
</tr>
<tr>
<td>S(5)</td>
<td>161</td>
<td>183</td>
<td>87</td>
<td>140</td>
</tr>
<tr>
<td>S(6)</td>
<td>197</td>
<td>120</td>
<td>151</td>
<td>123</td>
</tr>
<tr>
<td>S(7)</td>
<td>146</td>
<td>128</td>
<td>178</td>
<td>164</td>
</tr>
<tr>
<td>S(8)</td>
<td>145</td>
<td>101</td>
<td>96</td>
<td>150</td>
</tr>
<tr>
<td>S(9)</td>
<td>142</td>
<td>116</td>
<td>116</td>
<td>152</td>
</tr>
<tr>
<td>S(10)</td>
<td>87</td>
<td>156</td>
<td>121</td>
<td>167</td>
</tr>
<tr>
<td>S(11)</td>
<td>126</td>
<td>149</td>
<td>168</td>
<td>127</td>
</tr>
<tr>
<td>S(12)</td>
<td>140</td>
<td>144</td>
<td>93</td>
<td>128</td>
</tr>
<tr>
<td>S(13)</td>
<td>82</td>
<td>145</td>
<td>119</td>
<td>152</td>
</tr>
<tr>
<td>S(14)</td>
<td>139</td>
<td>139</td>
<td>136</td>
<td>147</td>
</tr>
<tr>
<td>S(15)</td>
<td>127</td>
<td>135</td>
<td>148</td>
<td>86</td>
</tr>
<tr>
<td>S(16)</td>
<td>126</td>
<td>138</td>
<td>178</td>
<td>141</td>
</tr>
<tr>
<td>S(17)</td>
<td>74</td>
<td>127</td>
<td>140</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>2242</td>
<td>2302</td>
<td>2091</td>
<td>2279</td>
</tr>
</tbody>
</table>
Column 4 included data of secondary educators with more than seven years experience who were also satisfied with their careers in education. Stress scores among this group of educators ranged between eighty-five and one hundred sixty-seven.

In Column 5 data were reported which indicated the stress scores of dissatisfied elementary educators with seven years or less experience. This group's stress scores ranged between eighty-six and two hundred five.

Data which indicated the stress scores of dissatisfied elementary educators with more than seven years experience were reported in Column 6. Stress scores for this group ranged between one hundred four and two hundred five.

In Column 7 data were revealed relative to dissatisfied secondary educators with seven years or less experience. This group's stress scores ranged between one hundred fourteen and one hundred seventy-eight.

In Column 8 data were reported which indicated the stress scores of dissatisfied secondary educators with more than seven years experience. This group's stress scores ranged between eighty and one hundred eighty-one.

Data presented in Table 2 showed mean scores and standard deviations for group performance on the SOS Inventory. The data in each cell of the design were computed from the scores of eight groups of seventeen members each.
Table 2
Means and Standard Deviations of Stress Scores for Groups of Educators Assigned on the Basis of Selected Variables

<table>
<thead>
<tr>
<th>Groups</th>
<th>( \bar{X} )</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Educators, Seven Years or Less Experience, Satisfied</td>
<td>131.88</td>
<td>30.57</td>
</tr>
<tr>
<td>Elementary Educators, More than Seven Years Experience, Satisfied</td>
<td>135.41</td>
<td>28.58</td>
</tr>
<tr>
<td>Secondary Educators, Seven Years or Less Experience, Satisfied</td>
<td>123</td>
<td>34.23</td>
</tr>
<tr>
<td>Secondary Educators, More than Seven Years Experience, Satisfied</td>
<td>134.06</td>
<td>24.21</td>
</tr>
<tr>
<td>Elementary Educators, Seven Years or Less Experience, Dissatisfied</td>
<td>151.35</td>
<td>27.83</td>
</tr>
<tr>
<td>Elementary Educators, More than Seven Years Experience, Dissatisfied</td>
<td>159.65</td>
<td>23.07</td>
</tr>
<tr>
<td>Secondary Educators, Seven Years or Less Experience, Dissatisfied</td>
<td>146.71</td>
<td>16.17</td>
</tr>
<tr>
<td>Secondary Educators, More than Seven Years Experience, Dissatisfied</td>
<td>145.41</td>
<td>28.34</td>
</tr>
</tbody>
</table>
A 2 x 2 x 2 factorial design was used and the data were analyzed by the analysis of variance method. Respondents' stress scores for each cell were analyzed to determine if any significant differences existed among the eight group scores. The independent variables were grade level, years of experience, and job satisfaction. The dependent variable was the group score on the SOS Inventory. This score was the indication of the degree of stress for the work related events. In other words, the higher the score the greater the degree of stress perceived by the educator. The Summary data resulting from these statistical computations were presented in Table 3. The level of significance chosen for testing the seven hypotheses was .05.

