

**A SURVEY OF OCCUPATIONAL STRESS,
PSYCHOLOGICAL STRAIN, AND COPING RESOURCES
IN LICENSED PROFESSIONAL COUNSELORS IN VIRGINIA**

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

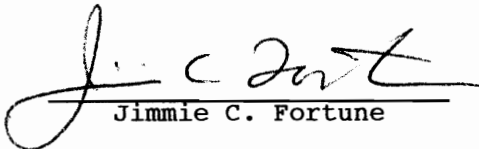
DOCTOR OF PHILOSOPHY

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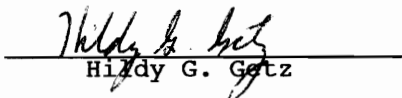
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Key words:

Licensed Professional Counselors, Job Stress,
Occupational Stress Inventory, Counselors,
Occupational Stress, Coping

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(ABSTRACT)

The Occupational Stress Inventory (OSI) and an Individual Data Form (IDF) provided information about the levels of occupational stress, psychological strain, and coping resources for a random selection of 414 professional counselors licensed by the state of Virginia (LPC). The return rate was 77.3% (n=320), and the number of responses used for analysis was 258.

The IDF provided a general description of the LPCs. Most of the respondents were white (n=248) and married (76%) and averaged 47.23 years old. There were 154 females and 104 males. The majority (72.5%) were parents and the mode for number of children was two (32.94%). The LPCs averaged 15 years experience and had been licensed an average of 8.86 years. The most often reported practice setting was private practice, either individual (20.5%) or with group affiliation (17.4%). The majority (91.7%) of the LPCs worked with clients and averaged doing so 4.2 days per week. The average number of daily client sessions was 4.78. The maximum number of client sessions per day averaged 7.45. Most of the clients (60.59%) were self-referred for counseling.

Overall T-scores on the OSI were in the average range for stress, strain, and coping. Demographic variables found to be significant for levels of occupational stress included gender, primary work setting, weekly work hours, number of days per week clients were seen, average and maximum daily client sessions, and whether the clients were self-

referred or legally mandated to attend counseling. Levels of psychological strain were significantly different depending on the LPCs' age, gender, marital status, primary work setting, and whether stress-related treatment had been sought. Primary work setting, number of days each week clients were seen, and whether the LPCs had sought stress-related treatment significantly influenced coping resources. Various subscales of the OSI were found to be significant for each of the domains of stress, strain, and coping depending upon the level of the demographic variables.

The only variables found to have significance for levels of stress, strain, and coping was practice setting. Implications for the profession and recommendations for future research are made.

ACKNOWLEDGMENTS

I want to thank Tom Hohenshil, my committee chair, for his guidance and support, and especially for his understanding in allowing me to complete this in an untimely fashion. I appreciate Jim Fortune for his statistical advice and his personal support. Thanks to Hildy Getz and Barry Mallinger for their willingness to serve and their suggestions. To Paul Trivette I owe a special gratitude. He has carefully listened, thoughtfully responded, provided guidance, suggestions, limits, and unwavering support and has been my friend since we began our program together. These are my committee members, and I am fortunate to have had them to guide me.

I appreciate Vicki Meadows for her consistent help when I called and for her friendship. I thank Janice Black for her understanding support and advice for being able to call her friend.

To my parents, Arnold and Ila Jean, I offer my deeply felt appreciation. My mother provided most needed and much appreciated clerical help as well as vocalized pride in this accomplishment. My father consistently believed in this actually coming to fruition and in the benefit of education.

To my husband, Sonny, and my son, Patrick, I offer my appreciation and my apologies. I thank you, Sonny, for your willingness to take up the slack in caring for Patrick, and for your unquestioning understanding of my need to do this. I apologize, Patrick, for the time and energy I spent on this project rather than with you, and I thank you for your child's level understanding of Mom working on this long, long endeavor. And I thank you both for your unending love.

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CHAPTER I
INTRODUCTION

Individuals choose counseling as a profession for a variety of reasons. Personal satisfaction, need for achievement, personal growth and self-awareness, financial rewards, intellectual stimulation, high status and a desire to help those in need may motivate people to enter the psychotherapeutic field (Berkowitz, 1987; Frudenberger, 1990). In a study investigating patterns of satisfactions and stresses in psychotherapeutic work Farber and Heifetz (1981) named three factors which best defined the general realm of satisfactions experienced by therapists in their daily practice: (a) promoting growth in oneself as well as others; (b) intimate involvement, which is the enjoyment from hearing details of clients' lives, as well as satisfaction from being in a position of helpful intimacy; and (c) revered efficacy, the gratification of performing a difficult job well and being respected for it. In addition, 97% of the therapists surveyed indicated that helping troubled individuals was at least a moderate source of satisfaction for them.

Being in a care giving role is not without consequences. Counselors are often seen as saviors by their clients, a role which is impossible to fulfill. It is often reported that the counseling profession attracts persons who tend to give care to others. Many of the people who seek counseling do so out of a need for support and nurturance. Others may come to counseling as a victim of violence: an abused child, a battered woman, or an incest victim. Depression and a general feeling of not being in control of one's own life are common. The energy expended by the counselor may, at times, be extreme. The counselor who does not plan for replenishing himself or herself may feel

stressed and depleted. The primary source of stress for therapists, according to a study by Farber and Heifetz (1982), was the inability to promote positive change in clients. The authors found the primary factor underlying burnout to be the nonreciprocated attentiveness and giving that are inherent within the therapeutic relationship.

There is other stress to consider in the role of a professional counselor. Psychotherapy typically happens in isolation, with a counselor and a client. Marital, family, and group counseling mean there are more than two people, and occasionally a co-therapist is involved. Being a counselor is, however, largely a solitary endeavor. The counselor who does not make an effort to talk to and associate with other professionals may eventually experience feelings of isolation or worse, may fear exposing therapeutic failures. Exclusive self-reliance is emotionally draining and may be physically as well as psychologically damaging.

Forces outside the counselor-client realm also contribute to occupational stress for the professional counselor. Working in a bureaucratic setting such as a school or agency or an inpatient facility has its own influential factors. For those practitioners dealing with insurance companies, in whatever setting, managed care has had a significant impact. And whatever changes are brought about as a result of changes in our nation's health care are sure to influence the profession, administratively and clinically.

Given the aforementioned sources of stress for the counselor it would seem to follow that some sources of stress reduction are necessary. Psychotherapists are often warned of the hazards inherent in the profession and encouraged to take action to help reduce feelings of stress (Farber, 1990; Fruendenberger, 1983, 1990). Attending to one's physical health through physical exertion, proper nutrition, and getting

enough rest and recreation are often mentioned as factors to consider. Assessing priorities and readjusting when necessary and establishing and maintaining adequate support systems are repeatedly recommended. While there appears to be nothing amiss in these recommendations, they are opinion. This study will empirically assess whether counselors are indeed utilizing the recommended coping resources.

Rationale for Study

If one accepts that counselors, being in a care-giving profession, may be susceptible to feelings of stress (strain), it follows that identifying areas of work which are found to be stressful for them is important. The identification of specific work roles found stressful by counselors can contribute to the general fund of knowledge in the field.

In answering the question of how to prevent or minimize stressful phenomena in psychotherapeutic work, Farber and Heifetz (1982) called for more opportunity for those in the field to express how they feel about their work and that evaluation be a part of the structure of the profession. The authors further stated that graduate training programs should attend more to the limitations and stresses of the psychotherapeutic role. The proposed study addresses each of these suggestions by studying opinions of those in the field and by identifying sources of stress in the field of counseling.

Statement of the Problem

Stress can hamper job effectiveness and affect us psychologically and physically. Job related stresses have negative effects across occupations. It is of note that the previously cited sources studied psychologists, psychiatrists, social workers or counselors in institutional/agency settings where the term counselor was used

generically without regard to training or professional affiliation. In fact a thorough search of ERIC, Psych Lit, and Dissertation Abstracts revealed a paucity of research about occupational stress related to counselors. The history of counseling as a profession is relatively brief compared to psychology and psychiatry. In Virginia, personnel and guidance counseling was first legally recognized as a profession separate from psychology in 1972. Virginia was the first state to enact legislation which licensed counselors for private practice. One study was found relating to occupational stress with this population. Clemons (1988) studied job satisfaction and occupational stress among Licensed Professional Counselors (LPC) in Virginia. A notable limitation of this study was in not addressing how the counselors' appraisal and evaluation of stressors affected perceived occupational stress and how coping resources serve as mitigating factors in dealing with job stress. In fact, only one study was found which addressed, however minimally, these issues. Raquepaw and Miller (1989) found that it was the psychotherapists' perception of having too many clients rather than the actual number of clients that was associated with feelings of burnout. This study will identify sources of stress for counselors. It will also assess the interaction between counselors' perceptions of their stress and the resulting psychological strain as mitigated by their coping resources.

Purpose of the Study

The purpose of this study is to provide information about the levels of occupational stress, perceived psychological and physical effects of stress (strain), and coping resources for professional counselors licensed by the state of Virginia. Using the Occupational Stress Inventory (OSI) (Osipow & Spokane, 1987), overall levels of

stress, strain, and coping, as well as factors contributing to each concept will be described. In addition, demographic information will be gathered from the sample. These variables will be described and related to the OSI scales and factors contributing to those scales. The following research questions will be addressed by the proposed study:

1. According to the Occupational Roles Questionnaire (ORQ), what are the levels of stress factors for Licensed Professional Counselors (LPCs) in Virginia?
2. According to the Personal Strain Questionnaire (PSQ), what are the levels of psychological and physical effects of stress (strain) for LPCs in Virginia?
3. According to the Personal Resources Questionnaire (PRQ), what are the levels of coping resources for LPCs in Virginia?
4. Are occupational stress factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?
5. Are psychological strain factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?
6. Are coping resources different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?

Limitations of the Study

Professional counselors licensed by the state of Virginia will make up the sample for the study. Results should not be generalized to

non-licensed counselors, to counselors (licensed or non-licensed) in other states, or to licensed professionals in other fields.

Definition of Terms

The following terms will be used in this study and are defined as:

1. Licensed Professional Counselor (LPC)--individuals who have received their licenses as professional counselors from the state of Virginia.
2. Occupational Stress--aspects of a job which impact or threaten to impact the individual in undesirable ways. The Occupational Roles Questionnaire (ORQ) measures various aspects of a job which an individual may experience as stressful.
3. Strain--the experience of an individual in response to stress, which may be manifested in various ways. The Personal Strain Questionnaire (PSQ) measures disruptions in an individual's psychological, interpersonal, physical, and on-the-job functioning.
4. Coping--an individual's psychological or behavioral attempts to manage experienced strain. The Personal Resources Questionnaire (PRQ) measures various resources an individual may employ in this attempt.

Summary

This chapter provided a general introduction to the proposed study. A rationale for the study was discussed and a statement of the problem to be addressed by the study was presented. The purpose of the study, including a statement of research questions to be addressed was presented. Finally the limitations of the study and definitions of terms specific to the study were discussed.

CHAPTER II
REVIEW OF THE LITERATURE

Many believe that ours is the "age of stress" and most people consider their own occupation to be the most stressful (Selye, 1993). There is substantial disagreement over the definition of stress. Breznitz and Goldberger (1993) acknowledged that this lack of agreement on the definition of stress is seen by some as indicative of a paradigm crisis. The authors stated that "the absence of consensus more properly reflects the rapid expansion of stress research in many divergent directions" (p. 4), and supported this divergence as conducive to future theorizing.

The word stress has many different meanings. It has been used as a substitute for anxiety, conflict, emotional distress, extreme environmental conditions, ego-threat, frustration, threat to security, tension, arousal, fear, fatigue, pain, the need for concentration, loss of blood, or an unexpected success (Appley & Trumbull, 1967; Selye, 1983).

Historical Perspective

Walter B. Cannon titled his ground breaking book The Wisdom of the Body (1939), as a statement in his belief that understanding disease and pain could help ease the burden of mankind. In tracing the historical development of the stress concept, Hans Selye (1993) credited European physiologists working in the late 1800's with setting the stage for Cannon's work. These 19th century scientists focused on the body's active adaptation in order to maintain a steady state. Cannon (1939) used the term homeostatis to refer to the steady states in a living being which are maintained by the coordination of various physiological

processes. He noted the involvement of "the brain and nerves, the heart, lungs, kidneys and spleen, all working cooperatively" (p. 24) in order to maintain a relatively constant condition.

In examining bodily responses to emotional excitement, Cannon (1939) found that rage and fear elicited similar, and intense, physiological reactions. He associated fear with the instinct to run or escape and anger, or aggressive feeling, with the instinct to attack. He attributed "these...fundamental emotions and instincts (to the) experience of multitudes of generations in the fierce struggle for existence" (p. 227). This phenomenon has become known as fight or flight. According to Selye (1993), it was against this background that he began to focus on the "syndrome of just being sick" (p. 29).

Hans Selye, an endocrinologist, was seeking a new ovarian hormone when he injected extracts of cattle ovaries into rats. He noted a triad of changes in the rats involving the adrenal glands, lymph nodes, and inner surface of stomach. He soon discovered the same pattern of responses to all toxic substances and many other stimuli. He used the term "alarm reaction" for this response which became the first stage of his General Adaptation Syndrome (GAS). He noted two subsequent stages in the GAS: the stage of resistance or acquired adaptation; and, finally, the stage of exhaustion, which inexorably follows if the demand is severe enough and applied for a sufficient length of time (Selye, 1993).

Selye (1976a) defined stress as "the nonspecific response of the body to any demand" (p. 15). He noted that there cannot be different types of stress. He did, however, distinguish between two types of stress effects: (a) eustress--stress having desirable effects, and (b) distress--stress resulting in undesirable effects.

Definitions and Theoretical Approaches

In an effort to organize the numerous definitions of stress, several authors (Ghadially & Kumar, 1987; Richard & Krieschok, 1989; Trivette, 1993) suggested there are three discernable theoretical approaches: (a) stimulus-based; (b) response-based; and (c) interactional.

Stimulus-based

As explained by Lazarus (1993), the concept and definition of stress has its roots in late seventeenth-century engineering principles. In this model the external force was the load, stress was the pressure on the object created by the load, and strain was the deformation of the object. Such is the basis for the stimulus-based explanation. The theoretical underpinnings of The Social Readjustment Scale (Holms & Rahe, 1967) is an example of a stimulus-based approach to stress, which maintains that any change, positive or negative, can have stressful impact. Other factors which may be considered include the duration of the stressor and whether it is chronic or acute (Lazarus & Folkman, 1984).

Response-based

The response-based view is most popularly represented by Selye's definition (see above) of stress which he later said he should have called "strain reaction" (Selye, 1976b, p. 50). Instead he introduced the word stressor to indicate the causative agent, and retained stress to name the resulting condition. Factors which influence individual differences in how we respond to stress include: (a) genetic--physique, constitution, gender, intelligence; (b) acquired--education, age, social

class; and (c) trait--anxiety, Type A behavior, self-image/esteem, locus of control, flexibility, and extroversion-introversion (Chesney & Rosenman, 1983; Payne, 1988).

Interactional

From the interactional view, situational variables (stimulus) are seen as interacting with personal variables (response) to lead to different stress reactions (strain). The Occupational Stress Inventory (OSI) (Osipow & Spokane, 1987) is based on this model. According to Cooper (1981), "...rather than being either response- or situation-based, the concept of stress truly makes sense only when seen as imbalance in the context of an individual-environment transaction" (p. 9).

An example of the interactional view is the person-environment fit theory which distinguished between two types of fit. Needs-supplies fit addresses whether the needs and values of the person fit with the environmental supplies and opportunities to meet these needs and values. Abilities-demands fit regards the fit between the demands of the environment and the abilities of the person to meet those demands (Caplan, 1983). Caplan further explained an important element of the person-environment fit model to be the distinction between objective and subjective components of fit, both of which are seen as having an effect on strain. Coping is defined as a change in objective fit occurring either via a change in how one perceives the environment (environmental mastery), or the perception of oneself (adaptation). The Occupational Roles Questionnaire (ORQ) of the OSI may be seen as subjectively measuring the perception of the demands of the work environment. The OSI's Personal Strain Questionnaire (PSQ) corresponds to the

psychological strain experienced as a result of the person's perception of his or her ability (or difficulty) to adapt to those demands.

Appraisal as a Mediator of Strain

Richard and Krieshok (1989), using the interactive model as proposed by Osipow and Spokane (1984), defined strain as a function of stress and coping. The authors further explained that "given equal amounts of stress, strain will vary as a function of coping" (p. 121). Appley and Trumbull (1967) stated, "with the exception of extreme and sudden life-threatening situations, it is reasonable to say that no stimulus is a stressor to all individuals exposed to it" (p. 7). The authors go on to note that perceived stress (strain) "depends on the mediation of some appraising, perceiving, or interpreting" (p. 9) by the individual.

Richard Lazarus has written extensively on the subject of appraisal as a mediator of stress (e.g. Lazarus, 1966; Lazarus & Folkman, 1984). While his theoretical orientation has been called interactional (Cooper, 1981), Lazarus defined his theory as relational (Lazarus, 1993) referring to the assumption that stress is a "relationship between the person and the environment that is appraised by the person as taxing" (Lazarus & Folkman, 1984, p. 19). He defined appraisal as an evaluative process of categorizing an encounter with respect to its significance for well-being (Lazarus & Folkman, 1984).

Two evaluative issues of cognitive appraisal have been identified: (a) primary appraisal wherein the person decides what is personally at stake--whether the experience is a threat or a benefit, and in what way; and (b) secondary appraisal when the person decides what, if any, action can be taken (i.e., what are the coping options). The interplay between the two is seen as complex and bidirectional (Folkman & Lazarus, 1988;

Lazarus & Folkman, 1984). The authors further noted the process of reappraisal, which they defined as a changed appraisal following an earlier appraisal in the same encounter, based on new information from the environment. These cognitive reappraisals continuously mediate one's coping process (Lazarus & Folkman, 1984).

Coping

The interactional view assumes that people are actively responsive to forces that impinge upon them. Coping refers to the things that people do to avoid being harmed by life-strains (Pearlin & Schooler, 1978). Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141).

How an individual's personality characteristics and defenses interact with coping has been examined by various researchers (Cherniss, 1980b; Haan, 1993; Pendergast, 1987/1988; Perlin & Schooler, 1978), and is not specifically addressed in this study. Osipow and Spokane (1984) acknowledged that patterns of coping are complex and individualistic, that these patterns are relatively automatic and reflexive, and that their involuntary nature may be rooted in individual personalities. The Personal Resources Questionnaire (PRQ) is aimed at assessing predictable components of coping patterns and is based on Lazarus' concepts of coping and coping styles (Osipow & Spokane, 1984, 1987).

Strain

The terminology used in research on stress and strain is chaotic, the words being used to mean either the agent or the response (Lazarus & Folkman, 1984). In Selye's later writings he stated he should have used

strain reaction to identify what by then was popularly called stress (Selye, 1976b). Freud used anxiety as an organizing framework in writing about psychopathology. In Freudian formulations anxiety served as a trigger for defense mechanisms and unsatisfactory modes of coping that produced symptom patterns. If the heavy overlap between the terms of stress and anxiety is acknowledged, the Freudian view of psychopathology (and of many later theorists) is that it is a product of stress (Lazarus & Folkman, 1984).

