To the Graduate Council:

I am submitting herewith a dissertation written by Harold Wayne Jernigan, Jr. entitled "The Relationship Between the Frequency of Occurrence of Potentially Stressful Events and Their Overall Ranking by School Psychologists, with Exercise as a Moderating Variable." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

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THE RELATIONSHIP BETWEEN THE FREQUENCY OF OCCURRENCE OF POTENTIALLY STRESSFUL EVENTS AND THEIR OVERALL RANKING BY SCHOOL PSYCHOLOGISTS, WITH EXERCISE AS A MODERATING VARIABLE

A Dissertation
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Harold Wayne Jernigan, Jr.

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Dedicated to my parents, Melba Cox Jernigan
and Harold Wayne Jernigan.

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ABSTRACT

The concept of stress and its relationship to events relevant to the profession of school psychology was investigated. The purpose of this descriptive study was to investigate the relationship between the relative frequency of stressful events related to school psychology and their overall ranking as to degree of stressfulness, with exercise considered as a moderating variable.

The survey research method was utilized. Surveys were mailed to a sample of 281 school psychologists, primarily within the state of Tennessee. The instrument included a modified version of Wise's (1985) School Psychologists and Stress Inventory which allowed each of 35 potentially stressful events to be rated, using a Likert-type scale, both as to the degree of stress associated with the event, and as to its reported frequency of occurrence as experienced by the psychologist. The survey also included an assessment of exercise habits utilizing a seven-day recall procedure developed by Blair (1984). Demographic data were collected and reported on eleven separate variables.

An overall response rate of 84.6% was obtained from the survey. Rankings, means and standard deviations of the stressful events were reported in each of three separate

categories: potential amount of stress reported, frequency of occurrence of the events, and amount of stress actually experienced. Spearman rank-order and Pearson product-moment correlations were used in the data analysis.

It was hypothesized that stressful events occurring more frequently would result in higher item rankings of stressfulness than events occurring less frequently. This prediction was not supported. It was also hypothesized that subjects with higher mean frequency scores would have higher perceived stressfulness ratings. This prediction was supported by the study. Finally, a third hypothesis, that involvement in a regular exercise program would result in lower overall perceived stressfulness ratings, was supported for those subjects who were at least moderately active. The school psychologists indicated that they considered their positions as moderately stressful.

These outcomes are discussed, and suggestions are included for future research.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

The concept of stress and its relationship to psychological and physical well-being has received increasing attention in the research literature during the last few decades. A vast body of research has developed, with many studies directed at those involved in the helping professions such as policemen, medical personnel, and educators (including school psychologists).

School psychologists make up a significant subgroup within these professions. Fagan (1986) states that there are now approximately 20,000 school psychologists in the United States. It has been reported that 79 percent are employed by school systems and 7 percent by colleges and universities. The remaining 14 percent are self-employed, or are employed by various institutions such as state governments, mental health centers, hospitals and private corporations (Ramage, 1979).

Possible stressors associated with the practice of school psychology have been the focus of several discussions within the professional literature (Anderson, Brown, & Hohenshil, 1984; Reiner & Hartshorne, 1982; Solly & Hohenshil, 1986; Trachtman, 1981; Vensel, 1981; Wise,

1985; Wright & Thomas, 1982). Major stressors for school psychologists have been proposed to include excessive caseloads, inadequate time fully to meet job expectations, and a lack of support and appreciation for their efforts (Reiner & Hartshorne, 1982). These stressors are seen to influence overall levels of job satisfaction, performance, and the ultimate decision of some school psychologists to leave the field entirely.

Research studies concerning stress have developed primarily from three major conceptualizations: stimulus oriented theories, response oriented theories, and transactional theories. Stimulus oriented theories view stress as residing primarily within the environment and focus on its impact with the organism. Response oriented theories focus on the response of the individual to events originating within the environment. Transactional theories focus on the mediating effect of the individual in the interaction between the environmental stimulus and the resulting effect (Derogatis, 1982). These theories share some common conceptions and appear to differ most in the areas on which they place primary emphasis.

Each of these theories has stimulated research within the stress arena. As examples, stimulus oriented theories have prompted studies investigating the inherent stress potential of various environments. The many

measures developed to study the effects of common life-events serve as examples. Response oriented theories have prompted investigations of how certain moderating variables might help to account for the variations in individuals' responses to similar stressful environments. Transactional theories have stimulated investigations concerning the effect that differing cognitive appraisals of stress have on their ultimate outcomes.

Statement of Problem

The existing body of research literature also contains several studies of the degree of stress related to various professions or occupations. Although issues related to the degree of stress associated with the practice of school psychology have been discussed within the literature, no study has investigated the perceived stressfulness of the profession as it is actually experienced by practitioners on a day-to-day basis. Stemming from this theoretical and empirical base, the primary emphasis of this study involved an investigation of how stress impacts the profession of school psychology. Rankings of potentially stressful events as actually perceived and experienced, and by the frequency of their occurrence, by a sample of school psychologists were

developed. Since exercise has been proposed as a moderating life-style variable capable of mediating many of the negative effects of stress, a secondary emphasis was to explore its impact on the perception of stress of this population related to these events.

This study contains elements stemming from each of the three major conceptualizations of stress. The ranking of stressful events related to school psychology provided data concerning the inherent stress potential of that environment, and is thus conceptually linked to the stimulus oriented theories. The collection of data related to an individual life-style moderating variable (exercise) provided information linked to the response oriented theories. Finally, the ability of individual school psychologists cognitively to appraise the personal degree of stressfulness of individual events is linked to the transactional theories.

The Research Question

It is the purpose of this study to investigate the relationship between the relative frequency of stressful events related to school psychology and their overall ranking as to degree of stressfulness, with exercise considered as a moderating variable.

Hypotheses

1. Stressful events occurring more frequently will result in higher item rankings of stressfulness than events occurring less frequently.
2. A positive relationship will exist between subjects' mean frequency scores and mean perceived stressfulness ratings.
3. Involvement in a regular exercise program will result in lower overall perceived stressfulness ratings.

Definition of Terms

Since some of the terms and constructs used in this study could be interpreted and defined in different ways, the following definitions apply:

School Psychologist. Although many subgroups of psychologists may be involved from time to time in the educational process, for the purposes of this study a school psychologist is one whose primary place of practice is within a private or public school setting, and who is directly involved in the delivery of psychological services.

Stress. Following Holmes and Rahe's (1967) disruption-based definition of stress, stress is the

response to the disruptive effect a given event has upon an individual's life.

Stressor. A stressor is the specific event that elicits the change or disruption in an individual's life.

Potential Amount of Stress. This term identifies a variable used in this study to express the degree of perceived stressfulness of selected events relevant to the profession of school psychology. This estimation was made regardless of whether the event had actually occurred in the experience of the subject.

Frequency of Occurrence. The term frequency of occurrence identifies a variable used in this study to express the frequency with which selected potentially stressful events normally occur in the experience of the sample. This estimation was made utilizing a scale ranging from never to more than once per day.

Experienced Stress. This term identifies a variable used in this study to express the degree of stressfulness of selected potentially stressful events when their actual frequency of occurrence is considered. It was determined by multiplying each event's potential amount of stress rating by its degree of frequency score.

Moderating Variable. A moderating variable is a variable that may interact with life stress and serve to buffer the negative impact of stress on the individual.

The list of proposed moderating variables includes personality characteristics, social support, constitutional predispositions, health practices, and coping techniques (Korbasa, Maddi, & Puccetti, 1982).

Exercise. Exercise functions in this study as a health practices moderating variable. According to Blair's (1985) definition, exercise is the total energy expenditure of an individual as the result of physical activity.

Limitations

1. The possible inadequacies of self report instruments as a method of measuring stress and exercise behavior.
2. The representativeness of the selected sample to the overall population.
3. The reliability/validity of the measurement instruments.
4. The limitations inherent with mail survey procedures such as subject veracity and response rate.

CHAPTER II

REVIEW OF LITERATURE

School Psychology and Stress

Although there is an immense body of research concerning stress available in the psychological literature, a review of each of the major journals specifically related to school psychology (the Journal of School Psychology, Psychology in the Schools, and School Psychology Review) indicates surprisingly few studies published in this area. Beginning the review in 1975, the author found no studies on stress or related topics until 1981. Since that time, the pace of publication has increased, although fewer than 25 articles related to the concept of stress have been published. Clearly, school psychology lags behind psychology as a whole in the production of research in this area.

Job-Related Stress

There is a growing body of literature investigating the effects of professional, or job-related, stress on the overall functioning of the employee. Job stress has been referred to as a common malady in modern society, and an

unwanted result of our industrial age (Calhoun & Calhoun, 1983). The specific stressors related to the profession of school psychology, and their overall effects on both individual psychologists and the profession as a whole, have been discussed by several investigators. Because of the frustrations inherent in working within a service profession, Trachtman (1981) felt that it may be necessary for school psychologists to be dissatisfied with their jobs. He proposed that consistent success within a large organization, with many competing factions, may be unrealistic. Trachtman advocated, in fact, that school psychologists consider adopting a model of performance similar to that used in the sport of baseball where a batting average of .300 is considered excellent. Kilpatrick, Shook, and Swanson (cited in Vensel, 1981) reported that the pressures unique to the profession led almost one-half of their survey respondents to state that they planned to leave the field within five years.