MAIN EFFECTS

The method for combining the means of the various groups to test the effect of grade level was shown in Table 4. The mean of the sum of the means of elementary educators was 144.57. The mean of the sum of the means of secondary educators was 137.30. The obtained F value for grade level with one degree of freedom was 2.45. Therefore, the stress scores of the elementary grade level group were not significantly different than the stress scores of the secondary grade level group. The null hypothesis was accepted, demonstrating that the group at the elementary grade level did not score differently than the group at the secondary level.
Table 3

Stress Scores in Terms of Analysis of Variance
Of Grade Level, Years Experience, and Job Satisfaction
A 2 x 2 x 2 Factorial Design
Summary Table

<table>
<thead>
<tr>
<th>SOV</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>1</td>
<td>1,801.7</td>
<td>1,801.7</td>
<td>2.45</td>
<td>n.s.</td>
</tr>
<tr>
<td>Years Experience</td>
<td>1</td>
<td>990.4</td>
<td>990.4</td>
<td>1.35</td>
<td>n.s.</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>1</td>
<td>13,183.2</td>
<td>13,183.2</td>
<td>17.94</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Grade Level x Years Experience</td>
<td>1</td>
<td>8.9</td>
<td>8.9</td>
<td>.01</td>
<td>n.s.</td>
</tr>
<tr>
<td>Grade Level x Job Satisfaction</td>
<td>1</td>
<td>158.9</td>
<td>158.9</td>
<td>.22</td>
<td>n.s.</td>
</tr>
<tr>
<td>Years Experience x Job Satisfaction</td>
<td>1</td>
<td>122.4</td>
<td>122.4</td>
<td>.17</td>
<td>n.s.</td>
</tr>
<tr>
<td>Grade Level x Years Experience x Job Satisfaction</td>
<td>1</td>
<td>622.7</td>
<td>622.7</td>
<td>.85</td>
<td>n.s.</td>
</tr>
<tr>
<td>Error</td>
<td>128</td>
<td>94,066.2</td>
<td>734.89219</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>110,954.4</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
Table 4

Method of Summing Means of Groups to Test the Main Effect of Grade Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>(131.88) + (135.41) + (151.35) + (159.65) = (123) + (134.06) + (146.71) + (145.41)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>144.57</td>
<td>137.30</td>
</tr>
</tbody>
</table>

The method for combining the means of the various groups to test the effect of years of experience was presented in Table 5. The mean of the sum of the means of educators with seven years or less experience was 138.24. The mean of the sum of the means of educators with more than seven years experience was 143.63. The obtained F value for years experience with one degree of freedom was 1.35. Therefore, the stress scores of the group with seven years or less experience were not significantly different than the scores of the group with more than seven years experience. The null hypothesis was accepted, demonstrating that the group of individuals who had seven years or less experience did not score differently than the group of individuals who had more than seven years of experience.