The interactional model, as explained by Richard and Krieshok (1989) assumes that "there is an interaction between the social roles and the individual's ability to cope with the negative aspects of those roles. This interaction will determine the amount of undesirable effects, or strain, felt by the individual" (p. 118). The authors noted that the concept of strain has been studied using the terms stress, strain, and burnout.

Attempts to quantify levels of strain in individuals include measuring body weight, body temperature, blood pressure, and pulse rate (Selye, 1976a), as well as cold-flu episode rates and other infectious diseases such as mononucleosis (Hendrix, Steel, & Schultz, 1987; Kasl, 1983). Other researchers have examined emotional manifestations of strain such as anger, hostility, aggression, anxiety, and depression (Lazarus & Folkman, 1984; Selye, 1976a). The study of the contribution of strain in the development of diseases such as peptic ulcers, ulcerative colitis, rheumatoid arthritis, cardiovascular diseases, gastrointestinal diseases, and asthma appears abundant (Kimball, 1977; Selye, 1976a).

Occupational Stress: Relevant Theoretical Issues

Two areas of occupational stress research which relate directly to the OSI are whether stress is measured objectively or subjectively and role theory of occupational stress.

Objective vs. Subjective Measurement

In his review of research on occupational stress, Holt (1993) categorized stress according to whether it is objectively or subjectively defined. One of the major contributors to developing subjective measures of occupational stress, according to Holt (1993), was French (1974), and his colleagues (French, Rodgers & Cobb, 1974). Osipow and Spokane (1987) credited French's work regarding measurement of an individual's subjective perception of occupational stress and strain as a starting point in the development of the OSI.

The strategy of measuring occupational stress in subjectively defined terms has its critics. A major criticism is the need of persons to maintain a public posture of toughness. For example, men in more objectively rigorous, physically demanding, and dangerous jobs may deny any stress, yet exhibit the highest rates of stress disease (Holt, 1993). In other words, it may be possible to report minimal job stress and yet exhibit symptoms of strain. The Personal Strain Questionnaire (PSQ), and especially the Physical Strain (PHS) sub-scale, may be elevated even though a person reports few work stresses on the Occupational Roles Questionnaire (ORQ).

Role Theory

Role Theory of occupational stress was developed by Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) and Kahn (1974). Role theory suggests that job roles can be stressful regardless of the specific

occupation. That is, the stressful aspects of job roles cut across occupations and are not specific to a particular job. Role conflict, role ambiguity, and role overload are three elements specifically mentioned as contributing to job stress (Kahn, 1974). The work of the above mentioned authors along with that of McLean (1974) regarding roles in occupational stress were used in the development of the OSI (Osipow & Spokane, 1987). Using research of these authors, Osipow and Spokane developed the Occupational Role Questionnaire (ORQ). The ORQ is made up of six subscales constructed to measure various roles found to be stress-inducing in the workplace.

Occupational Stress, Strain and Coping

The following sections will be organized around the OSI and its scales and subscales. Research relevant to each factor will be reported. Research findings focusing on counselors will be used when available and relevant. Other times research from general occupational stress studies will be used.

The first section will deal with the Occupational Roles Questionnaire (ORQ), which measures occupational stress. Subsequent sections will focus on the Personal Strain Questionnaire (PSQ) which measures various aspects of psychological strain, and the Personal Resources Questionnaire (PRQ) which measures coping resources. As a means of distinguishing the OSI from general constructs and definitions, the scales and subscales of the OSI will be capitalized in this study. When reporting information relevant to this study which may use the same words and/or phrases, lower case letters will be used.

Occupational Stress Factors

Definitions and categorizations of occupational stress are numerous (Osipow & Spokane, 1987). Holt (1993) offered one of the most succinct: "Some aspects of many kinds of work have bad effects on most people under certain circumstances" (p. 344). The Occupational Roles Questionnaire (ORQ) was developed to assess occupational stress across occupational fields and levels. The ORQ is made up of six subscales. These subscales will be defined and elaborated upon in the following section.

Role Overload. Role Overload (RO) measures the degree that personal and workplace resources are exceeded by job demands and to what extent work loads are accomplished by the individual. Osipow and Davis (1988) found Role Overload to be significantly related to vocational strain in veterinary students. In a study of white-collar union members Beehr, Walsh, and Taber (1976) reported Role Overload correlated positively and significantly with job dissatisfaction.

In a study of medical residents and faculty, Role Overload was reported as the major stress (Alexander, Monk & Jonas, 1985). Similarly, in a study of Licensed Professional Counselors (LPCs), Role Overload was found to be the stress subscale with the highest rating. However, it showed no effect on job satisfaction for the LPCs (Clemons, 1988). In a study of elementary school counselors (Trivette, 1993), Role Overload scores fell into the average range overall. However, for those counselors who reported higher stress scores overall, Role Overload scores were significantly higher and were significantly correlated to the elevated stress scores.

Role Insufficiency. Role Insufficiency (RI) measures the appropriateness of the individual's training, education, skills and experience to the requirements of his/her job. Osipow and Davis (1988)

found Role Insufficiency had a significant impact on vocational strain. In a study of extension service administrators Role Insufficiency was not found to significantly contribute to occupational stress (Clark & Smith, 1987). Research with counselors has yielded mixed results. Trivette (1993) reported average scores on Role Insufficiency with elementary school counselors. Clemons (1988), however, found Role Insufficiency had the most significant impact on job satisfaction of LPCs and was responsible for the largest amount of explained variance in his model.

Role Ambiguity. Role Ambiguity (RA) assesses whether the individual has a clear idea of the priorities, expectations, and evaluation criteria of the job. Role ambiguity has been found to have a strong positive correlation to job dissatisfaction and to negatively correlate with effort toward quality and involvement (Beehr, 1976; Beehr, et al., 1976; Kahn, et al., 1964). Research with counselors has shown Role Ambiguity to have a positive correlation with emotional exhaustion and lack of professional accomplishment (Pendergast, 1987/1988) and with higher stress scores (Trivette, 1993). Clemons (1988) found that as Role Ambiguity increased, overall job satisfaction decreased, and that it was the major contributor to the variance in satisfaction with supervision.

Role Boundary. Role Boundary (RB) measures the extent to which conflicting role demands and work setting loyalties are a problem for the individual. This definition appears to be what is referred to in the literature as the concept of role conflict (Trivette, 1993). In a national study of supervisors in major corporations almost half of the respondents reported being caught in the middle between two conflicting persons or demands and high role conflict was related to lower job satisfaction and greater job-related tensions (Kahn, et al., 1964).

Role Boundary has been found to contribute significantly to overall vocational strain (Osipow & Davis, 1988; Osipow, Doty & Spokane, 1985). Clemons (1988) found Role Boundary to negatively influence satisfaction with company policies and practices but reported no significant effect on job satisfaction for LPCs. Trivette (1993) found Role Boundary scores increased significantly for those counselors reporting higher levels of overall job stress.

Responsibility. Responsibility (R) assesses the degree of the individual's perceived or actual responsibility for the performance and welfare of other persons at work. Responsibility has been found to significantly contribute to Occupational Stress (Clark & Smith, 1987; Osipow, et al., 1985), and to Physical Strain (Osipow & Davis, 1988). As reported in Kahn, et al. (1964), a national survey of males in a cross section of various occupations found that an individual's level of tension increased directly as a function of his supervisory responsibility. In a study of counselors at university counseling centers, supervision of another counselor was found to be a significant predictor of emotional exhaustion (Ross, Altmaier, & Russell, 1989). Trivette (1993) reported that counselors serving in more than one type of school setting had significantly higher Responsibility scores than those serving one type of school setting. While these results appear to indicate negative results of increased responsibility for counselors, Clemons (1988) found Responsibility to positively and significantly influence overall job satisfaction for LPCs.

Physical Environment. Physical Environment (PE) measures exposure to extreme physical conditions or high levels of environmental toxins as reported by the individual. It also assesses erratic work schedules and whether the individual is isolated from others. Research regarding the effects of physical environment on occupational stress has been

overwhelmingly in the area of blue collar workers and those workers in dangerous physical environments. A study with members of a state university found Physical Environment stress to vary significantly with the teaching discipline category (Brown, et al., 1986). In a study of social workers Jayaratne and Chess (1984) found physical comfort significantly contributed to job satisfaction for workers employed at family service agencies. Clemons (1988) reported Physical Environment explained both negative and positive variance in job satisfaction depending upon the facet of job satisfaction to which it applied, with no clear implications.

Occupational Strain Factors

An assumption of the OSI is that occupational stress substantially impacts the individual. Disruptions in work performance and impairment in the individual's functioning may be manifestations of the strain experienced by the individual as a result of the perceived stress (Osipow & Spokane, 1987). The OSI's Personal Strain Questionnaire (PSQ) was developed as a measure of factors found to contribute to experienced strain.

Kahn, et al. (1964) stated that role conflicts (a major contributor to general occupational stress) are costly to both the organization and the individual, whose emotional and interpersonal functioning may be affected. In organizing the variables seen as effects of occupational stress Holt (1993) separated strains from illnesses, yet acknowledged the distinction as arbitrary and open to challenge. The four areas measured by the PSQ include: (a) Vocational Strain; (b) Psychological Strain; (c) Interpersonal Strain; and (d) Physical Strain. As before, these subscales will be addressed individually with relevant research reported for each subscale.

Vocational Strain. Vocational Strain (VS) assesses the individual's attitudes toward work and whether the person is experiencing problems in work quality or output. According to Carroll and White (1982) a decrement in the quality of services provided to clients is the primary sign of burnout (a result of stress) in the human services field. In a study of women in various occupations, job satisfaction was significantly related to lower levels of role strain (Hemmelgarn & Laing, 1991). Beehr (1976) reported job dissatisfaction to be strongly correlated with Role Ambiguity. Job stress negatively affected job performance in nurses (Motowidlo, Packard, & Manning, 1986). Osipow and Davis (1988) found Vocational Strain to be related to Role Overload, Role Insufficiency, Role Boundary, and Physical Environment in a study of veterinary students.

Psychological Strain. Psychological Strain (PSY) assesses whether the individual is experiencing psychological or emotional problems such as depression, anxiety and irritability. Role Insufficiency, Role Boundary, and Responsibility subscales were found to significantly contribute to Psychological Strain in veterinary students (Osipow & Davis, 1988). Nurses reported that the frequency and intensity of job demands were significantly related to felt stress, anxiety, and depression (Motowidlo, et al., 1986).

The number of stressful events or the amount of vocational stress was found to be a significant predictor of emotional exhaustion for counselors and other mental health professionals (Miller, 1986/1987; Ross, et al., 1989). In addition Pendergast (1987/1988) found a positive correlation between Role Ambiguity and emotional exhaustion in counselors.

Interpersonal Strain. Interpersonal Strain (IS) measures conflict with or excessive dependency on the individual's family members or

friends. Desiring time alone or reporting not enough time with others are also factors contributing to the IS score. Osipow and Davis (1988) found Role Overload, Role Boundary, and Responsibility to be the best predictors of Interpersonal Strain. In a study of medical students and faculty, Interpersonal Strain was rated as the major effect of Occupational Stress (Alexander, et al., 1985). In Clemons' (1988) study of LPCs, a significant number of respondents reported "stress at work impacts on stress in the rest of life" (p. 124). Conversely, therapists in a study by Farber and Heifetz (1982) reported home stress impaired their ability to effectively deal with clients.

Physical Strain. Physical Strain (PHS) assesses various physical symptoms, weight changes, and disturbances in sleeping patterns. Overuse of alcohol and feelings of lethargy and apathy are also addressed.

Linking stress to the development of physical symptoms has been widely, although not universally, accepted (Kasl, 1983). In university faculty and staff the most frequent sign of stress was some form of body signal (Brown, et al., 1986). For teachers, organizational (job) factors were found to significantly influence development of serious illness (Bhagat, Allie & Ford, 1991). In counselors, Role Ambiguity was related positively to number of physical symptoms reported (Pendergast, 1987/1988). Additional information regarding physical and psychological effects of stress is provided in the following section on burnout.

Burnout: Its Meaning and Relationship to the Occupational Stress Inventory

Burnout, a term coined by Freudenberg in 1974 (Farber & Heifetz, 1982), has been heavily researched by Maslach and is, perhaps, most closely associated with her definition--"a syndrome of physical and

emotional exhaustion, involving the development of negative self-concept, negative job attitudes, and loss of concern and feeling for clients" (Pines & Maslach, 1978, p. 233). Burnout is considered primarily a work-related concept. However, other facets of an individual's life contribute to burnout and are affected by burnout (Carroll & White, 1982). In fact, Paine (1982) called "burnout stress syndromes, 'the consequences of high levels of job stress, personal frustration, and inadequate coping skills'" (p. 11), a definition quite similar to Osipow and Spokane's (1987) explanation of what the OSI measures—"occupational stress, psychological strain, and coping resources" (p. 1). Citing supportive research for their study, Lee and Ashforth (1990) noted that burnout can be understood in terms of the stress-strain-coping framework of Lazarus (Lazarus & Folkman, 1984), the model also used for the OSI (Osipow & Spokane, 1987).

There are three usually, although not universally, accepted dimensions of burnout. Emotional exhaustion, depersonalization of others, and a feeling of reduced personal accomplishment are widely accepted as indicative of burnout (Lee & Ashforth, 1990). In these authors' study regarding the meaning of the three dimensions of burnout, emotional exhaustion and depersonalization were strongly associated with psychological and physiological strain. Thus, burnout appears to correspond to factors measured by the PSQ. In fact the factors of Physical/Psychological Exhaustion and Physical Strain were found to account for 65.3% of the PSQ's variance (Osipow & Spokane, 1987).

Research regarding burnout among counselors has identified various sources of stress. In a longitudinal study by Cherniss (1980a) with poverty lawyers, mental health professionals, teachers, and public health nurses new to their professions, the most critical source of stress was the problem of competence. Feelings of incompetence relate

to the Role Insufficiency (RI) and Role Overload (RO) scales of the OSI. Other factors identified by Cherniss and the ORQ scale with which they correspond include: (a) bureaucratic interference, Role Ambiguity (RA) and Role Boundary (RB); (b) working with clients who were not motivated, cooperative or grateful, Responsibility (R); (c) boredom, Role Insufficiency (RI); and (d) relationship with peers, Responsibility (R). In a study of college and university counseling center staff, the number of stressful events were predictive of burnout (Ross, et al., 1989). Farber and Heifetz (1982) found that burnout occurred when psychotherapists perceived their work as particularly frustrating and minimally successful.

Occupational Coping Factors

"A response intended to eliminate, ameliorate, or change the stress producing factors in the job context or intended to modify, in a beneficial way, the individual's reaction to the stressful job situation" (p. 2) is how Newman and Beehr (1979) defined "adaptive response to job stress" (p. 1). In the authors' exhaustive review of relevant literature, four strategies were delineated and discussed as adaptive responses to felt job stress. The personal strategies for eliminating or relieving stress were aimed at changing one's psychological condition, physical condition, behavior, and/or work environment. These four sets of coping behaviors were used by Osipow and Spokane (1987) as the basis for the Personal Resources Questionnaire (PRQ). The PRQ is the OSI's scale which assesses an individual's coping resources.

In a study regarding the moderating role of styles of coping on stress and strain, Bhagat, et al. (1991) defined two factors of coping: problem-focused and emotion-focused. While both factors were found to

significantly moderate stress-strain relationships, problem-focused coping was found to have a stronger impact than emotion-focused coping. Three of the four PRQ's subscales assess problem-focused coping. The four scales of the PRQ will be defined and discussed in the following section. As before, relevant research will be reported for each scale.

Recreation. Recreation (RE) assesses whether the individual engages in non-work related recreational/leisure activities and whether these activities are pleasurable to the person. Osipow and Davis (1988) reported that high levels of Recreation served to moderate the impact of Role Overload, Role Ambiguity, and Responsibility on strain. First year medical residents scored significantly lower on Recreation than did medical faculty (Alexander, et al., 1985), a finding which may be related to the age of the individual, since workers in various occupations were found to employ recreation as a coping resource more as they aged (Osipow, et al., 1985). This finding is similar to those reported for counselors (Trivette, 1993). In addition, counselors who were parents scored significantly lower on recreation than did non-parents (Trivette, 1993).

Self-care. Self-care (SC) measures stress reducing activities in which the individual engages. Getting enough sleep, exercising regularly and avoidance of harmful substances are behaviors presumed to help alleviate or reduce stress. While physical exercise, eating well, and the judicious use of alcohol and tobacco have been recommended as part of a low-stress lifestyle (Cooper, 1981), physical activities were reported as being used as a coping resource by only 1% of the respondents in one study (Pines, Aronson & Kafry, 1980). High scores on Self-care were found to reduce the impact of Role Ambiguity and Responsibility and to lower strain scores (Osipow & Davis, 1988).

Freudenberger (1990) recommends physical activity as a means of preventing burnout in psychotherapists. As with Recreation, perhaps as individuals age they practice better Self-care. Trivette (1993) found older counselors scored higher on Self-care than did younger ones. In the same study, parents scored significantly lower on Self-care than did non-parents.

Social Support. Social Support (SS) focuses on the quality of the individual's interpersonal relationships. High scores indicate that the person has a person or group with whom he/she can discuss work problems and count on for help either at work or at home. High levels of Social Support were found to reduce the impact of all scales of the ORQ with the exception of Physical Environment (Osipow & Davis, 1988). In a study of clinicians with various backgrounds and training, Miller (1986/1987) found that all respondents viewed family and colleagues as available support but regarded supervisors, clients and personal therapy as inaccessible for support. Conversely, in a study of university counseling staff, supervisor support was significantly related to lowered levels of burnout (Ross, et al., 1989). Social support was positively related to job satisfaction and negatively to burnout in a study of female social workers (Melamed, Dushnir & Meir, 1991).

Rational/Cognitive Coping. Rational/Cognitive coping (RC) assesses the individual's ability to evaluate consequences, prioritize, redesign work schedules when needed, and leave their job at work. According to Lazarus and Launier (1978), research has shown that cognitive appraisal and intrapsychic modes of coping determine the degree and kind of stress response. In a study of teachers, organizational stress was significantly moderated by emotion-focused coping. The moderating effects were, however, considerably weaker than those related to problem-focused coping (Bhagat, et al., 1991).

Osipow and Davis (1988) found Rational/Cognitive Coping to be the least effective of the coping resources in moderating PSQ scores. When LPCs were asked how work stress related to life stress 44% reported a relationship between the two (Clemons, 1988), perhaps indicating counselors find it difficult to forget about their jobs when they go home.

Correlates of Occupational Stress, Strain and Coping

The following section will address the demographic variables to be included in the study. Characteristics of counselors are often included in dissertation research (Clemons, 1988; Miller, 1986/1987; Pendergast, 1987/1988; Segedin, 1992/1993; Trivette, 1993), with inconsistent findings. These results will be reported for each variable. Research with counselors or other mental health professionals will be used when possible. When available, research using the OSI will be reported.