The reasons for, and intensity of, these frustrations have been explored by several writers. The issues of underutilization of psychologists' skills, lack of appropriate supervision, disparities between school psychologists' and educators' perceptions of appropriate role and function, lack of opportunities for professional advancement, isolation from peers, and the demeaning

effects of the limited assessment role have all been discussed within the literature as impacting on the overall level of job satisfaction of school psychologists (Solly & Hohenshil, 1986; Wright & Thomas, 1982). Reiner and Hartshorne (1982) noted major stressors for school psychologists included excessive caseloads, inadequate time fully to meet job expectations, and a lack of support and appreciation for their efforts.

A more positive set of studies concluded that school psychologists are neither more satisfied, nor more dissatisfied, than the overall work force (Anderson, Brown, & Hohenshil, 1984; Solly & Hohenshil, 1986). Those working within rural areas, where isolation from peers is greater, existing educational programs are likely to be less adequate, and opportunities for professional advancement may be even more limited than in suburban or urban systems, expressed higher levels of job dissatisfaction than did a national sample of school psychologists (Solly & Hohenshil, 1986). Caseload size also appears to be related to job satisfaction with school psychologists. As the psychologist-to-student ratio increases, job satisfaction decreases (Anderson, Brown, & Hohenshil, 1984).

Conceptualizations of Stress

The fundamental definition of the stress concept remains somewhat ambiguous at this time, with varying meanings attributed to the term. Stress research has developed from many points of view: anthropological (Cannon), biological (Selye), cultural (Zborowski), ethological (Tinbergen), and psychological (Lazarus) (Cameron & Meichenbaum, 1982). Each of these perspectives can be grouped into one of three major conceptualizations: stimulus oriented theories, response oriented theories, and transactional theories.

Stimulus Oriented Theories

Stimulus oriented theories view stress as a product of environmentally induced stimuli. Those properties of the environment that are new, intense, or disorganizing to the individual impose stress (Derogatis, 1982). Each individual is seen as having an innate capacity to adapt and respond to these environmental stressors. When this capacity is overtaxed, the individual's ability to function deteriorates. This deleterious reaction is seen as the inevitable result of prolonged exposure to stressful conditions originating from sources external to the individual. Stimulus oriented theories emphasize exploring

individual environments to determine their stress eliciting potential. Historically, this perspective is among the earliest conceptualizations of stress.

Response Oriented Theories

Response oriented theories emphasize the response of the individual to stressful stimuli. Selye, associated with this conceptualization, defines stress as a state of imbalance between environmental demands and the response capabilities of the individual to cope with these demands (Selye, 1976). This response is seen as nonspecific to any demand made on the body, be it physical or emotional in nature, or perceived as pleasant or unpleasant to the individual. Any demand is seen as producing an identical physiological reaction, varying only by the degree of response called for by the intensity of the stimulus.

This process described above has been termed the General Adaptation Syndrome by Selye (1980b) and is made up of three stages. During the Alarm Reaction stage the body adjusts to the sudden exposure to stimuli for which it has not adapted by preliminary symptoms such as decreased temperature and blood pressure, followed by an initiation of defensive measures resulting in the enlargement of the adrenal cortex and increased secretion of corticoid hormones such as the adrenocorticotrophic hormone (ACTH).

The heart rate increases and galvanic skin response changes. Adrenaline is secreted to make energy available to the body. The Stage of Resistance is marked by adaptation to the stress producing agent and improvement or disappearance of symptoms, although there is a resulting decrease in the body's resistance to other diseases. The Stage of Exhaustion follows when the event is sufficiently severe and of prolonged duration. During this stage the original symptoms reappear, and if the stress continues, the final result is death.

Transactional Theories

The third conceptualization, the transactional theories, emphasizes the mediating effect of the individual between the stimulus characteristics of the environment and the response they invoke (Derogatis, 1982). Richard S. Lazarus and his associates have been major contributors to the development of this model (Lazarus, 1966; Coyne & Lazarus, 1980; Lazarus and Folkman, 1984). Lazarus finds inherent limitations in viewing stress either as simply a product of environmental stimuli, or as the response to these stimuli. Transactional theories emphasize individual cognitive appraisals and coping responses. They help to account for the vast range of responses in individuals to identical stressful experiences. Thus an experience is

stressful only if the individual perceives it as such.

According to the transactional theories, a stressful transaction involves an appraisal that a situation requires an effective response to avoid or reduce physical or psychological harm, and the awareness that no effective response is available. The response that the individual makes results in environmental repercussions, and the external situation is then altered. This prompts reappraisal of the situation and potential coping responses, with this reappraisal then affecting the ongoing response to the situation (Cameron & Meichenbaum, 1982). In this way, transactional theories emphasize the ongoing relationship of individuals with their overall environment, and in turn, the ongoing impact of individuals on their environment. These theories are strongly linked to cognitive-behavioral conceptions of behavior.

Measurements of Stress

Life Events Self-report Instruments

One method that has been used to measure the effects of stress on individuals has been to explore the impact of common life events on physical and psychological status through the use of self-report instruments. These instruments stem originally from the stimulus oriented

theories, but have characteristics in common with each of the three main conceptualizations. Holmes and Rahe (1967) asked subjects to estimate the degree of disruption a specific life event had on their lives in the development of the researchers' Schedule of Recent Events instrument. Examples of some of these events include marriage, death of a parent or spouse, and changing employment status. Numerous research studies have demonstrated correlations between life events and both physical and psychological illness (Dekker & Webb, 1974; Dohrenwend & Dohrenwend, 1974; Sarason, Sarason, Potter & Antoni, 1985; Tausig, 1982). There have been many other similar self-report instruments developed. Among these are the Life Experiences Survey (Sarason, Johnson, & Siegel 1978), also for use with with adults, and the Life Events Scale for Children (Coddington, 1972) and the Source of Stress Inventory (Chandler, 1981), developed for use with children.

The last few years have shown a decline in some of the early enthusiasm for the life events method of assessing stress. Critics have questioned the lack of a sufficient causal link between life events and later disorder (Rabkin, 1980). Although the relationship between stressful life events and subsequent health problems has repeatedly been found to be statistically reliable, the

size of the relationship has been modest, with correlations usually less than .30. This indicates that the incidence of stressful life events frequently accounts for less than 10% of the variance in the measures of the subsequent health problems (Roth & Holmes, 1985).

Population-Specific Instruments

Some criticisms of life events methods of assessing stress have centered on the limited psychometric generalizablility of life events scales, and the content validity of many scales for the populations on which they were used (Perkins, 1982). One method of increasing both the generalizability and the content validity of the instruments is through the development of individual population-specific instruments (Hurst, 1979; Selye, 1980a). Population-specific instruments allow the investigator to examine facets of stress associated solely with the individual population of interest. The closer one can get to measuring the specific population, the more valuable the test.

Population-specific stress assessment instruments have been developed for several professions; some examples are teachers (Johnson, Gold, & Vickers, 1982; Fimian, 1987), school administrators (Koff, Laffey, Olson, & Cichon, 1980), and nurses (Calhoun & Calhoun, 1983). One

such instrument was constructed by Wise (1985) for the profession of school psychology. She developed a self-report instrument to identify, and rank as to the degree of severity, a list of potentially stressful events relevant to the population of school-based psychologists. Thirty-five events were included in the final School Psychologists and Stress Inventory. The content validity of the instrument was addressed through the selection of the items, by the author and her colleagues, from an initial list of 175 events recommended as stressful by a state-wide survey of school psychologists. Additional psychometric data were not reported. The events were ranked in terms of the degree of severity, common factors among them were analyzed, and the relationships between relevant demographic variables and the rankings were investigated.

Effect of Moderating Variables

Other criticisms of life events methods of assessing stress have focused on the reliable, but modest, relationship between stressful life events and subsequent health problems. To help account for the limited strength of this relationship, some investigators have looked at variables that may interact with life stress and serve to buffer the negative impact of stress on the individual

(Johnson & Sarason, 1978; Kobasa, 1979; Rabkin & Struening, 1976). The list of proposed mediators includes personality characteristics, social support, constitutional predispositions, health practices, and coping techniques (Korbasa, Maddi, & Puccetti, 1982). Of these, the health practices variables are potentially the most modifiable, and therefore have attracted research interest.

Physical Exercise. Physical exercise has been proposed by many investigators to function as a health practice variable capable of buffering the negative effects of experiencing stressful events (Brown & Lawton, 1986; Keller, 1980; Korbasa, Maddi, & Puccetti, 1982; Roth & Holmes, 1985; Sinyor, Schwartz, Peronnet, Brisson, & Seraganian, 1983). Roth and Holmes (1985) note that although there has been speculation that psychosocial stress may precipitate illness by altering health related behaviors such as physical exercise, this hypothesis was not supported by their study involving a female adolescent population. Exercise has also been proposed as an especially effective method of countering the effects of depression following the experience of life stress (Markoff, Ryan, & Young, 1982; Ransford, 1982; Roth & Holmes, 1985). Overall, these studies conclude that involvement in a regular exercise program results in less

evident emotional and physiological debilitating effects from stressful life events.

There is not universal acceptance of this position, however. Some have questioned the degree of current enthusiasm concerning the benefits of physical exercise, in relation to the stress response, based on the existing body of literature. Blair, Jacobs, and Powell (1985) note that although exercise has been widely promoted as an antidote for stress, their review of the literature found limited data in support of this position. They call for additional research studies to investigate the association between physical activity and stress. Taylor, Sallis, and Needle (1985) add that although exercise may alter some aspects of the stress response, additional studies are needed to determine the effectiveness of exercise in reducing the perception of stress and stress responses.

