

A NATIONAL SURVEY OF OCCUPATIONAL STRESS,
PSYCHOLOGICAL STRAIN AND COPING RESOURCES
IN ELEMENTARY SCHOOL COUNSELORS

by

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

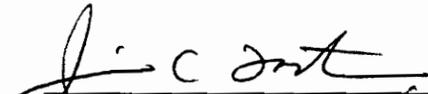
DOCTOR OF PHILOSOPHY

in Counseling/Student Personnel Services

(School Psychology)

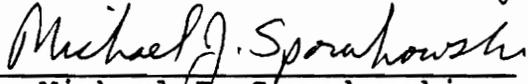
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School Psychology/Counseling

(ABSTRACT)

The Occupational Stress Inventory (OSI) and a Data Form were used to describe levels of occupational stress, psychological strain, and coping resources of 500 randomly selected elementary school counselors across the United States. Stress, strain, and coping were examined at levels of demographic variables including age, gender, school size and setting, parental status, years in profession, schools served, marital status, students assigned, and hours worked.

Data were collected by mail survey which had an 84% ($n = 410$) return rate. Of these, 310 were usable for data analysis. Respondents averaged 44.18 years old; 87.1% were female. Approximately three fourths had less than 10 years experience in their jobs, worked in education more than 8 years, were married, and were parents.

Scores on the OSI for stress, psychological strain, and coping resources fell in the average ranges for all subscales. Examination of levels of demographic variables revealed Role Overload, Role Boundary, and Role Ambiguity

subscales were higher for counselors serving three or more schools. Counselors serving schools in two or more kinds of geographic settings reported higher Role Overload and Responsibility stress.

Elementary school counselors who were parents of one child had higher overall scores on Psychological, Interpersonal, and Physical strain scales compared to parents with two children.

Counselors aged 56 & older showed better Self-care and Recreational coping scores than some younger counterparts. Parents scored significantly lower on the Recreational and Self-care scales compared to non-parents, as did counselors who were parents of one child compared to parents of two.

It is recommended that counselor educators attempt to increase student awareness of the importance of developing coping skills to apply to their own occupational stress. This should be emphasized during practicum and internship activities. Legislative or administrative action may help provide support for counselors in the form of increased parental leave time, assignment to fewer than three schools, or assignment to schools located in similar geographic settings. Counselor education programs are urged to teach counselors organizational skills, systematic problem solving, and time management skills. Recommendations for further research are made.

ACKNOWLEDGEMENTS

I would like to express a special gratitude to Tom Hohenshil and Jim Fortune, my committee co-chairmen, for their friendship, support, and advice. Also, I wish to thank my other committee members, Tim Keith, Martin Gerstein, and Mike Sporakowski for their careful suggestions and support during the process.

There are others who have been essential in many different ways. I would like to thank Rhonda Ryan, Jannis Floyd, and Mike Brown for being my listeners, partners, and friends from start to finish. I am especially indebted to Vicki Meadows for her help on the final copies and even more so for her friendship as we worked together.

I owe debts which cannot be paid to my parents Mary Ellen and Dewitt who gave me my most important research skills - the love of learning and the desire to ask questions. Also, I send my deepest gratitude to my siblings, Janese, Carol, and Robert, who share our parents' gifts and who buoyed me up with their words, examples, and love.

And last, thanks to Janice Black who went crazy with me, and alone on her own dissertation, for her caring support which helped the two of us survive to care for each other at the end of it all.

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CHAPTER I
INTRODUCTION

The types of problems schools and school counselors face are increasing. Single parent homes are on the rise, and over half our country's children will live in one before age 18. The percentage of families with two working parents has increased. Drug abuse, child physical and sexual abuse, and families with children living below the poverty line appear to be increasing. The poverty rate for families with children has been increasing since 1970 (Slauter, 1989). These factors result in more problems with which school personnel must deal.

As these societal changes are manifest in the school arena as severe academic, behavioral, and emotional problems, school counselors are one of the primary professionals involved in attempts to provide assistance. For example, as suicide among school youth has risen in the last decade, school counselors are often called upon to organize and coordinate suicide prevention and intervention programs. Olson & Dilley (1988) asserted that although each new "at risk" population is worthy of attention, these new roles have proliferated without giving counselors any relief by subtracting old ones. These authors contended there is

substantial evidence to support counselor assertions that they cannot meet all the old demands (let alone the new demands) placed on them. Inability to meet the demands is clearly a source of stress. As a result the mental health and quality of work of counselors is adversely affected. (p. 196)

Institutional pressures on schools have increased as well. In 1991, 37 of the 50 states confronted substantial budget deficits with constitutions that allowed no deficits whatsoever (Hoagland, 1992). Political decisions to avoid new taxes often result in reduced educational funding at state and local levels. Positions disappear and counselors may serve more students and schools. Within schools, counselors may find themselves assigned to more tasks--including secretarial, administrative, nursing, teaching, or substitute teaching duties. Counselors not directly affected may be dealing with other staff and students strained by reduced resources, materials, or increased class sizes.

Stress and Counselors

Although there is extensive research on general occupational stress (Barling, 1990; Cooper & Payne, 1988; Hendrix, Steel, & Schultz, 1987; Richard & Krieshok, 1989), there is a relative paucity of research about the occupational stress of counselors. There is little research on school counselor stress, and especially

elementary counselors. Much of what was written was opinion only, used weak instrumentation or design, or examined quite limited populations.

Some variables in the work place and home environment generate stress, while others act as coping mechanisms (Holt, 1982). The variables contributing to stress may or may not be under the control of counselors, administrators, or counselor educators. However, the dearth of research to guide decisions at the individual, program, or national policy level, makes attempts at preventing or moderating stress for counselors an exercise in uninformed guesswork.

Whether from general societal changes, additional roles, insufficient training, or changes within educational institutions, the result is an increase in the number of occupational stressors experienced by school counselors. (Occupational stress generates psychological, behavioral, and physiological manifestations which may affect counselor's physical health, mental health, and effectiveness (Moracco, Butcke, & McEwen, 1984).)

The potential for stress to alter the ability of counselors to deliver services competently as noted by some researchers (Maslach, 1982; Moracco, 1981) only begins to address the scope of the problem. Stress is linked to problems with mental and physical health (Beehr & Newman, 1978; Hendrix et al. 1987). (There is a strong connection

between stress and burnout, which depletes professionals' emotional energy and increases the chances of leaving their profession (Friesen & Sarros, 1989; Maslach, 1982)) Even if the result is not directly related to job continuation through burnout, stress may affect long term job continuation by its impact on job satisfaction and job performance (Clemons, 1988; Schaubroek, Cotton, & Jennings, 1989).

Elementary school counselors are a unique professional group. They are in the position of being advocates for a large number of children who are powerless to advocate for themselves because of their age. Due to the critical nature of counselors' positions, (it is paramount that their professional performance be at the highest level.) Understanding the factors related to occupational stress of counselors is important for the profession and the clientele they serve.

Rationale for Study

Elementary school counselors operate in an environment different from most other school or mental health professionals in terms of both stresses and coping resources. Besides advocating for students, elementary school counselors must be comfortable working with young children and yet easily move to consultation with various

adult publics. These publics include teachers, administrators, social workers, psychologists, other mental health professionals, and most importantly parents. The difficulties and complexities of working with these groups increase because many counselors lack sufficient training to handle at risk populations (Olson & Dilley, 1988).

Although there has been increased emphasis on training for elementary school counselors in the last 10 years (Hollis & Wantz, 1990), there has not been increased knowledge of the levels of stresses and strains of these professionals. Lack of such knowledge may have negative effects on the counselors, the school children, and the adults they serve. The current study provides information that can contribute to better understanding and decision making by the following groups:

1. (Counseling students need a realistic awareness of the stresses of their prospective profession.) Student counselors will be able to use the results of this study to compare their personal and professional resources to the strains of the job. With this knowledge, they may be able to take steps to develop some of the personal coping resources they will need as well as plan for development of additional coping resources in the job setting.

2. Counselors already working in elementary schools need to heighten their awareness of particular stressors associated with their professional role and setting. Selye (1956) believed that just knowing what the stressors are on any given person is intrinsically important to healing. Beyond this, knowing the likely stressors and important coping mechanisms enables counselors to proactively develop resources and strategies for preventing and reducing strain.

3. School administrators may utilize the information from this study in a variety of ways to enable counselors to work at optimum levels. (Principals may be able to rearrange schedules, shift responsibilities, or modify noncounseling duties to support coping or reduce stress in their counselors.) Information from this study will apprise district and state administrators of stress related to student/counselor ratios, school size, schools served, and other information that should be considered when personnel assignments and funding decisions are made.

4. Counselor educators can benefit from awareness and understanding of the personal and professional resources needed by those they are training. If class or practicum training is not providing realistic experiences for counseling students to develop the needed skills,

alternative choices need to be considered in counselor education programs across the country.

5. Besides providing information to counseling and administrative professionals, the research from this study will support efforts of other researchers by providing an information base to aid comparisons of stress, strain, and coping to (a) levels of school counselors, (b) counselors in other fields, and (c) public service professionals. From the results of this study, further research directions may be indicated to more completely understand stress, psychological strain, and coping in elementary school counselors.

Statement of the Problem

A variety of forces may be increasing the occupational stress experienced by school counselors. (Excessive occupational stress negatively affects job satisfaction, job performance, and long term job commitment.) However, little is known about the stress of elementary school counselors in their job setting or about their levels of perceived strain. Further, there is only limited knowledge about the mechanisms available to and used by elementary school counselors to cope with stresses and strains as they occur. There are no national data to provide this information.

Purpose of the Study

The purpose of this study is to provide information that contributes to the understanding of stress, strain, and coping of elementary school counselors. The researcher describes overall levels of occupational stress, perceived physical and psychological effects (strain), and coping resources among elementary school counselors employed throughout the United States using the Occupational Stress Inventory (OSI) (Osipow & Spokane, 1987). The researcher gathered information about demographic variables from the participants and describes these variables in relation to the OSI scores for stress, strain, and coping.

The study is designed to answer the following research questions:

1. What are the levels of the Occupational Roles Questionnaire (ORQ) subscales (stress factors) among elementary school counselors?

2. What are the levels of the Personal Strain Questionnaire (PSQ) subscales (strain factors) among elementary school counselors?

3. What are the levels of the Personal Resources Questionnaire (PRQ) subscales (coping resources) among elementary school counselors?

4. Are there differences in occupational stress of elementary school counselors related to the following

demographic variables: age, gender, marital status, parental status, number of years in profession, number of schools served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

5. Are there differences in psychological strain among elementary school counselors related to the following demographic variables: age, gender, marital status, parental status, number of years in profession, number of schools served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

6. Are there differences in coping resources among elementary school counselors related to the following demographic variables: age, gender, marital status, parental status, number of years in profession, number of school served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

Limitations of the Study

The sample for the present study consists of counselors who are members of the American School Counselors Association (ASCA) and who are currently employed full-time in elementary schools in the United States. Because respondents are members of a professional

organization (ASCA), generalizing results to elementary counselors who are not members should be done with caution since membership and its attendant activities may systematically affect some of the stress or coping variables. The results may not be generalized to counselors at other school levels, part-time school counselors, those employed outside school settings, or those employed outside of the United States.

Definition of Terms

The following is a list of definitions for the purpose of this study:

1. Elementary school counselor - counselors who designate "elementary school" as their area of primary work responsibility and are members of ASCA.
2. Stressors - internal or external demands on an individual.
3. Stress - results when internal or external demands exceed persons perceived or actual resources to deal with them.
4. Occupational Stress - job characteristics which lead to internal or external demands as perceived by the individual. Overall occupational stress is represented by the total score for the Occupational

Roles Questionnaire (ORQ) of the Occupational Stress Inventory.

5. Strain - the outcome or effects of stress which may be exhibited as vocational, physical, interpersonal, and psychological variations from normal responses. Psychological strain is reflected in the total score for the Personal Strain Questionnaire (PSQ) of the OSI.
6. Coping - psychological, behavioral, or cognitive processes that the individual attempts or uses to handle external or internal pressures and struggles that push or surpass the person's resources. Global coping is reflected in the total score for the Personal Resources Questionnaire (PRQ) of the OSI.

Summary

This chapter was introduced by reviewing some of the current problems facing school counselors. Some of the implications of stress for the physical and mental health of the professional and the welfare of their clients were discussed. The special niche of elementary school counselors was outlined, and a rationale for the study was given. The problem and purpose of the study were delineated, research questions were stated, and the limitations of the study were given. Lastly, the major

terms and concepts were defined as they were used for this research.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter summarizes theoretical views and research pertaining to the understanding of stress, strain, and coping in elementary school counselors. The review focuses on literature related to the concepts used in this study. The chapter's main sections address (a) historical background, (b) theoretical conceptions and definitions of stress, (c) perception and appraisal of stress, (d) concepts of coping, (e) effects of stress, (f) theoretical perspectives of occupational stress, (g) contributing factors of stress, strain, and coping, (h) correlates of occupational stress, (i) counselors and occupational stress, (j) measurement of occupational stress, and (k) the Occupational Stress Inventory.

Historical Background

Cannon (1939) coined the word homeostasis for the physiological processes which maintain generally steady states in body functions. His research demonstrated many mechanisms which protect the body against hunger, thirst, bleeding, and changes in body temperature and levels of nutrients. He paid special attention to changes in the sympathetic nervous system and resulting adrenalin release.

This takes place when the organism is angry or in pain, and the cardiovascular changes from this process ready the body for flight or fight (Selye, 1976) which is Cannon's best known concept.

Cannon laid the groundwork for Selye's (1956; 1976; 1982) work and the interactive theories of stress by suggesting that all complex organizational systems (including biological, industrial, and social systems) "must have more or less effective self-righting adjustment in order to prevent a check on its functions or a rapid disintegration of its parts when it is subjected to stress" (p. 25). Cannon's theoretical conceptualization of the potential intricacies of homeostatic processes in complex systems foreshadows the difficulties and apparent contradictions researchers have often encountered in the study of stress.

Building on Cannon's work, Selye (1956, 1976) found the same pattern of autonomic preparation in response to a variety of stimuli. This "biologic stress syndrome" (Selye, 1976, p. 5) of internal adaptation subsequently became known as the General Adaptation Syndrome (GAS) (Selye, 1956). An organism's reaction to stimuli consists of three stages: (a) an alarm reaction in which the body manifests initially lower resistance followed by activation of the defense mechanisms; (b) a stage of resistance where

some body functions return towards normal; and (c) a stage of exhaustion if stress is unrelenting for a long enough period of time (Selye, 1976). Here again, early conceptualizations anticipated much of the later research. The alarm reaction can be viewed as the physical, psychological, or emotional equivalent of being rocked back on your heels. When individuals marshal coping resources--perhaps even becoming more productive, resilient, or satisfied under stress--this parallels the stage of resistance. The strains (effects) of unrelenting, unmodified, or unavoidable stress are roughly equivalent to the stage of exhaustion and appear conceptually related to the Exhaustion factor (Physical/Psychological) identified by Osipow and Spokane (1987) and to Maslach's (1982) definition of burnout.

Theoretical Conceptions and Definitions of Stress

Beyond general agreement that Cannon and Selye were pioneers in stress conceptualization, there is an array of theoretical views. One of the problems in this field is that stress is used to refer to entirely different, not just slightly modified, concepts. To help clarify the concept of stress underlying this study, three of the major theoretical views of stress are briefly explained. In the most basic terms, these theoretical views conceive of

stress as (a) response, (b) stimulus, or (c) an interaction between response and stimulus.

Response-based View

Selye (1976, 1982) defines stress as a general, or common, nonspecific response to any mental or physical demand made upon the body. In research terms, stress is the dependent variable or response to a stressor (Cox, 1978). Stressors may be any number of conditions, actions, or situations, and according to Selye, stress cannot be avoided. "Stress is essentially the rate of all the wear and tear caused by life" (Selye, 1956, p. viii). All stress is conceptualized as being the same thing, but stress can have desirable (eustress) or undesirable (distress) effects. Stress-induced or related conditions include shock, peptic ulcers, hypertension, heart attack, various psychiatric disturbances and various immune diseases (Selye, 1976). Selye's view of stress is a example of response-based definitions of stress (Richard & Krieshok, 1989; Cox, 1978).

Stimulus-based View

The stimulus-based view of stress is borrowed from the physical sciences and depicts stress as an event. This corresponds to the concept of "stressor" in the response-

based view (Richard & Krieshok, 1989). Stress is described in terms of the stimulus characteristics of the surroundings which are identified as somehow troubling or unsettling (Cox, 1978). Stimulus-based stress can range from the catastrophic to simple daily hassles (Dohrenwend & ShROUT, 1985).

Interactive View

Richard and Krieshok (1989) suggest that the most appropriate definitions of stress are interactive in nature and include both stimulus-based and response-based components. These researchers and others with similar views (Cooper, 1988; Cox, 1978; Lazarus & Folkman, 1984) see strain (effects, negative impacts, the perception of stress) as stress that is moderated by the coping activities of the individual. The conceptualization of occupational stress that guides the OSI (Osipow & Spokane, 1987) is interactive. Interactive conceptualizations and similar transactional paradigms (Kyriacou & Sutcliffe, 1978) often include an evaluative component which focuses on significance or meaning.

Between Stress and Coping: Perception and Appraisal

Lazarus and Folkman (1984), Lazarus and Launier, (1978), Moracco (1981), and Kyriacou and Sutcliffe (1978) conceive of stress as a transactional or interactive process taking into account the individuals appraisal of (a) the demands being made on them and (b) the adequacy of their coping resources to diminish perceived stress (Moracco, 1981; Kyriacou & Sutcliffe, 1978). Kasl and Cobb (1982) assert that the importance of this and similar stress definitions is the "incorporation of both individual differences. . .and subjective perceptions" (p. 445). The subjective perceptions by the individual of conditions containing elements of harm, loss, treat or challenge mediates the perception of stress (Lazarus & Launier, 1978). Factors which mediate one's appraisal or interpretation of stressors may be environmental, emotional, and/or psychological in nature and include physical resources, attitudes towards the source of stress, and perceptions of control or social support (Baum, Singer, & Baum, 1984).

The concept of appraisal finds perhaps it's fullest development in the work of Lazarus and his associates who explain appraisal as an evaluative process that defines the meaning of a given situation or experience for the individual involved (Holroyd & Lazarus, 1982). Lazarus and

Folkman describe this process as categorization of encounters according to their "significance for well-being" (1984, p. 31). This model of the appraisal process has three components (a) primary appraisal, (b) secondary appraisal, (c) and reappraisal (Lazarus & Folkman, 1984).

Primary appraisal focuses on the issue of "'Am I in trouble or being benefitted, now or in the future, and in what way?'" (Lazarus & Folkman, 1984, p. 31). Primary appraisals may be considered (a) irrelevant, (b) benign-positive, or (c) stressful. The three types of stress appraisals are (a) harm-loss, (b) threat, and (c) challenge.