The method for combining the means of the various groups to test the effect of job satisfaction was reported in Table 6. The mean of the sum of the means of educators who indicated they were satisfied with education as a career was 131.09. The mean of the sum of the means of educators who said they were dissatisfied with education as a career was 150.78. The obtained F value for job satisfaction with one degree of freedom was 17.94. Therefore, the stress scores for the independent variable, job satisfaction, were significant at the .05 level. The null hypothesis was rejected, demonstrating that educators who reported themselves to be satisfied regardless of years of experience or grade level taught scored differently on the SOS Inventory than did educators who were dissatisfied.
Table 5

Method of Summing Means of Groups to Test the Main Effect of Years Experience

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Experience</td>
<td>(131.88) + (123) + (151.35) + (146.71) = (135.41) + (134.06) + (159.65) + (145.41)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>138.24 = 143.63</td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Method of Summing Means of Groups to Test the Main Effect of Job Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>$(131.88) + (135.41) + (123) + (134.06) = (151.35) + (159.65) + (146.71) + (145.41)$</td>
<td>$131.09 = 150.78$</td>
</tr>
</tbody>
</table>
INTERACTION EFFECTS

The second order interaction of Grade Level x Years Experience was not significant. Therefore, the null hypothesis relating to those interactions was accepted. The stress score differences in this study were not due to systematic effects of grade level and years experience.

The second order interaction of Grade Level x Job Satisfaction was not significant. Therefore, the null hypothesis relating to those interactions was accepted. The stress score differences in this study were not due to systematic effects of grade level and job satisfaction.

The second order interaction of Years Experience x Job Satisfaction was not significant. Therefore, the null hypothesis relating to those interactions was accepted. The stress score differences in this study were not due to systematic effects of years of experience and job satisfaction.

The third order interaction (Grade Level x Years Experience x Job Satisfaction) was not significant. Therefore, the null hypothesis relating to those interactions was accepted. The stress score differences in this study were not due to systematic effects of years of experience and job satisfaction.

The third order interaction (Grade Level x Years Experience x Job Satisfaction) was not significant. Therefore, the null hypothesis relating to those interactions was accepted. The stress score
differences in this study were not due to systematic effects of the independent variables of grade level, years of experience, and level of job satisfaction.
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

This study attempted to determine if differences in the extent of educator stress as measured by the Sources of Stress Inventory was a function of the interaction between grade level taught, years experience, and level of job satisfaction. Graduate students enrolled at Louisiana State University composed the sample for the study. Data analysis was intended to reveal if any differences in stress scores were by systematic effects of grade level, years of experience, and level of job satisfaction. The summary, conclusions and recommendations of the study are included in this chapter.

There is a paucity of research concerning the stress generated by specific work related events among educators. Most of the studies reviewed in the literature revealed problems of definition and the use of various methodologies. To be more specific, no study was reported that investigated the effects of stress on the three independent variables grade level taught, years of experience, and level of job satisfaction using a robust design. The present investigation was designed to provide information concerning degrees of stress among these three variables.
In this study, the interaction effects of Grade Level x Years Experience x Job Satisfaction, Years Experience x Job Satisfaction, Grade Level x Job Satisfaction, and Grade Level x Years Experience were insignificant. The results showed that, in the present investigation, the combined effect of the independent variables was less than the effect of the separate variables. Neither the three variable combinations, nor any two variable combination had any significant effect.

In this study, the only significant finding was the difference in stress scores of the satisfied and dissatisfied educators. This study merely pointed out that educators who were satisfied with their careers in education reported work-related events differently than did educators who were dissatisfied with education as a career. The data supported the notion that there is a relationship between job satisfaction and job stress. However, it was not within the purview of this study to predict the direction, rather its purpose was to determine if there was any difference between job satisfaction and job stress. Within the limits of this study, the finding basically supported the study by Kyriacou and Sutcliffe (1978). These researchers reported that teachers who experience greater stress are also likely to experience lower job satisfaction, to be absent more frequently and to be more likely to leave teaching. It is reasonable to find a significant difference due to job satisfaction and dissatisfaction. From this, one can conclude whether or not an educator
is satisfied influences his ability to handle job stress, and that there may be a difference in the way a satisfied educator handles stress compared to how a dissatisfied educator handles stress. For example, the absentee rate for the two groups may be different.