Impact on School Psychology

Little is known concerning how these issues impact on school psychologists. Wise's (1985) study concerning stressful events related to the profession of school psychology is not without some rather serious limitations, if it is to be used to interpret the actual experiences of school psychologists. While the overall composition of the

events included in her assessment instrument appears valid, many events might be seen as occurring with a high degree of frequency, such as "not enough time to perform job adequately," and others might be seen as occurring fairly infrequently, such as "public speaking engagements (e.g., PTA)." No attempt was made to investigate the relationship between the relative frequency of the events and their subsequent rankings as to degree of stressfulness. There is increasing evidence to support the hypothesis that it is the minor but everyday stressors, rather than the infrequent major stressors, that have the greatest negative impact on both somatic and mental health status (Breznitz & Goldberger, 1982; Kanner, Coyne, Schaeffer, & Lazarus, 1981).

An additional criticism of the Wise study relates to her method of rating the perceived stressfulness of events. Subjects were asked to estimate the perceived stressfulness of events even if they had not experienced them. Since the instrument did not allow an estimation of the frequency of occurrence of the events, from daily to never, the final ranking of stressful events obtained in the study may not accurately reflect the actual experiences of practicing school psychologists. In addition, neither Wise nor any other investigator has analysed the degree to which moderator life-style variables such as exercise influence

the perception of stressfulness of common events in the profession of school psychology. Previous research findings from other populations suggest that the higher the degree of involvement in a regular exercise program, the lower the perception of stressfulness of the events is likely to be.

Conclusion

It is evident, then, that several important research issues related to the impact of stressful events associated with the profession of school psychology remain unresolved. The effect of frequency of occurrence of the stressful events needs to be investigated. It is unclear at this time whether it is the infrequently occurring events, or the common everyday frustrations, which lead school psychologists to suffer the effects of job-related stress, and cause some to desire to leave the profession. The nature of the relationship between potentially stressful events, such as those studied by Wise (1985), and stressful events actually experienced by the psychologist is also unclear. In addition, the effect a moderator variable such as physical exercise has on the perception of stressfulness of common events unique to the profession of school psychology remains unknown.

CHAPTER III

METHOD

Design

The aim of the study was to describe the relationship between several variables related to the ranking of potentially stressful events by school psychologists. Since the study did not involve any manipulated treatments, a descriptive correlational design was employed.

Subjects

Members of the Tennessee Association of School Psychologists (N = 281) served as subjects. Although the vast majority of this association reside, and are employed in Tennessee, the sample also included members within the states of Georgia, Kansas, New York, North Carolina, South Carolina, Texas, Virginia, and West Virginia. The majority of these psychologists are based within public school systems, and primarily provide direct services within the schools. They represent a varied mixture of rural, suburban, and urban districts. As is the case with the

profession of school psychology as a whole, the largest percentage of the members have a sub-doctoral level of training.

As there were no known risks to the subjects, this study was exempted from formal review for research involving human subjects. A Form A was submitted for review and approval by both the Department of Educational and Counseling Psychology and the University of Tennessee Office of Research Compliance (see Appendix A).

Instruments

Subjects were administered the 1988 School Psychologists and Stress Survey instrument (see Appendix B). The survey was divided into three sub-sections. The first section, the Sources of Stress Inventory, was composed of a modified version of Wise's (1985) School Psychologists and Stress Inventory. The modification allowed each of the 35 potentially stressful events to be rated both as to the degree of stress associated with the event, and as to its reported frequency of occurrence as experienced by the psychologist. Both ratings were by a likert-type scale procedure. The degree of stress section was rated on a scale of from 1 to 9, with the higher the rating, the greater the degree of stress associated with

the event. The frequency of occurrence section was rated on a scale of from 0 to 5, from never to more than once per day, with the higher the rating, the more frequently occurring the event. One question on the inventory was presented in an open-ended format to allow the respondent to include, and rate, any relevant item or event which they felt was not present in the current instrument.

The second section of the 1988 School Psychologists and Stress Survey was an Assessment of Exercise Habits. This was composed of two questions assessing the subjects' level of general exercise participation utilizing a seven-day physical activity recall procedure modified from a previously validated procedure (Blair, 1984). Subjects were asked to record how much total time, to the nearest .5 hour, they spent during the previous seven days engaged in: (1) VIGOROUS physical activity (jogging or running, swimming, strenuous sports such as singles tennis or racquetball, digging in the garden, chopping wood, brisk walking, etc.), and (2) MODERATE physical activity (sports such as golf or doubles tennis, yard work, heavy housecleaning, bicycling on level ground, leisurely walking, etc.). A final kilocalories per kilogram of body weight expended per day figure was calculated from the hour totals. This method was previously indirectly validated using results from a community health survey, a teacher

health promotion study, and a randomized clinical trial. A short-term repeatability of r = 0.67 was reported (Laporte, Montoye, & Caspersen, 1985). This type of short-term recall survey procedure has been increasingly used in epidemiologic investigations of physical activity. It is currently seen as the most practical means of measuring physical activity in large populations (Laporte, Montoye, & Caspersen, 1985).

The third section of the survey, Demographic Information, was composed of twelve questions concerning demographics and one final open-ended question. Demographic information on twelve separate variables was collected: present employment status, sex, age, marital status, work setting, type of community, number of school districts in which psychologist works, number of students served, socioeconomic status of the majority of the population served, number of years in present job, annual salary, and length of contract. The open-ended question asked for any possible comments the subject might wish to make concerning the stress involved in their position, or methods they used to deal with it.

Procedure

The survey research method was used. Procedures suggested by Dillman (1978) to increase response rates were employed. The sample received by mail a brief, individually addressed and signed cover letter explaining the purposes of the study, its social usefulness, informed consent information, and instructions concerning how to receive a summary of the results if desired (see Appendix C). The mailing also included a copy of the 1988 School Psychologists and Stress Survey, and a postage-paid envelope for return of the instrument. The cover letter and survey were mailed under the letterhead of the Department of Educational and Counseling Psychology. The seven page survey instrument was printed using an Apple LaserWriter Plus printer, reduced to 79% of its original size, and reproduced front-to-back in a booklet format on 20# ivory paper by offset printing methods. The reduction of the instrument to its final 6 1/8 by 8 1/2 inch size allowed the entire package to be mailed within the minimum first-class postage requirements, and had the additional potential benefit of reducing the apparent social cost to the respondent for completing and returning the survey (Dillman, 1978).

An individually signed follow-up postcard was sent to the entire sample after one week, either thanking them for their participation in the research project, or urging them to complete and return the instrument at that time (see Appendix D). A final follow-up letter was sent to all nonrespondents after three weeks (see Appendix E). This letter again stressed the importance of both the study and of the return of each survey instrument. An additional copy of the survey was included in the mailing at this time in the event that the original instrument had been misplaced or destroyed. Data collection was completed after five weeks. The study's final N was reduced somewhat by eliminating surveys completed by those not working as psychologists within school settings.

Data Analysis

The demographic characteristics of the subjects were presented, by frequency of response by category and percentage of the total, in a table format. Rankings, means, and standard deviations of the 35 stressful events were determined in each of three separate categories: amount of stress reported, the frequency of occurrence of the stressful events, and by the amount of stress actually experienced. The ranking of the amount of stress actually

experienced was determined by multiplying each event's amount of stress rating by its degree of frequency score.

The general exercise participation figure (total kilocalories per kilogram of body weight expended per day) was determined by a formula (see Appendix F) developed by Blair and his associates (1984) and was used for correlational analyses. Hypothesis number one was evaluated by comparing the rankings utilizing Spearman's rank order correlations with tests of significance at the .05 alpha level. Hypotheses two and three were evaluated by correlational analysis utilizing Pearson Product-Moment correlation coefficients with tests of significance at the .05 level.

CHAPTER IV

RESULTS

Descriptive Analysis

Survey Response Rate

A total of 281 surveys were mailed out to the sample. Of this total, one was "returned to sender" by the postal service because of an inaccurate current address, and 237 were completed and returned. The completed and returned surveys accounted for an 84.6% overall response rate. Of the 237 returned surveys, 178 (75.1%) were completed by individuals who were currently working within the schools as psychologists, and therefore met the definition of a school psychologist employed in this study. The remaining 59 included university trainers, supervisors of psychological services on both a state and local level, Career-Ladder evaluators, psychologists in private practice with limited school-based practice, students, retired school psychologists and those who had left the profession to pursue another career. Of the 44 nonreturned surveys it can be assumed that the same approximate percentage (75.1%), or 33, would also have met criteria for inclusion within the population of interest. Therefore it is

estimated that 84.4% of the overall target sample of school psychologists were included within the survey respondents.