Secondary appraisal concerns the question "'What if anything can be done about it?'" (Lazarus & Folkman, 1984, p. 31). Secondary appraisal is a complex process that interacts with primary appraisal to fashion each emotional reaction's substance, power, and characteristics (Lazarus & Folkman, 1984). It is evaluative in the sense of considering the consequences of possible options as they relate to possible outcome and to other concurrent inner or outer demands (Lazarus & Folkman, 1984).

Reappraisal may occur as part of the interactive process. Reappraisal includes new internally or externally derived information. It is this overall process rather

than emotions that lead to the organization of coping behaviors (Lazarus, 1965).

Interactive Coping Concepts

The concept of coping is so intertwined with stress as to make discussion of one nearly impossible without the other. Sharit and Slavendy (1982) assert that the very recognition of the concept of coping implicitly acknowledges the intricate relationship of individual elements. This recognition further implies "that the degree to which an event is stressful depends on a complex interaction of factors that include genetic predisposition, early social experience, cultural factors and a lifelong conditioning process" (Sharit & Slavendy, 1982 p. 130). Thus, there are numerous definitional and theoretical approaches to coping, but an interactive model underlies the current study.

Interactive models of coping (Lazarus & Folkman, 1984; Cooper, 1988) are widespread in research on general stress and coping (Baum et al., 1984; Folkman & Lazarus, 1988a, 1988b) and on occupational stress (Osipow & Davis, 1988; Osipow & Spokane, 1987; Richard & Krieshok, 1989). These interactive or transactional models tend to view coping as a changing and ongoing process of interaction between the individual and demands that are perceived to have negative,

taxing or excessive effects on the person or their resources. The coping process is an effort to manage or reduce these effects (Cooper, 1988; Lazarus & Folkman, 1984).

There is substantive research support for interactive models of coping. Relationships have been reported among primary appraisal of health risks, secondary appraisals of coping possibilities, and reappraisal considerations about health (Brody, 1988). Other researchers found that coping mediated emotional responses by influencing attention, altering subjective meanings of social stressors, and altering the relation of the person to the surroundings (Folkman & Lazarus, 1988a). Finally, persons with low psycho-social coping resources were found to be more vulnerable to illness and mood disturbance when stress levels increased, even if the stress was considered to be at a low level (Folkman & Lazarus, 1988b). Factors reported as significant buffers to stress include coherence, sense of purpose, effectiveness, social relations, sleep, locus of control, coping, health control, time perspective, leisure, eating, exercise, growth, and health practices (Wheeler & Frank, 1988).

Effects of Stressors (Strain)

Payne (1980) noted that strains can result from internal or external stresses or pressures. The terms, "burnout," "stress," and "strain" have been interchangeably used for the same concept by various researchers (Richard & Krieshok, 1989). Regarding this confusion, Lazarus (1966) noted that the term "strain" had its origins from engineering terminology, and that it is a poor analogy to the homeostatic and adaptive mechanisms examined by Cannon and Selye.

In the interactive model of Osipow and Spokane as described by Richard and Krieshok (1989), strain is a function of stress moderated by coping. Thus defined, strain is an effect or a result and is used as such for the purposes of this study. The effects of stress range from small changes in behavior to dramatic major clinical manifestations (Breznitz & Goldberger, 1982). Strain may be reflected in work problems, interpersonal relationships, adjustment or mood problems, complaints about illness, self-care habits, and other indicators (Osipow & Davis, 1988). Some of the disease related effects of stress include coronary disease, psychiatric disorders, alcohol abuse, and headaches among others (Breznitz & Goldberger, 1982).

Both physiological and self-report procedures have been used to measure strain. Some of the physiological means include blood pressure, blood volume, galvanic skin responses, and electrocardiography. Self-report measures have assessed clinical syndromes as well as the concept of strain alone (Richard & Krieshok, 1989). However, there is a relative lack of published attempts to measure the effects of stress (strains) or coping in either the general or occupational stress literature (Butcke, Moracco, & McEwen, 1984).

Occupational Stress: Theoretical Perspectives

Occupational stress theories and theoretical constructs are numerous (Clemons, 1988). As is the case in theoretical concepts of general stress, there is no one theory that accounts for all factors contributing to occupational stress. In this section, three theories relevant to factors measured in this study are briefly reviewed.

Person-Environment Fit Theory

Among the most influential of the theories is the Person-Environment Fit Theory. According to Caplan (1983) it deals with the well being of individuals as affected by their own characteristics and surroundings. Every work

environment provides a variety of opportunities for the needs and values of the person to be met. Conversely an individual's abilities to meet the demands of the workplace also vary. The two dimensions can be judged to fit or not fit based on either subjective or objective assessments.

Both the cognition of the individual and the distortions of the environment may cause a discrepancy between objective and subjective dimensions. Research has shown that human perceptions of stressors do serve as mediators between stress and strain (Caplan, 1983) when related to such variables as role conflict and workload. This approach is basically an interactive one and the Occupational Role Questionnaire's (ORQ) subscales Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Responsibility and Physical Environment might all be construed to relate to person-environment fit.

Role Theory

The works of Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) and Kahn (1974) are also predecessors of the ORQ (Osipow & Spokane, 1987). This theory reflects the work context aspect of occupations and the stresses of work roles which might not be specific to a particular job, but which cut across jobs or levels of a job. Roles are behaviors a person performs as a part of a job. Role

conflict is conceived as occurring when a worker perceives more than one expectation from other workers, and role overload occurs when there is pressure to do more work than can be done. Unclear communication of roles is related to role ambiguity, while poor communications about role responsibilities, particularly responsibility for others, is analogous to the OSI scale of Responsibility.

Kasl (1978) suggested five factors that separately or together contribute to occupational stress: (a) environmental work conditions; (b) job content that overtaxes the individual physically, mentally, or emotionally; (c) the quality of social interaction with other workers; (d) supervisor characteristics; and (e) general organizational structure and policy. This model seems to be closely related to Physical Environment and Role Overload factors of the OSI.

Contributing Factors of Stress, Strain, and Coping

In this section, factors related to stress, strain, and coping will be examined with emphasis on factors relating to this study. This section will be organized around the OSI. The first factors to be discussed will be the those found in the Occupational Roles Questionnaire (ORQ) which is the domain designed to measure occupational stress. This will be followed by discussions of the

factors of the Personal Strain Questionnaire (PSQ) and the Personal Resources Questionnaire (PRQ) whose subscales respectively represent psychological strain and coping resources. Some findings come from general occupational stress studies, but where it is appropriate and available, research on job stress and counselors has been given precedence.

For clarification, in this study when the names of the OSI subscale factors or the OSI definitions are being referred to they are capitalized. This distinguishes them from the same words used to describe general constructs or similar factors, which are written in lower case lettering.

Occupational Stress Factors

According to Holt (1982), the types of occupational stress (independent variables) found in the research can be divided into two broad types. Objectively defined variables are those determined to be stressful by the researcher or other outsider. Subjectively defined variables are those deemed stressful by the person being stressed. Objectively defined variables in previous research have included physical characteristics of the workplace, time variables, social and organizational characteristics of the job and workplace, and job changes (Holt, 1982). Variables for subjectively defined research

has generally fallen into categories having to do with roles, person-environment fit, on and off the job stress, relationships with co-workers, relationships with supervisors, and miscellaneous others (Holt, 1982). There has been a wide variety of stress research done using reports of subjective or perceived stress, strain, and/or coping (Bach, 1972; Cooper, 1981; Fletcher, 1988; Pearlin, 1967). The OSI is an instrument based on subjective reports of stress, strain, and coping by the person under stress.

In the following sections, research is reported that relates to subscales of the ORQ which is the OSI domain measuring stress. The sections correspond to the ORQ subscales Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Responsibility, and Physical Environment. Each section is introduced by an explanation of the construct as used in the OSI.

Role Overload. Role Overload (RO) assesses the degree that personal and workplace resources are exceeded by job demands and the extent that the person can perform at expected work levels. Role overload was found to be significantly related to Vocational Strain in veterinary students (Osipow & Davis, 1988) and to stress in school counselors (Sears & Navin, 1984; Tegtmeier, 1980). In other research on counselors, role overload received the

highest score of six job stress factors (Heiden, 1988/1989), but for Licensed Professional Counselors (LPCs) Role Overload showed no effect on job satisfaction (Clemons, 1988).

Role Insufficiency. Role Insufficiency (RI) measures how well a person's training, education, skills, and experience fit the needs of his/her job. Role insufficiency was reported to relate to role conflict, which in turn was correlated with three measures of stress (a) emotional exhaustion, (b) depersonalization, and (c) lack of professional accomplishment (Pendergast, 1987). For counselors, Role Insufficiency produced a strong negative influence on job satisfaction (Clemons, 1988), and perceived inability to meet demands contributed to their stress levels (Bayerl & MacKenzie, 1981).

In research relating role insufficiency to school counselors, Heiden (1988/1989) reported counselors found conducting group counseling stressful. The author hypothesized that counselors may lack sufficient training for this role activity. School counselors who were asked to perform more non-professional duties reported higher stress levels (Heiden, 1988/1989; Parker, 1989).

Role Ambiguity. Role Ambiguity (RA) evaluates the degree of clarity the individual has about his/her job requirements, priorities, and evaluation standards. Role

ambiguity was positively correlated with the stress related variables of depersonalization, emotional exhaustion, and lack of professional accomplishment (Pendergast, 1987), as well as with psychological strain variables (anxiety, hostility, depression) (Motowidlo, Packard, & Manning, 1986). In the latter study, the effect of role ambiguity on strain also had indirect negative impact on job performance. Results are mixed on the effect of role ambiguity on school counselors. Moracco et al. (1984) reported role ambiguity was related to stress, but another study reported no significant difference between role ambiguity in school counselors and other educational professionals (Pierson-Hubeny & Archambault, 1987).

Role Boundary. Role Boundary (RB) measures the extent to which the worker is caught between contradictory demands and allegiances or is unclear about lines of authority. Role Boundary on the OSI measures conflicting role demands and loyalties and has many elements of what is considered to be role conflict. Olson and Dilley (1988) stated that "it would be impossible for counselors, given the number of students they are responsible for, to perform all the roles and functions that the various publics believe are important" (p. 196). Ambiguity about which publics to serve increase stress for school counselors (Ibrahim, Helms, & Thompson, 1983).

Research reported on other role boundary facets indicated that low perceived control about job decisions significantly contributed to job strain factors (Melamed, Kushnir, & Meir, 1991; Tegtmeier, 1980). One aspect of role boundary stress (role conflict) contributed significantly to emotional exhaustion for school psychologists and was significantly higher compared to role conflict in teachers (Pierson-Hubeny & Archambault, 1987). No significant effect was reported for Role Boundary on the job satisfaction of licensed professional counselors (LPCs) (Clemons, 1988).

Responsibility. In the OSI, Responsibility (R) assesses the amount of responsibility, or perceived responsibility, the person has for the actions and work achievements of others. For LPCs, job satisfaction (measured by the Minnesota Satisfaction Questionnaire) increased as the level of stress measured by the Responsibility subscale increased (Clemons, 1988). On the OSI, the Vocational Strain (VS) subscale contains elements of job satisfaction. For the Clemons (1988) study, an unexpected finding was that a high job satisfaction score and a high VS score were associated with high Responsibility scores in the OSI model. Olson (1986) reported that the perceived responsibility for teacher and parent problems were related to school counselor stress.

Physical Environment. The Physical Environment (PE) subscale gauges exposure to physically harmful or unpleasant conditions in the workplace and reflects personal isolation or erratic schedules. During the literature review, no research relating toxins or extreme environmental conditions to elementary school counselor settings was found. This is hardly surprising; most elementary schools are relatively benign environments compared to many industrial settings. Also, the physical threat to staff in public schools is associated primarily with middle and high schools.

A related study noted that school psychologists reported the hassles of driving between urban schools to be stressful (Wise, 1985). Female school psychologists gave higher ratings to items referring to high risk to self and others higher than did males (Wise, 1985). A substantial sense of isolation for school counselors was noted by Tegtmeier (1980).

Occupational Strain Factors

The second major construct in the OSI is measured by the Personal Strain Questionnaire (PSQ). This OSI domain measures psychological strain, and in the following sections, research is reported that relates to subscales of the PSQ. High levels of occupational stress can have

significant personal, social, and organizational costs (Paine, 1982). Strains (effects) used as dependent measures within occupational stress research have been arbitrarily divided into strains and illness by Holt (1982). The variables on the PSQ solicit information on constructs which fall primarily in Holt's categories of psychological strain, behavioral and social strain, and on somatic-physiological (including psychosomatic) illness.

The following sections correspond to the PSQ subscales Vocational Strain, Psychological Strain, Interpersonal Strain, and Physical Strain. Again the concepts as used in the OSI are defined at the beginning of each section. A special case of occupational strain is discussed after the OSI factors.

Vocational Strain. Vocational Strain (VS) assesses difficulties in the amount or quality of work and attitudes such as job satisfaction. Morocco (1981) reported that stress reduces a counselor's quality of performance which is a major facet of Vocational Strain. This factor was significantly affected by Role Overload, Role Insufficiency, Role Boundary and Physical Environment of full time veterinary students (Osipow & Davis, 1988). Job performance in nurses was negatively affected by job stress (Motowidlo et al., 1986).

Psychological Strain. Psychological Strain (PSY) measures emotional or psychological difficulties of the person as reflected by various affective and subjective responses such as anxiety or depression. Stress was reported to contribute significantly to psychological exhaustion in school psychologists (Pierson-Hubeny & Archambault, 1987), while job circumstances were found to contribute to self-reports of anxiety, hostility, and depression in nurses (Motowidlo, et al., 1986). Psychological Strain in veterinary students was significantly affected by Role Insufficiency, Role Boundary, and Responsibility subscales (Osipow & Davis, 1988).

Interpersonal Strain. Interpersonal Strains (IS) assesses disruptions in interpersonal and social functions and may include frequent quarrels with family, isolation, dependency, anger, and irritability. Moracco (1981) found stress impacted family life quality for counselors, and that stress contributes to maladaptive coping strategies which may be exhibited in relations with co-workers, clients, and family members.

Physical Strain. Physical Strain (PHS) gauges levels of reported physical illness, especially psychogenically based disorders. PHS includes reported cardiovascular difficulties, poor health habits, and responses such as

disturbances in sleeping and eating. Although physical consequences of stress have been reported, the link is not considered undeniably established by some (Sharit & Slavendy, 1982). In one study, stress was reported to contribute significantly to physical and psychological exhaustion in school psychologists (Pierson-Hubeny & Archambault, 1987). No research was found that linked this variable and school counselors; however, additional information on the relationship between stress and physical strain follows in the next section on burnout.

Burnout: A Special Case of Occupational Strain. For the over the last 20 years, burnout has been the subject of considerable research. A typical definition of burnout is of a subjectively experienced "state of physical, emotional, and mental exhaustion caused by long term involvement in situations that are emotionally demanding" (Pines & Aronson, 1988, p. 9). Some major effects include negative attitude toward others and self. During early stages of conceptualization, burnout was considered to occur only in helping professionals. More recently the term has been applied to persons in a broader range of occupations (Maslach, 1982; Pines & Aronson, 1988).

For the purposes of this study, the basic components of burnout are considered to be a part of the domain of Psychological Strain measured by the PSQ. Forney and

Wiggers (1984) noted that aspects of burnout and the OSI subscales have been linked by other researchers. In fact, in doing the confirmatory analysis for the OSI, Osipow and Spokane (1987) named the factor which described 56.7% of the PSQ domain's variance "Exhaustion Physical/Psychological." This is quite similar to common burnout definitions. Another similarity between burnout and the OSI can be seen in a transactional definition of burnout suggested by Cherniss (1980a). This describes burnout in professionals as a result of perceived strain that has been inadequately dealt with by coping mechanisms.

In related research, guidance counselors have reported significantly lower burnout levels than school psychologists (Pierson-Hubeny & Archambault, 1987). Age, gender, marital status, and years of experience were associated with burnout in public school counselors (Burchette, 1983).

Occupational Coping Factors

The third major domain of the OSI measures coping resources and contains subscales representing four factors. Factors which have been examined as possible moderating or coping variables in occupational stress research have been divided into five categories by Holt (1982):

1. Physiological factors including use of alcohol, drugs, caffeine, diet disruption, exposure to radiation, dust, and chemical pollution.

2. Characteristics of individuals including both demographic variables and personality traits or variables.

3. Situational variables including social support, work group characteristics and job characteristics.

4. Organizational structure and climate factors.

5. Sociological variables including home support and community or other non-work interpersonal ties and involvements.

The factors that make up the PRQ and the demographic data being collected for this research have components that appear to fall into all but the organizational category as delineated by Holt (1982). According to Osipow and Spokane (1987) the PRQ domain is based primarily on a comprehensive review of literature by Newman and Beehr (1979). There is research supporting predicted effects of coping resources measured by PRQ subscales; that is, they modify the effects of stress on strain (Osipow & Davis, 1988).

In the following four sections, research is reported that relates to PRQ subscales which is the OSI domain measuring coping resources. The sections correspond to the PRQ subscales Recreation, Self-care, Social Support, and Rational/Cognitive Coping.

Recreation. Recreation (RE) assesses the extent to which a person uses and enjoys recreational activities as a distraction from work and a source of satisfaction outside of work. This was suggested as one coping strategy for counselors under stress (Kremer & Owen, 1979). Recreation was reported to moderate the effect of Role Overload, Role Ambiguity, and Responsibility on a global measure of strain (Osipow & Davis, 1988). Workers in a broad range of occupations were found to use this coping device more as they age (Osipow, Doty, & Spokane, 1985).

Self-care. Self-care (SC) assesses the amount of self-care behaviors (i.e., engagement in healthy activities) which cut down or ease chronic stress. This factor was found to moderate the relationship between Responsibility and Psychological Strain measured by the global PSQ score (Osipow & Davis, 1988). Older workers have been reported to utilize use more Self-care coping resources than younger workers (Osipow et al., 1985). Kremer and Owen (1979) suggested that counselors use self-care strategies such as relaxation training and exercise as coping devices.

Social Support. Social Support (SS) measures reported feelings of the respondent about whether individuals or groups around them can and will provide various types of help and support. In a study using the OSI, Social Support

reduced the effect of five of the six ORQ stressor variables (Osipow & Davis, 1988). Other researchers found perceived social support moderated the effects of overall stress on strain (Melamed et al., 1991). In related research, moderating effects of social support on burnout have been reported by Pines and Aronson (1988), and Cherniss (1980a).

For counselors and other human service workers, support groups seem to help provide social support (Moracco et al., 1987; Cherniss, 1980a), but results may have been related to rational/cognitive resources. Less formal support systems moderated for minority counselors in a university setting (Casas, Furlong, & Castillo, 1980), and school counselors reported effective social support from peers and supervisors (Heiden, 1988/1989; Ekbohm, 1985).