CONCLUSIONS

The subjects for this study consisted of one hundred thirty-six students enrolled in the Graduate Division of Education at Louisiana State University. Subjects were selected from a pool of respondents who were administered the SOS Inventory during the spring semester of 1981. The sample consisted of eight groups with seventeen members each. The eight groups were as follows:

Group I - Satisfied educators with seven years or less experience, teaching at the elementary level.

Group II - Satisfied educators with more than seven years experience teaching at the elementary level.

Group III - Satisfied educators with seven years or less experience who were teaching at the secondary level.

Group IV - Satisfied educators with more than seven years of experience, who were teaching at the secondary level.

Group V - Dissatisfied educators with seven years or less experience, who were teaching at the elementary level.
Group VI - Dissatisfied educators with more than seven years experience, who were teaching at the elementary level.

Group VII - Dissatisfied educators with seven years or less experience, who were teaching at the secondary level.

Group VIII - Dissatisfied educators with more than seven years experience, who were teaching at the secondary level.

The total population was administered the forty-six item Likert-type scale depicting work related events that were common to practicing educators. From the scores accumulated, the dependent variable for the study, stress, was generated.

A 2 x 2 x 2 factorial design was used. The data were analyzed by the analysis of variance method. Statistical analysis tested the following hypotheses related to the main effects of Grade Level, Years Experience, and Job Satisfaction:

1. There is no significant difference between groups of teachers in extent of stress by grade level. This hypothesis was accepted.

2. There is no significant difference between groups of teachers in extent of stress by years of experience. This hypothesis was accepted.
3. There is no significant difference between groups of teachers in extent of stress by job satisfaction. This hypothesis was rejected.

The same statistical analysis tested the following hypotheses related to second and third order interactions:

4. There is no significant interaction between grade level and years experience. This hypothesis was accepted.

5. There is no significant interaction between grade level and job satisfaction. This hypothesis was accepted.

6. There is no significant interaction between years of experience and job satisfaction. This hypothesis was accepted.

7. There is no significant interaction among grade level, years of experience, and job satisfaction. This hypothesis was accepted.

The study showed that for the group of educators under study there was a significant relationship between job satisfaction and job stress. This may indicate that those individuals who were dissatisfied with their jobs scored higher on the SOS Inventory.

**RECOMMENDATIONS**

This study investigated the extent of stress as a function of grade level taught, years of experience, and level of job satisfaction of practicing educators. The following recommendations are a direct result of the present investigation:
1. A similar study should be conducted of those teachers who have left the teaching profession.

2. Teachers in training should be studied to ascertain their responses to the SOS Inventory.

3. Further study is needed to develop an instrument that has higher reliability and validity coefficients for future research.

4. Additional refinement of instruments employing work related events associated with teaching should be conducted.

5. Additional information is needed concerning the relationship between degrees of stress generated by work situations and teacher burnout.

6. The data obtained in this study demonstrated that job satisfaction made a significant difference in educators responses on the SOS Inventory. Further investigation should concentrate on identifying specific differences between these two groups of educators. One method for determining differences would be to conduct an item analysis of the responses of the two groups.

7. Neither years of experience nor grade level taught demonstrated any significant difference in stress scores. At least for the group under study these two variables need not be studied further. However, it is not possible to maintain that this insignificance would hold for a different educator population.
 SELECTED BIBLIOGRAPHY


Gallup, George H. "The Eleventh Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," Phi Delta Kappan, 61 (September, 1979), 36.


Rabkin, Judith G. and Struening, Elmer L. "Life Events, Stress, and Illness," Science, 194 (December 3, 1976), 1013-1020.


Sparks, Dennis. "A Biased Look at Teacher Job Satisfaction," The Clearinghouse, 52 (1979), 447-449.


TENTATIVE PROPOSAL REVIEW:

FROM: Committee on the Use of Humans and Animals as Research Subjects

TO:

RE: Proposal of received 8-10-47
Entitled Education Stress in Terms of Selected Variables

This is to certify that the Chairman of the Committee on the Use of Humans and Animals as Research Subjects has reviewed the above proposal. The Chairman evaluated the procedures of the proposal with appropriate guidelines established for activities supported by federal funds involving as subjects humans and/or animals.

