A Survey of the Occupational Stress, Psychological Strain, and Coping Resources of Licensed Professional Counselors in Virginia: A Replication Study

by

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(ABSTRACT)

The Occupational Stress Inventory Revised Edition (OSI-R) and an Individual Data Form (IDF) were used to examine the current levels of occupational stress, psychological strain, and coping resources for a random sample of 360 licensed professional counselors (LPCs) in Virginia. Using the OSI-R (Osipow, 1998), a comparison of the results of this study to the Occupational Stress Inventory (OSI), (Osipow & Spokane, 1987) Ryan (1996) used was made. Replicating Ryan's study was needed to determine if significant differences at the level of occupational stress, psychological strain, and coping resources exist over time which would emphasize the importance of occupational stress research for this population.

The OSI-R is a concise measure of three dimensions of occupational adjustment: occupational stress, psychological strain, and coping resources. Demographic variables, such as age, gender, ethnicity, marital and parental status, primary work-setting, years of experience, stress related treatment, and years licensed were examined within the three dimensions of stress, strain, and coping.

Data were collected via first mailing of 360 surveys with a final response rate of 63.52%. The number of responses used for analysis was 183. The majority of the participants were white (93.4%), female (65%), parents (69.9%) of two children (33.9%), and adults averaging 49 years old. There were 120 females (65.6%) and 63 males (34.4%). Private practice either individual (21.9%) or group affiliation (18.6%) was identified as the primary work setting. The majority (86.3%) of the LPCs worked with clients and averaged 19.79 hours per four day week, counseling clients. The average number of daily client sessions was 4.76 and the maximum number of daily client sessions was 6.52. Most (49.2%) of the clients' source of referral were legally mandated

Overall, the T-scores on the OSI-R fell in the average range for stress, strain, and coping. Variables that had no significant differences in level of stress, strain, or coping were marital and parental status, number of children, years experience, average daily client sessions, and stress related treatment. Demographic variables that contributed to differences in levels of stress only included ethnicity and weekly work hours. Demographic variables that contributed to differences in scores of strain only included age and years licensed. Demographic variables that contributed to differences in scores of coping were weekly work hours, number of days per week clients seen.

Variables that had significant differences on the levels of stress, strain, and coping were gender, primary work setting, number of work settings, maximum daily client sessions, and referral source of clients. Thus, future research in the counseling profession for occupational stress, psychological strain, and coping resources are warranted Implications for the profession and recommendations for future research were made.

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DEDICATION

Lastly, but definitely not least, I dedicate this dissertation to my immediate family with love.
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CHAPTER I

INTRODUCTION

The field of counseling can be rewarding and challenging for those who enter it as a profession. Many choose counseling as a career because of a desire to help others in need, receive intellectual stimulation, or even achieve high status (Frudenberger, 1990). Although counselors, known as professional counselors (PCs), are attracted to these rewards in the counseling profession, they are entering a field without understanding the entire picture; the path of a helping professional is a step by step process (Skovholt, 2001). Skovholt (2001) indicated that the more novice practitioners understand the ambiguity and complexity inherent in the counseling process, the less stress they will experience in their early years as counselors. The counseling relationship is a reciprocal one with the counselor using clinical skills and theoretical approaches that encourage the client to actively participate in the counseling process. Rogers (1957) reported that accurate empathy, counselor genuineness, and unconditional positive regard are necessary conditions for an effective counselor-client relationship. Thus, the novice counselor's awareness of stages of development to those of an experienced one is important information (Skovholt, 2001).

The giving of self via daily communication, thinking, and problem solving is at the core of the counseling process. Therefore, counselors can experience mental and physical fatigue due to the nature of their job. It is conceivable that professional counselors (PCs) have a huge impact on their client's lives by attending to a myriad of needs (psychological, physical, or spiritual) expressed by their clients on a daily basis. Many clients seek counseling because they feel depressed, hopeless, or even suicidal. Some suffer from anxiety or phobias that affect their daily functioning, while many are court-mandated to counseling for anger management, sexual offenses, or physical abuse. It is probable that counselors' experience daily stress and strain from attending to the nature of these concerns. Guy (1987) discussed the importance of the development of the professional counselor because of the possible conflicts of professional and personal functioning. Furthermore, ambiguity and lack of closure when working with clients is another stressor because counselors cannot discuss their work with others and may feel isolated (Skovholt, 2001).