Rational/Cognitive Coping. The Rational/Cognitive Coping (RC) subscale focuses upon the ability of the respondent to reduce work stress through cognitive skills such as systematic problem solving, priority setting, and time management. Research results on this coping variable are mixed. For example, older worker more effectively used Rational/Cognitive Coping techniques than did younger workers (Osipow et al., 1985). However, two other studies reported no evidence suggesting improved coping results using this strategy (Osipow & Davis, 1988; Nowack, 1988).

Kremer and Owen (1979) suggested some counselors may cope by using avoidance and cognitive restructuring which are techniques related to this factor.

Correlates of Occupational Stress

Demographic variables are frequently included in stress research (Clemons, 1988), but results are inconsistent in general and counselor stress research. In the following sections, demographic variables used in this study will be discussed briefly. Literature will be noted relating these variables to stress, strain, and coping of school counselors and other occupational groups. In some instances, a suggestion will be made as to which OSI domain or subscale may relate most closely to the variable; although, other interpretations will be possible in many cases.

Age. Age is outside the OSI model and appears potentially associated with any subscale. Research using a sample of workers representing many occupations, reported that stress from Physical Environment and from Role Conflict demands decreased as age increased (Osipow et al., 1985). The same authors found strain from Role Overload and Responsibility increased with age.

The counseling literature is mixed on this variable. Age and experience were positively related to job

satisfaction (one facet of Vocational Strain) for LPCs (Clemons, 1988). Older high school counselors reported less stress (Ekbohm, 1985), but other research showed no relationship between age and role conflict or role ambiguity for school counselors (Redick, 1972; Heiden, 1988/1989). Neither was there any reported relationship between stress and counselor age (Heiden, 1988/1989). Even within the same study, different stress factors may show different relationships to age. Moracco et al. (1984) reported counselor-teacher professional relationships, financial security, and professional job overload were associated with higher stress for younger counselors, but three other stress variables were not significantly related to stress.

Counseling Experience. This variable would appear to be closely linked with age. However, many school counselors enter the profession after several years in teaching or other job settings which could confound the analysis by age. Two studies reported that years of experience did not differentiate stress in school counselors (Moracco et al., 1984; Tegtmeier, 1980).

Student/Counselor Ratio. Of all the OSI subscales, Role Overload appears most directly related to student/counselor ratio. For school counselors, role overload associated with too many students per counselor or

too many student contacts was found to be related to higher stress (Sears & Navin, 1984). Olson (1986) found student/counselor ratio to be positively related to stress for school counselors, but Heiden (1988/1989) found no significant relationship between student/counselor ratio and counselor stress.

School Size. Kahn et al. (1964) suggested that increases in size and complexity of schools contribute to role ambiguity and role overload. School size was found significantly correlated to counselor stress (Heiden, 1988/1989) and to five of six stress factors examined by Moracco et al. (1984).

School Setting. This variable reflects geographic location of the school and includes urban, suburban, and rural categories. Laffey, Cichon, Koff, and Olson (1981) concluded that teachers in suburban and urban settings were in significant agreement about selected variables related to job stress. Yet, Moracco et al. (1984), found for school counselors, that school setting did not affect perceptions of stress.

Hours Worked per Week. This variable is external to the OSI model. However, the possibility that perceived overload might be reflected in attempts to moderate job stress by working extra home cannot be overlooked nor can the potential impact of a second paid job. In related

research, Steffy and Jones (1990) reported part-time patient-care hospital employees perceived greater role strain than did full time employees. This variable was not found in the counseling literature.

Gender. Results relating stress and gender have been mixed (Clemons, 1988). Osipow et al. (1985) found no significant differences in the strains experienced by men and women across a wide range of occupations at any age level. In the counseling literature, a study of LPCs found no difference in the contribution of stress to job satisfaction for either sex (Clemons, 1988). No difference in perceived stress of school counselors across gender was found by Moracco et al. (1984), but Heiden (1988/1989) reported significantly higher stress in female counselors than in males.

Home Factors and Job Stress. Although the existence of connections between these variables and job stress may seem intuitively obvious, Barling (1990) asserts that there is relatively little research that clarifies the interactive connections between job, stress, and family. The possibility of interaction of counselor job stress and home stress was suggested by Moracco (1981). Some results from the counseling research support this concept. For example, unmarried counselors reported significantly higher levels of stress than did married counselors (Parker,

1979). The same author reported counselors with more children of their own reported experiencing less job stress. A perceived lack of financial security was significantly related to increased counselor stress (Heiden, 1988/1989), and it was hypothesized that this may be connected to the reported higher stress in single counselors since they have no partner contribute finances or provide backup in case of emergency or job loss.

School Counselors and Occupational Stress

Butcke et al. (1984) described six factors that contribute to the explanation of stress in all levels of school counseling. These factors are (descending from most variance explained) are (a) lack of decision-making authority, (b) financial security, (c) nonprofessional duties, (d) professional job overload, (e) counselor-teacher professional relationships, and (f) counselor-principal professional relationships. The authors cited a modest amount of literature related to these factors.

Sears and Navin (1983) studied stress and school counselors and reported moderate stress related to factors for quantitative overload, role conflict, and role ambiguity. No relationship was found between stress and sex, age, marital status, assigned grade level and years of counseling experience. As with many other occupational

groups, stress has been associated with higher levels of illness (Parker, 1979). Finally, role conflict and role ambiguity were positively but not significantly correlated with increased levels of job-related tension but negatively and significantly correlated with job satisfaction among secondary school counselors (Thompson & Powers, 1983).

Elementary Counselors and Occupational Stress

Heiden (1988/1989) found elementary school counselors to be less stressed than secondary school counselors and speculated this was due to increased paperwork at secondary levels. An alternative explanation is possible. In the same study, there was a significant positive relationship between larger school size and higher stress (Heiden, 1988/1989). Secondary schools tend to be larger than elementary schools, and factors such as increased role ambiguity or decreased social support could also explain the reported results. Other researchers reported no difference in stress for counselors at different school levels (Moracco et al., 1988). Beyond this, no literature on elementary school counselors and occupational stress was found.

Measurement of Occupational Stress

The interactive view of stress implies that reactions to stressors are distinctive for each individual. Thus responses may be consistent for the individual but not between individuals, even under the same stimulus (Kremer & Owen, 1979). Kasl and Cobb (1982) assert that "though this idiographic, subjectivistic approach to stress may be necessary in order to capture the complexity of the problem, it does cause many conceptual and methodological headaches" (p. 445). The same authors go on to say that:

the challenge here is two-fold: to develop relatively objective measurement procedures for subjective constructs and to develop complex data analysis strategies so that objective and relatively superficial indicators can reveal some of the subjective and idiosyncratic import that they may have for particular individuals (Kasl & Cobb, 1982, p. 463).

If, as interactive models suggest, stress is an interaction between the environment and the perception of the individual, then the self-perception and therefore self-report of the respondent must be an important measure of stress. In other words, as far as professional and personal functioning is concerned, it is important to determine whether individuals perceive themselves as stressed.

Alternatively, it may be less important whether physiological measures or assessments by others define the

individual as stressed. There is limited information on the correlation of self-reported occupational stress and other measures. However, significant positive correlations have been reported between supervisor and co-worker ratings and self-reports of job stress (Motowidlo et al., 1986) as well as for biological measures and self-reports of stress (Kinnunen, 1987). Frankenhaeuser (1977) stated that the impact of a stressor measured by catecholamine excretion is determined by the person's cognitive appraisal of the stressor rather than by its physical properties. Furthermore, on four physiological measures of stress, significant individual differences in sensitivities of responsiveness were found by Bridges, Jones, and Leak (cited in Coelho & Irvin, 1981). The authors cautioned against inferring the intensity of the psychological experience of stress from these measures. In conclusion, while self-report measures have limitations, it is the contention of this author that previous research supports the importance and reliability of self-report for perceived occupational stress, and that a well-constructed self-report instrument should be the method of choice for the current study.

Occupational Stress Inventory

The instruments available for stress research are many and varied. In the following section some considerations that led to the choice of the OSI are briefly reviewed. Next, descriptions of the goals and structure of the OSI and a discussion of research support for the model.

Consideration of Alternatives

Previous research has utilized various instruments and approaches in the measurement of stress, strain, and coping. These approaches range from the use of a single question to assess stress (Cummings & Nall, 1983) to the use of multiple self-report measures to assess components of stress (Pendergast, 1987). Some researchers developed their own stress measurements but provided limited information on psychometric proprieties (Parker, 1979). Others used instruments developed for a single occupational category (Heiden, 1988/1989; Moracco, 1983) or measured only one component such as strain (Derogatis, 1982). Richard and Krieschok (1989) suggested the use of the Occupational Stress Inventory (OSI) because other instruments tended to measure only strain and provided limited measurement of stress and coping which are both central to an interactive model of occupational stress.

For the purposes of this study, the OSI developed by Osipow and Spokane (1987) was considered the most appropriate tool. Dorn (1991) noted that the OSI clearly fills a need in the evaluation of occupational stress and strain. The following section describes the OSI.

Description of OSI

Osipow and Spokane (1987) state that occupational stress is an interaction between three dimensions of occupational adjustment that is, occupational stress, psychological strain, and coping resources. According to the authors, the OSI was designed for two main reasons:

- 1) to develop generic measures of occupational stressors that would apply across different occupational levels and environments; and 2) to provide measures for an integrated theoretical model linking sources of stress in the work environment, the psychological strains experienced by individuals as a result of work stressors and the coping resources available to combat the effects of stressors and alleviate strain. (Osipow & Spokane, 1987, p. 1)

The OSI is based on the concept that perceived occupational stresses potentially have significant disruptive psychological and physical outcomes (experienced strain). These stresses may be moderated by coping resources utilized by individuals (Osipow & Spokane, 1987; Osipow, 1991). In these authors' view, the interactive nature of these related, but distinct, areas necessitated

the development of instrumentation to assess each of the three domains of occupational adjustment (Osipow & Spokane, 1987). The three instruments are:

1. The Occupational Roles Questionnaire (60 items). The ORQ purports to measure occupational stress by assessing role overload, role insufficiency, role ambiguity, role boundary conflicts, levels of real or perceived responsibility, and physical stressors.

2. The Personal Strain Questionnaire (40 items). The PSQ purports to measure psychological strain by assessing vocational problems with quantity or quality of work, psychological and/or emotional problems, interpersonal strain, physical complaints, or poor health habits.

3. The Personal Resources Questionnaire (40 items). The PRQ is designed to assess coping resources by measuring recreation activities, self-care, social support, and rational/cognitive coping.

Research Support

Support for the OSI model is found in the manual and in occupational stress literature. Treatment studies cited by the authors indicate the PSQ and PRQ were found to be sensitive to treatment efforts aimed at reducing stress (Osipow & Spokane, 1987). Studies examining the relationships between the domains and scales of the OSI

with work-related variables found, for the most part, scale and domain correlations significantly related to the variables as predicted by the model (Powell, 1991). The relationship of the PSQ and a measurement of burnout was in the predicted direction (Forney & Wiggers, 1984). Richard and Krieshok's (1989) findings that coping behaviors were important in reducing strain lends support to the validity of the interactive model. Further support for the OSI model came from research demonstrating relationships among subscales that are consistent with predictions based on the model (Osipow & Davis, 1988; Osipow et al., 1985).

The goal of the OSI developers was to make an instrument that could be used across occupations and with professional, white collar, and blue-collar workers (Osipow, 1991). Osipow (1991) noted that for individual clinical work, a more comprehensive understanding of the client's work stress, work strain, personality, family status and other types of stresses should be assessed. Powell (1991) found the OSI to be well grounded in theory and recommended it for research purposes.

Summary

In this chapter, historical and theoretical antecedents of the selected model were reviewed. Theoretical conceptions of stress were discussed, and the notion of an interactive definition involving stress, strain, and coping was introduced. The concepts of primary and secondary appraisal were defined and connected to the concept of coping. Strain was defined, and some of its effects were noted. Two occupational stress theories were briefly reviewed and related to concepts of the OSI. Literature relating to the factors represented by the subscales of the OSI was reviewed. Likewise, literature related to occupational stress and various demographic variables was described. Finally, general measurement considerations for occupational stress were discussed, and specific information on the OSI was introduced.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe procedures designed to answer the research questions proposed for this study. Included is a description of the population, sample, instrumentation, data collection, and data analysis procedures.

Research Questions

The following research questions were addressed in this study:

1. What are the levels of the ORQ subscales (stress factors) among elementary school counselors?
2. What are the levels of the PSQ subscales (strain factors) among elementary school counselors?
3. What are the levels of the PRQ subscales (coping resources) among elementary school counselors?
4. Are there differences in the occupational stress among elementary school counselors related to the following demographic variables: age, gender, marital status, parental status, number of years in profession, number of school served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

5. Are there differences in the psychological strain among elementary school counselors related to the following demographic variables: age, gender, marital status, parental status, number of years in profession, number of school served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

6. Are there differences in the coping resources among elementary school counselors related to the following demographic variables: age, gender, marital status, parental status, number of years in profession, number of school served, students assigned, school size, hours worked per week, or school setting (urban, suburban, rural)?

Sample

This study surveyed a national sample of elementary school counselors. Permission was granted by The American School Counselors Association (ASCA) for access to a random sample of its elementary school counselor membership. From the overall list of approximately 3212, a random sample of 500 was selected by ASCA's research department. Only elementary school counselors identifying themselves as primarily employed in an elementary school or schools were included in the study.

Instrumentation

Elementary school counselors selected for the study were requested to fill out and return the Occupational Stress Inventory and the Individual Data Form. Data from these responses provide the basis for the analysis done to answer the research questions for this study.

Individual Data Form

The Individual Data Form (Appendix A) was designed to gain information on respondent characteristics. Information was collected from the respondents on the following variables: age, gender, marital status, number of years in profession, number of students assigned, number of schools served, hours worked per week, school size, parental status (parent or not), and school setting (urban, suburban, rural). In addition, two questions were asked assessing perceived overall job and overall non-job stress. All information obtained from the Data Form was treated as categorical data to make it easier to describe group differences. However, most information was collected in such a way that variables can be treated as continuous for possible follow up analysis. The final version of the Data Form came after pilot testing on masters level counseling students who were currently in supervised placements.

The Occupational Stress Inventory

The three domains of the Occupational Stress Inventory (OSI) are the Occupational Roles Questionnaire (ORQ), Personal Strain Questionnaire (PSQ), and Personal Resources Questionnaire (PRQ) (See Appendix B). Each domain has subscales which assess distinctive characteristics of the person or the surroundings and provides detailed information about important parts of the domains (Osipow & Spokane, 1987). The subscales which constitute the OSI are:

1. For the ORQ, (a) Role Overload, (b) Role Insufficiency, (c) Role Ambiguity, (d) Role Boundary, (e) Responsibility, and (f) Physical Environment.

2. For the PSQ, (a) Vocational Strain, (b) Psychological Strain, (c) Physical Strain, and (d) Interpersonal Strain.

3. For the PRQ, (a) Recreation, (b) Self-care, (c) Social Support, and (d) Rational/Cognitive Coping.

The subscales each have 10 items resulting in 140 total items and requiring approximately 20 to 40 minutes to complete (Osipow & Spokane, 1987). The three domain questionnaires may be administered separately or together, but were done together for this research project. Responses are on 5 point Likert-type scale of rarely or never, occasionally, often, usually, most of the time. The

items are designed to assess the frequency that each item pertains to the respondent. Some items are reverse scored to discourage response sets. Raw scores of each subscale are derived by summing the scores of the ten items. Raw scores are converted to T-scores which can be compared to norms for the subscales. Percentile scores and individual profile sheets were provided.

Norms. Current research norms were obtained using a sample of 909 employed adults from 130 diverse occupational groups. These were primarily technical, professional, and managerial employees from schools, services organizations, and large manufacturing settings. In the manual, separate norms are provided for males and females. The test is intended primarily for research purposes (Osipow & Spokane, 1987).

Reliability. The OSI manual reports that internal consistency analysis was based on 549 working adults. Alpha coefficients of .89 (ORQ), .94 (PSQ), and .99 (PRQ) were reported for the total questionnaire scores. Alpha coefficients for the 14 scales ranged from .71 to .94.

Validity. The OSI's authors report validity data from factor analytic studies, correlation studies, studies using the scales as outcome measures for stress treatment programs, and studies of the model comparing selected criterion groups. The authors and other reviewers (Powell,

1991; Yanico, 1985) note that factor studies have provided evidence of construct validity.

Data Collection

Data for the study were collected by mail. As originally planned, the sequence of data collection procedures included an introductory letter, the first mailing of the survey, a postcard reminder, a follow-up mailing of the survey, and a phone call follow-up to a random selection of non-respondents. These procedures are based on Dillman's (1978) guidelines for mail surveys. Following these guidelines, a decision to send out a third complete mailing of the questionnaire was made after the response to the planned mailings were tabulated. A record was kept of when surveys were returned. No unusual pattern of response or non-response to surveys was noted.

Pre-letter

Three days before the first distribution of survey materials, an introductory letter (Appendix C) was sent to all potential participants. The letter included a brief description of the study's purpose, its importance, and assurance of confidentiality, along with encouragement to participate in the study.

Initial Mailing

The first mailing of questionnaire materials was on April 16, 1992. Each packet contained an explanatory cover letter (Appendix C) and survey materials along with a self-addressed, stamped, return envelope. It was explained that coding of materials was to aid follow-up, and packet recipients were assured of the confidentiality of responses.

Postcard Reminder

One week after the initial mailing a postcard was sent to all participants (Appendix C). They were reminded of the study and their participation was requested again. Participants who failed to receive the survey packet were requested to call the researcher (collect), so a packet could be sent to them. Appreciation was expressed to those who had already completed and returned the materials.

First Follow-up Mailing

Approximately 3 weeks after the initial mailing on May 11, a second full packet of materials was sent to participants who had not yet responded. Also included in the packet was a letter from the chairman of the dissertation committee (Appendix C) encouraging the participants to respond. Again a self-addressed, stamped

return envelope was included. A request was included to return the item booklet(s) in the return envelope even if the response sheet was not filled out.

Second Follow-up Mailing

In order to obtain the maximum return rate, on June 1, a third full packet of materials was sent to participants who had not yet responded. A letter from the researcher was included (Appendix C) emphasizing the importance of having participation from the widest possible representation of elementary school counselors. Again a self-addressed, stamped return envelope was included.

Phone Follow-up

Roughly 9 weeks after the initial survey was mailed, a phone follow-up was made to a random selection of 10% of the non-respondents (eight people). The following information was recorded for this sample: (a) age, (b) gender, (c) number of students assigned to work with, (d) marital status, (e) years worked as an elementary school counselor, (f) whether full or part time, and (g) and the last question from the Data Form (Appendix A) on global job stress. These persons were also asked why they did not respond to the mailed survey. No unusual pattern of

response or non-response to the phone survey was noted. A copy of the questions asked is in Appendix A.