Demographics

Statistical Analysis System (SAS) computer programs were used for statistical analysis of the data. The overall demographic characteristics of the sample are presented within Table 1. Of the responding school psychologists, 76.4% (n = 136) were female, 57.3% (n = 102) were between 31 and 40 years of age, and 72.9% (n = 129) were married. The largest percentage, 76.4% (n = 136), worked within a combination of elementary and secondary schools equally divided, 34.5% (n = 61), between urban and rural communities. The respondents indicated that 84.6% (n = 153) worked within one school district, and the largest percentage of the psychologists, 30.5% (n = 51), report caseloads of 3000 or more. The socioeconomic status of the population served by the psychologists was somewhat equally divided across classifications, although the largest percentage, 29.7% (n = 52), was reported to be lower middle class. Twenty-seven percent (n = 47) reported serving two to three years in their present positions. The samples' average annual incomes were rather equally divided between the surveys' upper-two classifications: 42.5% (n = 74) reported incomes of between $20,000-$25,000 per year, and

TABLE 1

CHARACTERISTICS OF THE SAMPLE

Characteristic	Categories	Frequency	Percentage
Sex	Male	42	23.6
	Female	136	76.4
Age	30 and under	19	10.7
	31-40	102	57.3
	41-50	40	22.5
	51-60	14	7.9
	61 or older	3	1.7
Marital status	Single	26	14.7
	Married	129	72.9
	Divorced	21	11.9
	Widowed	1	0.6
Work setting	Elementary Schools Only	21	11.8
	Secondary Schools Only	1	0.6
	Combination of Ele. and Sec. Schools	136	76.4
	Other	20	11.2
Type of community	Urban	61	34.5
	Rural	61	34.5
	Suburban	17	9.6
	Combination	38	21.5
Number of districts in which you work	1	153	86.4
	2	8	4.5
	3	8	4.5
	4	3	1.7
	5 or more	5	2.8
Approximate no. of students you serve (the number of students in your district divided by the number of psychologists)	Fewer than 1000	22	13.2
	1,500	25	15.0
	2,000	35	21.0
	2,500	34	20.4
	3,000 or more	51	30.5
Socioeconomic status of the majority of the population you serve	Low income/poverty	32	18.3
	Lower middle class	52	29.7
	Middle class	39	22.3
	Upper middle/upper	4	2.3
	Combination	48	27.4
Number of years in your present job	0-1	22	12.6
	2-3	47	27.0
	4-5	40	23.0
	6-10	40	23.0
	11 or more	25	14.4
Annual Salary	Under $15,000	13	7.5
	$15,000-$20,000	17	9.8
	$20,000-$25,000	74	42.5
	Over $25,000	70	40.2
Length of contract	Nine months	15	8.8
	Ten months	90	52.9
	Eleven months	38	22.4
	Twelve months	19	11.2
	Other	8	4.7

40.2% (n = 70) reported salaries of over $25,000. The majority, 52.9% (n = 90), were employed on ten month contracts. This sample is admittedly regional in character, being composed primarily of psychologists from one southern state. Despite this fact, several of the demographic characteristics (such as sex, age, number of students served, and length of contract) appear consistent with those provided in the National Association of School Psychologists (NASP) membership directory (NASP, 1987).

Inventory Reliability

The internal consistency of the Sources of Stress Inventory was determined by Cronbach's Alpha. Reliability coefficients for each of the three principal variables were as follows: Potential Amount of Stress (r = .9310), Frequency of Occurrence (r = .8574), and Experienced Stress (r = .8799).

Rankings of the Events

Rankings, means, and standard deviations of the ratings of the stressful events are presented in Tables 2 through 4. The rankings are presented in each of three separate categories: potential amount of stress reported; the frequency of occurrence of the stressful events; and

TABLE 2

Ranks, Means, And Standard Deviations Of Ratings Of Potential Amount Of Stress For Total Subjects (N=178)

	Rank	Mean	Standard Deviation
Not enough time to perform job adequately	1	6.91	1.92
Potential suicide cases	2	6.81	2.24
Feeling caught between child's needs and administrative constraints (i.e., trying to "fit" a child into an existing program)	3	6.76	1.77
Pressure to complete a set number of cases (e.g., you must test at least 100 children a year)	4	6.70	2.27
Notification of unsatisfactory job performance	5	6.68	2.99
A backlog of more than 5 reports to be written	6	6.67	2.07
A backlog of more than 10 referrals	7	6.66	2.03
Child abuse cases	8	6.56	1.91
Threat of a due process hearing	9	6.42	2.44
Lack of appropriate services for children	10	6.38	1.88
Conferences or staffings with resistant parents	11	6.28	1.80
Working with uncooperative principals and other administrators	12	6.19	2.08
Incompetent and/or inflexible "superiors"	13	6.06	2.60
Report writing	14	6.04	2.03
Keeping your district "legal" (i.e., in compliance with federal, state, and local regulations)	15	5.95	2.16
Conferences or staffings with resistant teachers	16	5.79	2.00
Working in physically dangerous situations (e.g., gang-ruled high schools)	17	5.74	2.81
Telling parents their child is handicapped	18	5.42	1.84
Conducting in-service workshops	19	5.36	2.00
Teacher dissatisfaction with your recommendations	20	5.34	1.85
Public speaking engagements (e.g., PTA)	21	5.31	2.31
Insufficient recognition for your work	22	5.05	2.18
Inadequate secretarial help	23	4.98	2.50
Lack of contact with professional colleagues	24	4.90	2.48
Lack of consensus in a staffing	25	4.88	2.23
A change in the schools or districts which you serve	26	4.71	2.38
Conducting parent groups	27	4.50	2.11
Screening bilingual children	28	4.44	2.40
Lack of availability of appropriate assessment materials	29	4.39	2.25
Carrying testing equipment around in unfavorable weather conditions	30	4.33	2.35
Being told that you "have it easy" by classroom teachers	31	4.19	2.49
Supervising an intern or school psychology graduate student	32	3.83	2.03
Keeping up with current professional literature	33	3.62	1.86
Spending time driving between schools	34	3.10	2.02
Impending teachers' strike in your district	35	2.95	2.65

TABLE 3

Ranks, Means, And Standard Deviations Of Ratings Of Frequency Of Occurrence Of Stressful Events For Total Subjects (N=178)

	Rank	Mean	Standard Deviation
Report writing	1	3.63	0.83
Spending time driving between schools	2	3.49	1.40
Not enough time to perform job adequately	3	3.46	1.19
Carrying testing equipment around in unfavorable weather conditions	4	2.81	1.26
Keeping your district "legal" (i.e., in compliance with federal, state, and local regulations)	5	2.73	1.50
A backlog of more than 10 referrals	6	2.62	1.55
A backlog of more than 5 reports to be written	7	2.58	1.25
Feeling caught between child's needs and administrative constraints (i.e., trying to "fit" a child into an existing program)	8	2.49	1.03
Telling parents their child is handicapped	9	2.48	0.76
Lack of appropriate services for children	10	2.37	1.28
Pressure to complete a set number of cases (e.g., you must test at least 100 children a year)	11	2.36	1.68
Keeping up with current professional literature	12	2.21	0.71
Conferences or staffings with resistant teachers	13	2.18	0.92
Working with uncooperative principals and other administrators	14	1.87	1.01
Lack of consensus in a staffing	15	1.86	0.78
Inadequate secretarial help	16	1.82	1.58
Teacher dissatisfaction with your recommendations	17	1.68	0.75
Insufficient recognition for your work	18	1.67	1.33
Conferences or staffings with resistant parents	19	1.66	0.66
Lack of contact with professional colleagues	20	1.62	1.55
Child abuse cases	21	1.61	0.85
Incompetent and/or inflexible "superiors"	22	1.56	1.57
Lack of availability of appropriate assessment materials	23	1.38	1.11
Conducting in-service workshops	24	1.15	0.49
Potential suicide cases	25	1.10	0.75
Public speaking engagements (e.g., PTA)	26	0.99	0.71
Being told that you "have it easy" by classroom teachers	27	0.96	1.01
Supervising an intern or school psychology graduate student	28	0.95	1.20
Conducting parent groups	29	0.89	0.84
A change in the schools or districts which you serve	30	0.73	0.66
Threat of a due process hearing	31	0.58	0.65
Working in physically dangerous situations (e.g., gang-ruled high schools)	32	0.49	1.00
Screening bilingual children	33	0.44	0.61
Notification of unsatisfactory job performance	34	0.24	0.52
Impending teachers' strike in your district	35	0.08	0.27

TABLE 4

Ranks, Means, And Standard Deviations Of Ratings Of Experienced Stress (Amount of Stress x Frequency Of Occurrence) For Total Subjects (N=178)

	Rank	Mean	Standard Deviation
Not enough time to perform job adequately	1	25.25	12.22
Report writing	2	22.39	10.04
A backlog of more than 10 referrals	3	18.31	13.10
A backlog of more than 5 reports to be written	4	17.93	10.97
Keeping your district "legal" (i.e., in compliance with federal, state, and local regulations)	5	17.69	12.18
Feeling caught between child's needs and administrative constraints (i.e., trying to "fit" a child into an existing program)	6	17.59	9.51
Pressure to complete a set number of cases (e.g., you must test at least 100 children a year)	7	17.35	14.35
Lack of appropriate services for children	8	16.15	11.36
Telling parents their child is handicapped	9	13.53	6.33
Conferences or staffings with resistant teachers	10	12.95	7.11
Carrying testing equipment around in unfavorable weather conditions	11	12.93	10.61
Working with uncooperative principals and other administrators	12	12.20	8.18
Incompetent and/or inflexible "superiors"	13	11.15	13.06
Spending time driving between schools	14	11.14	8.96
Inadequate secretarial help	15	10.89	11.75
Conferences or staffings with resistant parents	16	10.66	5.44
Child abuse cases	17	10.55	6.30
Lack of contact with professional colleagues	18	9.87	11.90
Insufficient recognition for your work	19	9.42	9.86
Teacher dissatisfaction with your recommendations	20	9.34	6.19
Lack of consensus in a staffing	21	9.29	5.91
Keeping up with current professional literature	22	8.37	6.03
Potential suicide cases	23	7.63	5.65
Lack of availability of appropriate assessment materials	24	7.47	8.28
Conducting in-service workshops	25	6.10	3.49
Public speaking engagements (e.g., PTA)	26	5.22	3.94
Being told that you "have it easy" by classroom teachers	27	4.97	7.49
Supervising an intern or school psychology graduate student	28	4.04	6.22
Conducting parent groups	29	3.95	3.88
A change in the schools or districts which you serve	30	3.75	4.27
Threat of a due process hearing	31	3.74	4.68
Working in physically dangerous situations (e.g., gang-ruled high schools)	32	2.64	5.82
Screening bilingual children	33	2.01	3.43
Notification of unsatisfactory job performance	34	1.60	3.95
Impending teachers' strike in your district	35	0.26	1.10

the amount of stress actually experienced (potential amount of stress x frequency of occurrence).