According to a study by Farber and Heifetz (1982), the inability to promote positive change in clients was a primary source of stress for therapists. Moreover, they reported the primary factor underlying burnout was the therapist perceiving the client as non attentive and giving. Clients are a microcosm of the larger society; therefore, they are of different ages, gender, soci-economic status, race, nationality, ethnicity, and religions (Pederson, 1991). Each of these variables is important for counselors to acknowledge when responding to clients in promoting positive change during treatment.

Counselors having such a broad range of care for their own clients should recognize and respond to the importance of self-care in their lives. Because of the nature of counseling, therapists need to monitor their client workload, the level of client pathology, and their personal self-care (Hackney & Cormier, 2001). Without this self-care, counselors will probably be more at risk to experience the physical and psychological effects of stress. Good psychological health in counselors is a precursor for burnout prevention and is found in counselors who possess self-awareness, growth, sensitivity to and understanding of racial, ethnic, and cultural factors in self and others, objectivity, and trustworthiness (Hackey & Cormier, 2001).

Professional counselors can be affected by the difficult nature of their work with clients (Skovholt, 2001). For example, Skovholt reported how many times clients have needs greater

than the social service, educational, or health system can or will meet; therefore, counselors may feel inadequate in helping their clients or frustrated with the systems that are suppose to provide services that meet the needs of their clients. Furthermore, managed care is a system that affects the counselor's financial well-being because of adherence to rigid guidelines that may limit clients' access to mental health services (Zieman, 1998).

Due to this myriad of concerns, occupational stress and psychological strain of professional counselors is important to study. White and Franzoni (1990) reported on several studies that revealed higher rates of depression, anxiety, and relationship problems in counselors than the general population. So, counselors have a responsibility to themselves to find support, counsel, and resources to decrease their susceptibility to mental health disorders or occupational burnout (Skovholt, 2001). Counselors need to confront and resolve their personal issues and foster professional stability by nurturing a personal life and valuing their own sense of wellness (Skovholt, 2001).

Rationale for Study

Ryan (1996) conducted a survey study that examined the occupational stress, psychological strain, and coping resources of Licensed Professional Counselors (LPCs) in Virginia. Ryan (1996) recognized that counselors are helping professionals that tend to experience stress and psychological strain because of the nature of their work. Counselors are likely to use energy attending to each client's cognition, affect, and behavior in the context of their presenting problem. Even the most experienced counselor will experience stress and strain relative to their client's level of pathology and how often they are counseled (Skovholt, 2001).

Skovholt (2001) reported a need for counselors and other health care professionals to remain resilient. Skovholt provided strategies of coping resources for counselors to consider as prevention for burnout. Farber and Heifetz (1982) stated the need for those in the field to express how they feel about their work roles and that evaluation should become a part of the structure of the profession. Identifying specific counselor work roles can be considered an important evaluative tool that contributes to counselor well-being. Therefore, Ryan's (1996) study was replicated and results compared for significant differences over time.

Statement of the Problem

Knowing that stress is inevitable in any career and understanding how to decrease its effect on the human body and mind is needed. Counselors continue to be susceptible to occupational stress and strain in their work roles. Replicating Ryan's (1996) study required repeated searches in ERIC, Psych Lit, and Dissertation Abstracts for updated references on occupational stress and professional counselors. Counselors, social workers, psychiatrists, and psychologists are discussed in much of the literature as one in the same. Identifying licensed professional counselors' occupational stress separate from other mental health professionals is needed. This study will identify sources of stress for professional counselors and compare the results to Ryan's study. This study identifies sources of stress for professional counselors and compares the results to Ryan's study.