Data Analysis

Data Management

The researcher employed assistants to enter data into a Quatro pro (1992) spreadsheet. All data entered in the spreadsheet were verified by the researcher. All computations and analysis of the data were done by the researcher. Both Number cruncher statistical system (Hintze, 1990) and SPSS PC (1990) were utilized.

Missing items were handled in various ways depending on the variable. Missing items were typically assigned the mean score of the entire group for that item minus outliers. Outliers were operationally defined as scores more than four standard deviations from the mean. Any other decision made was guided by the intention to replace missing items in a manner which least affected the variance of the data. Exceptions to these general rules are explained when describing the demographics in Chapter IV.

Analyses Procedures

The following analyses were used for the study:

1. Correlations for the total sample (male and female respondents) were computed among the three domains of the OSI to further verify the independence of the domain scores. For each domain, the subscale scores were added up. The scores of the three domains were correlated and inspected to see if they were comparable to the correlations provided in the manual. Correlations were run among all subscales and the domain scores and visually compared to the correlations in the manual in order to determine if the generally expected relationships are found in the collected sample. Correlations were run between the ORQ, PSU, and PRQ and the Data Form questions assessing job and non-job stress to determine the general relationship between what the respondents believed about their stress and what was measured by the OSI. Finally, correlations were calculated between the ORQ, PSQ, PRQ and the Data Form questions that yielded continuous data.

2. To answer research questions one through three, for each of the three domains, subscale totals, means, standard deviations, and T-scores were computed. These were discussed relative to the interpretive guidelines provided in the manual.

3. To describe levels of the subscales (research questions four through six), subscale totals and their and T-scores were computed. These were discussed relative to the interpretive guidelines provided in the manual.

To describe occupational stress, strain, and coping using the demographic variables, each demographic variable was first compared respectively to the ORQ, PSQ, and PRQ total scores. Dichotomous variables were analyzed using t-tests. Analysis of variables with three or more levels utilized Analysis of Variance (ANOVA). Categories were developed from examination of descriptive statistics or using other logical considerations. Specific procedures are noted in Chapter IV.

For each demographic variable with more than two levels, descriptive statistics were run respective to ORQ, PSQ, or PRQ. Then an F-test was calculated to determine if variances were equal between levels. For groups with unequal variances, transformations of the data were attempted. ANOVAS were run, and when significant differences were indicated ($p < .05$) between groups, a post hoc test was run (usually Scheffe's multiple comparison test).

For those levels indicated as different by the post hoc tests, descriptive statistics were calculated for all subscales of that domain. This was also done for subscales

of domains found to be significantly different for dichotomous variables. The descriptive statistics were examined for apparent differences in means in order to select those subscales which would be compared between levels of the demographic variables. This was done in an attempt to limit the occurrence of significant t-test results due to experimentwise error rate. T-tests were calculated to test for significant differences ($p < .05$) between levels of subscales.

Summary

This chapter outlined the research questions proposed for the study. Proposed data collection methods were described including the mailing procedures, non-respondent follow-up, and the handling of missing data. The population, participants, and instrumentation were presented, and the basic data analysis procedures were briefly described.

CHAPTER IV
RESULTS OF THE STUDY

The results of the analysis of data are presented in this chapter. Response rates for each data collection stage are reported in the first section. In the second, the sample is described in terms of the demographic data. The third section presents the results of the analytical procedures in relation to the research questions. A brief concluding section provides a summary of the chapter.

Survey Response

The return numbers and percentages are presented in Table 1. The final response rate was 84% ($n=420$). Of these, 110 surveys were eliminated from the analysis because they did not fit the sampling requirements. Most were eliminated because they were not employed full time as an elementary school counselor. Others were full time employees but had other duties such as part time teacher, psychologist, or administrator. Still others indicated that they were employed part time but did not elaborate. There were 310 surveys used for the analysis in this study. Eight randomly selected non-respondents (10%) were contacted by phone. The group consisted of seven females

Table 1

Survey Response Rates

Step	Number returned	Percent of total
Initial mailing including postcard reminder	334	66.8
First follow-up mailing	51	10.2
Second follow-up mailing	35	7.0
TOTAL	420	84.0

Note. There were 500 possible participants

and one male. Reasons given for not responding included "didn't have time," "not currently a elementary counselor," "just procrastinated," and "didn't wish to participate." No pattern of reasons for non-response was noted.

Demographic Data Information

Responses to the Data Form were used to describe the population and help define relationships between the various demographic variables and the scales of the OSI. For variables where categories were developed after collection of the data, a brief explanation of the process is given. The variables are presented in the order they occurred on the Data Form.

Age

The number of respondents and corresponding percentage of the total for each age category is presented in Table 2. Categories were developed by starting from the lowest age in the sample and adding the approximate equivalent of one standard deviation up to 4 groups (8 years rounded down from 8.4). The mean age for the respondents was 44.18 years of age.

Table 2

Age Distribution

Age range	Number	Percent of Total
below 31.9	25	8.06
32 - 39.9	64	20.65
40 - 47.9	120	38.71
48 - 55.9	65	20.97
56 & older	<u>36</u>	<u>11.61</u>
TOTAL	310	100.00

Gender

The elementary school counselors who responded were 12.90% ($n=40$) males and 87.10% females ($n=270$).

Years as an Elementary School Counselor

The number of years worked as an elementary school counselor is presented in Table 3. In forming categories for this variable, the first group (*0-2 years*) was decided based upon literature from organizational orientation and organizational studies (Feldman, 1976; Nelson, 1987; Wanous, 1977). It was considered important to attempt to see if very new counselors (*0-2 years*), or relatively new (*3-5 years*) counselors were in some way different from counselors with moderate to substantial experience. Over 78% of the respondents had worked 10 or fewer years as elementary school counselors.

Total Years Worked As a Counselor

Total years of experience in all types of counseling settings was very evenly divided between four groups. The group with under 2 years experience had 22.26% ($n=69$) of the total; the *2.1 to 5.0* year group contained 26.13%

Table 3

Years Worked as an Elementary School Counselor

Years worked	Number	Percent of total
0 - 2	78	25.16
2.1 - 5	100	32.26
5.1 - 10	64	20.64
10.1 & over	<u>68</u>	<u>21.94</u>
TOTAL	310	100.00

(n=81); the *5.1 to 10.0* group had 22.58% (n=70), and the *10.1 and over* experience group had 29.03% (n=90).

Years in Professional Education

Table 4 contains information on the total number of years the respondents had worked as professional educators in all capacities including as counselors, teachers, administrators, or other positions. The standard deviation of the group was used as the basis for the categories (8.0 rounded from 8.1). Nearly 80% of the counselors had over 8 years of professional education experience.

Counseling Work Hours

The categories for the number of hours worked for the elementary counseling job are *40.9 hours or less* per week (an average work week), *41 to 48.9* hours (one full 8 hour workday extra), and *49.0 hours and up* (more than one full 8 hour workday extra). An average work week was the norm for 40.65 % (n=126) of the respondents. About 27.1% (n=84) indicated they worked between 41 and 48.9 hours. While 32.36% (n=100) reported working 49 or more hours per week. Respondents who reported a range such as "40 to 45" hours were assigned the mean of that range, i.e., 42.5.

Table 4

Total Years Worked in Professional Education

Years Worked	Number	Percent of Total
0 - 8	67	21.61
8.1 - 16	106	34.19
16.1 - 24	88	28.39
24.1 & over	<u>49</u>	<u>15.81</u>
TOTAL	310	100.00

Additional Paid Employment

A total of 17.1% ($n=53$) of respondents reported having additional paid employment outside of the elementary counseling job. The large majority, (82.9%, $n=257$) reported no other paid work.

Number of Schools Served

A total of 64.52% ($n=200$) of the study participants reported working in a single school. Serving in two schools was reported by 25.48% ($n=79$) of the counselors, while 10% ($n=31$) reported working in three or more schools.

Working with Other Counselors

In the school or schools where they worked, only 25.81% ($n=80$) of the counselors reported working with another counselor or counselors. The majority (74.19%, $n=230$) worked with no other counselors in their school settings.

Students Assigned for Services

Table 5 presents information on the number of students that counselors are typically assigned. Approximately one-third (32.9%, $n=102$) were assigned between 401 and 600 students.

Table 5

Students Assigned for Services

Students Assigned	Number	Percent of Total
400 & under	65	20.97
401 - 600	102	32.90
601 - 800	88	28.39
801 - 1000	25	8.06
1001 & over	<u>30</u>	<u>9.68</u>
TOTAL	310	100.00

For this item, a number of respondents put such a low number of "children assigned" that it did not appear sensible. This was especially suspicious when they were the only counselor in the school. Three respondents wrote notes to the effect that they were actually counseling the low number of students but were assigned a larger number as their responsibility. Based on this it was decided to attempt to clarify what the low numbers represented. A coin toss was used to determine which of these apparently contradictory responses to contact ("heads" meant call, "tails" not call). One third of the total of these respondents were called. Every counselor contacted, indicated that they were responsible for all the students in their schools but were counseling the lower number. The remaining questionable items were replaced with the number of students in the school except for one which indicated she worked with another counselor. For this item, the mean was used.

Total Students in School

The number of students in the schools of the counselors in the study are presented in Table 6. Categories for this group were determined by removing 4 outliers, computing the mean and standard deviation, then going out one-half standard deviation both above and below

Table 6

Number of Students in School

Student in School(s)	Number	Percent of Total
573 & under	108	34.84
574 - 955	133	42.90
956 - 1337	37	11.94
1337 & over	<u>32</u>	<u>10.32</u>
TOTAL	310	100.00

the mean and additional standard deviations above or below as dictated by the data distribution. Top and bottom groups were collapsed. A total of 77.74% ($n=241$) of the counselors worked in school(s) with less than 955 students.

School Setting

An *Urbanized Area* for this category was operationally defined as a city of 50,000 population or more. Sixty-two percent of survey respondents worked in schools located either in the *Urban Fringe* (suburb) of an *Urbanized Area* (23.25%, $n=86$) or a *Town* (34.52%, $n=107$). A *Town* was defined as having a population between 2,500 and 50,000. *Central City* locations (in an *Urbanized Area*) were reported as the job setting by 18.06% ($n=56$). *Rural* locations in communities of less than 2,500 were reported by 13.87% ($n=43$). Counselors reporting working in more than one school located in two different kinds of settings made up 5.8% ($n=18$) of the respondents.

Marital Status

A total of 228 (73.54%) of the respondents were married at the time of the study. Those indicating they were currently divorced comprised 11.6%, and about 10.3% reported never having been married. Six respondents were

separated, five were widowed, and three were living with someone.

Parents and Children

There were 232 parents in the responding sample constituting 74.84%. Those not reporting being parents totaled 78 or 25.16%. Table 7 depicts the number of children reported by the parents. The mode for this variable was two children. One child was the second most frequent response number.

Global Estimated Job Stress

Respondents were asked to estimate the total level of job related stress on a scale of 1 - 10. For the development of groups, one-half standard deviation above and below the mean was considered to be the *Medium* stress group. Above and below this point were the *Low* stress and *High* stress groups respectively. Using these groups, 88 respondents fell into the *Low* group, 108 in the *Medium* group, and 114 in the *High* group for this global estimate of job stress.

Table 7

Number of Children of Counselors who are Parents

Children Reported	Number	Percent of Total
0	78	25.16
1	55	17.74
2	113	36.45
3	39	12.58
4	17	5.49
5	5	1.61
6	2	.65
7	0	0
8	<u>1</u>	<u>.32</u>
TOTAL	310	100.00

Global Estimated Non-job Stress

The same question format and procedure was used for this item as for the Job Stress item. For global indication of non-job stress, 87 respondents fell into the *Low* category, 115 were in the *Medium* category and 108 were in the *High* group.

Results

Scale Correlations

Table 8 shows the correlations between the OSI as well as the global stress questions from the Data Form. As would be predicted by an interactive theory of occupational stress, ORQ and PSQ scores were positively correlated (.60), and the PRQ was negatively correlated with both the ORQ (-.33), and the PSQ (-.56). These correlations were larger than those reported for the norm group in the OSI manual. The Data Form question (DFQ) rating global job stress (DFQ#16) was strongly correlated with the measures for stress and strain on the OSI. The question on non-job stress (DFQ#17) showed much lower correlations.

Correlations between subscales (Appendix D, Table D-31) were also in the expected directions and were also typically of a greater magnitude than those in the manual.

Table 8

Correlations of Occupational Stress Inventory Scales and
Data Form Global Stress Questions

	ORQ	PSQ	PRQ	DFQ#16	DFQ#17
ORQ (Stress)	1.00				
PSQ (Strain)	.60	1.00			
PRQ (Coping)	-.33	-.56	1.00		
DFQ#16 (Job Stress)	.45	.40	-.21	1.00	
DFQ#17 (Non-job Stress)	.08	.25	-.34	.04	1.00

Note. ORQ = Occupational Roles Questionnaire; PSQ = Personal Strain Questionnaire; PRQ = Personal Resources Questionnaire; DFQ = Data Form Question.

These results appear to support the notion that the data for this occupational group follow the patterns predicted by the interactive model.

Correlations were calculated between the domain scales of the OSI and the Data Form questions which had results in the form of continuous data (Appendix D, Table D-32). The correlations were checked for significance at $p < .01$ and only the correlation between the PSQ and an increase in the number of schools served by counselors ($r = 0.14$) was found to be significant.

Subscale Scores

T-scores on all ORQ, PSQ, and PRQ subscales fell in the average ranges for occupational stress, psychological strain, and coping respectively based on the interpretive guidelines and norms provided in the OSI manual (Osipow & Spokane, 1987). This was true for both male elementary school counselors and female elementary school counselors. T-Scores for both groups are presented in Table 9.

Computations were made of the percentage of T-scores for elementary school counselors that were two or more standard deviations above or below the mean for the OSI norm sample. These results are presented for females (Appendix D, Table D-33) and for males (Appendix D, Table D-34). Separate tables for the respective genders were

Table 9

T-Scores for Mean Scale Scores for ORO, PSO, and PRO
for both Males and Females

Scales	T-Scores Male	T-Scores Female
Occupational Roles Questionnaire		
Role Overload	51	54
Role Insufficiency	45	46
Role Ambiguity	50	50
Role Boundary	50	48
Responsibility	47	52
Physical Environment	52	47
Personal Strain Questionnaire		
Vocational Strain	49	48
Psychological Strain	50	48
Interpersonal Strain	50	49
Physical Strain	54	49
Personal Resources Questionnaire		
Recreation	48	49
Self-care	53	48
Social Support	52	49
Rational/Cognitive Coping	51	52

necessary since the OSI manual does not provide norms for males and females together.

Analysis of Levels of Demographic Data and OSI Scales

This section presents the description of the different levels of demographic data for the ORQ, PSQ, and PRQ. The variables consist of personal background variables and job setting variables and are presented in the order they occur on the Data Form.

No significant differences between groups or levels of variables were found for the following: (a) gender, (b) years employed as an elementary school counselor, (c) years employed in professional education, (d) years as a counselor in all settings, (e) hours worked per week, (f) other paid employment, (g) working with other counselors, (h) students assigned, (i) the number of students in the school, and (j) marital status. The tables for these variables are found in Appendix D.

Age.

Age was coded 1, 2, 3, 4, and 5 for the ages *below 31.9*, *32 - 39.9*, *40 - 47.9*, *48 - 55.9*, and *56 and over* respectively. The analysis procedures described in Chapter III were followed. Results shown in Tables D-1 and D-2 (Appendix D) indicate

no significant difference was found between levels for either the ORQ or the PSQ. However, Table 10 for age levels of the PRQ indicated a significant difference in variances ($p < .06$). The use of $p = .06$ and the subsequent use of Fishers LSD were the only departures from the analysis guidelines outlined in Chapter III. The decision was made to do so for this variable in order to increase the power of the analysis. The researcher decided this was necessary after working with categories of this variable over a period of time and observing patterns that suggested real differences. A Scheffe's "post hoc" test was initially run and showed no difference between levels. However, due to what the researcher considered a fairly large difference between several means, the more liberal Fishers LSD was run. Differences in means between levels 2 and 5 as well as between 3 and 5 were indicated.

Examination of descriptive statistics for levels 2, 3, and 5 of the PRQ subscales led to a decision to run the 5 t-tests which are found in Table 11 and Table 12. Self-care scores for those *56 and over* were significantly higher than those for people between the ages of *32.0 - 39.9* and approached being significantly higher than the *40.0 - 47.9* age group ($p < .07$). A significantly higher Recreation mean was

Table 10

Personal Resources Questionnaire at Different Levels of Age
of Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
AGE	4	3113.9	778.47	2.36*
Error	305	100703.4	330.17	
Total	309	103817.2		

* $p < .06$.

Table 11

Contrasts of Age Levels Two and Five for Self-care,
Recreation, and Rational/Cognitive Coping

	Level 2 (32-39.9)		Level 5 (56 & over)		
Coping Scale	M	SD	M	SD	t
Self-care	27.03	5.67	30.89	8.50	-2.43*
Recreation	26.17	6.23	28.50	7.72	-1.63
Rational/ Cognitive	36.83	5.47	38.64	6.75	-1.46

Note. This table examines two of five age levels for three of four Coping scales.

*p < .05.

Table 12

Contrasts of Age Level Three and Age Level Five for
Self-care and Recreation

	Level 3 (40.0-47.9)		Level 5 (56 & over)		
Coping Scale	M	SD	M	SD	t
Self-care	28.98	6.10	30.89	8.50	-1.84
Recreation	25.62	5.43	28.50	7.72	-2.08*

Note. This table examines two of five age levels for three of five Coping scales.

* $p < .05$.

obtained for the 56 and over group compared to the 40.0 - 47.9 age group, but not compared to the 32.0 - 39.9 group.

No difference was found between age levels two and five on their Rational/Cognitive scale scores. All PRQ scores that were significantly higher or in the direction of significance, favored the older counselors.

Gender.

For Gender, males were coded 1 and females coded 2. The results of t-tests comparing responses by gender showed no differences between scores on the ORQ, PSQ, or PRQ scales. Results of the t-tests are presented in Table D-3 in Appendix D.

Years Employed as an Elementary School Counselor.

Years employed as an elementary school counselor was coded 1 = 2 or fewer years, 2 = 2.1 to 5 years, 3 = 5.1 to 10 years, 4 = over 10 years. After running descriptive statistics and checking variances with F-tests, no difference was found between levels of years employed for either ORQ (stress) or PSQ (strain) (see Table D-4, and D-5, Appendix D). For the PRQ (coping) the group variances were heterogeneous (F obtained = 1.69 and F critical = 1.63). Log, square root, and arc tangent transformations were attempted and variances checked with no success in reducing heterogeneity. Failing these attempts, an ANOVA for the

PRQ was run with untransformed data (Table D-6, Appendix D). The F -ratio was not significant. Although there appears to be some difference between levels, it is showing up in the variances and not in the means. This will be further examined in the discussion section.