Age. Using the OSI in a recent study of social workers, age was found to be a positive predictor of Recreation and Self-care on the PRQ (Segedin, 1992/1993). The same findings were reported by Trivette (1993). Clemons (1988) reported age made a significant contribution to job satisfaction in LPCs, with older workers reporting being more satisfied. In a study examining age-stage relationships and job stress, strain, and coping, Osipow, et al., (1985) reported that Role Overload and Responsibility tended to increase with age, while Role Boundary and Physical Environment tended to decrease. In the same study, workers' scores on all coping resources measured, except social support, increased with age of the respondent.

Gender. Results regarding occupational stress and gender have been mixed. An absence of differences in stress, strain, and coping as related to gender was reported by Osipow, et al., (1985). In a study of

University faculty, strain scores tended to decrease for males as they moved up in rank, whereas there was an increase in female strain scores as they were promoted (Richard & Krieshok, 1989). Trivette (1993) noted no gender differences in his study. Segedin (1992/1993), however, reported males scored higher than females on the ORQ's Role Insufficiency and Role Boundary subscales and on the PSQ's Physical Strain subscale. Clemons (1988) found gender made no contribution to general job satisfaction in LPCs.

Ethnicity. In Clemons' (1988) study of LPCs, 93.6% of the respondents identified themselves as white. Other analyses were not reported. Two studies done with college or university counseling center staff are relevant to this variable. Casas, Furlong, and Castillo's (1980) study indicated that minority counselors with a nonadequate self-help system, experienced significantly more on-the-job stress than did those counselors with an adequate self-help system. Ross, et al. (1989) found, however, that minority staff reported experiencing fewer stress events on-the-job than did non-minority staff.

Practice Setting. LPCs are found in a variety of work settings. Clemons (1988) found 49.1% of LPCs identified themselves as practitioner, either self-employed or employed by others. Counselor educator and supervisor/administrator was chosen by 17.2% and 19% respectively. Further analyses were not reported. Clinicians in institutional practice reported more stress from work-related issues and more feelings of disillusionment than did those in private practice (Farber & Heifetz, 1982; Hellman & Morrison, 1987). Psychologists in private practice reported significantly lower levels of job-related stress than did psychologists in academe (Boice & Myers, 1987).

However, a comparison of public and private sector rehabilitation practitioners indicated no difference in job satisfaction (Farruggia, 1986).

Experience. University counseling center staff with fewer years of postdoctoral experience were found to report an increase in number of stressful events and feelings of emotional exhaustion (Ross, et al., 1989). Similarly, Clemons (1988) found experience to contribute significantly to general job satisfaction. Conversely, Pines and Maslach (1978) reported experience positively predicted feeling less successful in working with an inpatient population. Trivette (1993) reported no significant differences regarding experience. Segedin (1992/1993) found experience to be significantly correlated with the use of Rational/Cognitive Coping on the OSI for Social Workers.

Number of Clients Seen Per Day. Only one study was found which specifically addressed this variable. Farber and Heifetz (1982) found that most (63.6%) psychotherapists felt they could see 4-6 clients per day before becoming depleted. Others felt they could see 7-8 (18.2%) or 9-10 (7.3%) per day before feeling depleted. Gender significantly affected the results, with males reporting they could see more clients per day than females. While caseload, hours worked per week (Clemons, 1988; Trivette, 1993) and weekly client contact hours (Hellman & Morrison, 1987; Ross, et al., 1989) have been examined with varying results, a pertinent and largely unexamined variable appears to be the number of daily client contact hours.

Counselors's Number of Children. An unexpected finding of Trivette (1993) regarded the counselor's number of children. Parents with one child reported higher scores on three subscales of the PSQ than did parents of two children. In addition, parents of two children

scored significantly higher on Recreation and Self-care subscales of the PRQ than did those with one child. Additional research seems appropriate and needed.

Occupational Stress Inventory

According to the authors, the Occupational Stress Inventory (OSI) was developed for two primary 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 model for the instrument, as described by Osipow (1991), was that the work environment places individuals in roles that potentially create the perception of stress, that people use various methods to resolve (cope with) these stresses, and the degree of success of these methods in combination with the intensity of the stress as well as a number of personal variables interact to produce a level of strain (p. 324).

Thus, the authors used the interactive model in their conceptualization of job stress. The OSI separates the three aspects into distinct components. These three domains are measured by separate instruments which together make up the OSI (Osipow & Spokane, 1987; Osipow, 1991).

The OSI includes:

1. The Occupational Roles Questionnaire (ORQ). The ORQ is made up of six scales with ten items for each scale, and measures the occupational stress domain of the interactive model. The roles identified as potentially stressful include role overload, role insufficiency, role ambiguity, role boundary, responsibility and physical environment.

2. The Personal Strain Questionnaire (PRQ). The PRQ includes four scales with ten items for each scale, to assess the perceived strain, or disruptive, aspects that may result from stress. The manifestations of stress (strain) are quantified by assessing problems in work quality or output (vocational strain), perceived psychological or emotional problems (psychological strain), and illness or poor self-care (physical strain).
3. The Personal Resources Questionnaire (PRQ). The PRQ includes four scales with ten items per scale, and assesses available coping resources. Identified coping responses include recreation, self-care, social support, and rational/cognitive coping.

Research Support

Factor analyses, correlational studies, treatment studies and studies of the stress, strain, and coping model are reported in the OSI manual. Several authors have published reviews of the OSI. Cochran (1992) found the factor analytic studies supported the internal structure of the instrument and the facets of the model. Correlational studies, as reviewed by Powell (1991), found that the OSI scales correlated significantly with the variables with which they should theoretically be linked. The treatment studies were found to support the validity of the total scores on the PSQ and PRQ by Bunda (1992). The relationship between the scales and measures of job satisfaction and burnout were found to be quite respectable by Bunda (1992).

According to Powell (1991) the OSI was "the only published measure of stress that assesses stress, strain, and coping resources, the three major components of the interactional model" (p. 127). In addition, the

author found the instrument well grounded in theory with sufficiently strong psychometric support to recommend it for research purposes. More recent reviews of the OSI indicate that research has strengthened confidence in the test (Cochran, 1992), and recommend it for a wide range of research studies as a meaningful instrument (Bunda, 1992). Cochran (1992) found the OSI to be a "well-conceived, well-constructed, and worthwhile instrument for research and practice" (p. 624).

The OSI has been used in dissertation research with related occupations. Segedin (1992/1993) surveyed social workers in the area of family services who were employed by Wyoming Division of Public Assistance and Social Services using the OSI. Elementary school counselors were researched by Trivette (1993). In a study of Licensed Professional Counselors (LPCs) in Virginia, Clemons (1988) used the Occupational Environment Scales, an earlier form of the Occupational Roles Questionnaire (ORQ).

Summary

This chapter addressed historical information relevant to the study. A discussion of theoretical approaches to stress, strain, and coping was included as it applies to the study. Specifically the interactional view of the concepts was presented.

Each subscale of the Occupational Stress Inventory was discussed noting research data relevant to that subscale or concept. A description of demographic variables to be included in the study was presented along with research pertinent to each variable. Finally, a description of the OSI and a review of the literature supporting its use as a research instrument was discussed.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to delineate the methodological procedures to be used in the study. Included are the research questions, description of the instrument, and the methods of data collection and analysis which will be used.

Research Questions

1. According to the Occupational Roles Questionnaire (ORQ), what are the levels of stress factors for licensed professional counselors (LPCs) in Virginia?
2. According to the Personal Strain Questionnaire (PSQ), what are the levels of psychological and physical effects of stress (strain) for LPCs in Virginia?
3. According to the Personal Resources Questionnaire (PRQ), what are the levels of coping resources for LPCs in Virginia?
4. Are occupational stress factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?
5. Are psychological strain factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?
6. Are coping resources different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?

Sample

This study surveyed a sample of Professional Counselors licensed by the state of Virginia. On October 5, 1994 the Virginia Department of Health Professions provided a list, arranged from lowest to highest license number, of all persons (1614) holding a license as a professional counselor. Randomly choosing 400 names was accomplished by the following procedure. The names were numbered 1-1614. Since 400 names were needed, 1614 was divided by 400, which equals 4.04. The number 2 was pulled from the numbers 1-4. Beginning with 2, 4.04 was added and then re-added to each sum up to 1613.96. These numbers were rounded to the nearest whole number. The names with these numbers were chosen for the initial mailing of 400.

According to the responses to the initial mailing, several respondents were unable to complete the materials due to being retired. Due to the disproportionately large number of persons indicating retirement as a reason for non-participation, it was decided to send replacements for the retirees. Replacements were chosen by flipping a coin. Heads meant choose the name immediately preceding the retiree on the original list. Tails meant the name immediately following the retiree was used. A total of 14 replacements packets were sent.

Instrumentation

The instrumentation used included the Occupational Stress Inventory and an individual data form. Subsequent analysis used the data from these two instruments.

Individual Data Form

An individual data form (Appendix B) was developed to provide information on certain demographic variables pertinent to the study.

Information was collected for the following variables: age, gender, marital status, parental status, number of children, children's ages, ethnicity, work setting(s), weekly work hours, professional activities, years licensed, years of experience, whether the respondents worked with clients, estimated job and non-job stress, and whether treatment had been sought for stress related problems. For those respondents indicating they did work with clients additional variables included: number of days each week clients were seen, average and maximum daily clients sessions, and the referral source of clients. These variables were all treated as categorical data. The individual data form was pilot tested on individuals working with clients in the counseling field, which yielded the version used.

The Occupational Stress Inventory

The Occupational Stress Inventory (OSI) (Appendix C) was developed by Osipow and Spokane (1987) as a measure of three dimensions of occupational adjustment. Each dimension is measured by assessing specific attributes contributing to the overall score. These individual or environmental attributes are the subscales of the three dimensions and are as follows:

1. Occupational Roles Questionnaire (ORQ)-Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Responsibility, Physical Environment.
2. Personal Strain Questionnaire (PSQ)-Vocational Strain, Psychological Strain, Interpersonal Strain, Physical Strain.
3. Personal Resources Questionnaire (PRQ)-Recreation, Self-care, Social Support, Rational/Cognitive Coping.

The OSI's three questionnaires, the ORQ, PSQ, and PRQ, are contained in a booklet, and may be used separately or together. There

are a total of 140 items, 10 items per subscale. The ORQ has a total of 60 items, and there are 40 items each on the PSQ and PRQ. A separate rating sheet is used for the recording of responses to each item. A 5-point scale is used for each response. Responses are made based on the frequency with which an item applies to the respondent and include: rarely or never, occasionally, often, usually, most of the time. Approximately a seventh grade reading level is required.

The rating sheet is designed to be hand scored. The raw scores for each subscale may be entered on a profile form which provides T-score equivalents. The manual provides both T-score and percentile equivalents for subscale raw scores. Separate norms are provided for males and females.

Norms. A total sample of 909 adults, representing 140 different occupations, were used in the establishment of norms for the OSI. The subjects were primarily employed in technical, professional, or managerial positions in schools, service organizations, and manufacturing settings.

Reliability. According to the authors, alpha coefficients for total questionnaire scores, based on internal consistency analysis, were .89 (ORQ), .94 (PSQ), and .99 (PRQ) (Osipow & Spokane, 1987). Bunda (1992) suggested that the more appropriate indices are the 14 subscale scores, which have alpha coefficients ranging from .71 to .90. Samples of 549 (ORQ), 419 (PSQ), and 453 (PRQ) were used as the basis for these coefficients, and were replicated fairly well in another study of 155 participants. Bunda (1992) also reported test-retest reliabilities ranging from .56 to .94. Cochran (1992) stated that factor analytic studies indicated a degree of agreement between the allocation of items to scales and patterns of factor loadings for items which supported the instrument's internal structure and the facets of the model. Powell

(1991) reported the scales and subscales had internal consistency which was adequate for research purposes.

Validity. As reported in the manual, studies regarding the OSI's validity are based on factor analytic studies, correlational studies, stress reduction studies which use the scales as outcome measure, and comparison studies of the model to selected criterion groups. Other authors have reported that studies using the OSI provide reasonable evidence for concurrent validity (Cochran, 1992), and moderate to strong support for construct validity (Powell, 1991). Bunda (1992) recommended the OSI for use in a wide range of research studies based on correlational studies of the scales.

Data Collection

Distribution and collection of materials used for gathering data was accomplished by mail. The mailings occurred in the sequence of a pre-letter, initial survey distribution, a postcard reminder, two follow-up mailings, and a phone call follow-up to a random selection of non-respondents. The survey materials were coded in order to record the returns.

Pre-letter

Three days prior to the initial mailing a pre-letter (Appendix A) was sent to all members of the sample. The letter briefly explained the purpose of the study, encouraged participation, and assured confidentiality.

Initial Mailing

The first mailing of survey materials was on December 2, 1994, and consisted of a cover letter (Appendix A) assuring confidentiality,

explaining the purpose of the coding, and urging participation; the individual data form; the OSI booklet and answer sheet; and a self-addressed, stamped envelope in which to return the materials. In addition an informed consent form (Appendix A) was included, which advised the participant of the purpose of the research, explained the procedure for maintaining confidentiality, and provided names and phone numbers of persons to contact with questions. A separate self-addressed, stamped envelope was provided for returning a signed copy of the informed consent form.

Postcard Reminder

A postcard reminder (Appendix A) was sent to all participants on December 9, 1994. The postcard served to thank those participants who had responded and reminded those who had not of the importance of their participation. It asked that anyone who had not received a packet to phone the researcher (collect) so that a packet could be mailed to them.

First Follow-up Mailing

On January 3, 1995 all non-respondents were sent another survey packet. A cover letter from the researcher (Appendix A), urging participation and assuring confidentiality, was included. The mailing included all materials which were sent in the initial mailing.

Second Follow-up Mailing

The final mailing, occurring January 20, 1995, was sent to all non-respondents. A cover letter (Appendix A) from the chair of the dissertation committee, urging participation, accompanied all survey materials.

Replacements

The 14 replacements were handled in the same manner as the first 400 potential participants. The initial mailing was on December 31, 1994, and the first and second follow-up were on January 24, 1995, and February 10, 1995 respectively. All letters are included in Appendix A.

Phone Follow-up

A random sample of 10% of non-respondents (nine people) were contacted by phone approximately two months after the initial mailing. The questions asked (Phone Follow-up, Appendix B) included: age, gender, marital status, ethnicity, parental status, number of children, primary work setting, years of experience, maximum number of daily client sessions, and estimated job and non job related stress. In addition these persons were asked why they did not respond to the survey. No unusual pattern was noted.

Data Analysis

Management of the Data

The data was entered by an assistant employed by the researcher, and all data was verified by the researcher. Number Cruncher Statistical System (Hintz, 1990) was used for data analysis. Analysis of the data was completed by the researcher.

All decisions regarding missing data were made with the intention of affecting the variance of the data as little as possible. Missing items were typically assigned the mean of the entire group for that item. In certain situations a sub-group mean was used for the replacement data.

Procedures

Data was analyzed by the following procedures:

1. Total scale scores for the ORQ, PSQ, and PRQ were calculated and correlated in order to determine the independence of the three scales. The subscale scores were tabulated and correlations were run. These correlations were compared to the scale intercorrelations provided in the manual in order to ascertain whether they generally corresponded. Correlations were run between the ORQ, PSQ, and PRQ, and the global job and non-job stress questions from the individual data form.
2. Answering research questions one, two, and three, regarding the overall levels of stress, strain, and coping for LPCs in Virginia, was accomplished by computing raw scores, means, standard deviations, and T-scores for each subscale of the ORQ, PSQ, and PRQ, separately for females and males. Based on interpretative information in the manual, the results were discussed respective to each subscale.
3. Research questions four, five, and six, regarding stress, strain, and coping and the selected demographic variables, were answered using the following procedures. Subscale totals was computed. Each demographic variable was compared to overall ORQ, PSQ, and PRQ scores. Categories for each demographic variable were developed by examining the descriptive statistics for each variable, usually using means and standard deviations. At times other considerations were used, which are discussed in Chapter IV.

For dichotomous demographic variables t-tests were used. Analysis of Variance (ANOVA) was used for demographic

variables with three or more levels. Descriptive statistics, respective to overall ORQ, PSQ, and PRQ scores were run for those demographic variables with more than two levels. Homogeneity of variance was tested using an F-test. Transformation of the data was attempted for groups found to have heterogeneity of variance. When a significant ($p < .05$) F-value was obtained, a post hoc test was computed.

Descriptive statistics were run for each subscale when the post hoc test indicated a difference in the overall level. The descriptive statistics were visually examined and T-tests run for only those subscales appearing to be different, in an attempt to minimize experiment-wise error rate. Dichotomous variables found to have significant overall differences were handled in the same manner. Significance for the t-tests comparing demographic variables to individual subscale scores was set at $p < .05$.

Summary

The research questions were outlined in this chapter. A description of the population sampled was provided along with a description of the instrumentation used. Finally, the methods of obtaining and analyzing the data were discussed.

CHAPTER IV
RESULTS OF THE STUDY

The results of the data analysis are presented in this chapter in three sections. The first section reports response rates for each collection phase. Section two presents a description of the sample in terms of demographic data. The research questions and the data analysis procedures employed to address these questions are presented in section three. The chapter concludes with a brief summary.

Survey Responses

Table 1 presents the response rates and their percentages of overall responses. The final response rate was 77.3% (n=320). Included in the response rate were those persons who responded but said they were inappropriate or chose not to participate. Subjects considered themselves inappropriate for a variety of reasons, including no longer being employed in the counseling field, and health problems for self or family. The most frequent reason was retirement. Not having time to participate was the most frequent reason given for not completing the materials. Nine responses were eliminated due to incomplete data. A random selection (10%, n=9) were contacted by phone. Five females and four males were contacted. There was no specific pattern evident in the reasons for not responding. Not having time was the most frequent response. Others included not being employed in the counseling field, and "just put it off."

Demographic Data Information

Information from the Individual Data Form (IDF) was used to describe the population. Some categories were developed following

Table 1

Survey Response Rates

Step	Number returned	Percent of total
Initial mailing including postcard reminder	230	55.56
First follow-up mailing	53	12.80
Second follow-up mailing	27	6.52
Replacements	<u>10</u>	<u>2.42</u>
TOTAL	320	77.30

Note. There were 400 possible participants in the initial mailing, and 14 in the replacement mailing.

collection of the data. In those cases a brief explanation of the development of the categories is provided. The variables are presented in the order in which they appeared on the IDF.

Age

Respondents ranged in age from 28 years to 79 years, with a mean of 47.23 years. Categories were developed by beginning with the lowest age and adding approximately 1 standard deviation (8.73 rounded to 9) for each of the first 4 categories. All those above retirement age were included in group 5, since only one respondent was above 73 years. Results are presented in Table 2.

Gender

Respondents included 154 females (59.7%) and 104 males (40.3%). Clemons' (1988) study of LPCs included 55.8% females. In a study of members of Virginia Counselors Association by Sowa, May, and Niles (1994), 79% of the respondents were female.

Marital Status

Married was noted as current marital status by 76% (n=196) of the respondents. Divorced and never married represented 10.1% (n=26) and 7.8% (n=20) of the respondents respectively. Living with someone was noted by 10 respondents (3.9%) as marital status. Four (1.6%) respondents were single and 2 (.8%) were widowed.

Parental Status and Number of Children

A total of 187 (72.5%) respondents indicated they were parents, and 71 (27.5%) reported they were not parents. The number of children reported is presented in Table 3.