The ranking of the events by the school psychologists according to their potential amount of stress (Table 2) indicates that the most stressful event was "not enough time to perform job adequately" (M = 6.91) and the least stressful event was "impending teachers strike in your district" (M = 2.95). Fourteen of the events demonstrated means of greater than 6.00. The ranking of the events according to their frequency of occurrence (Table 3) indicates that the most frequently occurring event was "report writing" (M = 3.63) and the least frequently occurring event was "impending teachers strike in your district" (M = 0.08). The ranking of the events according to the amount of experienced stress associated with the event (Table 4) placed "not enough time to perform job adequately" (M = 25.25) first and "impending teachers strike in your district" (M = 0.26) last.

While the first and last place item rankings in the amount of stress and experienced stress categories were consistent, other events varied widely. For example, while "potential suicide cases" ranked second in the amount of stress category, it ranked twenty-third in the experienced stress category, and while "notification of unsatisfactory job performance" ranked fifth in the amount of stress

category, it ranked thirty-fourth in the experienced stress category. Using a change in rank positions of ten or more positions as a criterion, nine of the events differed in their rankings to this degree between the two categories. These differences would indicate that the relative stress associated with the events by the sample varies according to their actual occurrence in the experience of day-to-day practice. This finding supports the proposition that a ranking of the events without consideration of their frequency of occurrence provides, at best, a distorted representation of their actual relationship.

Overall Level of Job Stress

Item 36 of the Sources of Stress section of the survey asked the respondents "Using the same scale (1-9), how stressful is your job overall?". The mean for this item was 5.99 (SD = 1.56). This result would tend to indicate that the respondents considered their jobs as moderately stressful. When the respondents' ratings for this item were compared with their mean score for the experienced stress item ratings on the survey a moderately high correlation ($r = .53458$, $p < .0001$) was obtained indicating adequate concurrent validity between the two assessment methods.

Additional Stressful Events

The last item of the Sources of Stress section of the survey was an open-ended question asking for additional items or events which the respondents felt should be included in a survey of stressful events for school psychologists. It was also requested that the events be assigned a numerical value, both for stressfulness (1-9) and frequency of occurrence (0-5) consistent with the ratings given the other survey items. A total of 59 events were suggested and are included within Appendix G.

Several of these events were specific to this state such as "Career-Ladder evaluations" and "changes in State Department of Special Education evaluation and diagnostic criteria". Others, such as "inadequate working conditions/office space" and "frequent changes in daily schedule due to parent, teacher, principal schedule changes" have been mentioned frequently elsewhere in the literature and are more general in their application. Eleven of the events were mentioned two or more times indicating solid support for their possible inclusion in a future, revised survey.

Assessment of Physical Activity/Exercise Habits

As mentioned previously, a secondary emphasis of this study was to explore the possible moderating effect of

exercise on the perception of stress associated with the above events. The sample was asked to estimate the total time spent in both vigorous and moderate activity during the last seven days prior to completion of the survey. A calculation of estimated levels of energy expenditure was made based on these reported times. This process resulted in a range of kilocalorie per kilogram of body weight (KCKG) expended per day figures of 32.00 to 50.79 with a mean of 34.78 (SD = 3.02). This level of energy expenditure would place the sample at the upper end of a "very inactive" range according to the classification system developed by Blair (1984). This system of classification is reported to be relatively constant for adult men and women across age ranges.

Test of Hypotheses

The hypotheses were tested by correlational analyses. Hypothesis one was evaluated by comparing the rankings, utilizing Spearman's rank order correlations with tests of significance at the .05 alpha level. Hypotheses two and three were evaluated utilizing Pearson Product-Moment correlation coefficients, also with tests of significance at the .05 level.

Hypothesis One

The first hypothesis predicted that stressful events occurring more frequently would result in higher item rankings of stressfulness than events occurring less frequently. The hypothesis was tested by relating the events' frequency of occurrence rankings with their amount of stress rankings. This hypothesis was not supported; the resulting correlation was statistically non-significant ($r = .25350$, $p < .1417$).

Hypothesis Two

The second hypothesis predicted a positive relationship between mean frequency scores and mean perceived stressfulness ratings. The hypothesis was tested by relating the subjects' mean frequency of occurrence scores with their mean amount of stress scores. A low, although statistically significant, relationship was found between the scores ($r = .17589$, $p < .0189$). Thus, hypothesis two was supported.

Hypothesis Three

The third hypothesis predicted that involvement in a regular exercise program would result in lower overall perceived stressfulness ratings. The hypothesis was tested by relating the subjects' mean kilocalorie per kilogram of

body weight (KCKG) expended per day figures with their mean amount of stress scores. An inverse relationship between the two variables was expected. When this comparison was made for the total sample, the relationship was in the expected direction, although a statistically non-significant correlation was obtained ($r = -.10683$, $p < .1570$).

As previously stated, however, the overall mean KCKG figure for the sample fell at the upper end of a "very inactive" range of energy expenditure; therefore, additional comparisons were made with more extreme subgroups of the sample. When those subjects with mean KCKG scores falling above one-half standard deviation below the mean ($N = 111$) were considered, a significant relationship was found to exist ($r = -.19625$, $p < .0390$). The strength of the relationship increased when subjects with mean KCKG scores falling above the mean ($N = 66$) were included ($r = -.26139$, $p < .0340$). Finally, when those subjects with mean KCKG scores falling more than one standard deviation above the mean ($N = 20$) were considered, the strength of the relationship increased further, although it only approached the .05 significance level established ($r = -.44272$, $p < .0506$).

This pattern of lower amount of stress mean scores as physical activity increased was also indicated when the

sample was examined according to Blair's (1984) physical activity classification system. Those subjects (N = 118) falling within a "very inactive" range of physical activity (KCKG 32.00 < 35.00) obtained an amount of stress mean of 5.49 (SD = 1.18). Those subjects (N = 51) falling within an "inactive" range of physical activity (KCKG 35.00 < 40) obtained an amount of stress mean of 5.37 (SD = .97). And, finally, those subjects (N = 8) falling within the system's highest classification, a "relatively active" range of physical activity (KCKG > 40), obtained an amount of stress mean of 4.62 (SD = 1.83).

Thus, these results do appear to demonstrate that a significant relationship existed between physical activity/exercise habits and the perception of the stressfulness of the events for those subjects who were at least moderately active. Further, the trend of these results indicated that the strength of this relationship increased in correspondence with increased overall levels of physical activity. In other words, correspondingly smaller amount of stress mean scores and larger correlations between physical activity and the perception of the stressfulness of the events were found as the sample was restricted to the more and more physically active.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Introduction

In the statement of the problem which formed the support for this research, it was noted that although the existing body of research literature contains several studies concerning the degree of stress related to various professions, no study had investigated the perceived stressfulness of school psychology as it is actually experienced by practitioners on a day-to-day basis. The primary emphasis of this study was to develop rankings of potentially stressful events as actually perceived and experienced, and considering the frequency of their occurrence, by a sample of school psychologists. In addition, since exercise has been proposed as a moderating life-style variable capable of mediating many of the negative effects of stress, a secondary emphasis was to explore its impact on the perception of stress of this population related to these events.

Relationships Between the Events

The development of separate rankings of the stressful events (potential amount of stress, frequency of occurrence, and experienced stress) provides three individual perspectives for viewing job-related stress associated with the profession of school psychology. Several of the events which ranked among the highest in the potential amount of stress category, such as "not enough time to perform job adequately" and "pressure to complete a set number of cases (e.g., you must test at least 100 children a year)" were among those areas mentioned in previous discussions of job-related stress and school psychology (Reiner & Hartshorne). These factors are among those performance-related expectations over which many school psychologists have little, if any, control.

By taking into consideration the frequency of occurrence of the events, this study attempts to address an apparent weakness found in Wise's (1985) investigation concerning the topic. Since the Wise instrument did not allow an estimation of the frequency of occurrence of the events (or that they may never have occurred) the final ranking of the events obtained in the study may not accurately reflect the actual experiences of practicing

school psychologists. Those events which potentially could occur, but seldom, if ever, do in the experience of the sample, may well receive unrealistic rankings if the frequency of their occurrence is not considered.

The present results indicate that this possibility may indeed have occurred in the Wise study. Although each of the rankings are interrelated, important distinctions between them remain. It was noted in reporting the results of the current study that when the potential amount of stress and experienced stress rankings are compared, nine of the events, or approximately 25% of the total, differed in their rankings by a criterion of ten or more rank positions. It is suggested that these differences are of consequence, and that the most valid method of viewing the actual relationship of stressful incidents related to school psychology is through examining the experienced stress ranking. It is this ranking which appears most representative of how the sample actually experienced the events on a day-to-day basis.