Years in Professional Education.

Total years employed in professional education was coded as 1 = 8 or fewer years, 2 = 8.1 to 16 years, 3 = 16.1 to 24 years, and 4 = over 24 years. ANOVAS (Tables, D-7, D-8, and D-9, Appendix D) were run for the ORQ, PSQ, and PRQ and showed no difference in means of the levels of years in professional education.

Total Years Worked as a Counselor.

Total years worked as a counselor in all settings (including school and non-school settings), was coded as 1 = 2 or fewer years, 2 = 2.1 to 5 years, 3 = 5.1 to 10 years, and 4 = over 10 years. Descriptive statistics were calculated and variances checked. Variances were found to be homogeneous between the different levels of the ORQ and PSQ. The variances for the PRQ levels were not homogeneous (F obtained = 1.60 and F critical = 1.58). A log transformation was attempted, variances checked and were still heterogeneous. However, according to Zar (1984) when, as is the case here, the n 's are different and the

larger variance is associated with the larger group and the smaller variance associated with the smaller group, the analysis of variance becomes a more strict measure (probability of a Type I error is decreased). Based on this it was determined to run an ANOVA on the untransformed ORQ data. ANOVAS were then run for the ORQ, PSQ, and PRQ. The F value was not significant for any of the three scales indicating no difference in means of the levels of years as a counselor in all settings. ANOVA results are presented in Tables D-10, D-11, D-12 in Appendix D.

Hours Worked Per Week.

Hours worked for the elementary counselor job were coded 1 = *40.9 hours and less*, 2 = *41 to 48.9 hours*, 3 = *49 hours and more*. Descriptive statistics were calculated and F tests computed from the variances. Variances were homogeneous for the ORQ and PSQ. Log, square root, and arc tangent transformations were run to attempt to obtain equal variances for the levels of the PRQ with no success. Again for this variable, the largest group was associated with the largest variance and the smallest group with the smallest variance, and it was determined to run an ANOVA using the original data. ANOVAS (Appendix D, Tables D-13, D-14, D-15) were computed for the ORQ, PSQ, and PRQ. The F value was not significant for any of the three scales, thus

indicating no difference in means of the levels of years as a counselor in all settings. It should be noted that from observing the means of the groups, there was a change in what would be the expected directions i.e. increases in stress and strain and a decrease in coping as hours worked increased. This observation will be discussed below.

Additional Paid Employment.

The respondents were asked to indicate if they had other paid employment outside of their counseling job. The responses were coded 1 for *no outside work* and 2 for *outside work*. T-tests were calculated on these two categories for the ORQ ($t = 1.21, p = .23$), the PSQ ($t = 4.9, p = .62$), and the PRQ ($t = -.34, p = .73$). None of the t-test values were significant.

Number of Schools Served.

The number of schools served by the participants category was broken into three categories and coded as 1 = *one school served*, 2 = *two schools served*, and 3 = *three or more schools served*. ANOVAS were run, a significant F was found for the ORQ (Table 13) but not the PRQ (Table D-18, Appendix D). The F for the PSQ (Table D-17, Appendix D) was approaching significance at $p = .056$. Although, this did not meet the study's guidelines for further analysis,

Table 13

Analysis of Variance Summary Table for Schools Served and Occupational Stress Scores

SOURCE	<u>df</u>	SS	MS	F
Schools Served	2	47.98.9	2399.5	4.03*
Error	307	182599.0	594.8	
Total	309	187397.9		

* $p < .05$.

it is interesting to note that this is consistent with the significant correlation found between this variable and the PSQ presented in Table D-32 (Appendix D).

For the ORQ, a Scheffe's comparison procedure was executed and indicated differences in stress between teachers working at *one school* and teachers working at *three or more schools*. Based on examination of the means and standard deviations of these six groups it was determined to run t-tests for four of the six tests (Table 14).

Significant differences were found between these two levels for scales measuring Role Overload ($t = -3.51$, $p < .001$), Role Ambiguity ($t = -2.44$, $p < .01$), and Role Boundary ($t = -2.99$, $p < .01$). No difference was found between the groups on the Responsibility subscale.

Working with Other Counselors.

Participants indicated whether they did (coded 1) or did not (coded 2) work with at least one other counselor in the school(s) they served. There were no significant differences between the two groups for stress, strain, or coping (see Table D-19, Appendix D).

Table 14

Contrasts for Selected ORQ (Stress) Scales Between
Counselors Serving One School and Counselors Serving Three
or More Schools

<u>Stress Scale</u>	<u>One School</u>		<u>Three or More Schools</u>		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Role Overload	29.46	7.26	32.02	6.22	-3.51**
Role Ambiguity	20.00	5.82	22.77	6.26	-2.44*
Role Boundary	19.38	5.95	22.84	6.30	-2.99*
Responsibility	24.94	5.90	26.06	6.50	-.98

Note. This table examines two of three levels of number of schools served and four of six Stress scales.

*p < .01. ** p < .001.

Students Assigned for Services.

Counselors indicated how many students they were responsible for in their job. Groups were coded 1 = 400 or less, 2 = 401-600, 3 = 601-800, 4 = 801-1000, and 5 = 1001 & up. ANOVA results for the three OSI domains (Tables D-20, D-21, and D-22 in Appendix D) show that none of the F -ratios were significant at the .05 probability level.

Total Students in School(s).

The total number of students in the school or schools where the counselors worked were coded 1 = less than 573, 2 = 574-955, 3 = 956-1337, 4 = 1338 & up. Descriptive statistics and F tests were run for the three OSI scales. Equal variances were found for the PSQ and PRQ scales. The PSQ variances were not equal. Log, square root, and arc tangent transformations were attempted but did not result in homogeneity of variance. The arc tangent transformation was the closest to resulting in an F value under the critical value (F obtained 1.80, F critical 1.79), and it was decided to run an ANOVA on these transformed data. Tables D-23, D-24, and D-25 (Appendix D) show results of the ANOVAS for the ORQ, PSQ, and PRQ. None of the F -ratios were significant at the .05 level of probability.

School Setting.

Initially, the categories on the Data Form (Appendix A) determined these groupings. But based on both logic and difficulty with obtaining homogeneity of variance for the existing groups, the following categories were utilized for analysis: 1 = *Central City*, 2 = *Urban Fringe or Town*, 3 = *Rural*, and 4 = *Any two locations*. The *Urban Fringe* and *Town* choices from the Data Form were combined together because conceptually they are not considered to be very different in terms of the type of school environment they might represent. Results of the ANOVAS are presented Tables D-26, D-27, and D-28, Appendix D. F-ratios were not significant for the ORQ, PSQ, or PRQ.

However, the level of probability for the ORQ was approaching significance (.099) and a look at the means of the location groups suggested differences. To further investigate, the location variable was collapsed to two categories coded 1 = one setting and 2 = more than one setting of different types. The results of this t-test showed significantly higher stress scores for the groups working in two different types of school settings ($t = -2.412, p < .05$). The means for the subscales of the ORQ were examined. These, plus consideration of the logical consequences of being located in two geographically

different schools, resulted in the choice to run the t-tests presented in Table 15. Both the Role Overload and Responsibility subscales were significantly higher ($p < .05$) for counselors working in two locations. Role Boundary approached but did not attain an acceptable significance level ($p < .06$) with the dual setting group reporting higher levels of conflicting role and loyalty demands.

Marital Status.

The responses to marital status were collapsed and coded 1 = *not married* and 2 = *married*. Table D-29 (Appendix D) presents the results for t-tests of means on the ORQ, PSQ, and PRQ. There was no significant difference between *married* and *not married* groups on the three scales.

Parental Status.

The counselors' responses indicating whether or not they were parents were coded 1 = *parent* and 2 = *not a parent*. The results in Table 16 showed no difference for the ORQ or PSQ. However, the mean for counselors who were not parents was significantly higher on the PRQ than for parents ($t = -2.21, P < .05$). Descriptive statistics were run and the means examined for all subscales of the PRQ. It was decided to run t-tests for the Recreation and Self-Care subscales. The counselors who were parents had

Table 15

Contrasts of One School Setting and More than One Type of School Setting on Scores for Role Overload, Role Boundary, and Responsibility

Stress Scale	One Setting		More Than One Setting		t
	M	SD	M	SD	
Role Overload	29.73	6.99	33.56	7.13	-2.25*
Role Boundary	20.12	5.82	22.17	7.23	-1.10
Responsibility	24.79	5.68	33.09	7.21	-3.36**

Note. This table examines two of three levels of number of schools served and three of six Stress scales.

* $p < .05$. ** $p < .001$.

Table 16

Stress, Strain and Coping Differences Between Elementary School Counselors who are and are not Parents

Scale Names	<u>Parent</u>		<u>Not Parent</u>		t
	M	SD	M	SD	
ORQ	131.82	24.23	131.88	25.93	-.02
PSQ	78.92	19.05	77.50	19.98	.56
PRQ	133.20	18.28	138.47	18.03	-2.21*

Note: ORQ = Occupational Roles Questionnaire, PSQ = Personal Strain Questionnaire, PRQ = Personal Resources Questionnaire.

*p < .05.

significantly lower scores than those who were not parents on Recreation ($t = -3.01, p < .01$) and Self-Care ($t = -2.94, p < .01$).

Number of Own Children.

Counselors designating themselves as parents were asked how many children they had, and their responses were coded 1 = *one child*, 2 = *two children*, 3 = *three children*, and 4 = *four or more children*. For the ORQ, the F-ratio was not sufficient to suggest differences in groups (Table D-30, Appendix D).

The ANOVA for the PSQ (Table 17) suggested possible differences in strain between the categories for numbers of children. A Scheffe's multiple comparison test was run and indicated greater strain on parents of one child as compared to parents with two children. Perusal of means and standard deviations plus consideration of content of the various PSQ subscales led to a decision to compute t-tests for the Psychological Strain, Interpersonal Strain, and Physical Strain subscales. The results of these t-tests are presented in Table 18. The t-values for all three subscales were significant at $p < .05$ or better and support the notion that parents of one child experience more perceived psychological strain than do parents of two children.

Table 17

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores and the Number of Their Own Children
Reported by Elementary School Counselors who were Parents

SOURCE	<u>df</u>	SS	MS	F
Number of Children	3	3833.46	1277.82	3.64*
Error	228	80039.99	351.05	
Total	231	83873.45		

* $p < .05$.

Table 18

Differences in Selected PSQ (Strain) Scale Scores between Elementary School Counselors who are Parents to One Child and Elementary School Counselors who are Parents to Two Children

Strain Scale	<u>One Child</u>		<u>Two Children</u>		t
	M	SD	M	SD	
Psychological	22.18	7.20	19.07	5.90	2.78**
Physical	22.80	7.22	19.30	6.20	3.25**
Interpersonal	22.62	5.55	20.72	4.96	2.24*

Note. PSQ = Personal Strain Questionnaire. This table examines two of four levels indicating how many of their own children were reported by counselors who were parents. It examines three of four Strain scales.

**p < .01. *p < .05.

The ANOVA for the PRQ (Table 19) also indicated level differences depending on the number of children a counselor had. A Scheffe's "post hoc" test indicated higher Coping scores for parents with two children compared to parents with one child. Descriptive statistics for the PRQ subscales were computed. Examination of means of the subscales, resulted in a decision to run t-tests to check three subscales. Significant differences between parents with one and two children were found on Recreation ($t = -2.84, p < .01$) and on Self-care ($t = -3.90, p < .001$). Level differences were not significant on Rational/ Cognitive Coping ($t = -1.92, p < .06$).

Summary

The results of the study were presented in this chapter. An 84% return rate was obtained for the survey. Responses on the OSI by both female and male elementary school counselors fell in average ranges for stress, strain, and coping. The collected demographic showed that the majority of the counselors were female, worked in one school, were parents, and had no other paid employment. The average age of the respondents was 44, and they had averaged working 10 or less years as elementary school counselors. Older counselors scored higher on self-care and recreational coping activities than did younger.

Table 19

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores and the Number of Their Own Children
Reported by Elementary School Counselors who were Parents

SOURCE	<u>df</u>	SS	MS	F
Number of Children	3	3708.90	1236.30	3.84*
Error	228	73448.58	322.14	
Total	231	77157.48		

* $p < .05$.

Counselors working in two different types of settings had higher stress scores as did those serving three or more schools. Some coping scales were lower for parents as a group and for parents with one child in particular. Parents with only one child also reported higher strain scores. No significant difference in stress, strain, or coping was found for categories based on gender, years employed as an elementary school counselor, years employed in professional education, years as a counselor in all settings, hours worked per week, other paid employment, working with other counselors, students assigned, the number of students in the school, and marital status.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

This chapter presents summarized results of the study and integrates the findings. The first section reviews the methodology employed. The second contains tables summarizing the data and reviews the findings with relevant conclusions related to each research question. In the final sections, the results of the study are discussed along with implications and recommendations for the profession and for further research.

Review of Methodology

The purpose of this study was to describe the stress, strain, and coping levels sample of ASCA elementary school counselors throughout the United States. Six research questions guided the study, and study participants came from a national sample of 500 elementary school counselors. They were randomly selected from the membership of the ASCA, and the survey had an 84% return rate ($n=420$). Participants used for analysis were those working full-time as elementary school counselors at the time of the survey ($n=310$).

Data were collected by mail. Participants received packets containing the Occupational Stress Inventory

(Osipow & Spokane, 1987) and a brief demographic Data Form during the Spring of 1992. The survey steps included: (a) a pre-letter, (b) initial packet mailing, (c) post card reminder, (d) first follow-up packet, (e) second follow-up packet, and (f) phone follow-up to 10% of non-respondents.

Statistical procedures were done using Quatro pro (1992), Number cruncher statistical system (Hintze, 1990), and SPSS (1990). Correlations were computed for the three OSI domains in order to determine if the general pattern of relationships followed what would be predicted from the interactive model of job stress underlying the instruments. Next, for the stress, strain, and coping domains respectively, subscale scores were totaled, T-scores were computed and discussed relative to guidelines in the manual. Based on theoretical considerations and examination of the data, levels of the demographic variables were determined. For the study's dichotomous demographic variables, t-tests were used to determine if differences existed in levels of the domains for ORQ (stress), PSQ (strain), and PRQ (coping). For variables with more than two levels, ANOVA's were used. When a t-test or an ANOVA indicated significant differences between levels, additional t-tests were computed for selected scales of the domain.

Summary of Results and Conclusions

Data compiled from the Data Form provided information for this study of elementary school counselors nationwide. The demographic data included both non-school and school variables.

Respondents averaged 44.18 years old, and 87.1% were female. Over 78% had spent 10 or less years in their jobs, but about 80% had worked in education for more than 8 years. Most, 73.54%, were married at the time of the survey, and 74.84% reported they were parents. The largest group of 36.45% had two children followed by 17.74% who reported having one child.

Of the respondents, 40.65% reported working about an average work week of 40 hours. But 32.36% ($n=100$) reported working 49 or more hours per week or the equivalent of at least one full extra workday per week. Most, 64.52%, worked in only one school, and 74.19% of the counselors did not work with another counselor in their schools. Just over 79% of counselors were assigned responsibility for 400 or more students, and 77% of them worked in schools with less than 955 students. The majority of the schools where counselors worked, 62%, were located in either the suburbs or in towns having populations between 2,500 and 50,000.

The research questions for the study help provide structure for summarizing the results and conclusions.

1. What are the levels of the ORQ subscales (stress factors) among elementary school counselors?

The six scales of the ORQ are Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Physical Environment, and Responsibility. T-scores computed from OSI scores for each of these scales fell in the average range for both male and female elementary school counselors. Compared to norms based on persons in a wide spectrum of occupations in this country, these scores indicate elementary school counselors perceive their job stress as neither particularly high nor particularly low.

2. What are the levels of the PSQ subscales (strain factors) among elementary school counselors?

T-scores for Vocational Strain, Psychological Strain, Interpersonal Strain, and Physical Strain all fell in what the manual guidelines describe as the average range. This suggests both female and male elementary school counselors reported an average, rather than particularly high or low, perceptions of strain defined as perceived variations from normal vocational, physical, interpersonal, and psychological responses to stress.

3. What are the levels of the PRO subscales (coping resources) among elementary school counselors?

T-scores for Recreation, Self-care, Social Support, and Rational/Cognitive Coping all fell in average ranges for females and males. The implication here is that elementary school counselors have no worse nor any better use of coping resources than the wide range of occupational groups on which the OSI norms are based.

The last three research questions inquire about how stress, strain, and coping might differ between levels of the survey's demographic variables. Tables 20, 21, and 22 summarize results of analysis of the demographic variables.

4. Are there differences in the occupational stress among elementary school counselors related to the study's demographic variables?

Stress levels were found to be higher for counselors serving three or more schools ($p < .05$) and in two or more different kinds of school settings ($p < .05$). Both of these demographic conditions were related to significantly higher scores on the Role Overload scale compared to those serving in one school ($p < .001$) or type of school setting ($p < .05$) only. Elementary counselors serving three or more schools also reported significantly higher scores for the Role Boundary ($p < .01$) and Role Ambiguity ($p < .05$) scales.

Table 20

Summary of Analysis of Variance Results for Demographic Variables with Three or More Levels

Demographic Variable	Stress	Strain	Coping
	F	F	F
Age	NS	NS	2.36
Elementary Counselor Years	NS	NS	NS
Professional Education Years	NS	NS	NS
All Counseling Years	NS	NS	NS
All Job Hours	NS	NS	NS
Number of Schools Served	4.03	NS	NS
Students Assigned	NS	NS	NS
Students in School(s)	NS	NS	NS
School Setting	NS	NS	NS
Number of Parents' Children	NS	3.84	3.64

Note. NS=Not Significant; a .05 probability level was required for significance except for the Age variable where .06 was used.

Table 21

Summary of t-test Results for Demographic Variables having Two Levels

Demographic Variable	Stress	Strain	Coping
	<u>t</u>	<u>t</u>	<u>t</u>
Gender	NS	NS	NS
Hours Worked Other Jobs	NS	NS	NS
Work With Other Counselor(s)	NS	NS	NS
School Settings	-2.41	NR	NR
Unmarried/Married	NS	NS	NS
Parent/Not Parent	NS	NS	-2.11

Note. NS=Not Significant; NR=Not Run; a .05 probability level was required for significance.