Table 2

Age Distribution

Age range	Number	Percent of total
28-37	36	14.0
38-46	87	33.7
47-55	97	37.6
56-64	29	11.2
65-79	<u>9</u>	<u>3.5</u>
TOTAL	258	100.0

Table 3

Number of Children

Number of children	Number of respondents	Percent of total
0	71	27.52
1	38	14.73
2	85	32.94
3	39	15.12
4	16	6.20
5	7	2.71
6	1	.39
7	<u>1</u>	<u>.39</u>
TOTAL	258	100.00

Ethnicity

Participants in the study were overwhelming white (n=248). There were seven African American respondents. There were one each Hispanic, Asian, and Lebanese. For analysis the three established categories were: 1=African American; 2=White; and 3=Other.

Primary Work Setting

Private practice, either individual or with group affiliation, was chosen as the primary work setting by 37.9% (n=98) of the respondents. Community mental health agency was chosen by 17.4% (n=45) of the respondents, and 29 respondents (11.2%) reported working in elementary, middle, junior high, or high school. A complete listing is presented in Table 4.

Additional Work Settings

A total of 98 (38%) of the respondents reported working in more than one setting. One respondent reported working in four settings. Table 5 presents the number of work settings reported.

For those subjects reporting at least two settings private practice, either individual (n=36, 36.7%) or with group affiliation (n=34, 34.7%), and teaching counseling in a college or university (n=14, 14.3%) were the most frequent additional settings. When at least three work settings were reported, the most frequent additional response was teaching counseling at a college or university, which accounted for 30.4% of the responses.

Table 4

Primary Work Setting

Setting	Count	Percent
Community mental health	45	17.4
Other public agency	16	6.2
Elementary, middle, jr. high, high school	29	11.2
College or university counseling Center	16	6.2
College or university - counselor preparation	11	4.3
Inpatient facility or unit of hospital	7	2.7
Outpatient facility or unit of hospital	6	2.3
Individual private practice	53	20.5
Private practice with group affiliation	45	17.4
Business/industry	12	4.7
Pastoral (counselor/minister)	4	1.6
Private (profit and non) organization	5	1.9
Residential	<u>9</u>	<u>3.5</u>
TOTAL	258	100.0

Table 5

Number of Work Settings

Number of settings	Count	Percent of total
One	160	62.0
Two	75	29.1
Three	22	8.5
Four	<u>1</u>	<u>.4</u>
TOTAL	258	100.0

Weekly Work Hours

Licensed counselors reported an average of 40.8 work hours per week. Hours spent working each week ranged from 2 to 80. The mode was 36.7 to 41 hours per week, with the second most frequent response ranging from 41 to 45.3 hours. Categories were established by adding one standard deviation to the minimum, and continuing to add one standard deviation for a total of six categories. Categories are presented in Table 6.

Professional Activities

Table 7 contains information regarding hours spent per week in various professional activities. As a group, professional counselors reported spending an average of 18.97 hours per week counseling. Administration was reported as taking an average of 8.04 hours per week. The hours listed are an average for the entire sample. The number of hours spent in each activity varied depending upon the respondents' work setting and specific job.

Years Licensed

Respondents had been licensed from 1 to 19 years. Categories for this variable were established using literature from organizational studies (Feldman, 1976; Nelson, 1987; Wanous, 1977), and those used by Trivett (1993). In order to distinguish new and relatively new licensed counselors from those with more substantial experience, category 1 consists of individuals who had been licensed 1-2 years. Category 2 includes counselors who had been licensed 2.1-5 years. The mean for this variable was 8.86 years with a standard deviation of 5.75 years (rounded to 5). Complete information is provided in Table 8.

Table 6

Weekly Work Hours

Hours worked	Count	Percent
2-14	9	3.5
14.1-26	22	8.5
26.1-38	40	15.5
38.1-50	150	58.1
51.1-62	29	11.2
>62.1	<u>8</u>	<u>3.1</u>
TOTAL	258	100.0

Table 7

Hours Spent Each Week in Professional Activities

Activity	Mean	Range
Counseling	18.97	0-50.0
Teaching (college/university)	1.64	0-40.0
Supervision	2.41	0-20.0
Administration	8.04	0-60.0
Training (workshops)	1.34	0-22.0
Consultation	2.80	0-45.0
Testing	.75	0-40.0
Case management	2.04	0-40.0
Research	.19	0-12.5
Guidance	.27	0-20.0
Marketing	.31	0-30.0
Other	.20	0-35.0

Table 8

Years Licensed

Years	Count	Percent of total
1-2	37	14.34
2.1-5	62	24.03
5.1-10	61	23.64
10.1-15	47	18.22
15.1-19	<u>51</u>	<u>19.77</u>
TOTAL	258	100.00

Years Experience

Respondents were asked to list the total number years of experience each had in the counseling field. Part-time, established as 20 hours or less weekly, and full-time experience, more than 20 hours weekly, were separate responses. The total years of experience was determined by adding $\frac{1}{2}$ of the part-time experience to the full time experience.

The mean years experience for all respondents was 15 years, with a standard deviation of 7.04, which was rounded to 7. The range was 2.5-35. Category 1 was established by adding one standard deviation to the minimum of 2.5. Categories 2-5 resulted from adding 1 standard deviation to the previous category. Table 9 presents the categories and percentages.

Work With Clients

Counselors who indicated they work with clients totaled 91.7% (n=235) of the sample. Respondents who indicated they did not see clients represented 8.9% (n=23).

Number Days Clients Seen

Of those counselors who worked with clients, the mean number of days they did so was 4.2. The range was from 1-6 days, and nearly half (48.2%) of the counselors reported seeing clients 5 days per week. In recording this variable only whole numbers were used. When a range was given the larger of the two numbers was recorded. Table 10 shows the categories and percentages.

Table 9

Years Experience

Years experience	Count	Percent of total
2.5 - 9.5	64	24.8
9.6 - 16.5	94	36.4
16.6 - 23.5	70	27.2
23.6 - 30.5	23	8.9
> 30.5	<u>7</u>	<u>2.7</u>
TOTAL	258	100.0

Table 10

Number Days Clients Seen

Days	Count	Percent of total
1	9	3.8
2	17	7.2
3	28	11.9
4	55	23.4
5	113	48.2
6	<u>13</u>	<u>5.5</u>
TOTAL	235	100.0

Average Daily Client Sessions

Of the counselors who reported client contact, the average number of client sessions per day was 4.78, with a range of 1-15. When a respondent gave a range the average was used (e.g. 4-5 was recorded 4.5). Categories were established based on a mean of 4.7 (rounded to 4.5) and a standard deviation of 2.23 (rounded to 2.25). Approximately 70% of the respondents worked between 2.26 and 6.75 average client sessions per day. Complete information is provided in Table 11. The last two categories were combined, since only 2 people worked an average of more than 11.25 sessions per day.

Maximum Daily Client Sessions

The maximum number of daily client sessions the counselors reported is presented in Table 12. The average for the variable was 7.45 with a standard deviation of 3.43. Based on the standard deviation and professional judgement, categories were established. The range for this variable was 1-24. The upper limits of this variable reflects counselors in work settings such as schools, courts, and career centers.

Referral Source of Clients

Clients who were self-referred accounted for 60.59% of the total number of clients being seen by the counselors who responded to the survey and who saw clients. Legally mandated clients accounted for 11.45%, and 27.96% were clients referred by a significant other, such as a spouse, parent, or employer.

Categories for type of clients were established based on percentages of the counselor's overall caseload. Category 1, in all

Table 11

Average Daily Client Sessions

Number sessions	Count	Percent of total
< 2.25	32	13.6
2.26 - 4.5	81	34.5
4.51 - 6.75	85	36.2
6.76 - 9	28	11.9
> 9	<u>9</u>	<u>3.8</u>
TOTAL	235	100.0

Table 12

Maximum Number of Daily Client Sessions

Number sessions	Count	Percent of total
≤ 3	21	8.9
4 - 6	75	31.9
7 - 9	88	37.5
10 - 12	40	17.0
≥ 13	<u>11</u>	<u>4.7</u>
TOTAL	235	100.0

cases, represented 0%, and categories 2,3, and 4 were divided into thirds (e.g., 33%, 66%, and 100%). Further information is provided in Table 13.

Global Estimated Job Stress

A scale of 1-10, with 1 being the lowest and 10 being the highest, was used when the respondents were asked to estimate job-related stress. Categories were developed based on the mean (5.39) and standard deviation (2.23), and were divided into low, medium, and high. The medium category was established using the mean and subtracting and adding $\frac{1}{2}$ standard deviation, and accounted for 31.8% (n=82) of the respondents. Below this point was the low group (n=86, 33.3%), and above this point was the high group (n=90, 34.9%).

Global Estimated Non-job Stress

Non-job stress categories were created using the same procedure as for job stress. Again the scale was 1-10, with 1 being the lowest and 10 the highest. A lower mean was noted, 4.64 as opposed to 5.39. The low category for estimated non-job stress contained 35.7% of the total respondents (n=92). The medium category had 95 respondents (36.8%), and 71 (27.5%) respondents were in the high category for non-job related stress.

Treatment

Respondents who reported having received treatment for stress related problems totaled 82 (31.8%). Respondents who indicated never having had such treatment totaled 176 (68.2%).

Table 13

Client Referral Sources and Percent of Counselor Caseload

<u>Percent of caseload</u>	<u>Self-referred</u>		<u>Legally mandated</u>		<u>Referred by significant other</u>	
	Count	% of total	Count	% of total	Count	% of total
0%	10	4.3	117	49.8	34	14.5
.1 - 33.3%	44	18.7	92	39.1	123	52.3
33.4 - 66.6%	59	25.1	15	6.4	52	22.1
66.7 - 100%	<u>122</u>	<u>51.9</u>	<u>11</u>	<u>4.7</u>	<u>26</u>	<u>11.1</u>
TOTAL	235	100.0	235	100.0	235	100.0

Results

The first three research questions guiding this study are as follows:

1. According to the Occupational Roles Questionnaire (ORQ), what are the levels of stress factors for licensed professional counselors (LPCs) in Virginia?
2. According to the Personal Strain Questionnaire (PSQ), what are the levels of psychological and physical effects of stress (strain) for LPCs in Virginia?
3. According to the Personal Resources Questionnaire (PRQ), what are the levels of coping resources for LPCs in Virginia?

These questions, regarding overall levels of occupational stress, psychological strain, and coping are addressed according to group T-scores for the subscales.

Scale Correlations

Correlations for scale scores of the OSI and the global stress questions were run and are presented in Table 14. The ORQ (stress) and the PSQ (strain) were positively correlated (.62). The PRQ (coping) was negatively correlated with both the ORQ (-.36) and the PRQ (-.58). These correlations are as would be predicted using the interactive theory of occupational stress. The correlations are of a greater magnitude than those in the OSI manual. The global stress questions from the Individual Data Form were correlated with the scales of the OSI. The global job stress questions positively correlated with the ORQ (stress) and with the PSQ (strain) at .44 and .46 respectively.

Table 14

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

	ORQ	PSQ	PRQ	Job stress	Non-job stress
ORQ	1.00				
PSQ	.62	1.00			
PRQ	-.36	-.58	1.00		
Job stress	.44	.46	-.26	1.00	
Non-job stress	.03	.28	-.29	.10	1.00

Note. ORQ = Occupational Roles Questionnaire; PSQ = Personal Strain Questionnaire; PRQ = Personal Resources Questionnaire; Job Stress and Non-job Stress are Individual Data Form questions.

Subscale Scores

Subscale scores of the ORQ, PSQ, and PRQ were converted to T-scores and are presented in Table 15. Males and females are presented separately in accordance with guidelines in the OSI manual (Osipow & Spokane, 1987). All T-scores are within normal ranges. Percentages of T-scores falling two standard deviations above and below the sample mean are presented in Table D-1 for females and Table D-2 for males.

Analysis of Levels of Demographic Data and OSI Scales

Research questions four, five, and six are:

4. Are occupational stress factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?
5. Are psychological strain factors different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours, worked, and number of children?
6. Are coping resources different for LPCs in Virginia as related to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of children?

Due to the interactive nature of the study, each demographic variable was examined for levels of stress, strain, and coping. Considering the large amount of information to be addressed, a full presentation of results will be done by demographic variables. This organization facilitates interpretation and discussion, and presents the

Table 15

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

Scale	T-scores male	T-scores females
<i>Occupational Roles Questionnaire</i>		
Role Overload	46	49
Role Insufficiency	49	44
Role Ambiguity	49	48
Role Boundary	48	45
Responsibility	48	50
Physical Environment	47	45
<i>Personal Strain Questionnaire</i>		
Vocational Strain	49	44
Psychological Strain	48	47
Interpersonal Strain	49	48
Physical Strain	50	47
<i>Personal Resources Questionnaire</i>		
Recreation	51	51
Self-care	54	55
Social Support	53	54
Rational/Cognitive	54	55

results in a manner which correlates with the interactive basis of the study. The demographic variables are addressed in the same order they appear on the Individual Data Form.

Age.

Age was coded 1, 2, 3, 4, and 5 for the ages 28-37, 38-46, 47-55, 56-64, and over 65, respectively. Descriptive statistics were run for the levels of age for the ORQ, PSQ, and PRQ totals, and variances were checked using F-tests. All variances were homogeneous. Analysis of Variance (ANOVA) tests for age level and the ORQ, PSQ, and PRQ were performed. No difference was found for the ORQ (Stress), and the PRQ (Coping). Results are shown in Tables D-3, and D-4 (Appendix D). A significant difference in variances ($p < .04$) was found for the PSQ (Strain) as shown in Table 16. A Scheffe's "post hoc" test indicated no difference between levels. However, the $p < .05$ met the guidelines for analysis outlined in Chapter 3, and the more liberal Fishers LSD was used. Differences between level 1 and levels 5, 4, 3, and 2 were indicated.

Descriptive statistics were examined for all levels of the PSQ subscales which led to a decision to run t-tests comparing levels 1 and 5, as well as levels 1 and 4 on the four subscales. In addition, t-tests were computed for levels 1 and 3 for two of the subscales. For the Psychological Strain subscale, age levels 1 and 5 yielded unequal variances. When variances are heterogeneous for two independent samples, Howell (1987) suggests solving for t' and df' as a legitimate alternative. Number Cruncher Statistical System (Hintze, 1990) provides both t' and df' for unequal variances. In this case, and throughout this student, t' and df' are reported when the variances were not homogeneous. Results are presented in Table 17, Table 18, and Table 19. Counselors aged 28-37 scored significantly higher on Psychological

Table 16

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Age of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Age	4	3280.19	820.05	2.51*
Error	253	82541.12	326.25	
TOTAL	257	85821.31		

* $p < .05$

Table 17

Contrasts of Age Levels One and Five for PSQ (Strain) Subscales

Strain scale	Level 1 (28-37)		Level 5 (65-79)		df	t
	M	SD	M	SD		
Vocational	18.17	5.70	15.33	4.15	43	1.40
Psychological	20.81	7.12	15.89	3.48	30	2.96*
Interpersonal	22.47	4.37	17.89	3.06	43	2.96*
Physical	18.86	5.94	15.11	4.08	43	1.78

* $p < .05$

Table 18

Comparison of Age Levels One and Four for PSQ (Strain) Subscales

Strain scale	Level 1 (28-37)		Level 4 (56-64)		df	t
	M	SD	M	SD		
Vocational	18.17	5.70	15.10	5.23	63	2.23*
Psychological	20.81	7.12	16.38	6.24	63	2.63*
Interpersonal	22.47	4.37	19.39	5.70	63	2.47*
Physical	18.86	5.94	17.66	6.93	63	.75

* $p < .05$

Table 19

Contrasts of Age Levels One and Three for Selected PSQ (Strain)

Subscales

Strain scale	Level 1 (28-37)		Level 3 (47-55)		df	t
	M	SD	M	SD		
Psychological	20.81	7.12	18.36	5.66	131	2.06*
Interpersonal	22.47	4.37	20.23	4.98	131	2.39*

* $p < .05$

Strain and Interpersonal Strain than did counselors aged 65-79, 56-74, and 47-55. The younger counselors also scored significantly higher on Vocational Strain than did counselors 56-64 years of age.

Gender.

For Gender, females were coded 1 and males were coded 2. T-test results for differences on the ORQ (Stress), PSQ (Strain), and PRQ (Coping) are presented in Table 20. Males scored significantly higher than did females on the ORQ. Descriptive statistics were examined and it was decided to compare the subscales which are presented in Table 21. Males scored significantly higher than did females on the Role Ambiguity and Responsibility Subscales.

Marital Status.

Marital status was coded 1=Single, 2=Widowed, 3=Never Married, 4=Married, 5=Divorced, and 6=Other (living with someone). Descriptive statistics were run and homogeneous variances were found for the ORQ, PSQ, and PRQ. Testing for difference using ANOVA indicated no difference in levels for the ORQ (Stress) and the PRQ (Coping) (Tables D-5, and D-6, Appendix D).

ANOVA for the PSQ (Strain) indicated a significant difference in variances ($p < .02$), results of which are presented in Table 22. A Scheffe's "post hoc" test was initially run and indicated no differences. However, the significance level met the criteria for analysis, and a Fisher's LSD indicated that Level 6 was different from Levels 2, 5, and 4. Based on the small number who reported being widowed ($n=2$) analysis of Level 2 was not run. Examination of descriptive statistics for Levels 6, 5, and 4 led to the decision to run the four t-tests which are presented in Tables 23 and 24. Those persons who indicated the marital status of Other (Living with someone) scored

Table 20

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

Scale	Female		Male		df	t
	M	SD	M	SD		
ORQ	119.42	26.45	126.35	27.56	256	-2.03*
PSQ	72.69	18.29	72.82	18.34	256	-0.06
PRQ	143.29	17.39	139.74	19.25	256	1.54

* $p < .05$

Table 21

Contrasts of Females and Males for ORQ (Stress) Subscales

Stress scale	Female		Male		df	t
	M	SD	M	SD		
Role Ambiguity	18.52	5.68	20.46	6.31	256	-2.57*
Role Boundary	17.34	6.18	18.86	7.46	194	-1.71
Responsibility	23.41	6.91	25.61	6.58	256	-2.57*

* $p < .05$

Table 22

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Marital Status of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Marital Status	5	4494.25	898.85	2.79*
Error	252	81327.06	322.73	
TOTAL	257	85821.31		

* $p < .02$

Table 23

Comparison of Marital Status for PSQ (Strain) Subscales

Strain scale	<u>Marital status</u>				df	t
	Other (living with someone)		Married			
	M	SD	M	SD		
Psychological	24	7.7	18.05	5.99	204	3.02*
Interpersonal	26.1	5.07	20.09	4.81	204	3.84*

* $p < .01$

Table 24

Comparison of Marital Status for PSQ (Strain) Subscales

Strain scale	<u>Marital status</u>				df	t
	Other (living with someone)		Divorced			
	M	SD	M	SD		
Psychological	24	7.7	18	5.06	34	2.74*
Interpersonal	26.1	5.07	20.52	5.20	34	2.90*

* $p < .01$

significantly higher on Psychological Strain and Interpersonal Strain than did respondents who were divorced or married.