When comparing the mean frequency of occurrence scores obtained in the present study it is noted that only seven of the events had scores of 2.5 or greater (the mid-point of the likert rating scale). These events tended to reflect the traditional assessment orientation

and itinerant nature of many school psychology positions. At the other end of the rankings, 10 events had mean frequency of occurrence scores of less than 1.0. The reasons for their limited occurrence, at least in the case of a few of the events, such as "impending teachers' strike in your district" and "screening bilingual children", may be most related to the sample's traditionally southern background where it would be expected that infrequent labor disputes occur and limited minority populations exist. In any case, it appears evident that many of the events included on the scale occur with limited frequency in the experience of the sample.

This study suggests that the respondents appeared to consider their jobs as moderately stressful. This finding seems to differ from earlier studies, such as those reported by Reiner and Hartshorne (1982) and Vensel (1981), which reported higher indications of apparent job-related stress associated with school psychology. The present outcome appears more closely related to the results of recent reports such as Anderson, Brown, and Hohenshil (1984) and Wise (1985) which also indicated that school psychologists viewed their profession as moderately stressful.

The results of this study do not support the prediction that the more frequently occurring stressful events would also tend to receive higher item rankings of overall potential stressfulness, than events occurring less frequently. The psychologists in this sample tended to rate many infrequently occurring events with a higher degree of stressfulness than the more common, everyday frustrations. It may be possible, as has been suggested in other stress/life events research, that a cumulative effect exists concerning the impact of stressful life events. In this case, the more frequently occurring, but less intensely rated, stressful events may be seen as contributing to the reported effects of job-related stress in school psychology, and the apparent desire of some school psychologists to leave the profession (Vensel, 1981).

Support was offered for the prediction that a positive relationship would exist between subjects' mean frequency scores and mean perceived stressfulness ratings. Although the relationship between these variables was modest, it does appear that those subjects who experienced the events more frequently also perceived them as more stressful. This is an especially important point of concern when attempting to instigate potential interventions in highly stressful environments. Not only

should methods be considered to alter the environmental setting events which precipitate the disruptive effects, but methods to alter individual cognitive perceptions of the events, such as cognitive-behavioral techniques, should also be included.

Exercise as a Moderating Variable

The results of this study also provided empirical support, albeit modest, for the prediction that involvement in a regular exercise program would correspond with lower overall perceived stressfulness ratings, when those school psychologists who were at least moderately active were considered. In addition, it was noted that the relationship between these variables appeared to become stronger as the sample was restricted to the more and more physically active.

The results of this study join a small but growing body of literature (such as the research reviewed by Blair, Jacobs, & Powell, 1985; Brown & Lawton, 1986; Haskell, Montoye, & Orenstein, 1985; and Taylor, Sallis, & Needle, 1985) suggesting that exercise may be an effective potential method of reducing both the perception of stress and stress responses. This outcome may be seen as especially important since the health practices variables,

such as exercise, are potentially modifiable and, therefore, offer attractive opportunities for intervention.

It is also interesting to observe that the results of this study failed to support the hypothesis proposed by Brown and Lawton (1986) that psychosocial stress may precipitate illness by altering health-related behaviors such as physical activity. For the present sample of school psychologists, the relationship between physical activity (mean KCKG scores) and the frequency of occurrence of stressful events (mean frequency of occurrence scores) was highly non-significant. In other words, the respondents' level of physical activity did not appear to decrease in relation to increased exposure to stressful events. This outcome is consistent with the results obtained by Brown and Lawton (1986) in their research involving a female adolescent population.

The survey research method, utilizing a mail survey, was chosen to explore this topic. It is also of interest to note that the attainment of an overall response rate of 84.6%, and the estimation that 84.4% of the target sample of school psychologists were included within the survey respondents, lends support both to this study's findings, and also to the use of survey methods as a research tool. It appears evident that through the

adoption of careful and systematic research procedures, such as those suggested by Dillman (1978) and others, survey research can provide a valid system for the investigation of analogous issues involving overall population groups.

Suggestions for Future Research

1. Continued effort should be made to increase the psychometric properties of population-specific stress assessment instruments. This should not, however, come at the expense of the modifiability of these instruments to meet differing individual environments. As has been pointed out by Selye (1980a) and others, these tests are most useful to the degree to which they can be individualized. Several of the items proposed by the respondents in this study as events for potential future assessment instruments (such as Career-Ladder evaluations) were appropriate for this state, but would not be appropriate in other locations. It is suggested that one of the most advantageous uses for these instruments is not for clinical/diagnostic purposes, but for educational/re-educative purposes (inservice training, workshop presentations); the instruments should, therefore, be adaptable to local conditions.

2. Will exposure to information concerning the relationship between potentially stressful events for school psychologists, and methods to moderate their effects (e.g., exercise) result in a prolonged positive alteration in the subjects' behavior and subsequent perception of the events? There is some support for the prediction that these outcomes would be likely to occur. Forman (1981) reports decreased self-reported anxiety, and increased job satisfaction, in a study of school psychologists following a six week cognitive-behavioral stress management training program.

3. Would adoption of non-traditional methods for the delivery of psychological services in the schools (non-assessment interventions, consultation, private practice, etc.) result in lower overall levels of reported job stress?

4. These results would suggest that physical activity/exercise is not a frequently used potential moderating variable for many school psychologists. Of the other proposed moderating variables (personality characteristics, social support, constitutional predispositions, coping techniques, or other health practices), which are more likely to be used in moderating job-related stress by school psychologists? How effective do methods to alter these variables appear to be with this

population? It appears obvious that school psychologists view their profession as at least moderately stressful. If exercise is not utilized as a moderating variable, then individual school psychologists should be encouraged to implement their own alternatives.

5. Are the physical activity/exercise habits of school psychologists significantly affected by the time of year in which they are measured? Several of the survey respondents indicated that due to the time of year the survey took place (i.e., winter) their exercise habits were reduced from what they considered normal activity. The winter months make up a sizeable proportion of the work year for many school systems and can, therefore, be seen as a valid period to measure job-related stress with school psychologists. This factor is not seen, then, as compromising the results of the present study, although it would be of interest to see if equivalent results would be obtained through assessment in the fall or spring seasons.

6. What is the minimum level of physical activity necessary for a relationship to exist between physical activity and the perception of decreased job-related stress? What is the optimum level necessary to maximize the relationship? Haskell, Montoye, and Orenstein (1985) recommend aerobic exercise performed at moderate intensity (more than 50 percent of heart rate reserve) for a

duration that results in an energy expenditure of more than 4 kilocalories per kilogram of body weight per session, every other day, as the minimum goal of adults who are otherwise sedentary for improvement in health-related status. It is not known, however, how this recommendation would specifically impact on the perception of job-related stress.

7. Increasing physical activity may be an effective means of countering the deleterious effects on physical and mental health of exposure to high levels of psychosocial stress. The significant correlations obtained in the present study, though, were relatively modest, as were the sample sizes involved. Extreme care should be taken in proposing causal explanations from this and other correlational studies. Prospective studies, involving treatment experiments, must be conducted regarding the moderating effect of exercise on the relationship between stressful events and the perception of stress before causal explanations can be offered.

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APPENDIXES

APPENDIX A

FORM A: CERTIFICATION OF EXEMPTION FROM REVIEW FOR RESEARCH INVOLVING HUMAN SUBJECTS

(PLEASE TYPE ON THIS FORM)
(Instructions on reverse side of this form)

FORM A
Certification of Exemption from Review for Research Involving Human Subjects

CRP# 256L
Date Received in ORC NOV 19 1987

A. PROJECT DIRECTOR(s) and/or CO-DIRECTOR(s): (For student projects, list both the student and the advisor)
Student - Hal W. Jernigan Advisor - Dr. Robert L. Williams

B. COMPLETE MAILING ADDRESS and PHONE NUMBER OF PD(s) and CO-PD:
(615) 974-5131 108 Claxton Education Building, College of Education UTK, Knoxville,TN 37996-3400

C. TITLE OF PROJECT:
The Relationship Between the Frequency of Occurrence of Potentially Stressful Events and Their Overall Ranking by School Psychologists, with Exercise as a Moderating Variable

D. DEPARTMENT:
Department of Educational and Counseling Psychology

E. EXTERNAL FUNDING AGENCY AND ID NUMBER (if applicable):
NA

F. GRANT SUBMISSION DEADLINE (if applicable):
NA

G. STARTING DATE: "Upon certification by Director of Research Compliances"
(NO RESEARCH MAY BE INITIATED UNTIL CERTIFICATION IS GRANTED)

H. ESTIMATED COMPLETION DATE: May 1988
(Include all aspects of research and final write-up)

I. Objective(s) of Project: (see reverse or Flyer #3) To investigate the relationship between the frequency of occurrence of potentially stressful events and their overall ranking by school psychologists, including the moderating effect of physical activity/exercise habits on this relationship.

II. Subjects: (see reverse or Flyer #3) The mailing list of the Tennessee Association of School Psychologists (N=approx. 300) will be obtained and its members will serve as subjects. The majority of these psychologists are based within public school systems, and primarily provide direct services within the schools. They represent a mixture of rural, suburban, and urban districts. Subjects will be involved (15 minutes) in completing the questionnaire.

III. Methods or Procedures: (see reverse or Flyer #3) The survey research method will be used. The six page questionnaire will contain Likert-type questions concerning the amount of stress associated with events common to the profession of school psychology, and their normal frequency of occurrence. Additional questions will be asked concerning assessment of physical activity/ exercise habits and demographics. The instrument will have an identification number for mailing purposes only. This is so the name can be checked off of the mailing list when the questionnaire is returned. The subject's name will never be placed on the questionnaire. Dr. Timothy Pettibone (Bureau of Educational Research and Service) will assist in the statistical analysis; Dr. Robert L. Williams is the advisor.