Recommendation of Chairman

Comments:

A review of this proposal by the Committee will be accomplished at the next monthly meeting and you will be notified of the committee's recommendation.

Date 2-10-47

W. S. Bivin, Chairman

/jg
To: 

Date:

From: Jack St. Clair

RE: Study of Educator Stress

Your assistance is asked in allowing me to administer or have administered a survey to members of _______________________________ class taught at _______________________________. The information collected will assist me in my dissertation research; the administration time should not exceed 15-20 minutes.

I should like to administer the survey during the week of ______________. Please indicate your wishes by completing the information below, signing, and returning this form to me at H.P. Long Field House, by __________________. Please call me should you have any questions (388-6662). Thank you for your cooperation.

_________________________________________________________________

Jack St. Clair

_________________________________________________________________

Chairman, Dissertation Committee

_________________________________________________________________

/ / Yes, I will allow the survey to be given to my class during the suggested week above.

/ / No, I do not wish my class to participate.

_________________________________________________________________

Signature
March 16, 1981

To: 

From: Jack St. Clair

Thank you very much for offering your assistance in helping me to collect data for my dissertation. By granting permission for your classes to participate and by helping me to administer the instrument, you have contributed greatly toward the realization of a long sought after goal.

Again, thank you for your cooperation and assistance. Best wishes to you.
APPENDIX D
My name is Jack St. Clair. I am a doctoral student in educational administration. I am doing a dissertation on teacher stress. Your cooperation as a participant in this study will be greatly appreciated. Participants will be assigned to groups using the information asked for at the bottom of this page. The information will be used only to place subjects into groups. No student will be identifiable in the study. Student numbers are needed only to avoid the replication of data.

I, __________ , agree to participate in the educational research project described above. I understand that I may withdraw from the study at any time. I am aware that all information will be treated confidentially. Neither I nor any other participant will be individually identifiable in any way in the study. Date ________________________________

1. What grade level do you teach? (Circle Only One)
   A. Kindergarten through 8 (ages 5 through 14).
   B. Nine through 12 (ages 15 through 18).
   If neither A nor B accurately describes your situation, please describe your position briefly:

2. How many years of experience do you have in the field of education? Define "field of education" broadly. Include the total number of years teaching, supervising, counseling, or time spent in other occupations in education. (Circle Only One)
   A. One to three years.
   B. Four to seven years.
   C. Eight to ten years.
   D. More than ten years.

3. Job satisfaction is an important factor in one's personal and professional life. (Circle Only One)
   A. I am satisfied with my career in education. If I were starting over again, I would choose education as a career.
   B. I am dissatisfied with my career in education. If I were starting over again, I would choose some other profession.
INSTRUCTIONS

1. Read each item very carefully. Decide whether each item is:
   A. Extremely Stressful = 5
   B. Very Stressful = 4
   C. Moderately Stressful = 3
   D. Mildly Stressful = 2
   E. Not at all Stressful = 1

2. For each item circle the corresponding number in one of the five columns on the right. Base each decision on your actual experience. If you have not experienced the event, decide how you would perceive that event if it were to occur.

3. Make sure that you circle only one of the five numbers for each item. If you decide to change a response, please erase completely or mark an X over your mistake and circle the correct response.