Table 22

Summary of t-tests Comparing Subscales of Stress, Strain, and Coping, for Follow-up of Demographic Variable Analysis

Demographic Variable Levels Compared	Occupational Stress Inventory Subscales					
	<u>Occupational Roles Questionnaire (Stress)</u>					
	RO <u>t</u>	RI <u>t</u>	RA <u>t</u>	RB <u>t</u>	R <u>t</u>	PE <u>t</u>
Schools Served						
1 & 3 or more	-3.50	NR	-2.44	-2.99	NS	NR
School Settings						
1 or more	-2.25	NR	NR	-1.89	-3.36	NR
	<u>Personal Strain Questionnaire (Strain)</u>					
	VS <u>t</u>	PSY <u>t</u>	IS <u>t</u>	PHS <u>t</u>		
Number of Children						
one or two		NR	2.78	2.24	3.25	
	<u>Personal Resources Questionnaire (Coping)</u>					
	RE <u>t</u>	SC <u>t</u>	SS <u>t</u>	RC <u>t</u>		
Age						
32-39.9 or 56 & up		NS	-2.43	NR	NS	
40-47.9 or 56 & up		-2.08	.NS	NR	NR	
Parent/or Not						
		-3.01	-2.94	NR	NR	
Number of Children						
one or two		-2.84	-3.90	NR	NS	

Note. RO=Role Overload, RI=Role Insufficiency, RA=Role Ambiguity, RB=Role Boundary, R=Responsibility, PE=Physical Environment, VS=Vocational Strain, PSY=Psychological Strain, IS=Interpersonal Strain, PHS=Physical Strain, RE=Recreation, SC=Self-care, SS=Social Support, RC=Rational/Cognitive. NS=Not Significant; NR=Not Run; a .05 probability level was required for significance.

In addition, counselors serving in more than one type of setting had significantly higher stress scores on the Responsibility scale ($p < .001$) compared to those serving one type of school setting. This variable reflects the amount or responsibility the person has or believes they have for the actions or work of others.

The variable related to increased work hours was also associated with a consistent rise in the mean scores for stress as work hours increased. However, the rise was not statistically significant. No levels for other variables were associated with increases in stress scores.

These results suggest that diverse settings and serving more schools may be associated with higher levels of some components of job stress. Only variables related to the job (setting and number of schools) were significantly associated with higher counselor stress. None of the non-school personal variables such as age and marital status were associated with higher scores on stress scales.

5. Are there differences in the psychological strain among elementary school counselors related to the study's demographic variables?

Elementary school counselors who were parents of one child had higher overall scores on strain at the .05 level of significance. Parents with one child had higher scores

on the Psychological ($p < .01$), Interpersonal ($p < .05$), and Physical ($p < .01$) strain scales of the PSQ compared to parents with two children. Mean strain scores of parents with four or more children were higher than for those with one, two, or three, but the differences were not significant. In addition, the variables measuring number of schools served and the number of hours worked for the job approached, but did not attain acceptable significance levels. No other demographic personal or job setting variables were associated with significant increases in strain subscale scores.

6. Are there differences in the coping resources among elementary school counselors related to demographic variables?

Higher scores on some coping scales were found for counselors in the 56 & up age range compared to younger counselors. The older counselors scored significantly better on the Self-care scale than did their 32-39.9 year old counterparts. They scored better on Self-care and on Recreational coping resources than did elementary counselors in the 40-47.9 age range. All significant results show older counselors having higher coping scores than some of their younger counterparts. Thus it appears that at least some coping strategies/resources are better

utilized by older counselors as compared to some younger counselors.

Counselors who were parents scored significantly lower on the Recreational and Self-care scales compared to non-parents. Likewise, those who were parents of one child scored significantly lower on Self-care and Recreational compared to parents with two children. Other demographic variables did not show significant variation between levels of the PRQ scales. Only personal variables, as opposed to job setting variables, appeared to affect coping.

Discussion

The purpose of this study was to describe the stress, strain, and coping levels of a sample of ASCA elementary school counselors. Correlations between the ORQ and PSQ scales and the questions pertaining to global job stress (strong correlations) and non-job stress (very weak correlations) support the belief that the survey is tapping into job related stress rather than some overall level of life stress. This allows for a more confident interpretation of results and strengthens the possibility of developing themes for further analysis or research.

Several factors are deemed important overall. First, 78% of elementary counselors have been in the profession 10 years or less. Because of its relative youth, the

profession probably has the opportunity to make use of research and experience to shape its role in the educational system and to develop programs which will help facilitate that role. Second, increased stress scale levels were associated with workplace variables only. Third, coping scale scores were only significantly affected by personal non-job variables rather than job setting variables. Fourth, the only two coping scales that were significantly different were Recreation and Self-care. These factors should be held in mind during the following discussion.

Stress

Counselors who worked in three or more schools showed significantly higher stress levels on Role Overload, Role Ambiguity, and Role Boundary areas. These results have clear implications for administrative and political leaders. Counselor organizations must create opportunities to convince those in charge of organizational and financial decisions that assignment of counselors to multiple schools needs to be avoided for the sake of counselors and their clients. For the individual counselor who is serving several schools, she or he should diligently develop personal coping resources and skills.

Role Overload and Responsibility scales were higher for counselors who worked in two different types of school settings (urban and central city for example). The elevated levels of these stress subscales might occur for several reasons. One possibility is that this is simply a function of two schools rather than one or more children. However, neither of those variables showed significant differences between levels. Alternative hypotheses might suggest that the skills required to work with typical student populations in different geographic locations are different. Under this conceptualization, it is possible that the number of skills required may be related to the increased stress. This problem could often be alleviated by personnel placement decisions. Counselors in these situations should work with local administrators to alter schedules and assignments where possible.

A related variable, the number of hours worked as a counselor exhibited non-significant increases in stress (and strain) scores as hours worked increased.

Coping

Current results do not indicate that non-job setting demographic variables are associated with higher levels of vocational stress. However, different levels of some of these variables were associated with different utilization

of coping resources. Elementary school counselors that were 56 & older had stronger coping scores on Self-care and Recreation than some of their younger peers. This is consistent with the suggestion that older workers alter their responses to the work environments (Osipow, et al., 1985). More experienced counselors may have learned the importance of managing stress through coping activities and skills. Stress reduction programs teaching either relaxation techniques or rational/cognitive techniques have been suggested (Kremer & Owen, 1979) and found effective in altering such perceptions (Higgins, 1986).

Elementary school counselors who were parents had significantly lower scores than non-parents on the coping subscales Recreation ($t = -3.01, p < .01$) and Self-Care ($t = -2.94, p < .01$). This is a case of research supporting common sense perceptions. That is, it is hard to make use of regular recreational activities or other personal activities that reduce stress when you are constantly hurrying from work to drive the car pool, do general child crises management, and help your own children with their homework.

One work setting variable, number of years in the profession, had such heterogeneity of variance of its levels on coping scores that no analysis was done. It is not clear why. One possibility is that the data may be

muddied by the effect of the previous experience, educational background, and age of some relatively new counselors. Another workplace variable, number of hours worked, was associated with a consistent, though not statistically significant, decrease in coping scores for counselors.

Strain

In an apparent contradiction to common sense, the elementary counselors with only one child rated Psychological Strain, Interpersonal Strain, and Physical Strain subscale scores significantly higher than did parents with two children. One possible explanation is that by the time they have two or more children, parents have partially worked out their coping systems. These might take the form of increased use of recreational opportunities, better general self-care, and more supportable levels of worry about their children including improved rational/cognitive skills (knowing when to worry and when not to). Finally, parents may often be cut off from parts of social support systems until they either develop new ones or incorporate children into pre-child support systems.

Overall, few variables seemed to affect the strain scales differentially at different levels. Perhaps strains

are not being reported. Perhaps counselors are in denial of problems or just tend to see things positively. Perhaps because the profession is relatively young, the cumulative effects of various strains are not yet apparent.

Implications and Recommendations for the Profession

1. For this study, both female and male counselors reported average levels of coping and strain compared to other occupations. Since elementary counselors are a group whose professional training often includes opportunities to learn about the importance of stress reduction and how to develop coping strategies, the average PRQ scores (as well as the average PSQ scores) are not necessarily reassuring. Where it is not currently being done, it is recommended that counselor education programs attempt to increase student awareness of the importance of applying information learned about coping to the students' future job settings. Included in such an attempt could be discussion of potential job stressors and requirements that students actively develop or upgrade coping strategies as a part of practicum and internship activities. Most of the significantly higher coping skills in the study were found in older counselors. It may be possible that the amount of trial and error learning of coping skills by new counselors could be reduced if they have more opportunities to learn

and practice development of coping skills in the educational process.

2. The study's results have implications for counselors who are or hope to be parents. Elementary counselors who were parents reported reduced availability and/or utilization of coping resources. In addition, it appears that parents with a single child have reduced coping resources and increased strain. Recreational and self-care activities were reportedly lower for both groups. It is recommended that counselors in these groups, make recreational and self-care activities a regular part of their routine.

3. School setting variables are particularly amenable to interventions by administrators. Based on current results, it is recommended that (a) administrators assign elementary counselors to fewer than three schools as a method of helping these professionals avoid high job stress levels, and (b) administrators avoid assigning elementary counselors to two schools located in different types of settings, such as to one rural and one suburban school.

4. It was notable that there were no instances of above average scores for this sample on the coping scales measuring rational/cognitive coping or social support of any level of any demographic from this sample. It is considered likely that counselors and counseling students

need to be taught and encouraged to utilize these strategies. Both dental and medical training programs teach their students organizational and time saving techniques related to setting up of a practice. Where it is currently not done, it is recommended that counselor education programs teach counselors, at all levels, organizational skills, systematic problem solving, and time management skills.

5. Likewise, it should be part of the counselor education program to teach counselors at all levels ways to apply their people skills to deliberately building social support both in and out of the school setting. Frequently, counselors do not feel appreciated or understood by other staff (Moracco et al., 1984), especially teachers. It is recommended that counselors intentionally and systematically engage in activities that will promote the social support of staff and faculty. However, they often decline or deflect help and cannot draw on their own resources enough to develop support systems (Kesler, 1990). In programs where it is not being done, the intentional development of professional and personal support networks should be explained to counselor trainees and they should be encouraged to use them during internship and practicum.

Recommendations for Further Research

Recommendations for further research are presented in this section. These suggestions originate from consideration of the structure and limitations of the current research as well as from the results obtained.

1. The current study is a descriptive one. The same data examined with different statistical analysis might provide more useful information on scale or variable relationships. The OSI's interactive nature would lend itself to such analysis.

2. One limitation of the current study is that it provides information on stress, strain, and coping for elementary school counselors only. It is recommended that similar studies be done for middle and high school counselors across the nation. It is considered probable that elementary counselors differ from middle school or high school counselors on some subscales and levels of demographic variables. If found, such differences might lead to differential recommendations for counselor training or personal development.

3. Research on stress, strain, and coping of elementary counselors who are not members of ASCA should be done and compared to the current study. Studies should also be completed at state levels to determine if there are

training needs related to stress, strain, and coping that are unique for a given state.

4. Two specific additions are recommended for future research using the same format as the current study. First, it is suggested that a question be added to the Data Form inquiring specifically as to the amount, if any, of classroom teaching experience counselors have had. Since many states require this for certification as a school counselor, it would be most useful to know of any effects this variable might have on stress, strain, and coping. Second, it is suggested that a question be added about salary to determine if higher or lower remuneration is associated with differences in stress, strain, and coping.

5. Although, no significant difference between groups or levels of variables was found for many of the demographic variables, this does not mean that further research is contraindicated. A non-significant (at $p = .05$) increase or decrease in the mean scores in the direction predicted by the OSI model was found for levels of several variables. The variable concerning hours worked for the job is an excellent example of such a variable. Another example for further consideration is the variable for number of years worked as a counselor where the levels exhibited quite heterogeneous variances. For these variables, a different approach to formation of the levels,

the questions asked, or the analysis used may provide additional information on effect on other subscales or other levels of the same variables.

6. In the current study, there was only one variable associated with a significant score on strain. Richard and Kreishok (1989) note that the bulk of the variance, approximately 56% on the PSQ, was accounted for by a factor which could be termed physical/psychological exhaustion. It is recommended that future research attempt to assess more completely some of the factors found on the strain scale. Currently the OSI is under revision by the authors. One of the recommendations made to them by this researcher was to strengthen the factors on the PSQ which currently account for relatively small amounts of the scales variance.

7. It is recommended that coping strategies of elementary school counselors be examined for their effects immediately after the occurrence of a stressor as compared to their effect on stresses which occur over a period of time. This essentially suggests we need to know if there is a difference in coping strategies during an initial stage of stress compared to long term more chronic stresses.

8. It is recommended that future research consider employing qualitative components to attempt to assess if

these professionals are as relatively unstressed as they appear based on the current survey.

9. It is recommended that research be pursued to determine what academic and practical opportunities to learn about stress, strain, and coping are available to students in counselor training programs.

Summary

Elementary school counselors across the United States reported average amounts of occupational stress, strain, and coping. This chapter provided for examination and interpretation of these general results and the relationships of these scales with various demographic variables. Implications of the results and recommendations for the profession were given with an emphasis on the counselor training program possibilities and on the usefulness of the results to the individual counselor. In the concluding section of the chapter, recommendations for further research were made.

References

- Barling, J. (1990). Employment, stress and family functioning. Chichester, England: John Wiley.
- Baum, A., Singer, J. E., & Baum, C. S. (1984). Stress and the environment. In A. Pines & C. Maslach (Eds.), Experiencing social psychology: Reading and projects (2nd ed.). New York: Knopf.
- Bayerl, J. A., & MacKenzie, T.E. (1981). Unload, don't overload: A workshop model on stress in education. School Counselor, 29, 54-60.
- Beehr, T. A. (1976). Perceived situational moderators of the relationship between subjective role ambiguity and role strain. Journal of Vocational Psychology, 61, 35-40.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model and literature review. Personnel Psychology, 31, 665-699.
- Beehr, T. A., Walsh, J. T., Taber, T. D. (1976). Relationships of stress to individually and organizationally valued states: higher order needs as a moderator. Journal of Applied Psychology, 61, 35-40.
- Brown, R. D. , Bond, S.C. & Prentice, D. G. (1984). The Osipow-Spokane: Validity issues of an interactional stress measure. Paper presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- Brody, J. G. (1988). Responses to collective risk: Appraisal and coping among workers exposed to occupational health hazards. American Journal of Community Psychology, 16, 645-663.
- Breznitz, S. & Goldberger, L. (1982). Stress research at a crossroads. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 1-7). New York: Free Press.

- Burchette, B. W. (1983). The extent of professional burnout and related factors affecting public school counselors (Doctoral dissertation, East Tennessee State University, 1982). Dissertation Abstracts International, 43, 2554-A.
- Butcke, P., Moracco, J. C., & McEwen, M. K. (1984). Measuring occupational stress among counselors: A multidimensional concept. Measurement and Evaluation in Guidance, 17, 24-31.
- Cannon, W. B. (1939). The wisdom of the body (rev. ed.). New York: Norton.
- Caplan, R. D. (1983). Person-Environment fit: Past, present, and future. In C. L. Cooper (Ed.), Stress research: Issues for the eighties (pp. 35-78). Chichester, England: John Wiley.
- Casas, J. M., Furlong, M. J., & Castillo, S. (1980). Stress and coping among university counselors: A minority view. Journal of Counseling Psychology, 27, 364-373.
- Cherniss, C. (1980a). Professional burnout in human service organizations. New York: Praeger.
- Cherniss, C. (1980b). Staff burnout: Job stress in the human services. Beverly Hills, CA: Sage Publications.
- Clemons, C. R., Jr. (1988). The relationships of occupational stress and certain other variables to job satisfaction of licensed professional counselors in Virginia. (Doctoral dissertation, Virginia Polytechnic Institute and State University, 1988). Dissertation Abstracts International, 50, 360A.
- Coelho, G. V., & Irvin, R. I. (1981). Coping & adaptation: An annotated bibliography and study guide. (DHHS Publication No. ADM 81-863). Washington, DC: U.S. Government Printing Office.
- Cooper, C. C. (1981). The stress check. Englewood Cliffs, NJ: Prentice-Hall.
- Cooper, C. C., & Payne, R. (Eds.). (1988). Causes, coping and consequences of stress at work, Chichester, England: John Wiley.

- Cox, T. (1978). Stress. Baltimore, MD: University Park.
- Cummings, O. W., & Nall, R. L. (1983). Relationships of leadership style and burnout to counselors' perceptions of their jobs, themselves, and their clients. Counselor Education and Supervision, 22, 227-234.
- Derogatis, R. D. (1982). Self-report measures of stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 270-294). New York: Free Press.
- Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley.
- Dohrenwend, B. P. & Shrout (1985). "Hassles" in the conceptualization and measurement of life stress variables. American Psychologist, 40, 780-785.
- Dorn, F. J. (1991). The Occupational Stress Inventory: A picture worth a thousand words about work. Journal of Counseling & Development, 70, 328-329.
- Dragan, J. W. (1981). Role conflict and counsellor stress. The School Guidance Worker, 37(2), 18-23.
- Ekbom, C. W. (1985). The effects of social support of counselor burnout. (Doctoral dissertation, Virginia Polytechnic Institute and State University, 1985). Dissertation Abstracts International, 46, 895A.
- Feldman, K. C. (1976). A contingency theory of socialization. Administrative Science Quarterly, 21, 433-452.
- Fletcher, B. (C) (1988). The epidemiology of occupational stress. In C. L. Cooper and R. Payne (Eds.), Causes, coping and consequences of stress at work (pp. 3-50). Chichester, England: John Wiley.
- Folkman, S., & Lazarus, R. S. (1988a). The relationship between coping and emotion: Implications for theory and research. Social Science and Medicine, 26, 309-317.
- Folkman, S., & Lazarus, R. S. (1988b). Coping as a mediator of emotion. Journal of Personality and Social Psychology, 54, 466-475.

- Forney, D. & Wiggers, T. T. (1984). The saga continues: Stress, strain, and burnout among career development professionals. Journal of College Placement, 45, (1), 34-39.
- Frankenhaeuser, M. (1977). Job demands, health and well being. Journal of Psychosomatic Research, 21, 313-321.
- Friesen, D. & Sarros, J. C. (1989). Sources of burnout among educators. Journal of Organizational Behavior, 10, 179-188.
- Heiden, J. M. (1988/1989). Occupational stress and activities of the school counselor. (Doctoral dissertation, University of Wisconsin-Madison, 1988). Dissertation Abstracts International, 49, 2212A.
- Hendrix, W. H., Steel, R. P., & Schultz, S. A. (1987). Job Stress and life stress: their causes and consequences. Journal of Social Behavior and Personality, 2, 291-302.
- Hintze, J. L. (1990). Number cruncher statistical system [Computer program]. Kaysville, UT: Dr. J. L. Hintze.
- Hoagland, J. (Jan. 13-19, 1992). Could Clinton Win? The Washington Post National Weekly Edition. Vol. 9, No 11. Washington, DC: The Washington Post.
- Holroyd, K. A. & Lazarus, R. S. (1982). Stress, coping and somatic adaptation. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 21-35). New York: Free Press.
- Hollis, J. W., & Wantz, R. A. (1990). Counselor Preparation 1990-1992: Programs, Personnel, Trends (7th ed.). Muncie, IN: Accelerated Development.
- Holt, R. R. (1982). Occupational Stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 419-445). New York: Free Press.
- Issac, S., & Michael, W. B. (1981). Handbook in research and evaluation (2nd ed.). San Diego, CA: EdITS Publishers.