Parental Status.

The answer to the question asking whether the respondents were parents were coded 0=not a parent, and 1=parent. Results of t-tests on the ORQ, PSQ, and PRQ are presented in Table D-7 (Appendix D) and indicate there was no difference in responses based on parental status. While the difference on the PSQ (Strain) scale did not meet the study's guidelines, ($t=1.76$, $p<.08$) for further analysis, it is interesting to note the tendency of respondents who were parents to report less experienced strain than did non-parents.

Number of Children.

The number of children reported by respondents was coded 1, 2, 3, 4, and 5. The codes 1, 2, 3, and 4 represented actual number of children. Responses indicating 5, 6, or 7 children were coded 5. Variances were checked for the ORQ, PSQ, and PRQ and were found to be homogeneous. ANOVAs (Tables D-8, D-9, and D-10, Appendix D) indicated no significant difference in means of the Stress, Strain, or Coping Scores based on number of children reported.

Ethnicity.

Ethnicity was coded 1=African American, 2=White, and 3=Other. Variances were checked and were found to be homogeneous for the ORQ, PSQ, and PRQ. ANOVA results are presented in Table D-11, Table D-12, and Table D-13 in Appendix D. The F value was not significant for any of the three scales, indicating no difference in means for Stress, Strain, or Coping for counselors based on ethnicity.

Primary Work Setting.

The primary work setting for the counselors was coded 1=Community Mental Health Agency, 2=Other Public Agency, 3=Elementary, Middle, Junior High, or High School, 4=College or University Counseling Center, 5=College or University-Counselor Preparation, 6=Inpatient Facility or Unit of Hospital, 7=Outpatient Facility or Unity of Hospital, 8=Individual Private Practice, 9=Private Practice with Group Affiliation, 10=Business/Industry, 11=Pastoral Counseling/Minister, 12=Private (profit/non-profit) Organization, 13=Residential Facility. Descriptive statistics were computed and variances were checked for homogeneity. Variances for the ORQ, PSQ, and PRQ were found to be heterogeneous.

A log transformation yielded homogeneous data for the ORQ (Stress) scale, and an ANOVA was run using the transformed data. Results, which are presented in Table 25, indicate a significant difference in the means of different primary work settings. A Scheffe's "post hoc" test indicated possible differences in Levels 8 and 1. In order to further assess differences, a Fisher's LSD was run and indicated differences in several levels. Due to the small number of counselors in some work settings, only those t-tests with adequate cell sizes were completed. For those work settings which were different from the others according to Fisher's LSD comparison test, descriptive statistics were examined for differences and t-tests were run according to which means suggested differences.

Individual private practice was the work setting which showed the most difference from other work settings for the Strain subscales. It was particularly different from Mental Health Agency (Table 26), Other Public Agency (Table 27), and College or University Counseling Center

Table 25

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Primary Work Setting of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Work setting	12	.460257	3.835E-02	5.21*
Error	245	1.803352	7.36E-03	
TOTAL	257	2.263608		

Note. This table is a log transformation of the original data.

* $p < .01$

Table 26

Comparison of Primary Work Setting in Individual Private Practice and
Community Mental Health Agency for ORQ (Stress) Subscales

Stress scale	Primary work setting				df	t
	Individual private practice		Mental health agency			
	M	SD	M	SD		
Role Overload	20.57	6.18	28.56	6.57	96	-6.19**
Role Insufficiency	18.96	6.45	22.16	7.21	96	-2.31*
Role Ambiguity	16.87	5.77	21.38	5.21	96	-4.03**
Role Boundary	14.57	5.99	19.82	6.46	96	-4.17**
Responsibility	20.69	6.13	26.84	7.15	96	-4.59**
Physical Environment	13.83	2.82	14.56	3.86	81	-1.05

* $p < .05$

** $p < .001$

Table 27

Comparison of Primary Work Setting Individual Private Practice and Other Public Agency for ORQ (Stress) Subscales

Stress scale	Primary work setting				df	t
	Individual private practice		Other public agency			
	M	SD	M	SD		
Role Overload	20.57	6.18	29.38	7.20	67	-4.81**
Role Insufficiency	18.96	6.45	23.38	8.20	67	-2.25*
Role Ambiguity	18.87	5.77	20.33	6.89	67	-2.01*
Role Boundary	14.57	5.99	21.52	8.67	20	-3.01**
Responsibility	20.69	6.13	26.69	6.42	67	-3.40**

* $p < .05$

** $p < .01$

(Table 28). In addition differences were significant for some Stress subscales when compared to Business/Industry and School Counselors (Table 29).

Private Practice with Group Affiliation was significantly different in levels of Stress from Community Mental Health Agency (Table 30), and Other Public Agency (Table 31). Respondents who were teaching at the college level indicated less stress on two subscales than did counselors at a Community Mental Health Agency as shown in Table 32.

For the PSQ (Strain) scale, variances were homogeneous following an arc tangent transformation. Table 33 provides ANOVA results which indicate significance at the $p < .01$ level. Again Fisher's LSD Comparison test was used as a guide. Means and standard deviations were examined and selected t-tests were computed for certain subscales. The cells with questionably small numbers were eliminated. Counselors whose primary work setting was at a Community Mental Agency or Other Public Agency scored significantly higher on some stress subscales than did respondents whose primary work setting was teaching at the College or University level (Table 34) or Individual Private Practice (Table 35).

Obtaining homogeneous variances for the PRQ (Coping) Scale was unsuccessful using log, square root, and arc tangent transformations. According to Zar (1984), when the largest variance is associated with the largest n , and the smaller variance with the smaller n , the probability of a Type I error is decreased. As these criteria were met, an ANOVA was calculated using original data. ANOVA results are presented in Table 36, ($F=1.97$, $p < .05$). It is noted that these results should be viewed cautiously. Results involving the primary work setting of College or University-Counselor Preparation are particularly suspect, considering t' was used for several of the t-tests due to heterogeneity of variance for those levels. However, due to the fact that this

Table 28

Comparison of Primary Work Settings Individual Private Practice and College or University Counseling Center for ORQ (Stress) Subscales

Stress scale	Work setting				df	t
	Individual private practice		College counseling center			
	M	SD	M	SD		
Role Overload	20.57	6.18	27.50	5.39	67	-4.04**
Role Insufficiency	18.96	6.45	25.00	10.44	19	-2.19*
Role Ambiguity	16.87	5.77	20.56	7.51	67	-2.09*
Role Boundary	14.57	5.99	19.19	7.31	67	-2.56*
Responsibility	20.69	6.13	24.88	5.48	67	2.45*

* $p < .05$

** $p < .01$

Table 29

Comparison of Primary Work Setting Individual Private Practice and Selected Other Settings for ORQ (Stress) Subscales

Stress scale	<u>Work setting</u>					
	Individual private practice		Business/industry		df	t
	M	SD	M	SD		
Role Overload	20.57	6.18	27.83	7.00	63	-3.59**
Role Insufficiency	18.96	6.45	23.08	6.93	63	-1.97
Role Boundary	14.57	5.99	19.50	6.76	63	-2.51*

Stress scale	<u>Work setting</u>					
	Individual private practice		School		df	t
	M	SD	M	SD		
Role Boundary	14.57	5.99	19.83	6.14	80	-3.76**
Responsibility	20.69	6.13	25.86	6.32	80	-3.61**

* $p < .05$

** $p < .01$

Table 30

Comparison of Primary Work Settings Private Practice with Group
Affiliation and Community Mental Health Agency for the ORQ (Stress)
Subscales

Stress scale	Work setting				df	t
	Private practice group		Community mental health agency			
	M	SD	M	SD		
Role Overload	23.87	7.03	28.56	6.57	88	-3.27*
Role Insufficiency	18.51	5.19	22.16	7.21	82	-2.75*
Role Ambiguity	18.32	5.22	21.38	5.21	88	-2.78*
Role Boundary	15.92	6.07	19.82	6.46	88	-2.95*
Responsibility	22.05	6.94	26.84	7.15	88	-3.22*
Physical Environment	14.24	3.93	14.55	3.86	88	-0.38

* $p < .01$

Table 31

Comparison of Primary Work Settings Private Practice with Group
Affiliation and Other Public Agency for the ORQ (Stress) Subscales

Stress scale	Work setting				df	t
	Private practice group		Other public agency			
	M	SD	M	SD		
Role Overload	23.87	7.03	29.38	7.27	59	-2.67**
Role Insufficiency	18.51	5.19	23.38	8.20	20	-2.22*
Role Ambiguity	18.32	5.21	20.33	6.89	59	-1.22
Role Boundary	15.92	6.07	21.56	8.67	59	-2.84**
Responsibility	22.05	6.94	26.69	6.42	59	-2.34*

* $p < .05$

** $p < .01$

Table 32

Comparison of Primary Work Setting College or University Counseling
Center and Community Mental Health Agency for the ORQ (Stress) Subscales

Stress scale	Work setting				df	t
	College/ university counselor preparation		Community mental health agency			
	M	SD	M	SD		
Role Overload	26.27	5.52	28.56	6.57	54	-1.06
Role Insufficiency	15.64	5.10	22.16	7.21	54	-2.82*
Physical Environment	11.91	1.51	14.56	3.86	46	-3.60*

* $p < .01$

Table 33

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Primary Work Setting of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Work setting	12	2.902E-04	2.42E-05	2.35*
Error	245	2.525E-03	1.03E-05	
TOTAL	257	2.815E-03		

Note. This table is an arc tangent transformation of the original data.

* $p < .01$

Table 34

Comparison of Primary Work Setting College or University Counseling Center and Selected Other Work Settings for PSQ (Strain) Subscales

Stress scale	Work setting				df	t
	College/ university counselor preparation	SD	Community mental health agency	SD		
Vocational	14.82	3.37	17.07	4.30	54	-1.61
Psychological	15.09	4.35	20.29	5.60	54	-2.87**
Physical	13.18	4.33	18.53	5.22	54	-3.14**

Stress scale	Work setting				df	t
	College/ university counselor preparation	SD	Other public agency	SD		
Vocational	14.82	3.37	18.81	5.78	26	-2.26*
Psychological	15.09	4.35	19.81	4.68	25	-2.65*
Physical	13.18	4.33	19.38	5.38	25	-3.17**

* p<.05

** p<.01

Table 35

Comparison of Primary Work Setting Individual Private Practice and Selected Other Work Settings for PSQ (Strain) Subscales

Stress scale	Work setting				df	t
	Individual private practice		Community mental health agency			
	M	SD	M	SD		
Vocational	14.40	4.01	17.07	4.30	96	-3.18**
Psychological	17.13	6.08	20.29	5.60	96	-2.65**

Stress scale	Work setting				df	t
	Individual private practice		Other public agency			
	M	SD	M	SD		
Vocational	14.40	4.01	18.81	5.78	20	-2.85**
Psychological	17.13	6.08	19.81	4.68	67	-1.62
Physical	16.23	4.80	19.38	5.38	67	-2.24*

* p<.05

** p<.01

Table 36

Analysis of Variance for Personal Resources Questionnaire (Coping) and
Primary Work Setting of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Work setting	12	7510.04	625.84	1.97*
Error	245	77706.27	317.17	
TOTAL	257	85216.30		

* $p < .05$

variable was found to be significant for all domains (stress, strain, and coping), it was decided to report the results, and to note their limitations. Respondents who listed their primary work setting as Community Mental Agency or Other Public Agency scored significantly lower on the Coping subscales than did participants in Individual Private Practice (Table 37), or College or University-Counselor Preparation (Table 38). School counselors also had lower scores on selected Coping subscales than did professors or persons in solo private practice (Table 39).

Number of Work Settings.

The counselors' responses indicating their number of work settings were coded 1, 2, and 3. Codes 1 and 2 indicate actual number of work settings reported. Code 3 represents 3 or more work settings (one respondent indicated a total of 4 work settings.) Descriptive statistics were calculated and F tests computed from the variances. All variances were homogeneous. ANOVAS for the ORQ, PSQ, and PRQ (Tables D-14, D-15, and D-16, Appendix D) were run and showed no difference in means of the categories of Number of Work Settings.

Weekly Work Hours.

The number of hours counselors indicated working weekly was coded 1=2-14, 2=14.1-26, 3=26.1-38, 4=38.1-50, 5=50.1-62, 6=>62. Using descriptives, variances were checked and were found to be homogeneous for the ORQ, PSQ, and PRQ. The scales were tested for differences between levels with ANOVAs. Tables D-17 and D-18 (Appendix D) indicate no difference for the PSQ (Strain) and PRQ (Coping). ANOVA results (Table 40) indicate a significant F ($p < .01$) for the ORQ (Stress) scale. A Scheffe's "post hoc" test suggested differences between Levels 2 and 4, as well as Levels 2 and 5. Examination of descriptive

Table 37

Comparison of Work Setting Individual Private Practice and Selected Other Primary Work Settings for PRQ (Coping) Subscales

Coping scale	Work setting				df	t
	Individual private practice		Community mental health agency			
	M	SD	M	SD		
Recreation	30.68	6.14	27.49	6.50	96	2.49**
Self-care	32.11	7.09	28.73	5.73	96	2.56**
Social Support	43.64	5.45	41.44	6.70	96	1.79
Rational/cognitive	40.79	5.12	37.84	5.11	96	2.84*

Coping scale	Work setting				df	t
	Individual private practice		Other public agency			
	M	SD	M	SD		
Recreation	30.68	6.14	26.88	4.88	67	2.27**
Self-care	32.11	7.09	29.19	68.08	67	1.40
Social Support	43.64	5.45	40.38	6.57	67	2.00**

* $p < .05$

** $p < .01$

Table 38

Comparison of Work Setting of College or University - Counselor Preparation and Other Primary Work Settings for PRQ (Coping) Subscales

Coping scale	<u>Work setting</u>					
	College/ university counselor preparation		Community mental health agency		df	t
	M	SD	M	SD		
Self-care	34.55	4.25	28.73	5.73	54	3.15**
Social Support	47.82	2.79	41.44	6.70	44	4.89**
Rational/cognitive	42.09	6.79	37.84	5.11	54	2.31*

Coping scale	<u>Work setting</u>					
	College/ university counselor preparation		Other public agency		df	t
	M	SD	M	SD		
Self-care	34.55	4.25	29.19	8.08	25	2.24*
Social Support	47.82	2.79	40.38	6.57	23	4.03**
Rational/cognitive	42.09	6.79	38.81	4.96	25	1.45

* $p < .05$

** $p < .01$

Table 39

Comparison of Work Settings College/University Counselor Preparation and Individual Private Practice to Elementary, Middle, Junior High or High School for PRQ (Coping) Subscales

Coping scale	<u>Work setting</u>					
	College/ university counselor preparation		School		df	t
	M	SD	M	SD		
Self-care	34.55	4.25	30.52	5.69	38	2.13*
Social Support	47.82	2.79	42.62	5.40	37	3.98**
Rational/Cognitive	42.09	6.79	37.97	4.24	14	1.88

Coping scale	<u>Work setting</u>					
	Individual private practice		School		df	t
	M	SD	M	SD		
Recreation	30.68	6.14	26.66	6.12	80	2.84**
Rational/Cognitive	40.79	5.12	37.97	4.24	80	2.53*

* $p < .05$

** $p < .01$

Table 40

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Weekly Work Hours of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Hours worked	5	13953.66	2790.73	4.03*
Error	252	174308.70	691.70	
TOTAL	257	188262.40		

* $p < .01$

statistics for levels 2, 4, and 5 of the ORQ, led to a decision to execute the 8 t-tests found in Table 41 and Table 42. Due to the difference in the cell sizes of Levels 2 and 4, F-tests for homogeneity of variance were computed. All were found to be homogeneous.

Results of the t-tests indicate that counselors who worked 38.1-50 hours per week scored significantly higher on Role Overload, Role Boundary, and Responsibility subscales than did counselors working 14.1-26 hours per week. Those counselors who worked 51.1-62 hours per week scored significantly higher on the same three subscales than did counselors working 14.1-26 hours per week.

Years Licensed.

The number of years which the counselors reported having been licensed was coded 1=1-2 years, 2=2.1-5 years, 3=5.1-10 years, 4=10.1-15 years, 5=15.1-19 years. Variances were checked and found to be homogeneous between levels for the ORQ and the PRQ. The variances for the PSQ levels were heterogeneous. A log transformation provided homogeneity of variance. ANOVA results for the three OSI domains (Tables D-19, D-20, and D-21, Appendix D) show that none of the F ratios were significant at the .05 probability level.

Years Experience.

Years of experience in the counseling field was coded 1=2.5-9.5 years, 2=9.6-16.5 years, 3=16.6-23.5 years, 4=23.6-30.5 years, 5=>30.5 years. Variances between levels of this variable were found to be homogeneous for the ORQ, PSQ, and PRQ. The three scales were tested using ANOVAs (Tables D-22, D-23, and D-24, Appendix D, none of which yielded significant F values.

Table 41

Comparison of Weekly Work Hours Levels Two and Four for ORQ (Stress)

Subscales

Stress scale	Level 2 (14.1-26)		Level 4 (38.1-50)		df	t
	M	SD	M	SD		
Role Overload	19.55	6.41	27.13	6.71	170	-4.98*
Role Ambiguity	17.12	4.52	19.55	5.81	170	-1.88
Role Boundary	14.36	5.29	18.31	6.51	170	-2.71*
Responsibility	18.11	5.55	25.40	6.79	170	-4.80*

* $p < .01$

Table 42

Comparison of Weekly Work Hours Levels Two and Five for ORQ (Stress)

Subscales

Stress scale	Level 2 (14.1-26)		Level 5 (51.1-62)		df	t
	M	SD	M	SD		
Role Overload	19.55	6.41	27.66	6.67	49	-4.37*
Role Ambiguity	17.12	4.52	20.10	6.98	50	-1.85
Role Boundary	14.36	5.29	19.64	7.52	51	-2.94*
Responsibility	18.11	5.55	27.08	5.73	49	-5.61*

* $p < .01$

Number of Days Per Week Clients Seen.

Counselors were asked how many days per week they saw clients. Categories were established based on distribution of the data and logical considerations, and were coded 1=1-2, 2=3, 3=4, 4=5-6. The F-test indicated homogeneous variances for the PRQ. The variances for the ORQ and PSQ were not homogeneous. Log transformations for both scales yielded homogeneity of variance. ANOVA results for the PSQ (Strain) was not significant (Table D-25, Appendix D).

Analysis of the ORQ (Stress) using ANOVA indicated significance (Table 43). Fisher's LSD indicated possible differences in Levels 3 and 2 as well as Levels 3 and 4. Perusal of means and standard deviations resulted in the choice to run the t-tests which are found in Table 44. Those counselors who worked 4 days per week reported significantly lower scores on Role Overload than did counselors working 5-6 days or 3 days weekly. Additionally, Role Ambiguity and Responsibility scores were significantly lower for counselors in Level 3 (4 days) than those in Level 2 (3 days).

The F-Ratio for the PRQ (Coping) indicated significance ($F=3.71$, $p<.05$) between levels of this variable. Table 45 presents ANOVA results. Fisher's LSD Comparison indicated differences in Levels 4 and 1 as well as Levels 4 and 3. Descriptive statistics were run and examined. The 5 t-tests found in Table 46 were run. Counselors who reported seeing clients 1 or 2 days per week had higher Recreation, Self-care, and Rational/Cognitive scores than did counselors reporting seeing clients 5-6 days per week.