4. When you have finished, go back and read each item again to make sure you have responded to all items. Do not leave any items blank.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Source</th>
<th>Extremely Stressful</th>
<th>Very Stressful</th>
<th>Moderately Stressful</th>
<th>Mildly Stressful</th>
<th>Not at all Stressful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The first week of school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Reorganization of classes or program.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Colleague assaulted at school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Being fired.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Attendance at in-service meetings.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Working with other teachers on special projects.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Notification of unsatisfactory performance.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>8.</td>
<td>Unclear communications from supervisor.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>Overcrowded classroom or caseload.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>Isolation and confinement to the classroom.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11.</td>
<td>Change in duties/work responsibilities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12.</td>
<td>Conference with principal/supervisor.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13.</td>
<td>Poorly motivated students.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>14.</td>
<td>Involuntarily transferred.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>15.</td>
<td>Too many non-teaching responsibilities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16.</td>
<td>Managing &quot;disruptive&quot; students.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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### SOURCES OF STRESS INVENTORY

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Source</th>
<th>Extremely Stressful</th>
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<th>Not at all Stressful</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>Lack of input in decision-making.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>18.</td>
<td>Implementing Board of Education Curriculum goals.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>19.</td>
<td>Developing and completing daily lesson plans.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>20.</td>
<td>Supervising student behavior outside the classroom.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>21.</td>
<td>Low status of the teaching profession.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>22.</td>
<td>Threatened with personal injury.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>23.</td>
<td>Noisy pupils.</td>
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<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>24.</td>
<td>Maintaining self-control when angry.</td>
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<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>25.</td>
<td>Demands on after school time.</td>
<td>5</td>
<td>4</td>
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<td>26.</td>
<td>Dealing with students whose primary language is not English.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>27.</td>
<td>Target of verbal abuse by student.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>28.</td>
<td>Repetitious, non-stimulating work.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>29.</td>
<td>Evaluating student performance.</td>
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<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>30.</td>
<td>Lack of books and supplies.</td>
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<td>4</td>
<td>3</td>
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<td>31.</td>
<td>Dealing with staff racial issues.</td>
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<td>4</td>
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<td>2</td>
<td>1</td>
</tr>
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<tr>
<td>32.</td>
<td>Skills not being properly utilized by the school system.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>33.</td>
<td>Teaching &quot;below average&quot; or handicapped children.</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<td>1</td>
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<tr>
<td>34.</td>
<td>Poor facilities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>35.</td>
<td>Taking courses for promotion.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>36.</td>
<td>Lack of recognition for work.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>37.</td>
<td>Attitudes of the supervisor.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>38.</td>
<td>Teacher-parent conferences.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>39.</td>
<td>Seeking supervisor's intervention in a discipline matter.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>40.</td>
<td>Denial of promotion or advancement.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>41.</td>
<td>Dealing with student racial issues.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>42.</td>
<td>Unresolved disagreement with another teacher.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>43.</td>
<td>Low teacher salary.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>44.</td>
<td>Student &quot;drug&quot; abuse.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>45.</td>
<td>Behavior of the supervisor.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>46.</td>
<td>Maintaining students' records.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Adapted from Kyriacou & Sutcliffe, 1978; Koff & Cichon, 1980*
VITA

Jack L. St. Clair was born in Taylorsville, North Carolina on December 1, 1950, the son of Arlie and Rozella Burgess St. Clair.

After graduating from Taylorsville High School, Taylorsville, N.C., he attended Appalachian State University, Boone, N.C., where he received a Bachelor of Science degree in 1972 with a major in Health and Physical Education and a Master of Arts degree in 1973 with a major in Special Education. He attended Mississippi State University and received an Education Specialist degree in Administration and Supervision of Special Education in 1979.

His professional experiences include four years as an educator and supervisor in a state institution for the mentally retarded. He was appointed Director of Special Education at Western Carolina Center in Morganton, N.C. in 1975. In 1978, he became Assistant Programs Director at Rolling Hills Nursing Center in Starkville, Mississippi. Early in 1981, he was appointed Assistant Superintendent at Ruston State School, Ruston, Louisiana where he is presently employed.

He is married to Donna Dunn St. Clair.
EXAMINATION AND THESIS REPORT

Candidate: Jack St. Clair

Major Field: Education

Title of Thesis: Educator Stress In Terms of Selected Variables

Approved:

[Signatures: Major Professor and Chairman, Dean of the Graduate School]

EXAMINING COMMITTEE:

[Signatures: Committee Members]

Date of Examination:

April 21, 1981