- Ibrahim, F. A., Helms, B. J., & Thompson, D. L. (1983). Counselor role and function: An appraisal by consumers and counselors. The Personnel and Guidance Journal, 61, 597-601.
- Kahn, R. L. (1978). Job burnout: Prevention and remedies. Public Welfare, 36, 61-63. Is it in the library?
- Kahn, R. Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964) Organizational stress: Studies in role conflict and ambiguity. New York: John Wiley.
- Kasl, S. V. (1978). Epidemiological contributions to the study of work stress. In C. L. Cooper & R. Payne (Eds.), Stress at work. New York, Wiley, 1978.
- Kasl, S. V. & Cobb, S. (1982). Variability of Stress Effects among men experiencing job loss. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 445-465). New York: The Free Press.
- Kesler, K. D. (1990). Burnout: A multimodal approach to assessment and resolution. Elementary School Guidance & Counseling, 24, 303-311.
- Kinnunen, U. (1987). Teacher stress over autumn term: Relationships between subjective stress and catecholamine excretion during night rest. Scandinavian Journal of Psychology, 28, 293-303.
- Kremer, B. J. & Owen, W.A., (1979). Stress in the life of the counselor. The School Counselor, 25, 40-46.
- Kyriacou, C., & Sutcliffe, J. (1978). A model of teacher stress. Educational Studies, 4, 1-6.
- Laffey, J. M., Cichon, D. J., Koff, R. H., & Olson, G. E. (1981). Stress and teaching: A comparative study. Stress, 2, (Summer), 13-17.
- Lazarus, R. S. (1965). Cognitive and personality factors underlying threat and coping. In M. H. Appley & R. Trumbull (Eds.), Psychological stress: Issues in research (pp. 151-172). New York: Appleton-Century-Crofts.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.

- Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer Publishing Company.
- Lazarus, R. S. & Launier, R. (1978). Stress-related transactions between person and environment. In L. A. Plevin and M. Lewis, (Eds.), Perspectives in interactional psychology, pp. 287-327. New York: Plenum.
- Lynch, J. J. (1981). American School Counselor Association study on school counselor burnout (Research report). Chester, PA: Widner University.
- Margolis, B. L., Kroes, W. H., & Quinn, R. P. (1974). Job stress: An unlisted occupational hazard. Journal of Occupational Medicine, 16, 659-661.
- Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Ed.), Job stress and burnout (pp. 29-40). Beverly Hills, CA: Sage.
- Melamed, S., Kushnir, T., & Meir, E. I. (1991). Attenuating the impact of job demands: Additive and interactive effects of perceived control and social support. Journal of Vocational Behavior, 39, 40-53.
- Moracco, J.C. (1981). Burnout in counselors and organizations. Ann Arbor, MI: 2108 School of Education, University of Michigan. (ERIC Document Production Service No. ED 195 924)
- Moracco, J. C., Butcke, P. G., & McEwen, M. K. (1984). Measuring stress in school counselors: Some research findings and implications. The School Counselor, 32, 110-118.
- Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational stress: Its causes and consequences for job performance. Journal of Applied Psychology, 71, 618-629.
- Nelson, D. L. (1987). Organizational socialization; A stress perspective. Journal of Occupational Behavior, 8, 311-324.

- Newman, J. E., & Beehr, T. A. (1979). Personal organizational strategies for handling job stress: A review of research and opinion. Personnel Psychology, 32, 1-44.
- Nowack, K. M. (1988, April 28-May 1) Coping style, cognitive hardiness, & Health Status. Paper presented at the annual meeting of the Western Psychological Association, Burlingame, CA. (Eric Document reproduction Service No. Ed 299 508)
- Olson, M. J. (1986). An appraisal of school counseling in Wisconsin, 1984-1985, by counselors and consumer groups. Doctoral Dissertation, University of Wisconsin-Madison, 1986). Dissertation Abstracts International, 47, 1194A.
- Olson, M. J. & Dilley, J. S. (1988). An new look at stress and the school counselor. The School Counselor, 35, 194-198.
- Osipow, S. H. (1991). Developing instruments for use in counseling. Journal of Counseling & Development, 78, 322-326.
- Osipow, S. H., & Davis, A. S. (1988). The relationship of coping resources to occupational stress and strain. Journal of vocational Behavior, 32, 1-15.
- Osipow, S. H., Doty, R. E., & Spokane, A. R. (1985). Occupational Stress, Strain and Coping across the Life Span. Journal of Vocational Behavior, 27, 98-108.
- Osipow, S. H. & Spokane, A.R. (1984). Measuring occupational stress, strain, and coping. In Oskamp, S. (Ed.), Applied social psychology annual. #5: Applications in organizational settings. Beverly Hills, CA: Sage.
- Osipow, S. H., & Spokane, A. R. (1987). A manual for the Occupational Stress Inventory (Research Version). Odessa, FL: Psychological Assessment Resources.
- Parker, B. A. (1979). The relationship between stress, illness and job satisfaction in school counselors in the state of Michigan. Dissertation Abstracts International, 40, 5325-A. (University Microfilm No. 80-06, 176)

- Payne, R. (1980). Organizational stress and social support. In C. L. Cooper & R. Payne (Eds.), Current concerns in occupational stress. Chichester, England: John Wiley.
- Paine, W. S. (1982). Overview: Burnout stress syndromes and the 1980's. In W. S. Paine (Ed.), Job stress and burnout: Research, Theory and Intervention Perspectives (pp. 11-25). Beverly Hills, CA: Sage.
- Pendergast, D. L. (1988). Personal and environmental factors in experienced stress among counselors. Dissertation Abstracts International, 48, 2812-A. (University Microfilm No. 87-27, 686)
- Pierson-Hubeny, D. & Archambault, F. X. (1987). Role stress and perceived intensity of burnout among school psychologists. Psychology in the Schools, 24, 244-253.
- Pines, A., & Aronson, E. (1988). Career burnout: Causes and clues. New York: Free Press.
- Powell, T. E. (1991). A review of the Occupational Stress Inventory. Measurement and Evaluation in Counseling and Development, 24, 127-130.
- Quatro pro. (1992) [Computer program]. Scotts Valley, CA: Borland International.
- Redick, B. D. (1972). Role conflict and role ambiguity among public school counselors in Franklin County, Ohio (Doctoral dissertation, The Ohio State University, 1972). Dissertation Abstracts International, 33, 4098.
- Richard, G.V. & Krieschok, T. S. (1989). Occupational stress, strain, and coping in university faculty. Journal of Vocational Behavior, 34, 117-132.
- Schaubroeck, J., Cotton, J. L., & Jennings, K. R. (1989). Antecedents and consequences of role stress: A covariance structure analysis. Journal of Organizational Behavior, 10, 35-58.
- Savicki, V, & Cooley, E. J. (1982). Implications of burnout research and theory for counselor educators. The Personnel and Guidance Journal, 60, 415-419.

- Sears, S. J. & Navin, S. L. (1983). Stressors in School Counseling. Education, 103, 333-337.
- Selye, H. (1956) The stress of life. New York: McGraw-Hill.
- Selye, H. (1976). Stress in health and disease. Boston: Butterworth.
- Selye, H. (1982). History and present state of the stressconcept. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 7-17). New York: Free Press.
- Sharit, J. & Slavendy, G. (1982). Occupational stress: Review and reappraisal. Human Factors, 24, 129-162.
- Slauter, A. F. (1989). Changes in American Family Life (U.S. Bureau of the Census, Current Population Reports, Special Studies, Series P-23, No. 163). Washington, DC: U.S. Government Printing Office.
- SPSS PC. (1990). [Computer Program]. Chicago, IL: SPSS, Inc.
- Steffy, B. D. & Jones, J. W. (1990). Differences between full-time and part-time employees in perceived role strain and work satisfaction. Journal of Organizational Behavior, 11, 321-329.
- Tegtmeyer, V.L. (1980). Perceptions of stress and coping strategies in the school counselor. Charlottesville: U.V.A. dissertation.
- Thompson, D. & Powers, S. (1983). Correlates of role conflict and role ambiguity among secondary school counselors. Psychological Reports, 52, 239-242.
- Usdansky, M. L. (1992, February). Income gap means more kids live in poverty. USA Today, p. 5A.
- Wanous, J. P. (1977). Organizational entry: New comers moving from outside to inside. Psychological Bulletin, 84, 601-618.
- Wheeler, R. J. & Frank, M. A. (1988). Identification of stress buffers. Behavioral Medicine, 14, 78-89.

- Wise, P. S. (1985). School psychologists' rankings of stressful events. Journal of School Psychology, 23, 31-41.
- Yanico, B. J. (1985). Occupational Environment Scales Form E-2. In D. J. Keyser & R. C. Sweetland (Eds.), Test Critiques (pp. 535-542). Kansas City, MO: Test Corporation of America.
- Zar, J. H. (1984). Biostatistical Analysis (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Zarski, J. J., Bubbenzer, D. L., & West, J. D. (1986). Social interest, stress, and the prediction of health status. Journal of Counseling and Development, 64, 386-389.

Appendix A

Individual Data Form

No. _____

This Data Form will provide information about yourself and your work setting. Please read each item and respond as indicated:

1. Your Current Age: _____ 2. Your Gender: _____ Female _____ Male
3. Are you currently employed full time as an elementary school counselor?
____ Yes
____ No
4. How many years have you been employed as an elementary school counselor? _____
5. How many years have you been employed in professional education (teacher, counselor, etc.)? _____
6. How many years have you been employed as a counselor in all settings (including school and non-school settings such as mental health centers or private practice)? _____
7. How many hours per week do you work in your elementary counseling position (both in and out of school)? _____
8. If you have additional paid employment besides your elementary counseling position, please estimate how many hours per week you devote to that job. _____
9. How many elementary schools do you serve? _____
10. Do you work with at least one other counselor in the school or schools you are assigned to?
____ Yes ____ No
11. How many students are assigned to you for counseling services? _____
12. What is the total number of students in the school or schools you serve? _____
13. What is the setting of the school(s) you work in? (If you are assigned to more than one school, check all that apply.)
 - a. Urbanized Area (city of 50,000 population or more)
____ Central City of Urbanized Area
____ Urban Fringe (suburban) of Urbanized Area
 - b. ____ Town (population of 2,500 to 50,000).
 - c. ____ Rural (Community with population of less than 2,500)
14. Current Marital Status (check one)
____ Separated ____ Widowed
____ Married ____ Divorced ____ Never Married
____ Other (living with someone)
15. Are you a parent? ____ Yes ____ No. If "yes," to how many children? _____
16. On a scale of one to ten, rank the level of your total job related stress as an elementary school counselor (one is the lowest amount of stress and ten is the highest amount). _____
17. On a scale of one to ten, rank the level of your total non-job related stress (one is the lowest amount of stress and ten is the highest amount). _____

Phone Follow-up

No. _____

1. Your Current Age: _____
2. Your Gender: _____ Female _____ Male
3. Are you currently employed full time as an elementary school counselor?
_____ Yes
_____ No (During the past school year)
4. How many years have you been employed as an elementary school counselor? _____
5. How many students are assigned to you for counseling services? _____
6. Current Marital Status (check one)
_____ Separated _____ Widowed
_____ Married _____ Divorced _____ Never Married
_____ Other (living with someone)
7. On a scale of one to ten, rank the level of your total job related stress as an elementary school counselor (one is the lowest amount of stress and ten is the highest amount). _____
8. On a scale of one to ten, rank the level of your total non-job related stress (one is the lowest amount of stress and ten is the highest amount). _____
9. I appreciate your taking your time to answer these few questions, but I would like to know why you did not respond to the mailed survey.

Appendix B



OSI

ITEM BOOKLET

This booklet is divided into three sections which contain statements about work situations and individual habits. You may be asked to complete one, two, or all three of the sections. Be sure to respond to all of the statements for each section you are asked to complete.

Begin by completing the information on the front page of your OSI Rating Sheet. Enter your name, age, sex, job title, and today's date. Now turn to page 1 for directions for completing your ratings.

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Directions

Read each statement carefully. For each statement, fill in the circle with the number which fits you best.

Fill in ① if the statement is *rarely* or *never* true.

Fill in ② if the statement is *occasionally* true.

Fill in ③ if the statement is *often* true.

Fill in ④ if the statement is *usually* true.

Fill in ⑤ if the statement is true *most of the time*.

For example, if you believe that a statement is often true about you, you would fill in the ③ circle for that statement on your rating sheet.

<p>Example</p> <p>1. ① ② ● ④ ⑤</p>

Fill in only one circle for each statement. Be sure to rate ALL of the statements for each section you are asked to complete. DO NOT ERASE! If you need to change an answer, make an "X" through the incorrect response and then fill in the correct circle.

Section One (ORQ)

Make your ratings in Section One of the Rating Sheet.

1. At work I am expected to do too many different tasks in too little time.
2. I feel that my job responsibilities are increasing.
3. I am expected to perform tasks on my job for which I have never been trained.
4. I have to take work home with me.
5. I have the resources I need to get my job done.
6. I feel competent in what I do.
7. I work under tight time deadlines.
8. I wish that I had more help to deal with the demands placed upon me at work.
9. My job requires me to work in several equally important areas at once.
10. I am expected to do more work than is reasonable.
11. I feel that my career is progressing about as I hoped it would.
12. I feel that my job fits my skills and interests.
13. I am bored with my job.
14. I feel I have enough responsibility on my job.
15. I feel my talents are being used on my job.
16. I feel my job has a good future.
17. I am able to satisfy my needs for success and recognition in my job.
18. I feel overqualified for my job.
19. I learn new skills in my work.
20. I have to perform tasks that are beneath my ability.
21. My supervisor provides me with useful feedback about my performance.
22. It is clear to me what I have to do to get ahead.
23. I am uncertain about what I am supposed to accomplish in my work.
24. When faced with several tasks I know which should be done first.
25. I know where to begin a new project when it is assigned to me.
26. My supervisor asks for one thing, but really wants another.
27. I understand what is acceptable personal behavior on my job (e.g., dress, interpersonal relations, etc.)
28. The priorities of my job are clear to me.
29. I have a clear understanding of how my boss wants me to spend my time.
30. I know the basis on which I am evaluated.
31. I feel conflict between what my employer expects me to do and what I think is right or proper.
32. I feel caught between factions at work.
33. I have more than one person telling me what to do.
34. I feel I have a stake in the success of my employer (or enterprise).
35. I feel good about the work I do.
36. My supervisors have conflicting ideas about what I should be doing.
37. I am proud of what I do for a living.
38. It is clear who really runs things where I work.
39. I have divided loyalties on my job.
40. The work I do has as much payoff for me as for my employer.

41. I feel I deal with more people during the day than I prefer.
42. I spend time concerned with the problems others at work bring to me.
43. I am responsible for the welfare of subordinates.
44. People on the job look to me for leadership.
45. I have on the job responsibility for the activities of others.
46. I worry about whether the people who work for/with me will get things done properly.
47. People who work for/with me are really hard to deal with.
48. If I make a mistake in my work, the consequences for others can be pretty bad.
49. My job demands that I handle an angry public.
50. I like the people I work with.
51. On my job I am exposed to high levels of noise.
52. On my job I am exposed to high levels of wetness.
53. On my job I am exposed to high levels of dust.
54. On my job I am exposed to high temperatures.
55. On my job I am exposed to bright light.
56. On my job I am exposed to low temperatures.
57. I have an erratic work schedule.
58. On my job I am exposed to personal isolation.
59. On my job I am exposed to unpleasant odors.
60. On my job I am exposed to poisonous substances.

Section Two (PSQ)

Make your ratings in Section Two of the Rating Sheet.

1. I don't seem to be able to get much done at work.
2. I dread going to work, lately.
3. I am bored with my work.
4. I find myself getting behind in my work, lately.
5. I have accidents on the job of late.
6. The quality of my work is good.
7. Recently, I have been absent from work.
8. I find my work interesting and/or exciting.
9. I can concentrate on the things I need to at work.
10. I make errors or mistakes in my work.
11. Lately, I am easily irritated.
12. Lately, I have been depressed.
13. Lately, I have been feeling anxious.
14. I have been happy, lately.
15. So many thoughts run through my head at night that I have trouble falling asleep.
16. Lately, I respond badly in situations that normally wouldn't bother me.
17. I find myself complaining about little things.
18. Lately, I have been worrying.
19. I have a good sense of humor.
20. Things are going about as they should.
21. I wish I had more time to spend with close friends.
22. I quarrel with my spouse.
23. I quarrel with friends.
24. My spouse and I are happy together.
25. Lately, I do things by myself instead of with other people.
26. I quarrel with members of the family.
27. Lately, my relationships with people are good.
28. I find that I need time to myself to work out my problems.
29. I wish I had more time to spend by myself.
30. I have been withdrawing from people lately.
31. I have unplanned weight gains.
32. My eating habits are erratic.
33. I find myself drinking a lot lately.
34. Lately, I have been tired.
35. I have been feeling tense.
36. I have trouble falling and staying asleep.
37. I have aches and pains I can not explain.
38. I eat the wrong foods.
39. I feel apathetic.
40. I feel lethargic.

Section Three (PRO)

Make your ratings in Section Three of the Rating Sheet.

1. When I need a vacation I take one.
2. I am able to do what I want to do in my free time.
3. On weekends I spend time doing the things I enjoy most.
4. Lately, my main recreational activity is watching television.
5. A lot of my free time is spent attending performances (e.g., sporting events, theater, movies, concerts, etc.).
6. I spend a lot of my free time in participant activities (e.g., sports, music, painting, woodworking, sewing, etc.).
7. I spend a lot of my time in community activities (e.g., scouts, religious, school, local, government, etc.).
8. I find engaging in recreational activities relaxing.
9. I spend enough time in recreational activities to satisfy my needs.
10. I spend a lot of my free time on hobbies (e.g., collections of various kinds, etc.)
11. I am careful about my diet (e.g., eating regularly, moderately, and with good nutrition in mind).
12. I get regular physical checkups.
13. I avoid excessive use of alcohol.
14. I exercise regularly (at least 20 minutes most days).
15. I practice "relaxation" techniques.
16. I get the sleep I need.
17. I avoid eating or drinking things I know are unhealthy (e.g., coffee, tea, cigarettes, etc.).
18. I engage in meditation.
19. I practice deep breathing exercises a few minutes several times each day.
20. I set aside time to do the things I really enjoy.
21. There is at least one person important to me who values me.
22. I have help with tasks around the house.
23. I have help with the important things that have to be done.
24. There is at least one sympathetic person with whom I can discuss my concerns.
25. There is at least one sympathetic person with whom I can discuss my work problems.
26. I feel I have at least one good friend I can count on.
27. I feel loved.
28. There is a person with whom I feel really close.
29. I have a circle of friends who value me.
30. I gain personal benefit from participation in formal social groups (e.g., religious, political, professional organizations, etc.)
31. I am able to put my job out of my mind when I go home.
32. I feel that there are other jobs I could do besides my current one.
33. I periodically re-examine or reorganize my work style and schedule.
34. I can establish priorities for the use of my time.
35. Once they are set, I am able to stick to my priorities.
36. I have techniques to help avoid being distracted.
37. I can identify important elements of problems I encounter.
38. When faced with a problem I use a systematic approach.
39. When faced with the need to make a decision I try to think through the consequences of choices I might make.
40. I try to keep aware of important ways I behave and things I do.