Average Daily Client Sessions.

The average number of client sessions the counselors worked each day was coded 1= \leq 2.25, 2=2.26-4.5, 3=4.51-6.75, 4=6.76-9, 5= $>$ 9. F-tests

Table 43

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Number of Days Clients are Seen Per Week by Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Number of days	3	7.41E-02	2.47E-02	2.81*
Error	231	2.029737	8.79E-03	
TOTAL	234	2.103842		

Note. This table is a log transformation of the original data.

* $p < .05$

Table 44

Comparison of Selected Levels of Number of Days Clients Are Seen Per Week for the ORQ (Stress) Subscales

Stress scale	<u>Number of days</u>				df	t
	Level 3 (4 days)		Level 2 (3 days)			
	M	SD	M	SD		
Role Overload	23.16	6.72	26.43	7.29	81	-2.03*
Role Insufficiency	20.09	5.99	21.21	6.16	81	-0.80
Role Ambiguity	18.12	4.72	21.27	5.84	81	-2.65**
Role Boundary	16.22	5.80	18.79	5.76	81	-1.91
Responsibility	22.34	6.73	26.51	5.98	81	-2.77**

Stress scale	<u>Number of days</u>				df	t
	Level 3 (4 days)		Level 4 (5-6 days)			
	M	SD	M	SD		
Role Overload	23.16	6.72	26.35	7.55	179	-2.70**
Responsibility	22.34	6.73	24.41	6.91	179	-1.86

* p<.05

** p<.01

Table 45

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Number of Days Clients Are Seen Per Week by Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Number of days	3	3550.70	1183.57	3.71*
Error	231	73673.88	318.93	
TOTAL	234	77224.58		

* $p < .05$

Table 46

Comparison of Selected Levels of Number of Days Clients Are Seen Per Week for the PRQ (Coping) Subscales

Coping scale	<u>Number of days</u>				df	t
	Level 4 (5-6 days)		Level 1 (1-2 days)			
	M	SD	M	SD		
Recreation	27.57	6.33	31.00	7.34	150	-2.45*
Self-care	29.87	6.82	32.11	4.34	56	-2.41*
Social Support	42.76	6.20	45.27	5.70	150	1.90
Rational/Cognitive	38.52	4.89	40.65	5.39	150	-1.99*

Coping scale	<u>Number of days</u>				df	t
	Level 4 (5-6 days)		Level 3 (4 days)			
	M	SD	M	SD		
Self-care	29.87	6.82	31.85	6.75	179	1.80

* $p < .05$

yielded homogeneous variances for the ORQ and PRQ. Variances for the PSQ were heterogeneous, according to the F-test, and a log transformation succeeded in providing homogeneity. ANOVA results for the PSQ (Strain) and PRQ (Coping) are provided in Table D-26, and Table D-27 in Appendix D and indicate no difference in means of the levels of average daily client sessions. Table 47 provides ANOVA results for the ORQ (Stress) and indicates a significant F ($p < .05$) for the ORQ. Fisher's LSD Comparison Test indicated differences between Levels 1 and 4 as well as 1 and 3. Descriptive statistics were calculated, and a determination was made to run the 4 t-tests which are found in Table 48. Counselors who worked an average of ≤ 2.25 client sessions per day scored significantly higher on Role Overload and Responsibility subscales than did counselors who worked an average of 6.76-9 client sessions daily. Counselors who reported the least number of daily client sessions (≤ 2.25) also scored higher than did counselors working an average of 4.51-6.75 sessions on the Responsibility subscale.

Maximum Daily Client Sessions.

The maximum number of daily client sessions reported by the counselors was coded 1= ≤ 3 , 2=4-6, 3=7-9, 4=10-12, 5= ≥ 12 . Variances were checked and were found to be homogeneous for the PRQ, and heterogeneous for the ORQ and PSQ. A log transformation yielded homogeneity for the ORQ. The PSQ variances were found to be homogeneous following a square root transformation of the data. Testing for differences in the levels of Maximum Number of Daily Client Sessions with ANOVAs indicated non significance for the PSQ (Strain) and the PRQ (Coping). Results are presented in Tables D-28, and D-29 (Appendix D). ANOVA results for the ORQ (Stress) are presented in Table 49, and indicate significant differences in the levels of this variable. Scheffe's "post hoc" test

Table 47

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Average Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Average sessions	4	7165.68	1791.42	2.43*
Error	230	169569.20	737.26	
TOTAL	234	176734.90		

* $p < .05$

Table 48

Comparison of Selected Levels of Average Daily Client Sessions for ORQ
(Stress) Subscales

Stress scale	Level 1 (≤ 2.25 sessions)		Level 4 (6.76-9 sessions)		df	t
	M	SD	M	SD		
Role Overload	28.09	6.85	22.61	7.19	58	3.02*
Role Boundary	19.13	6.87	16.49	6.43	58	1.53
Responsibility	27.58	6.32	23.13	6.55	58	2.68*

Stress scale	Level 1 (≤ 2.25 sessions)		Level 3 (4.51-6.76 sessions)		df	t
	M	SD	M	SD		
Responsibility	27.58	6.32	22.89	6.58	115	3.47*

* $p < .01$

Table 49

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Maximum Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Maximum sessions	4	.11123	2.78E-02	3.21*
Error	230	1.99262	8.663E-03	
TOTAL	234	2.10384		

Note. This table is a log transformation of the original data.

* $p < .05$

indicated a difference in Levels 1 and 3. After examination of the means of all subscales, the 5 t-tests found in Table 50 were run. Counselors who reported a maximum of 1-3 daily client sessions scored significantly higher on Role Overload and Role Boundary than did counselors reporting 7-9 maximum daily sessions. In addition, the counselors seeing the higher number of clients (7-9) reported significantly lower scores on the Responsibility subscale than did those counselors in either Level 3 (1-3 sessions) or Level 2 (4-6 sessions).

Referral Source of Clients.

The counselors were asked to estimate the percentages of their clients who were Self-referred, Legally Mandated, and Referred by a Significant Other (spouse/partner, parent, employer, etc.). Categories for all referral sources were coded 1=0%, 2=.1%-33.3%, 3=33.4%-66.6%, 4=66.7%-100%. Variances for the ORQ, PSQ, and PRQ were evaluated for the referral sources and all were found to be homogeneous. Tables D-30, and D-31 (Appendix D) present ANOVA results for the PSQ (Strain) and PRQ (Coping) and indicate no difference among levels of percentages of Self-referred clients for the counselors. ANOVA testing for the ORQ (Stress) was significant ($F=3.81$, $p<.01$) and is presented in Table 51. Scheffe's "post hoc" test indicated differences in Levels 1 and 4, as well as Levels 1 and 3. Examining descriptive statistics of the levels of Self-referred clients for the ORQ subscales led to the decisions to run the t-tests which are presented in Table 52. It seemed appropriate to run an additional t-test for Levels 1 and 4 for the Physical Environment subscale. Due to unequal cell sizes ($n=10$, $n=122$) and unequal variances the results were questionable and are not reported. For Levels 1 and 2 of the same subscale the variances were heterogeneous, also. In this case the n's (10, 44) met the criteria according to Glass (1970), who

Table 50

Comparison of Selected Levels of Maximum Daily Client Sessions for ORQ
(Stress) Subscales

Stress scale	Level 3 (7-9 sessions)		Level 1 (1-3 sessions)		df	t
	M	SD	M	SD		
Role Overload	23.74	6.47	29.81	7.62	107	-3.73**
Role Ambiguity	18.18	5.42	21.26	7.90	25	-1.70
Role Boundary	16.89	6.22	20.86	8.22	107	-2.46*
Responsibility	22.55	6.63	27.21	7.06	107	-2.86**

Stress scale	Level 3 (7-9 sessions)		Level 2 (4-6 sessions)		df	t
	M	SD	M	SD		
Responsibility	22.55	6.63	24.72	6.90	161	-2.04*

* $p < .05$

** $p < .01$

Table 51

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Percentage of Self-referred Clients of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Self-referred	3	8337.31	2779.10	3.81*
Error	231	168397.60	728.10	
TOTAL	234	176734.90		

* $p < .05$

Table 52

Comparison of Selected Levels of Self-Referred Clients for ORQ (Stress)
Subscales

Stress scale	<u>Percentage of Clients Self-Referred</u>					
	Level 1 (0%)		Level 4 (66.7-100%)		df	t
	M	SD	M	SD		
Role Overload	31.1	8.36	24.25	7.42	130	2.78*
Role Insufficiency	23.6	8.36	20.80	7.23	130	1.17
Role Ambiguity	23.14	6.87	19.07	6.33	130	1.94
Role Boundary	24.1	9.07	17.50	7.01	130	2.80**
Responsibility	27.27	4.86	23.21	7.15	130	1.76
Stress scale	Level 1 (0%)		Level 2 (.1-33.3%)		df	t
	M	SD	M	SD		
Role Overload	31.1	8.36	25.95	6.83	52	2.06*
Role Insufficiency	23.6	8.36	19.75	7.01	52	1.51
Role Ambiguity	23.14	6.87	19.12	5.13	52	2.10*
Role Boundary	24.1	9.07	17.03	6.30	52	2.94*
Responsibility	27.27	4.86	24.64	6.70	52	1.17
Physical Environment	18.90	8.29	13.80	2.91	10	1.91

* $p < .05$

** $p < .01$

suggested cell sizes maintain at least a five to one ratio, and t' was calculated. For all other comparisons when the cell sizes were unequal, the variances were homogeneous. Counselors whose clients were a maximum of one-third self-referred (Level 2) scored significantly lower on Role Overload, Role Ambiguity, and Role Boundary than did those counselors whose caseloads included no Self-referred clients. Similarly, counselors who had 66.7% - 100% (Level 4) of self-referred clients scored significantly lower on Role Overload and Role Boundary than did counselors who did not work with any self-referred clients.

ANOVA results of levels of percentages of Legally Mandated clients for PSQ (Strain) and PRQ (Coping) are not significant and are presented in Table D-32, and D-33 (Appendix D). For the ORQ (Stress), ANOVA testing indicated a difference (Table 53). Fisher's LSD indicated a difference in Levels 3 and 1 as well as Levels 3 and 2. Means and standard deviations of the subscales were examined and the t-tests in Table 54 were executed. Counselors whose caseload did not include legally mandated clients scored significantly lower on Role Boundary than did counselors in Level 3 (33.4-66.6%). Counselors in Level 3 also scored significantly higher on Role Insufficiency than did respondents who were in Level 2 (.1-33.3%).

Categories of Clients Referred by a Significant Other did not yield significant ANOVA results for the ORQ, PSQ, or PRQ. Tables D-34, D-35, and D-36 in Appendix D show the results.

Stress Related Treatment.

Participants were asked whether they had received professional treatment for stress related problems. Responses were coded 0=No, 1=Yes. The results (Table 55) showed no difference for the ORQ (Stress), and indicated a significant difference for the PSQ (Strain) and the PRQ (Coping). After examining descriptive statistics for the

Table 53

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Percentage of Legally Mandated Clients of Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Legally mandated	3	5919.21	1973.07	2.67*
Error	231	170815.70	739.46	
TOTAL	234	176734.90		

* $p < .05$

Table 54

Comparison of Selected Levels of Legally Mandated Clients for ORQ
(Stress) Subscales

Stress scale	Percentage of Legally Mandated Clients					
	Level 3 (33.4-66.6%)		Level 1 (0%)		df	t
	M	SD	M	SD		
Role Insufficiency	24.47	7.71	20.56	7.42	130	1.91
Role Ambiguity	21.42	4.92	18.51	6.11	130	1.77
Role Boundary	21.50	9.22	17.54	6.90	130	2.01*
Responsibility	26.08	6.36	23.49	6.55	130	1.44

Stress scale	Level 3 (33.4-66.6%)		Level 2 (.1-33.3%)		df	t
	M	SD	M	SD		
	Role Insufficiency	24.47	7.71	20.54	6.86	105
Role Ambiguity	21.42	4.92	19.77	5.96	105	1.02
Role Boundary	21.50	9.22	17.60	6.31	17	1.58

* $p < .05$

Table 55

Comparison of Licensed Professional Counselors Who Had and Had Not Received Stress Related Treatment for the ORQ (Stress), PSQ (Strain), and PRQ (Coping) Scales

Scale	<u>Received Treatment</u>				df	t
	No		Yes			
	M	SD	M	SD		
Stress	121.76	27.42	123.20	26.43	256	-0.40
Strain	69.50	17.00	79.72	19.06	256	-4.33**
Coping	143.40	18.31	138.55	17.65	256	2.01*

* $p < .05$

** $p < .01$

subscales of the PSQ and PRQ it was decided to run the 5 t-tests which are presented in Table 56. The counselors who had not received treatment scored significantly lower on the Psychological, Interpersonal, and Physical Strain subscales. Those who had not received treatment scored higher on the Recreation and Rational/Cognitive Coping subscales.

Summary

The study's results have been presented in this chapter. The survey return rate was 77.3%. All T-scores on the OSI scales for females and males fell in the average range. The majority of the respondents were white, married, and averaged 47 years old. Of the 13 different work settings reported, over 90% required working with clients. Fifteen years was the average level of experience. Variables for which no significant difference in level of stress, strain, or coping was found included parental status, number of children, ethnicity, number of work settings, years of experience, and years licensed. Factors found to contribute to differences in levels of stress included gender, primary work setting, weekly work hours, number of days per week clients were seen, average and maximum number of daily clients sessions, and referral source of clients. Differences in strain scores were found for the demographic variables of age, marital status, primary work setting, and whether stress related treatment had been sought. Coping scores were found to be different for the variables of primary work setting, number of days each week clients were seen and treatment sought for stress related problems.

Table 56

Comparison of Stress Related Treatment and No Treatment for PSQ (Strain)
and PRQ (Coping) Subscales

Scale	<u>Treatment</u>				df	t
	No		Yes			
	M	SD	M	SD		
<i>Strain</i>						
Psychological	17.32	5.48	20.82	6.29	256	-4.55**
Interpersonal	19.79	4.73	22.05	5.13	256	-3.48**
Physical	16.54	5.13	20.06	6.99	124	-4.08**
<i>Coping</i>						
Recreation	29.52	6.67	27.34	6.14	256	2.50*
Rational/Cognitive	39.74	5.40	38.06	4.70	256	2.43*

* $p < .05$

** $p < .01$

Chapter V

DISCUSSION AND RECOMMENDATIONS

A summary and synthesis of the results of the study are presented in this chapter. The first section reviews methodology. The second section summarizes demographic data and addresses each research question. In the third section the results and conclusions are discussed. The final sections provide implications drawn from the study, along with recommendations for the profession and future research.

Review of Methodology

The study's purpose was to provide descriptive information about the levels of occupational stress, strain, and coping resources for professional counselors licensed by the state of Virginia. Participants were a random sample (n=414) of a complete list of Licensed Professional Counselors (LPC), provided by the Virginia Department of Health Professions. The return rate was 77.3% (n=320), and the number of responses used for analysis was 258.

In December, 1994 the participants received, by mail, a packet containing the Occupational Stress Inventory (Osipow & Spokane, 1987), and an Individual Data Form. Mailings included: (a) a pre-letter, (b) initial mailing, (c) postcard reminder, (d) first follow-up mailing, (e) second follow-up mailing, and (f) phone follow up.

Number Cruncher statistical system (Hintze, 1990) was used for data analysis. Descriptive statistics were reported for the demographic variables provided by the Individual Data Form. Categories were developed based on examination of the data, theoretical considerations, and professional judgement. The three domains of ORQ (Stress), PSQ

(Strain), and PRQ (Coping) were correlated to determine whether results corresponded to the interactive model on which the OSI is based. T-scores for the three domains were computed, separately for males and females, and were compared to the manual guidelines. Percentages of male and female respondents scoring two standard deviations above and below the relative mean were calculated.

For demographic variables with two levels t-tests provided information regarding significant differences in levels for the ORQ (Stress), PSQ (Strain), and PRQ (Coping). ANOVA testing provided the information for variables with three or more levels. When significance was found for the overall stress, strain, or coping scores, descriptive statistics were examined to determine whether additional analysis was indicated. When further analysis was deemed appropriate, t-tests were run for selected subscales.

Summary of Results and Conclusions

Information from the Individual Data Form provided a general description of the LPCs who responded to the survey. Most of the respondents were white (n=248) and married (76%), and averaged 47.23 years old. There were 154 females and 104 males. The majority (72.5%) were parents and two (32.94%) was the mode for number of children. However, 71 respondents (27.52%) did not have any children.

The LPCs reported working in 13 different settings, with the most often mentioned setting being private practice, whether individual (20.5%), or with group affiliation (17.4%). Most (62%) worked in only one setting and averaged 40.8 hours per week. Counseling was the most frequently reported professional activity (18.97%), with administrative

duties averaging 8.04% of the LPCs' work time. As a group they had 15 years experience in the counseling field and had been licensed 8.86 years.

The majority (91.7%) of the LPCs worked with clients and averaged doing so 4.2 days per week. The average number of daily client sessions was 4.78. When considering maximum number of client sessions per day the average was 7.45. Most of the clients (60.59%) were self-referred for counseling.

Further results will be addressed in terms of the research questions. For the first three questions, as per OSI manual instructions, results are separate for females and males. The percentages scoring two standard deviations above or below the mean are based on sample means.

1. According to the Occupational Roles Questionnaire (ORQ), that are the levels of stress factors for Licensed Professional Counselors (LPCs) in Virginia?

When LPCs' T-scores for the six subscales of the ORQ (Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Responsibility, Physical Environment) were evaluated according to OSI norms, all fell into the average range. For Role Boundary, 5.2% of the females and 8.7% of the males scored two standard deviations above the sample mean, indicating those counselors were experiencing conflicting role demands and loyalties in the work settings. While 6.7% of the males scored two standard deviations higher than the mean for the Responsibility subscale, only 1.3% of females did so.

2. According to the Personal Strain Questionnaire (PSQ), what are the levels of psychological and physical effects (strain) for LPCs in Virginia?

LPC's T-scores for Vocational Strain, Psychological Strain, Interpersonal Strain, and Physical Strain subscales all fell in the average range, according to manual norms. Comparison of T-scores showed that 5.8% of the males and 3.9% of the females were two standard deviations above the sample mean. However, for Physical Strain only 2.9% of the males were two standard deviations higher, while 6.5% of the females scored that high. Interestingly, 1% of the males scored two standard deviations below the mean for Interpersonal Strain.

3. According to the Personal Resources Questionnaire (PRQ), what are the levels of coping resources for LPCs in Virginia?

The four subscales of the PRQ are Recreation, Self-care, Social Support and Rational/Cognitive. All T-scores for males and females were in the average range, according to the OSI manual. For the Social Support subscale, 3.8% of the males and 7.1% of the females scored two standard deviations below the sample mean.

4. Are occupational stress factors different for LPCs in Virginia as related to the study's demographic variables?

Female stress levels were significantly less than males ($p < .05$). Males scored higher than females on Role Ambiguity ($p < .05$), and Responsibility ($p < .05$). Gender was the only non-work variable associated with increased stress scores.