IV. CATEGORY(s) FOR EXEMPT RESEARCH PER 45 CFR 46: 3 (see reverse side for categories

CERTIFICATION: The research described herein is in compliance with 45 CFR 46 101(b) and presents subjects with no more than minimal risk as defined by applicable regulations.

Investigator Name Hal W. Jernigan Signature Hal W. Jernigan DATE Nov. 19, 1987

Advisor Name Dr. Robert L. Williams Signature R. L. Williams DATE Nov. 12 -87

Dept. Head Name Dr. Siegfried C. Dietz Signature S. C. Dietz DATE 11-19-87

CERTIFICATION BY DIRECTOR, OFFICE OF RESEARCH COMPLIANCES Name L B. Cebik Signature L. B. Cebik DATE 11-23-87

REVISED 9/87

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

CRP # 2,561 A Date: 11-20-87

Relationship Btwn. Frequency of Stressful Events . . .

Hal W. Jernigan
108 Claxton Educ. Bldg.
Campus

Robert L. Williams
108 Claxton Educ. Bldg.
Campus

Office of Research Compliances

The project list above has been certified exempt from review by the Committee on Research Participation.

This certification is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #2 below).

The responsibilities of the project director includes the following:

1. To obtain prior approval from the Director of Research Compliances must be obtained before any changes in the project are instituted.

2. To submit a Form D at 12-month intervals attesting to the current status of the project (protocol is still in effect, project is terminated, etc.).

We wish you success in your research endeavors.

Sincerely,

L. B. Cebik, Director

cc: Department Head
CRP file

APPENDIX B

SCHOOL PSYCHOLOGISTS AND STRESS SURVEY

1988 SCHOOL PSYCHOLOGISTS AND STRESS SURVEY

DEPARTMENT OF EDUCATIONAL AND COUNSELING PSYCHOLOGY
THE UNIVERSITY OF TENNESSEE, KNOXVILLE
KNOXVILLE, TENNESSEE 37996-3400

This questionnaire is concerned with identifying and comparing potentially stressful incidents in the daily and overall functioning of school psychologists. Please answer all of the questions. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins.

Section I. Sources of Stress Inventory

Please rate each of the items or events listed below. The first rating is the amount of stress associated with the event. This rating should be from 1 to 9. The more stress associated with an event, the higher the rating. If you have not experienced an item or event, please estimate the relative stress associated with such an event.

The second rating for each item concerns the frequency with which this event normally occurs in your experience. This rating should be from 0 to 5. The more frequently the event occurs, the higher the rating. (0 = Never, 1 = Yearly, 2 = Monthly, 3 = Weekly, 4 = Daily, .5 = D+ more than once per day.)

Please rate each item on both amount of stress and frequency of occurrence. Do not leave any rating blank.

(Circle your answers)	AMOUNT OF STRESS									FREQUENCY OF OCCURRENCE					
	L								H	N	Y	M	W	D	D+
1. Keeping up with current professional literature.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
2. Conferences or staffings with resistant teachers.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
3. Supervising an intern or school psychology graduate student.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
4. Conducting inservice workshops.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
5. Carrying testing equipment around in unfavorable weather conditions.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
6. Pressure to complete a set number of cases (e.g., you must test at least 100 children a year).....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
7. Lack of availability of appropriate assessment materials.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
8. Report writing.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
9. Lack of consensus in a staffing.....	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

(Frequency rating: 0 = Never, 1 = Yearly, 2 = Monthly, 3 = Weekly, 4 = Daily, 5 = D+ more than once per day.)

(Circle your answers)	AMOUNT OF STRESS										FREQUENCY OF OCCURRENCE					
	L									H	N	Y	M	W	D	D+
10. Not enough time to perform job adequately.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
11. Impending teacher's strike in your district.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
12. Telling parents their child is handicapped.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
13. Working with uncooperative principals and other administrators.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
14. Public speaking engagements (e.g., PTA).....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
15. Potential suicide cases.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
16. Teacher dissatisfaction with your recommendation....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
17. Spending time driving between schools.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
18. Incompetent and/or inflexible supervisors.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
19. Feeling caught between child's needs and administrative constraints (i.e., trying to "fit" child into an existing program).....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
20. Inadequate secretarial help.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
21. Lack of contact with professional colleagues.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5

(Frequency rating: 0 = Never, 1 = Yearly, 2 = Monthly, 3 = Weekly, 4 = Daily, 5 = D+ more than once per day.)

(Circle your answers)	AMOUNT OF STRESS										FREQUENCY OF OCCURRENCE					
	L									H	N	Y	M	W	D	D+
22. Conducting parent groups.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
23. A backlog of more than 5 reports to be written.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
24. Notification of unsatisfactory job performance.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
25. Threat of due process hearing.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
26. Insufficient recognition of your work.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
27. Working in physically dangerous situations (e.g., gang-ruled high schools).....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
28. A backlog of more than 10 referrals.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
29. Lack of appropriate services for children.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
30. Child abuse cases.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
31. Being told that you "have it easy" by classroom teachers.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
32. Conferences or staffings with resistant parents.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5
33. Screening bilingual children.....	1	2	3	4	5	6	7	8	9	.....	0	1	2	3	4	5

(Frequency rating: 0 = Never, 1 = Yearly, 2 = Monthly, 3 = Weekly, 4 = Daily, 5 = D+ more than once per day.)

(Circle your answers)	AMOUNT OF STRESS L ... H	FREQUENCY OF OCCURRENCE N Y M W D D+
34. Keeping your district "legal" (i.e., in compliance with federal, state, and local regulations).....	1 2 3 4 5 6 7 8 9	0 1 2 3 4 5
35. A change in the schools or districts which you serve.....	1 2 3 4 5 6 7 8 9	0 1 2 3 4 5
36. Using the same scale (1-9), how stressful is your job overall?.....	1 2 3 4 5 6 7 8 9	

37. Is there an item or event which you feel should be included? If so, write the item in below and assign it a numerical value, both for stressfulness (1 - 9) and frequency of occurrence (0 - 5).

_____

_____

_____

Section II. Assessment of Exercise Habits

Another important purpose of this study is to learn more about the physical activity/exercise habits of school psychologists.

During the last seven days, how much total time did you spend doing VIGOROUS physical activity and MODERATE physical activity? Record only time actually engaged in the activity (ignore breaks, rest periods, etc.). Please do not record any LIGHT physical activity (office work, light housework, very light sports such as bowling, or any activities involving sitting).

	Total hours for last 7 days to nearest .5 hours
VIGOROUS ACTIVITY (jogging or running, swimming, strenuous sports such as singles tennis or racquetball, digging in the garden, chopping wood, brisk walking, etc.)	_____
MODERATE ACTIVITY (sports such as golf or doubles tennis, yard work, heavy housecleaning, bicycling on level ground, leisurely walking, etc.)	_____

Section III. Demographic Information

Finally, we would like to ask you a few questions about yourself to help us interpret the data. (Please circle the number of your answer.)

1. Present employment status
   1 CURRENTLY FUNCTIONING AS A SCHOOL PSYCHOLOGIST
   2 PRIMARILY ENGAGED IN THE TRAINING OF SCHOOL PSYCHOLOGISTS AT A COLLEGE OR UNIVERSITY
   3 TRAINED AS A SCHOOL PSYCHOLOGIST, BUT CURRENTLY FUNCTIONING AS A SUPERVISOR IN PSYCHOLOGICAL SERVICES
   4 TRAINED AS A SCHOOL PSYCHOLOGIST, BUT CURRENTLY FUNCTIONING AS A CONSULTANT
   5 STUDENT
   6 OTHER OR COMBINATION (PLEASE SPECIFY) _____

2. Sex
   1 MALE
   2 FEMALE

3. Age
   1 30 OR UNDER
   2 31 - 40
   3 41 - 50
   4 51 - 60
   5 61 OR OLDER

4. Marital status
   1 SINGLE
   2 MARRIED
   3 DIVORCED
   4 WIDOWED

5. Work setting
   1 ELEMENTARY SCHOOLS ONLY
   2 SECONDARY SCHOOLS ONLY
   3 COMBINATION OF ELEMENTARY AND SECONDARY SCHOOLS
   4 OTHER (PLEASE ELABORATE)_____

6. Type of community
   1 URBAN
   2 RURAL
   3 SUBURBAN
   4 COMBINATION (PLEASE SPECIFY)_____

7. Number of school districts in which you work
   1 ONE
   2 TWO
   3 THREE
   4 FOUR
   5 FIVE

8. Approximate number of students you serve (the number of students in your district, cooperative, etc., divided by the number of psychologists)
   1 FEWER THAN 1000
   2 1500
   3 2000
   4 2500
   5 3000 OR MORE

9. Socioeconomic status of the majority of the population you serve
   1 LOW INCOME - POVERTY
   2 LOW MIDDLE CLASS
   3 MIDDLE CLASS
   4 UPPER MIDDLE/UPPER
   5 COMBINATION (PLEASE SPECIFY)_____

10. Number of years in your present job
   1 0 - 1
   2 2 - 3
   3 4 - 5
   4 6 - 10
   5 11 OR MORE

11. Annual salary (gross)
   1 UNDER $15,000
   2 $15,000 - $20,000
   3 $20,000 - $25,000
   4 OVER $25,000

12. Length of contract
   1 NINE MONTHS
   2 TEN MONTHS
   3 ELEVEN MONTHS
   4 TWELVE MONTHS
   5 OTHER _____

If there are any other comments you would like to make concerning the stress involved in your position, or methods you use to deal with it, please use this space or the back of the booklet.