Additional copies are available from



Psychological Assessment Resources, Inc.

P.O. Box 998/Odessa, Florida 33556/Toll-Free 1-800-331-TEST

Appendix C

April 10, 1992

Dear Elementary School Counselor:

We are writing to encourage your participation in a study being conducted by Paul Trivette, a doctoral candidate in Counselor Education at Virginia Tech.

This national study is designed to investigate factors related to stress, strain, and coping among elementary school counselors who are members of ASCA. Your individual responses will be kept in strict confidence since only group data will be used in analysis. The results will be shared with ASCA and are available to you on request.

We hope that you will assist Paul by taking time out to complete and return the materials you will receive in a few days. His study will generate information instrumental to the development of elementary guidance and counseling.

Thank you in advance for your help with this study.

Martin Gerstein, Ed.D.
Director, Counseling Supervision

J. C. Fortune, Ph.D.
Professor of Educational
Research and Evaluation



VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Division of Administrative and Educational Services

College of Education
E. Eggleston Hall, Blacksburg, Virginia 24061-0302
(703) 231-5642 Fax: (703) 231-7845

April 15, 1992

Respond to:

P.O. Box 10662
Blacksburg, VA 24062-0662

Dear ASCA Member:

Currently I am completing my doctorate at Virginia Tech and am doing research on the occupational stress in elementary school counselors. I am asking for the help of elementary counselors across the country in collecting information about stress and coping in our profession.

Will you please take a few minutes to consider my request for assistance while you enjoy the enclosed coffee--decaffeinated to reduce stress of course.

With this letter is a copy of the Occupational Stress Inventory (OSI) Item Booklet, Rating Sheet, and an information form. The materials take about 30 minutes complete. I'll appreciate very much if you will fill out the Rating Sheet and information form and return them along with the OSI item booklet in the enclosed envelop by April 29.

All information will be kept confidential. The number which appears on the forms will be used to keep materials together and help in follow-up. Please put a note at the bottom of the answer sheet if you wish me to send you a copy of the results of the study.

Thank you, in advance for your cooperation. The success of this study depends on your help.

Sincerely,

Paul S. Trivette

April 27, 1992

Dear ASCA Elementary School Counselor,

Just a reminder to indicate that by this time you should have received all survey materials pertaining to my study of occupational stress in elementary school counselors. If you have already completed and returned the survey, please accept my sincere thanks. If not, I'll appreciate if you will complete the materials and return them by May 8. If you are still missing any materials, please call me collect at 703-951-8216. As an alternate number, try 703-552-0054 between 7:00 and 10:00 P.M. I will send you a new packet immediately.

Thank you again for your timely help,

Paul Trivette

May 11, 1992

Dear Colleague:

About four weeks ago, 500 ASCA members in the United States were asked to participate in a study conducted by Paul Trivette. The response of your fellow elementary school counselors has been excellent.

According to Paul's records, he has not received your complete materials. Since we want the highest possible rate of participation, I will appreciate it very much if you will assist Paul with his study. Your responses are vital to the results which are intended to provide information on elementary counselors' job stress across the nation. All individual responses will be held in strictest confidence.

Enclosed are duplicate survey forms and a stamped, self-addressed envelop. Won't you please take a few minutes to complete and forward the information to Paul? If you still have the original OSI booklet, please return this as well. These booklets are reusable and will be used in later research.

Thanks for your help.

Sincerely yours,

Thomas H. Hohenshil
Professor
Counseling/Psychology

June 1, 1992

Dear ASCA Member,

I am writing to follow-up my survey of job stress of elementary school counselors. The response to date has been tremendous with over 70% of the surveys having been returned.

However, besides those that have responded, you too have your opinions and experiences related to stress that deserve to be heard. The study will simply not be complete without your input.

So please take a few minutes, have another cup of coffee on me (I've switched to caffeinated for the end of the year), and fill out the enclosed Data Form and Answer Sheet. I have already begun entering the data I have received so far.

Best wishes for a good end of school year and a pleasant summer. If for any reason you feel like you should not fill out the questionnaire, please return the packet.

Sincerely,

Paul S. Trivette

Appendix D

Table D-1

Occupational Roles Questionnaire at Different Levels of Age
of Elementary School Counselor

SOURCE	<u>df</u>	SS	MS	F
AGE	4	1314.4	328.61	0.54
Error	305	186083.5	610.11	
Total	309	187397.9		

Table D-2

Personal Strain Questionnaire at Different Levels
of Age of Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
AGE	4	1539.8	382.69	1.03
Error	305	113209.6	371.18	
Total	309			

Table D-3

Comparison of Gender for the Occupational Roles
Questionnaire (ORQ), Personal Strain Questionnaire (PSQ),
and Personal Resources Questionnaire (PRQ)

<u>Scale</u>	<u>Male</u>		<u>Female</u>		<u>t</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
ORQ	131.93	24.70	131.22	24.42	.17
PSQ	78.41	18.86	79.58	22.07	-.35
PRQ	134.77	17.80	132.90	21.78	.61

Table D-4

Analysis of Variance of Occupational Roles Questionnaire
(Stress) Scores for Levels of Years as an Elementary School
Counselor

SOURCE	<u>df</u>	SS	MS	F
EC Years	3	159.0	52.99	.97
Error	306	187239.0	611.89	
Total	309	187397.9		

Table D-5

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Levels of Years as an Elementary School
Counselor

SOURCE	<u>df</u>	SS	MS	F
EC Years	3	260.7	86.89	.23
Error	306	114479.7	374.15	
Total	309	114740.3		

Table D-6

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Levels of Years as an Elementary School
Counselor

SOURCE	<u>df</u>	SS	MS	F
EC Years	3	711.8	237.26	.70
Error	306	103105.5	336.95	
Total	309	103817.2		

Table D-7

Analysis of Variance of Occupational Roles Questionnaire
(Stress) Scores for Levels of Years as a Professional
Educator

SOURCE	<u>df</u>	SS	MS	F
Pro Ed Years	3	1751.0	583.67	.96
Error	306	185646.9	606.69	
Total	309	187397.9		

Table D-8

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Levels of Years as a Professional
Educator

SOURCE	<u>df</u>	SS	MS	F
Pro Ed Years	3	800.5	266.83	.72
Error	306	113939.8	372.35	
Total	309	114740.3		

Table D-9

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Levels of Years as a Professional
Educator

SOURCE	<u>df</u>	SS	MS	F
Pro Ed Years	3	1233.6	411.23	1.23
Error	306	102583.5	335.24	
Total	309	103817.2		

Table D-10

Analysis of Variance of Occupational Roles Questionnaire
(Stress) Scores for Levels of All Years Employed as a
Counselor

SOURCE	<u>df</u>	SS	MS	F
All C Years	3	1711.6	570.53	.94
Error	306	185686.3	606.81	
Total	309	187397.9		

Table D-11

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Levels of All Years Employed as a
Counselor

SOURCE	<u>df</u>	SS	MS	F
Pro Ed Years	3	303.2	101.08	.27
Error	306	114437.1	373.98	
Total	309	114740.3		

Table D-12

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Levels of All Years Employed as a
Counselor

SOURCE	<u>df</u>	SS	MS	F
All C Years	3	716.1	238.70	.71
Error	306	103101.1	336.93	
Total	309	103817.2		

Table D-13

Analysis of Variance of Occupational Roles Questionnaire
(Stress) Scores for Levels of Hours Worked Weekly as an
Elementary School Counselor

SOURCE	<u>df</u>	SS	MS	F
Work Hours Weekly	2	1946.4	973.22	1.61
Error	307	185451.5	604.08	
Total	309	187397.9		

Table D-14

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Levels of Hours Worked Weekly as an
Elementary School Counselor

SOURCE	<u>df</u>	SS	MS	F
Hours Worked Weekly	2	1327.4	663.68	1.80
Error	307	113413.0	369.42	
Total	309	114740.3		

Table D-15

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Levels of Hours Worked Weekly as an
Elementary School Counselor

SOURCE	<u>df</u>	SS	MS	F
Hours Worked Weekly	2	501.3	250.64	.74
Error	307	103316.0	336.53	
Total	309	103817.2		

Table D-16

Stress, Strain, and Coping Differences Between Counselors
With and Without Extra Paid Employment

Scale Names	<u>No Extra Paid Work</u>		<u>Extra Paid Work</u>		t
	M	SD	M	SD	
ORQ	132.61	24.82	128.11	23.55	1.21
PSQ	78.81	19.32	77.38	19.18	.49
PRQ	134.27	18.74	135.32	16.34	-.35

Note: ORQ = Occupational Roles Questionnaire, PSQ = Personal Strain Questionnaire, PRQ = Personal Resources Questionnaire.

Table D-17

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Number of Schools Served by Elementary
School Counselors

SOURCE	<u>df</u>	SS	MS	F
Schools Served	2	2139.7	1069.81	2.92
Error	307	112600.7	366.78	
Total	309	114740.3		

Table D-18

Analysis of Variance of Personal Resource Questionnaire
(Coping) Scores for Schools Served by Elementary School
Counselors

SOURCE	<u>df</u>	SS	MS	F
Schools Served	2	500.2	250.08	.74
Error	307	103317.1	336.54	
Total	309	103817.2		

Table D-19

Stress, Strain and Coping Differences Between Counselors Working with Other Counselors and Those Not Working with Other Counselors

Scale Names	<u>Work with Others</u>		<u>Not Work With Others</u>		t
	M	SD	M	SD	
ORQ	130.04	23.07	132.47	25.61	-.76
PSQ	78.84	18.30	78.47	19.63	.15
PRQ	134.86	16.44	134.41	18.98	.19

Note: ORQ = Occupational Roles Questionnaire, PSQ = Personal Strain Questionnaire, PRQ = Personal Resources Questionnaire.

Table D-20

Analysis of Variance Summary Table for Occupational Roles
Questionnaire (Stress) and the Number of Students Assigned
to Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Students Assigned	4	2916.6	729.14	1.21
Error	305	184481.4	604.86	
Total	309	187397.9		

Table D-21

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Number of Students Assigned to
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Students Assigned	4	1690.4	422.61	1.14
Error	305	113049.9	370.66	
Total	309	114740.3		

Table D-22

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Number of Students Assigned to
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Students Assigned	4	622.9	155.72	0.46
Error	305	103194.4	338.34	
Total	309	103817.2		

Table D-23

Analysis of Variance Summary Table for Occupational Roles
Questionnaire (Stress) and the Total Number of Students in
Schools of Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Total Students	3	7.31E-07	2.44E-07	0.11
Error	306	6.85E-04	2.24E-06	
Total	309	6.86E-04		

Table D-24

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Total Number of Students in Schools of
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Total Students	3	1431.2	477.06	1.29
Error	306	113309.2	370.29	
Total	309	114740.3		

Table D-25

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Total Number of Students in Schools of
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Total Students	3	280.5	93.49	0.28
Error	306	103536.8	338.35	
Total	309	103817.2		

Table D-26

Analysis of Variance of Occupational Roles Questionnaire
(Stress) Scores for Setting of the School(s) Served by
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Setting	3	3796.7	1265.57	0.10
Error	306	183601.2	600.00	
Total	309	187397.9		

Table D-27

Analysis of Variance of Personal Strain Questionnaire
(Strain) Scores for Setting of School(s) Served by
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Setting	3	758.3	252.76	.057
Error	306	113982.1	372.49	
Total	309	114740.3		

Table D-28

Analysis of Variance of Personal Resources Questionnaire
(Coping) Scores for Setting of School(s) Served by
Elementary School Counselors

SOURCE	<u>df</u>	SS	MS	F
Settings	3	1009.8	336.60	0.39
Error	306	102807.5	335.97	
Total	309	103817.2		

Table D-29

Stress, Strain and Coping Differences Between Married Counselors and Unmarried Counselors

Scale Names	<u>Unmarried</u>		<u>Married</u>		t
	M	SD	M	SD	
ORQ	129.05	24.13	132.84	24.78	-1.20
PSQ	77.54	19.59	78.93	19.18	-.57
PRQ	134.55	19.59	134.52	17.90	.01

Note: ORQ = Occupational Roles Questionnaire, PSQ = Personal Strain Questionnaire, PRQ = Personal Resources Questionnaire.

Table D-30

Analysis of Variance Summary Table for Occupational Roles Questionnaire (Stress) and the Number of their Own Children Reported by Elementary School Counselors who were Parents

SOURCE	<u>df</u>	SS	MS	F
Total Students	3	4341.0	1446.99	2.51
Error	228	131268.8	575.74	
Total	231	135609.8		

Table D-32

Summary of Correlations of Occupational Stress Inventory Scales and Data Form Questions that Generated Continuous Data

		ORQ	PSQ	PRQ
DFQ#1	Age	-0.07	-0.09	0.07
DFQ#4	Years as Elementary Counselor	0.02	0.00	0.10
DFQ#5	Years in Public Education	-0.08	-0.08	0.10
DFQ#6	All Years as Counselor	0.05	-0.02	0.07
DFQ#7	Job Hours Worked Per Week	0.04	0.06	-0.01
DFQ#8	All Paid Job Hours Per Week	-0.04	0.02	0.01
DFQ#9	Number of Schools Served	0.10	-0.14*	-0.04
DFQ#11	Students Assigned	0.05	0.04	0.01
DFQ#12	Students in Schools	0.03	-0.07	-0.01
DFQ#15B	Number of Parents' Children	0.01	-0.01	-0.05

Note. ORQ = Occupational Roles Questionnaire, PSQ = Personal Strain Questionnaire, PRQ = Personal Resources Questionnaire, DFQ = Data Form Question.

*p < .01.

Table D-33

Means and Standard Deviations of T-Scores from OSI Subscales for Male Elementary School Counselors, and the Percent of Scores Falling Two or More Standard Deviations from the Mean

<u>Scale</u>	<u>Mean</u>	<u>SD</u>	<u>%<-2sd</u>	<u>%>+2sd</u>
ORQ (STRESS)				
Role Overload	28.9	6.9	0	0
Role Insufficiency	22.1	7.0	0	5.0
Role Ambiguity	19.9	5.3	0	0
Role Boundary	20.2	5.4	0	0
Responsibility	24.6	6.3	2.5	5.0
Physical Environment	15.6	5.9	0	12.5
PSQ (STRAIN)				
Vocational Strain	17.6	4.2	2.5	0
Psychological Strain	20.4	7.1	0	5.0
Interpersonal Strain	21.6	6.0	0	5.0
Physical Strain	20.0	7.4	0	12.5
PRQ (COPING)				
Recreation	27.4	6.9	0	5.0
Self-Care	27.4	6.2	0	7.5
Social Support	40.2	9.0	10.0	0
Rational/Cognitive	38.0	6.2	2.5	0

Note. OSI=Occupational Stress Inventory, ORQ=Occupational Roles Questionnaire, PSQ=Personal Strain Questionnaire, PRQ=Personal Resources Questionnaire.

Table D-34

Means and Standard Deviations of T-Scores from OSI Subscales for Female Elementary School Counselors, and the Percent of Scores Falling Two or More Standard Deviations from the Mean

<u>Scale</u>	<u>Mean</u>	<u>SD</u>	<u>%<-2sd</u>	<u>%>+2sd</u>
ORQ (STRESS)				
Role Overload	30.1	7.1	0	2.6
Role Insufficiency	19.3	5.7	0	0.4
Role Ambiguity	20.8	6.0	0	9.2
Role Boundary	20.3	6.3	0	0.4
Responsibility	25.1	5.8	0	4.1
Physical Environment	16.2	4.7	0	0.7
PSQ (STRAIN)				
Vocational Strain	17.1	4.2	2.5	1.5
Psychological Strain	20.1	6.5	0	1.3
Interpersonal Strain	21.0	6.0	0	1.0
Physical Strain	20.3	6.9	0	3.0
PRQ (COPING)				
Recreation	26.7	6.1	1.1	0.7
Self-Care	28.9	6.4	0	3.7
Social Support	42.0	6.7	2.2	0
Rational/Cognitive	37.2	5.5	3.0	.7

Note. OSI=Occupational Stress Inventory, ORQ=Occupational Roles Questionnaire, PSQ=Personal Strain Questionnaire, PRQ=Personal Resources Questionnaire.

VITA

Paul Sidney Trivette was born in Winston-Salem, North Carolina, on September 21, 1949. He attended public school in Hickory, North Carolina. In 1972, he received his Bachelor of Arts Degree in Sociology from Wake Forest University where he lettered four years on the men's swimming team, was team captain for three years, and was selected for Omicron Delta Kappa national leadership fraternity. In 1974 he received his Masters of Education in counseling and school psychology from Wake Forest. During his Masters program he worked as a Residence Counselor and member of the Student Affairs Staff of North Carolina School of the Arts for two years and as assistant coach for the Wake Forest University Swim Team.

After three years as a full time swim coach in Hickory, and a year as a middle school guidance counselor for Newton-Conover Schools, the author worked in Shelby, North Carolina as Director of Aquatics for Shelby City Schools and a high school physical education teacher until 1980. From 1980 until 1987 and again during the 1989 school year, he served as school psychologist for Shelby City Schools and Swim Coach for the local high school and United States Swimming Team.

For the 1987 and 1988 school years, the author worked in England as an elementary school counselor and school psychologist for the Department of Defense Dependent's Schools. In 1989, he entered Virginia Polytechnic Institute and State University, where he earned his Ph.D. in Counseling and School Psychology in 1993. At Tech, he received assistantships in counseling supervision and in a career development program as well as serving as a member of the Graduate Student Honor Council.

Currently the author teaches supervision classes for the counselor education program at Bowling Green State University, and evaluation courses for the school psychology, and special education departments at the University of Toledo in Ohio. He is certified as a school counselor and school psychologist by the North Carolina State Department of Public Instruction. In 1987, he was licensed by the North Carolina State Board of Examiners of Practicing Psychologists as Psychological Associate. He is a Nationally Certified School Psychologist, a member of the North Carolina Psychological Association, the National Association of School Psychologists, The American Swim Coaches Association, and of the American Counselors Association.

Paul S. Trivette 190