Regarding work related variables, primary work setting yielded significant results for stress ($p < .01$). LPCs at a Mental Health Agency or Other Public Agency had the highest stress scores, with all stress subscales being involved. The work setting with the lowest stress scales was private practice, both individual and with group affiliation. For selected scales, there were other work settings found to have different stress levels. These settings included: college counseling

center (high stress level); business/industry (high scores); elementary through high school (high scores); and teaching at the college level (low stress scores).

The number of hours the LPCs worked weekly influenced their stress levels ($p < .01$). LPCs working fewer hours had lower Role Overload ($p < .01$), Role Boundary ($p < .01$), and Responsibility ($p < .01$) scores than did those working above 38.1 hours per week. Interestingly, the group working the fewest hours (≤ 14) had higher mean scores, although not significantly so, than did counselors working 14.1-26 hours per week. LPCs who saw clients 4 days per week had significantly ($p < .05$) lower stress scores than did those who saw clients 3 days per week or 5-6 days per week. Role Overload was highest ($p < .05$) for the 3 days and 5-6 days groups. Role Ambiguity and Responsibility were higher ($p < .05$) for the 3 days group.

Both the average and maximum number of client sessions the LPCs worked each day were linked to significantly ($p < .05$) different stress scores. Seeing an average of 2.25 or fewer clients each day was associated with higher Role Overload and Responsibility ($p < .01$) scores. LPCs working a maximum of 7-9 sessions each day had lower Role Overload ($p < .01$), Role Boundary ($p < .05$), and Responsibility ($p < .01$) scores than those working 1-3 sessions. Similarly, Responsibility subscale scores were higher ($p < .05$) for respondents working 4-6 sessions than for those working 7-9 sessions daily.

For the LPCs whose caseload did not include any self-referred clients, Role Overload ($p < .05$) and Role Boundary ($p < .05$) were higher than when the caseloads included up to one-third or at least two-thirds self-referred clients. Additionally, Role Ambiguity scores were lower ($p < .05$) for counselors having up to one-third self-referred clients than for those whose caseload did not include self-referred clients. For

($p < .05$) for counselors having up to one-third self-referred clients than for those whose caseload did not include self-referred clients. For LPCs whose caseloads were one-third to two-thirds legally mandated clients, Role Boundary scores were higher ($p < .05$) than for counselors whose caseload were void of legally mandated clients. Role Insufficiency was higher ($p < .05$) for LPCs whose caseloads were one-third to two-thirds legally mandated clients than for counselors who worked with a maximum of one-third legally mandated to attend counseling.

5. Are psychological strain factors different for LPCs in Virginia as related to the study's demographic variables?

Age was a significant ($p < .05$) factor in the levels of stress scores. LPCs aged 28-37 scored higher ($p < .05$) on Psychological and Interpersonal strain than did counselors aged 47-55, 56-64, or 65-79. Additionally, respondents aged 56-64 had lower Vocational strain scores than did the youngest LPCs. The strain scores were not progressive depending on age. Counselors aged 38-46 had slightly lower scores than did counselors 47-55. LPCs who were either married or divorced had lower ($p < .01$) Psychological and Interpersonal strain scores than did respondents indicating they were living with someone. Counselors indicating they and received treatment for stress related problems had higher ($p < .01$) Psychological, Interpersonal, and Physical strain scores than those who had not received treatment.

Age and marital status are non-work related factors. The treatment question did not distinguish work related from non-work related factors. The only clearly work related variable found to be significant ($p < .01$) was primary work setting. Professors in a counselor preparation program had lower ($p < .01$) Psychological and Physical strain scores than did respondents working in a Mental Health Agency. LPCs

Other Public Agency also had higher Vocational strain ($p < .01$) scores than LPCs in Individual Private Practice. Other stress scales on which the agency employees were higher than private practitioners included Psychological ($p < .01$) and Physical ($p < .05$).

6. Are coping resources different for LPCs in Virginia as related to the study's demographic variables?

Respondents who had received treatment for stress related problems scored lower ($p < .05$) on some coping scales than did counselors indicating they had not received treatment. Both Recreation and Rational/Cognitive coping scores were lower ($p < .05$) for LPCs who had received treatment.

Work related variables found to yield significant differences ($p < .05$) on the coping scales were primary work setting and number of days per week clients were seen. Counselors who saw clients 1-2 days per week had higher ($p < .05$) Recreation, Self-care, and Rational/Cognitive coping scores than did those seeing clients 5-6 days per week.

Employees of a Mental Health or Other Public Agency had lower Self-care ($p < .05$) and Social Support ($p < .01$) scores than did LPCs teaching counseling at a college or university. Professors also had higher ($p < .05$) Rational/Cognitive coping scores than counselors at a Mental Health Agency. When comparing agency employees to individual private practice, lower ($p < .05$) scores were found on Recreation, Self-care, and Social Support. Rational/Cognitive coping was lower at the $p < .01$ level. LPCs employed in schools (elementary through high) had lower scores on Self-care ($p < .05$) and Social Support ($p < .01$) than professors. Additionally, they scored lower on the Recreation ($p < .01$) and Rational/Cognitive ($p < .05$) scales than did individual practitioners.

Discussion

Describing levels of occupational stress, strain, and coping resources of a sample of professional counselors licensed by the state of Virginia was this study's purpose. Correlations of domain scores of ORQ (stress), and PSQ (strain), and the Individual Data Form questions regarding global job and non-job stress support the interactive model of occupational stress. These correlations allow interpretation of the OSI as outlined in the manual.

In the following sections, results will be discussed in terms of stress, strain, and coping and their interaction. One demographic variable, Primary Work Setting, will be discussed separately since its influence was significant for all three domains.

Stress

Gender was the only non-work related variable found to contribute to the perceived stress of LPCs. Although results have been mixed in previous research (Segedin, 1992/1993; Sowa, et al., 1994; Trivette, 1993), the elevated scales of Role Ambiguity and Responsibility make sense in terms of the traditional male role of provider.

Work related variables of average and maximum daily client sessions yielded interesting results in that seeing the fewest clients was associated with increased stress levels. It may be that counselors who saw the fewest clients are new to the profession and are overly concerned with their roles. Number of days worked each week had similar implication. LPCs working 4 days per week had lower stress scores than those working either 3 or 5-6 days. Apparently, working too much or too little is associated with increased perceived stress. When counselors worked more than approximately the usual 40 hours per week, increased stress resulted.

While many of these counselors are employed by an organization, a significant number (n=98) were private practitioners, which would likely indicate control over their own schedules. For persons employed in administrative jobs in agencies, this information may be helpful in reducing employee occupational stress. Referral source was important in that having some self-referred clients was better than having none. Agencies could spread around legally mandated clients among the counselors.

Strain

In agreement with previous research (Clemons, 1988; Segedin, 1992/1993; Trivette, 1993) younger counselors perceived more occupational strain than did older counselors. This finding makes intuitive sense as does the fact that LPCs who said they were living with someone experienced higher Psychological and Interpersonal strain than did those who were either married or divorced. It may be that being clear about one's marital (relationship) status is preferable to uncertainty. A few respondents indicated that although living with someone was the most appropriate response, in reality they were in committed homosexual relationships. Perhaps the increased strain is related to being in a non-traditional relationship in a judgmental society.

Counselors who had received treatment for stress related problems had higher strain scores, which may indicate treatment was sought appropriately for increased perceived strain. However, the counseling field usually thinks of treatment as having the result of lowering strain level. In this case the results are not encouraging.

Coping

Counselors who had sought treatment had lower Recreation and Rational/Cognitive scales than their non-treatment seeking counterparts. Since rational thinking is widely accepted as a therapeutic technique, this result is troubling. One possible explanation is that no distinction was made on the Individual Data Form between medical (physical) treatment and psychological treatment, and counseling was not the treatment which had been received. However, Osipow and Davis (1988), found Rational/Cognitive coping to be the least effective of the resources measured by the PRQ in reducing occupational stress factors measured by the ORQ. Recreation is an easily incorporated coping techniques, assuming life-style and responsibilities allow time for it. Seeing clients 5-6 days per week was associated with lower Recreation, Self-care, and Rational/Cognitive coping scales. When no time is allocated for recreation and personal activities, perhaps judgement becomes clouded.

Primary Work Setting

The only variable found to be significant for all three domains was the LPCs primary work setting. Previous research (Farber & Heifetz, 1982; Hellman & Morrison, 1987) found institutional practice settings to be less desirable. In agreement with these findings, LPCs working at Community Mental Health or Other Public Agency had higher perceived stress, increased experiences strain, and lower coping scores than specific other work settings. Additionally, counselors employed at the elementary through high school levels had increased stress and lowered coping scores. Desirable work settings were teaching at the college

level and individual private practice, as was the case in a study by Boice and Myers (1987). These two work settings maintained their desirability across all three domains.

Several factors may contribute to these results. Agencies usually must rely on either governmental or private non-profit charities for funding. With tax dollars closely scrutinized by legislators in Virginia, funding is often bare bones. Increased case loads and understaffing are common. As was noted earlier, sufficient time off from work and a reasonable number of client sessions contribute to more favorable results. Agency employees have work expectations set for them by policy.

Higher education has long been seen as a desirable work setting, a position supported by these results, and by Clemons (1988). Professors typically have more discretion in determining goals, work hours, and other work-related variables. Similarly, persons in individual private practice are able to determine their own work schedule, type of client, and, assuming an adequate referral base, salary. It appears that control over one's work environment is desirable. It is also possible that different work settings attract people with different personality characteristics. That is, teaching at the university level or individual private practice are attractive to persons whose coping resources and ability to deal with the various occupational stressors is already in place. These factors are not addressed by this study.

Implications and Recommendations for the Profession

Due to the consistently higher stress and strain and lower coping scores for LPCs employed in agencies, several recommendations are related to this issue.

1. Professional organizations could be used to lobby the Virginia General Assembly for increased funding to our Mental Health System. Increased financial support may be helpful in providing workshops aimed at increasing specific skills which the agency personnel felt they were lacking. Coping skills is another topic which it appears would be helpful to teach and encourage.
2. Agency administration needs to clearly state what they expect the roles of LPCs employed there to be. Many of the increased stress scores for agency employees had to do with expectations and demands exceeding personal resources. Providing explicit written guidelines may help to lower the stress scores by stating the priorities, expectations, and evaluation criteria clearly.
3. Administrators may help lower stress and increase coping in the LPCs who work in agencies by allowing flexible scheduling of time spent at work. Providing a way for the counselors to have a say in when they work, within reasonable consideration, may provide more time for the counselors to engage in more recreation and self-care activities.
4. Whenever possible, when assigning cases it is important for the legally mandated clients to be distributed among LPCs in agencies, rather than having some caseloads which are primarily made up of legally mandated clients.
Two of the recommendations are for counselor preparation programs.
5. Counselor preparation programs need to include, as part of the counselors' education, a focus on personal coping strategies. While teaching ways to help clients deal with

their stressors is common, a focus on self-awareness for the counselor-in-training may not always be done. Specifically, it is recommended that critical thinking and rational problem solving be taught as it applies to the student's personal issues. Practicum or internship as well as supervision may be an appropriate time to incorporate this training. Additionally, the importance of recreation, self-care, and an adequate support system should be emphasized.

6. In counselor preparation programs, a specific course regarding agencies may be helpful in more adequately preparing future LPCs for work there.

The last two recommendations for the profession are for LPCs personally.

7. For counselors with control over their own work time and who see clients, it is recommended a regular day or two half-days be scheduled off each week. Results of this study support the notion that having a day a week, in addition to week-ends, when clients are not seen lowers the perceived occupational stress.
8. For LPCs who see legally mandated clients, it is recommended that the percentage of these clients not exceed one-third of the total caseload. Similarly, it is recommended that as high a percentage as possible be self-referred clients.

Recommendations for Future Research

1. Due to the descriptive nature of this study, the data was not analyzed for interaction. It may be useful to employ different statistical procedures to assess the information for interaction among variables.

2. This study collected data from professional counselors licensed by the state of Virginia. Other mental health professions licensed by this state include clinical social workers and psychologists. The three professions are similar in that they often work with the same clients. It is recommended that studies addressing this study's issues be done for clinical social workers and psychologists licensed by Virginia to determine similarities or differences to professional counselors.
3. For future studies using the same instrumentation as this study, specific recommendations are made for the question inquiring as to whether participants had sought treatment for stress related problems. Two additional questions should be added. First, determining whether the treatment was medical (physical) or psychological is important in light of low coping scores for those who had sought treatment. Second, it is recommended that the time frame of the treatment be determined. Whether the treatment has been recent, past or ongoing may be helpful in determining whether the strain is currently affecting coping resources.
4. Due to the large amount of information gathered regarding primary work setting, recommendations are made for future studies. A cluster analysis may aid in more clearly explaining the effect of this variable on counselor stress, strain, and coping. Evaluation of personality factors in conjunction with this study's focus may help to determine whether specific work settings are inherently more stressful or whether persons with less coping skills are attracted to certain job situations. Determining whether the counselors

are working where they choose to work could aid in assessing whether a portion of the stress and strain has to do with not liking their present work setting.

5. It is recommended that information regarding presenting problems of the clients with whom the counselors work be incorporated into future studies. Analysis of this data may be useful in explaining the level of the counselors' stress and/or strain.
6. Managed care of mental health benefits of health insurance companies has had, and is likely to continue to have, an impact on levels of occupational stress and psychological strain for LPCs. In the future a replication study is recommended to quantify such impact.
7. In future studies a more comprehensive pilot study could help to define the variables.
8. A study employing qualitative aspects, specifically indepth case studies, with the same population may provide a more complete picture of occupational stress, strain, and coping among LPCs.

Summary

A review of the methodology employed for the study and summary of the results began this chapter. Results were examined in terms of the research questions. The study's defining aspects of stress, strain, and coping were used for further consideration and organization of the results. Finally, recommendations for the counseling profession as well as for future research were outlined.

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Appendix A

November 29, 1994

Dear Licensed Professional Counselor:

I am writing to encourage your participation in a study being conducted by Rhonda Ryan, a licensed professional counselor and doctoral candidate at Virginia Tech.

This study is designed to investigate occupational stress, strain, and coping among professional counselors licensed by the state of Virginia. Analysis will be of group data only, and your individual responses will be kept strictly confidential.

I urge you to assist Rhonda by taking about 30 minutes of your time to complete and return the materials you will receive in a few days. Her study will provide information helpful in the development of professional counseling.

Thank you for your assistance.

Sincerely,

Thomas H. Hohenshil, Ph.D.
Professor
Counseling/Psychology



Division of Administrative and Educational Services

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

December 2, 1994

Respond to:
1632 Weaver Road
Salem, Va 24153

A few days ago you received a letter from Tom Hohenshil regarding my study. I am completing my doctorate at Virginia Tech and am investigating occupational stress of licensed professional counselors in Virginia. Your name has been selected at random from a current list of licensed professional counselors and I am requesting your assistance.

Please enjoy a cup of coffee--decaffeinated so as not to intensify any stress--as you look over and complete the enclosed materials. The materials consist of the Occupational Stress Inventory (OSI) Item booklet, The OSI Rating Sheet, an information form, and a form by which you give your consent to participate. I will very much appreciate you taking approximately thirty minutes of your time to fill out the Rating Sheet and information form and returning them, along with the OSI Item Booklet, in the manila envelope. The consent form is to be returned separately in the white envelope.

All individual information will remain confidential. The number on the forms will be used to keep the materials together and to aid in follow-up. If you wish to receive a copy of the results of the study please put a note at the bottom of the information form.

The success of the study depends on your help. I will be glad to answer any questions you may have. You may write or call me at (703) 389-6462. Please return the materials by December 16th. Thank you in advance for your cooperation.

Sincerely,

Rhonda K. Ryan
Licensed Professional Counselor

December 9, 1994

A few days ago I mailed you a packet of materials requesting your response regarding occupational stress in our profession. If you have already returned your response I sincerely thank you. If not, I urge you to do so now. Your input is extremely important in order for the results to accurately represent licensed professional counselors' opinions.

If, for any reason, you need a new packet, please call me collect--(703)389-6462--and I will mail you the materials.
Thank you!

Sincerely,

Rhonda K. Ryan
Licensed Professional Counselor



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

January 3, 1995

Respond to:
1632 Weaver Road
Salem, VA 24153

About a month ago I wrote you asking for your input on occupational stress among professional counselors licensed by the state of Virginia. I am researching the topic as part of completing my doctorate at Virginia Tech. As of today I have not received your response.

The holidays are over (whew!), and hopefully your time is less limited. I am again writing to remind you of the importance of your input to the success of this project. In order for the results of this study to accurately represent the opinions of professional counselors licensed by Virginia it is essential that each individual in the sample return the questionnaires. Your individual response will remain confidential as only group scores will be reported.

I have again enclosed a full packet of materials in case you have misplaced the one you already received. Please take a few minutes from your busy schedule and have a cup of coffee while you complete and return the materials.

If you have any questions you may call me collect at (703) 389-6462. I look forward to hearing from you.

Sincerely,

Rhonda K. Ryan
Licensed Professional Counselor

January 20, 1995

Dear Colleague:

A few weeks ago a sample of 400 professional counselors licensed by the Commonwealth of Virginia were requested to participate in a study by Rhonda Ryan. I wrote to you initially to let you know you had been chosen to represent this group. The response rate has been excellent with nearly 70% of your colleagues having returned the materials.

Rhonda's records indicate she has not as yet received your completed materials, and I am again writing to ask for your participation. Your opinions and experiences related to stress as an LPC, whatever your work setting may be, are vital to the study which will provide data regarding our profession. Individual responses will be held in strictest confidence.

Please take a few minutes and have a cup of coffee on Rhonda, as you complete the enclosed forms and return them to her in the stamped return envelope.

Thank you for your assistance.

Sincerely,

Thomas H. Hohenshil, Ph.D.
Professor of Counseling



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

December 31, 1994

Respond to:
1632 Weaver Road
Salem, VA 24153

Dear Licensed Professional Counselor:

I am currently completing my doctorate at Virginia Tech and am investigating occupational stress of licensed professional counselors in Virginia. Your name has been selected at random from a current list of licensed professional counselors and I am requesting your assistance.

Please enjoy a cup of coffee--decaffeinated so as not to intensify any stress--as you look over and complete the enclosed materials. The materials consist of the Occupational Stress Inventory (OSI) Item booklet, the OSI Rating Sheet, an information form, and a form by which you give your consent to participate. I will very much appreciate you taking approximately thirty minutes of your time to fill out the Rating Sheet and information form and returning them, along with the OSI Item Booklet, in the manila envelope. The consent form is to be returned separately in the white envelope.

All individual information will remain confidential. The number on the forms will be used to keep the materials together and to aid in follow-up. If you wish to receive a copy of the results of the study please put a note at the bottom of the information form.

The success of the study depends on your help. I will be available to answer any questions you may have. You may write or call me at (703) 389-6462. Please return the materials by January 20th. Thank you in advance for your cooperation.

Sincerely,

Rhonda K. Ryan
Licensed Professional Counselor

*A Land-Grant University--The Commonwealth Is Our Campus
An Equal Opportunity / Affirmative Action Institution*



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

January 24, 1995

Respond to:
1632 Weaver Road
Salem, VA 24153

About three weeks ago I wrote you asking for your input on occupational stress among professional counselors licensed by the state of Virginia. I am researching the topic as part of completing my doctorate at Virginia Tech. As of today I have not received your response.