Your contribution to this study is very greatly appreciated. If you would like a copy of the results, please print your name and address on the back of the return envelope (NOT on the questionnaire) and write "Copy of Results Requested". We will see that you get it.

Please return to: Hal W. Jernigan
Department of Educational and Counseling Psychology
108 Claxton Education Building
The University of Tennessee - Knoxville
Knoxville, Tennessee 37996-3400

APPENDIX C

SURVEY COVER LETTER

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

January 5, 1988

College of Education

Department of Educational and Counseling Psychology

As a school psychologist, I am well aware of the challenges and pressures encountered in this profession. One need only listen to the conversations which often develop whenever school psychologists gather, to realize that a great deal of the time is spent in discussion of the stressfulness of our profession. Yet little is known concerning the specific stressors related to school psychology, their strength, or how frequently they normally occur.

We believe that the only ones with the true answers to these questions are those who are actively involved in its practice. You are one of a small sample of school psychologists who are being asked to give some specific information concerning their experiences. I would greatly appreciate it if you would complete the enclosed questionnaire and return it in the self-addressed envelope. In order that the results will truly represent the profession, it is important that each questionnaire be completed and returned. To do so will require approximately ten to fifteen minutes of your time.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so your name can be checked off of the mailing list when the questionnaire is returned. Your name will never be placed on the questionnaire, nor will individual responses be identified.

The results of this research will be made available to the members of our state association (TASP) and to others involved in the training and supervision of school psychologists. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

I would be happy to answer any questions you might have. Please write or call. My telephone number is (615) 974-2272.

Thank you for your assistance.

Sincerely,

Hal W. Jernigan
Project Director

108 Claxton / Knoxville, Tennessee 37996-3400 / (615) 974-5131

APPENDIX D

FOLLOW-UP POSTCARD

Last week a questionnaire concerning your views of the stress involved in the practice of school psychology was mailed to you. Your name was selected from a list of school psychologists in the state of Tennessee.

If you have already completed and returned it to us, please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small sample of school psychologists, it is extremely important that we receive your questionnaire for the results to accurately reflect the profession.

If by chance you did not receive the questionnaire, or if it has been misplaced, please call (615) 974-2272, and I will get another one in the mail to you today.

Sincerely,

Hal W. Jernigan
Project Director

APPENDIX E

FOLLOW-UP LETTER

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

January 26, 1988

College of Education

Department of Educational and Counseling Psychology

About three weeks ago we wrote to you seeking your views concerning the stress involved in our profession of school psychology. As of today we have not received your completed questionnaire.

We have undertaken this study because of the significance of the issues to school psychology, and our belief that the only ones with the true answers to these questions are those who are actively involved in its practice.

I am writing to you again because of the importance each questionnaire has to the usefulness of this study. Your name was selected from a list of school psychologists in Tennessee. Because we are a relatively small body, in order for the results of the study to be representative of the profession, it is essential that each person in the sample return their questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed. May I urge you to complete and return it as quickly as possible.

I'll be happy to send you a copy of the results if you want one. Simply put your name, address, and "copy of results requested" on the back of the return envelope.

Your contribution to the success of this study will be greatly appreciated.

Sincerely,

Hal W. Jernigan
Project Director

108 Claxton / Knoxville, Tennessee 37996-3400 / (615) 974-5131

APPENDIX F

FORMULA FOR SEVEN-DAY PHYSICAL ACTIVITY RECALL CALCULATION

Formula for Seven-Day
Physical Activity Recall Calculation
(Blair, 1984)

1. Compute the total number of hours of sleep (based on an average eight hours of sleep per day). [8 x 7 = 56]
2. Multiply the total number of hours of sleep (line 1) by 1. [56 x 1 = 56]
3. Compute the total number of hours spent in moderate activity.
4. Multiply the hours spent in moderate activity (line 3) by 4.
5. Compute the total number of hours spent in vigorous activity.
6. Multiply the hours spent in vigorous activity (line 5) by 8.
7. Add the figures in lines 1, 3, and 5. [(1 + 3 + 5) =]
8. Compute the total hours spent in light activity by subtracting the figure in line 7 from 168 (24 hr. x 7) hours. [168 - (1 + 3 + 5) =]
9. Multiply the figure obtained in line 8 by 1.5.
10. Total the figures in lines 2, 4, 6, and 9. [(2 + 4 + 6 + 9) =]
11. Divide the figure arrived at in line 10 by 7.

12. The figure arrived at in line 11 is the average total kilocalories per kilogram of body weight expended per day.

APPENDIX G

ADDITIONAL SUGGESTED STRESSFUL EVENTS

Additional Suggested Stressful Events

Is there an item or event which you feel should be included? If so, write the item in below and assign it a numerical value, both for stressfulness (1-9) and frequency of occurrence (1-5). (Frequency rating: 0 = Never, 1 = Yearly, 2 = Monthly, 3 = Weekly, 4 = Daily, 5 = D+ more than once per day.)

	AS	FO
Having to wait on others to complete testing before a report can be completed (i.e. resource teacher doing academic testing)....	6	3
Counseling (Individual) (2)....	7	3
Counseling (Group) (2)....	8	3
Counseling with parents....	4	3
Counseling with uncooperative students....	8	2
Administrative stress from coordinating the services of a group of school psychologists....	7	3
Inadequate number of school psychologists within system....	8	4
Psychological services under Special Education Supervisor....	8	4
Changes in State Department of Special Education evaluation and diagnostic criteria (4)....	9	3

	AS	FO
Not being able to use professional judgment due to inflexible state diagnostic requirements....	7	2
Having to change eligibility/or handicapped status due to changes in state laws....	8	2
Inability of special education teachers, and supervisors to understand the diagnosis of child, i.e. the difference between MR, LD, and ED criteria....	7	2
Being used as a clerical person rather than as a school psychologist (2)....	9	4
Frequent changes in daily schedule due to parent, teacher, principal schedule changes (3)....	6	3
Resource teacher not doing work asked....	7	2
Overall atmosphere of a school being "poor", i.e. conflict among staff and/or between staff and administration....	8	1
Working with psychological staff in which everyone does not assume equal "load"....	5	5
Feeling inadequately compensated for services (2)....	7	5
Paperwork which is redundant and largely unnecessary (2)....	9	5
Following multi-step process to establish eligibility....	8	4

	AS	FO
Pressure from administrators to spend all of our time with "testing"....	6	4
Threatened with loss of position....	9	2
Career ladder evaluations (2)....	8	2
Not being treated as a professional....	7	5
Inadequate working conditions/office space (5)....	7	3
Unrealistic expectations of number of schools assigned to....	8	4
Lack of cooperation from community agencies....	7	3
Inadequate access to stress reduction activities....	7	4
Misunderstanding of profession by other education professionals....	7	4
No provision for confidential office meetings....	9	5
Administrative intrusiveness in casework or job functioning....	9	2
Dealing with resource teachers who feel School Psychologists should be able to make changes in state/local guidelines....	8	5
Unclear job role or expectations....	9	2
Having to work in situations where smoking is allowed....	9	3
Lack of a professional organization in touch with "real world" needs of school psychologists....	7	5

	AS	FO
Explaining test results of a gifted referral to parents of child who does not qualify....	7	2
Notification that staff I supervise are performing unsatisfactorily....	9	2
Dealing with peers whose incorrect diagnosis are left for you to explain....	7	2
Inadequate staff time for planning....	9	3
Dealing with teacher who is incompetent (2)....	7	4
Working with incompetent resource or other special education teachers....	9	3
Backlog of re-evaluations....	7	4
Inadequate office time (2)....	7	4
Working for a system where mediocrity is encouraged....	9	5
Not enough money allowed for travel....	4	5
Lack of input in administrative decisions....	8	1
Working in a political (school) system....	9	1
No control over utilization of recommendations after assessment....	6	3
Dealing with the Department of Human Services....	8	3
(Lack of) case staffings with colleagues to assure unanimity across cases....	8	0
Using precise scores and formulas from imprecise instruments....	8	5

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Helping students who are underachievers/ (with) no motivation....	6	3
Assigned to one school in combined role of guidance counselor/school psychologist/social worker....	8	4
Inappropriate testing referral....	8	3
Difficulty in consistent communications between school psychologist and classroom teacher....	7	3
Insecurity as to the appropriateness of specific interventions....	7	3
Dealing with third party payments....	7	3
Dealing with financial aspects of private practice....	7	4
Expected to be a "generalist" in practice, having expertise in many varied areas....	8	2

VITA

Harold Wayne Jernigan, Jr. was born in Knoxville, Tennessee on January 11, 1952. He graduated from Oak Ridge High School in Oak Ridge, Tennessee in June 1970. He received a Bachelor of Science degree in education, with a major in special education, from the University of Tennessee, Knoxville in March 1975, going on to receive the Master of Science degree in educational psychology, with an emphasis in school psychology, in June 1977.

His career has included employment as a school psychologist, special education teacher, and counselor with handicapped children. He holds Tennessee certifications as a School Psychologist and as a Special Education Teacher. The author is a member of the American Educational Research Association, the National Association of School Psychologists, the Tennessee Association of School Psychologists, and Phi Kappa Phi Honor Society.