I am again writing to remind you of the importance of your input to the success of this project. In order for the results of this study to accurately represent the opinions of professional counselors licensed by Virginia it is essential that each individual in the sample return the questionnaires. Your individual response will remain confidential as only group scores will be reported.

I have again enclosed a full packet of materials in case you have misplaced the one you already received. Please take a few minutes from your busy schedule and have a cup of coffee while you complete and return the materials.

If you have any questions you may call me collect at (703) 389-6462. I look forward to hearing from you.

Sincerely,

Rhonda K. Ryan
Licensed Professional Counselor

Virginia



Tech

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

February 10, 1995

Dear Colleague:

A few weeks ago a sample of 400 professional counselors licensed by the Commonwealth of Virginia were requested to participate in a study by Rhonda Ryan. The response rate has been excellent with nearly 70% of your colleagues having returned the materials.

Rhonda's records indicate she has not as yet received your completed materials, and I am writing to ask for your participation. Your opinions and experiences related to stress as an LPC, whatever your work setting may be, are vital to the study which will provide data regarding our profession. Individual responses will be held in strictest confidence.

Please take a few minutes and have a cup of coffee on Rhonda, as you complete the enclosed forms and return them to her in the stamped return envelope.

Thank you for your assistance.

Sincerely,

Thomas H. Hohenshil, Ph.D.
Professor of Counseling

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

A new procedure at Virginia Tech requires informed consent of participants in mail surveys. This document is to inform you of the procedures used in the study in which you are asked to participate. Please note a tear-off copy has been included for your records.

Title: A survey of occupational stress, psychological strain, and coping resources in professional counselors licensed by the state of Virginia.

Principal Investigator: Rhonda K. Ryan

The principal investigator is conducting dissertation research, the purpose of which is to identify sources of stress and use of coping resources by LPCs in Virginia. The procedures are standard mail survey procedures. The estimated time required to complete the survey is 30 minutes.

At this stage we can recognize no possible risk or discomfort to you. The benefits will be to further information on occupational stress among professional counselors. Strict confidentiality will be provided by separation of your name from your responses using subject numbers. The subject numbers will be used for sample control.

(over)

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Title: A survey of occupational stress, psychological strain, and coping resources in professional counselors licensed by the state of Virginia.

Principal Investigator: Rhonda K. Ryan

The principal investigator is conducting dissertation research, the purpose of which is to identify sources of stress and use of coping resources by LPCs in Virginia. The procedures are standard mail survey procedures. The estimated time required to complete the survey is 30 minutes.

At this stage we can recognize no possible risk or discomfort to you. The benefits will be to further information on occupational stress among professional counselors. Strict confidentiality will be provided by separation of your name from your responses using subject numbers. The subject numbers will be used for sample control.

(over)

This research has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University and by the Department of Education at the University. Should you have any questions about this research or its conduct you may contact:

**Rhonda Ryan, Investigator (703) 389-6462
Thomas Hohenshil, Faculty Advisor (703) 231-9720
Ernest R. Stout, Chair IRB, Research Division (703) 231-9359**

I know of no reason I cannot participate in this study.

Signature

Retain this portion for your records.

This research has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University and by the Department of Education at the University. Should you have any questions about this research or its conduct you may contact:

**Rhonda Ryan, Investigator (703) 389-6462
Thomas Hohenshil, Faculty Advisor (703) 231-9720
Ernest R. Stout, Chair IRB, Research Division (703) 231-9359**

I know of no reason I cannot participate in this study.

Signature

Please detach and return in the white envelope.

Appendix B

Individual Data Form

No. _____

1. Your current age: _____
2. Gender: _____ Female _____ Male
3. Current Marital Status:
 _____ Separated _____ Widowed _____ Never Married
 _____ Married _____ Divorced _____ Other (living with someone)
4. Are you a parent? _____ Yes _____ No. If "yes," to how many children? _____. What is (are) your child(ren)'s age(s)? _____. Please list the age(s) of child(ren) currently living with you _____.

5. Your ethnicity:
 _____ Hispanic _____ Asian
 _____ African American _____ Native American
 _____ White _____ Other (Please specify:)

6. What is your present work setting? (Check all that apply.)
 _____ Community Mental Health Agency _____ Other Public Agency
 _____ Elementary, Middle, Junior High or High School _____ College or University Counseling Center
 _____ College or University-Counselor Preparation _____ Inpatient Facility or Unit of Hospital
 _____ Outpatient Facility or Unit of Hospital _____ Individual Private Practice
 _____ Private Practice with Group Affiliation _____ Business/Industry
 _____ Other (Please specify:)

7. Regarding your response to Question 6, please indicate how many hours per week you spend in each setting. If you work in more than one setting, please indicate which is your primary setting.

work setting	Primary	hours per week
_____	_____	_____
_____	_____	_____
_____	_____	_____

8. Please estimate how many hours you spend per week in each of the following professional activities.
 _____ hrs. Counseling _____ hrs. Teaching in a college or university
 _____ hrs. Supervision _____ hrs. Administration
 _____ hrs. Training (e.g. workshops) _____ hrs. Consultation
 _____ hrs. Other (Please specify:)

9. In what year were you licensed as a professional counselor in Virginia? _____
10. How many years experience do you have in the counseling field?
 Part-time (20 hrs or less weekly): _____ years
 Full-time (more than 20 hrs weekly): _____ years

For the next three questions, sessions with a couple, family, or group are to be counted as one session. Do not include work completed outside session such as paperwork and telephone contacts. If you do not see clients, please check here: _____

11. How many days per week do you see clients? _____
12. What is the average (total number of clients you see per week divided by answer to Question 11) number of client sessions that you work per day? _____
13. What is the maximum number of client sessions that you work per day? _____
14. Considering the total number of clients you see in your counseling work, please estimate the percentages for the following categories. (Percentages should total 100%)
 _____% Self-referred clients
 _____% Legally mandated clients (e.g. DUI, child custody, suicidal, spouse/child abuse, etc.)
 _____% Clients referred by significant other (spouse/partner, parent, employer, etc.), but not legally mandated
15. On a scale of 1 to 10, rank the level of your total job related stress as a counselor (1 is the lowest amount of stress and 10 is the highest amount) _____
16. On a scale of 1 to 10, rank the level of your total non-job related stress (1 is the lowest amount and 10 is the highest amount) _____
17. Have you ever received professional treatment for stress related problems? _____ Yes _____ No

Phone Follow-up

No. _____

1. Your current age _____
2. Your gender _____ Female _____ Male
3. What is your current marital status?
_____ Separated _____ Widowed _____ Never Married
_____ Married _____ Divorced _____ Other (living
with someone)
4. What is your ethnicity?
_____ Hispanic _____ Asian
_____ African American _____ Native American
_____ White _____ Other (Please specify)
5. Are you a parent _____ Yes _____ No
If so, to how many children _____
6. What is your current primary work setting?
_____ Community Mental Health Agency _____ Other Public Agency
_____ Elementary, Middle, Junior _____ College or University
High or High School _____ Counseling Center
_____ College or University- _____ Inpatient Facility or
Counselor Preparation _____ Unit of Hospital
_____ Outpatient Facility or _____ Individual Private
Unit of Hospital Practice
_____ Private Practice with _____ Business/Industry
Group Affiliation
_____ Other (Please specify:) _____
7. How many years experience do you have in the counseling field?
_____ (Part-time = <20 hours/week)
_____ (Full-time = >20 hours/week)
8. What is the maximum number of client sessions that you work per day? _____
9. On a scale of one to ten, rank the level of your total job related stress as a counselor (one is the lowest amount and ten is the highest amount). _____
10. On a scale of one to ten, rank the level of your total non-job related stress (one is the lowest amount and ten is the highest amount). _____
11. I appreciate your taking the time to answer these few questions, and I would like to know why you did not respond to the mailed survey.

Appendix C

PLEASE RETURN



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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PAR Psychological Assessment Resources, Inc.
P.O. Box 998/Odessa, Florida 33556/Toll-Free 1-800-331-TEST

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98765

Reorder #RO-1344

Printed in the U.S.A.

This form is printed in green ink on white paper. Any other version is unauthorized.

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 do 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 (PRQ)

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 available from:
PAR Psychological Assessment Resources, Inc.
P.O. Box 998/Odessa, Florida 33556/Toll-Free 1-800-331-TEST

Appendix D

Table D-1

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

Scale	Mean	SD	%<2sd	%>+2sd
<i>ORQ (STRESS)</i>				
Role Overload	49.3	9.6	0	2.6
Role Insufficiency	44.0	6.8	0	4.5
Role Ambiguity	47.5	9.4	0	4.5
Role Boundary	44.8	7.7	0	5.2
Responsibility	49.9	10.6	0	1.3
Physical Environment	45.4	5.4	0	5.1
<i>PSQ (STRAIN)</i>				
Vocational Strain	43.6	8.9	0	4.5
Psychological Strain	46.6	7.8	0	5.2
Interpersonal Strain	47.8	8.2	0	3.9
Physical Strain	46.7	8.4	0	6.5
<i>PRQ (COPING)</i>				
Recreation	51.3	9.7	0.6	0.6
Self-care	54.5	9.0	1.9	2.6
Social Support	53.6	6.8	7.1	0.0
Rational/Cognitive	55.0	8.7	4.5	1.3

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

Table D-2

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

Scale	Mean	SD	%<2sd	%>+2sd
<i>ORQ (STRESS)</i>				
Role Overload	45.9	9.8	1.0	1.9
Role Insufficiency	48.7	11.2	0.0	5.8
Role Ambiguity	49.1	10.5	0.0	1.9
Role Boundary	48.2	11.5	0.0	8.7
Responsibility	47.9	10.1	0.0	6.7
Physical Environment	47.3	7.4	0.0	4.8
<i>PSQ (STRAIN)</i>				
Vocational Strain	48.6	11.1	0.0	4.8
Psychological Strain	48.0	8.5	0.0	3.8
Interpersonal Strain	48.7	9.1	1.0	5.8
Physical Strain	50.1	8.5	0.0	2.9
<i>PRQ (COPING)</i>				
Recreation	51.3	11.0	2.0	2.0
Self-care	54.4	11.3	0.0	3.8
Social Support	52.8	9.6	3.8	0.0
Rational/Cognitive	53.6	8.1	3.8	1.9

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

Table D-3

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Age of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Age	4	5640.44	1410.11	1.95
Error	253	182622.00	721.83	
TOTAL	257	188262.40		

Table D-4

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Age of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Age	4	1478.32	369.58	1.12
Error	253	83737.98	330.98	
TOTAL	257	85216.30		

Table D-5

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Marital Status of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Marital status	5	3606.27	721.25	.98
Error	252	184656.10	732.76	
TOTAL	257	188262.40		

Table D-6

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Marital Status of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Marital status	5	3163.62	632.72	1.94
Error	252	82052.68	325.61	
TOTAL	257	85216.30		

Table D-7

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

Scale	Not Parent		Parent		df	t
	M	SD	M	SD		
ORQ	125.58	26.71	120.94	27.16	256	1.23
PSQ	75.75	16.08	71.61	18.95	150	1.76
PRQ	140.24	16.02	142.48	18.95	151	-0.95

Table D-8

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
the Number of Children to Whom Licensed Professional Counselors were
Parents

Source	<u>df</u>	SS	MS	F
Number of children	4	495.81	123.95	.17
Error	182	136699.10	751.09	
TOTAL	186	137194.90		

Table D-9

Analysis of Variance of Personal Strain Questionnaire (Strain) for the
Number of Children to whom Licensed Professional Counselors were Parents

Source	<u>df</u>	SS	MS	F
Number of children	4	289.66	72.41	.20
Error	182	66535.95	365.58	
TOTAL	186	66825.61		

Table D-10

Analysis of Variance of Personal Resources Questionnaire (Coping) for
the Number of Children to whom Licensed Professional Counselors were
Parents

Source	<u>df</u>	SS	MS	F
Number of children	4	402.23	100.56	.27
Error	182	66583.87	365.85	
TOTAL	186	66986.10		

Table D-11

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
the Ethnicity of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Ethnicity	2	444.71	222.36	.30
Error	255	187817.70	736.54	
TOTAL	257	188262.40		

Table D-12

Analysis of Variance of Personal Strain Questionnaire (Strain) for the
Ethnicity of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Ethnicity	2	385.49	192.73	.58
Error	255	85435.84	335.04	
TOTAL	257	85821.31		

Table D-13

Analysis of Variance of Personal Resources Questionnaire (Coping) for
the Ethnicity of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Ethnicity	2	36.64	18.32	.05
Error	255	85179.66	334.04	
TOTAL	257	85216.30		

Table D-14

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Number of Work Settings of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
# work settings	2	885.63	442.82	.60
Error	255	187376.80	734.81	
TOTAL	257	188262.40		

Table D-15

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Number of Work Settings of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
# work settings	2	296.93	148.46	.44
Error	255	85524.38	335.39	
TOTAL	257	85821.31		

Table D-16

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Number of Work Settings of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
# work settings	2	293.1	146.55	.44
Error	255	84923.2	333.03	
TOTAL	257	85216.3		

Table D-17

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Weekly Work Hours of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Hours worked	5	969.09	193.82	.58
Error	252	84852.21	336.72	
TOTAL	257	85821.31		

Table D-18

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Weekly Work Hours of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Hours worked	5	2592.3	518.46	1.58
Error	252	82624.0	327.87	
TOTAL	257	85216.3		

Table D-19

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Years Licensed as a Professional Counselor

Source	<u>df</u>	SS	MS	F
Years licensed	4	1394.52	348.63	.47
Error	253	186867.90	738.60	
TOTAL	257	188262.40		

Table D-20

Analysis of Variances of Personal Strain Questionnaire (Strain) for
Levels of Years Licensed as a Professional Counselor

Source	<u>df</u>	SS	MS	F
Years licensed	4	.0813	.0203	1.94
Error	253	2.6434	.0104	
TOTAL	257	2.7247		

Note. This table represents a log transformation of the original data.

Table D-21

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Years Licensed as a Professional Counselor

Source	<u>df</u>	SS	MS	F
Years licensed	4	148.33	37.08	.11
Error	253	85067.96	336.24	
TOTAL	257	85216.30		

Table D-22

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Years of Experience of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Years of experience	4	1057.76	264.44	.36
Error	253	187204.60	739.94	
TOTAL	257	188262.40		

Table D-23

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Years of Experience of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Years of experience	4	2989.68	747.42	2.28
Error	253	82831.63	327.40	
TOTAL	257	85821.31		

Table D-24

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Years of Experience of Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Years of experience	4	2732.81	683.20	2.10
Error	253	82483.48	326.02	
TOTAL	257	85216.30		

Table D-25

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Number of Days Clients are Seen Per Week by Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Number of days	3	7.241E-02	2.41E-02	2.35
Error	231	2.375417	1.02E-02	
TOTAL	235	2.447828		

Note. This table is a log transformation of the original data.

Table D-26

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Average Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Average sessions	4	7.857E-03	1.964E-03	.19
Error	230	2.439971	1.060E-02	
TOTAL	234	2.447828		

Note. This table is a log transformation of the original data.

Table D-27

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Average Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Average sessions	4	974.32	243.58	.73
Error	230	76250.27	331.52	
TOTAL	234	77224.58		

Table D-28

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Maximum Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Maximum sessions	4	3.5129	0.87823	.84
Error	230	241.5676	1.05029	
TOTAL	235	245.0806		

Note. This table is a square root transformation of the original data.

Table D-29

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Maximum Daily Client Sessions of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Maximum sessions	4	900.13	225.03	.68
Error	230	76324.45	331.85	
TOTAL	234	77224.58		

Table D-30

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Percentage of Self-referred Clients of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Self-referred	3	707.40	235.80	.71
Error	231	76305.44	330.33	
TOTAL	234	77012.84		

Table D-31

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Percentage of Self-referred Clients of Licensed Professional
Counselors

Source	<u>df</u>	SS	MS	F
Self-referred	3	1316.22	438.74	1.34
Error	231	75908.36	328.61	
TOTAL	234	77224.58		

Table D-32

Analysis of Variance of Personal Strain Questionnaire (Strain) for
Levels of Percentage of Legally Mandated Clients of Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Legally mandated	3	506.49	168.83	.51
Error	231	76506.35	331.20	
TOTAL	234	77012.84		

Table D-33

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Percentage of Legally Mandated Clients of Licensed
Professional Counselors

Source	<u>df</u>	SS	MS	F
Legally mandated	3	1468.96	489.65	1.49
Error	231	75755.63	327.95	
TOTAL	234	77224.58		

Table D-34

Analysis of Variance of Occupational Roles Questionnaire (Stress) for
Levels of Percentage of Clients Referred by a Significant Other of
Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Significant others	3	803.78	267.93	.35
Error	231	175931.10	761.61	
TOTAL	234	176734.90		

Table D-35

Analysis of Variance of Personal Strain Questionnaire (Stress) for
Levels of Percentage of Clients Referred by a Significant Other of
Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Significant other	3	280.80	93.60	.28
Error	231	76732.04	332.17	
TOTAL	234	77012.84		

Table D-36

Analysis of Variance of Personal Resources Questionnaire (Coping) for
Levels of Percentage of Clients Referred by a Significant Other of
Licensed Professional Counselors

Source	<u>df</u>	SS	MS	F
Significant other	3	592.38	197.46	.60
Error	231	76632.20	331.74	
TOTAL	234	77224.58		

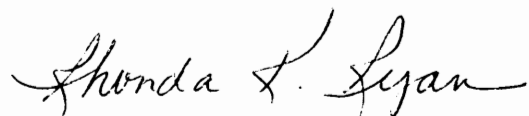
VITA

Rhonda Kitts Ryan was born in Bluefield, West Virginia on October 20, 1951. She grew up in Bastian, Virginia and received her elementary and high school education in the Bland County public schools. She graduated from Bluefield Junior College and received her Bachelor of Arts in Psychology/Sociology from Emory & Henry College in 1975. She was employed by Wythe County Department of Social Services as a Social Worker for six years prior to enrolling in graduate school.

The author received her Masters of Science degree in Clinical Psychology from Radford University at Radford, Virginia in 1984. Following graduation she was employed for four years at Roanoke Valley Psychiatric Center, an in-patient facility in Roanoke, Virginia as a clinical specialist. While there she administered and wrote comprehensive psychological evaluations as well as providing individual, family, and group psychotherapy for adults.

In 1990 the author entered Virginia Polytechnic Institute and State University as a doctoral student. At Tech she received an assistantship in counseling supervision. She completed a placement at Hollins College Counseling Center. She was licensed as a professional counselor in 1992. She received her Ph.D. from Tech in 1996.

Currently the author maintains a private practice in Roanoke and is employed as a counselor by Roanoke College. She is a member of the American Counselors Association, the Virginia Counselors Association, the Virginia Association of Clinical Counselors, and the Roanoke Area Clinical Counselors Association. She is also a member of the honor society of Phi Kappa Phi.

A handwritten signature in black ink that reads "Rhonda K. Ryan". The signature is written in a cursive style with a large, flowing 'R' and 'Y'.