Purpose of the Study

The purpose of this study was to provide current information on the levels of occupational stress, psychological strain, and coping resources for professional counselors licensed by the state of Virginia. Replicating Ryan's 1996 study allowed a comparison of these variables over time. Using the revised Occupational Stress Inventory (OSI-R) (Osipow, 1998), a comparison of the results of this study to the OSI (1987) Ryan (1996) used was made. Overall

levels of stress, strain, and coping, as well as factors contributing to each concept were described. Demographic information was collected from the sample and described and related to the OSI-R scales and factors contributing to those scales. This study replicated Ryan's (1996) study in instruments used, data collection and analyses. The OSI-R (1998) was used in this study because it replaced the OSI (1987) Ryan used. The results from this study were compared to Ryan's to determine if significant differences exist. The following research questions were addressed:

1. What are the levels of the Occupational Roles Questionnaire (ORQ) subscales (stress factors) among LPCs in Virginia in this study?
2. What are the levels of the Psychological Strain Questionnaire (PSQ) subscales (strain factors) among LPCs in Virginia in this study?
3. What are the levels of the Personal Resources Questionnaire (PRQ) subscales (coping resources) among LPCs in Virginia in this study?
4. According to the Occupational Roles Questionnaire (ORQ), are there significant differences in the levels of stress factors for Licensed Professional Counselors (LPCs) in Virginia in comparison to Ryan's (1996) study?
5. According to the Personal Strain Questionnaire (PSQ), are there significant differences in the levels of psychological and physical effects of stress (strain) for LPCs in Virginia in comparison to Ryan's (1996) study?
6. According to the Personal Resources Questionnaire (PRQ), are there significant differences in the levels of coping resources for LPCs in Virginia in comparison to Ryan's (1996) study?
7. Are occupational stress factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation 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?
8. Are psychological strain factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation 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?
9. Are coping resources significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation to the following demographic variables: age, gender, marital status, ethnicity, practice setting, experience, number of clients seen per day, hours worked, and number of clients?

Limitations of the Study

The sample in this study consisted of professional counselors licensed by the state of Virginia. The results in this study should not be generalized to non-licensed counselors in Virginia or any other state, to licensed counselors in other states, or to licensed professionals in other fields (i.e., psychologists or social workers).

Definition of Terms

The following terms were used and defined in this study:

1. Licensed Professional Counselor (LPC) - individuals who are licensed as professional counselors by the Commonwealth of Virginia.
2. Professional counseling - the application of mental health, psychological, and human development principles through cognitive, affective, behavioral and systemic intervention strategies, that address wellness, personal growth, and career

development, as well as pathology. (American Counseling Association Governing Council Minutes, September, 1997).

3. Occupational stress – a discrepancy between the demands of one's job and the ability to respond in an effective manner (Rabin, S, Feldman D. & Kaplan, Z. (1999). The Occupational Roles Questionnaire (ORQ) was used to measure the different roles that may cause stress for individuals.
4. Psychological Strain – psychological and/or emotional problems being experienced by the individual (Osipow, 1998, p.2). The Personal Strain Questionnaire (PSQ) was used to measure psychological strain using the work, psychological, interpersonal, and physical scales.
5. Coping resources – According to Hershenson, D., Power P., and Waldo, M. (1996, p.112), coping entails the following:
    a. Accurately assessing problem.
    b. Mobilizing the personal and environmental resources that are relevant to dealing with the problem at hand.
    c. Developing necessary but currently unavailable resources for dealing with the problem.
    d. Removing the personal and environmental barriers that are detrimental to dealing with the problem.

The Personal Resources Questionnaire (PRQ) was used to measure various resources that individuals may use when trying to cope.

Summary

This chapter provided an overview of the importance and need for a replication of Ryan's (1996) study. The important roles' professional counselors have, as well as the impact of stress and strain on their professional and personal lives were discussed. Understanding professional counselors' roles as distinct from other mental health professionals was discussed in the statement of the problem. The rationale and purpose of the study were provided in addition to research questions, and the limitations of the study. Lastly, the terms important to this replication study were defined.

CHAPTER II

REVIEW OF THE LITERATURE

It is likely that stress is associated with a lack of coping strategies to manage the pressures of life. According to Neufeld (1990), stress is a by-product of poor coping skills. Moreover, adjustment demands are considered stressors, the effects they create within an organism as stress, and efforts to deal with stress as coping strategies (Carson, Butcher, & Mineka, 1998). Adjustment demands come from a variety of sources. Certain occupations experience more pressure in job performance because of the role responsibilities of the job. For example, in mental health, counselors' works with people who have cumulative stressors in their lives that can significantly impact the stress level in the counselor's occupation (Evans, 1997). In this chapter, the literature focus is relative to the context of this study. As noted previously, this study is a replication of Ryan (1996), *A Survey of Occupational Stress, Psychological Strain, and Coping Resources for Licensed Professional Counselors (LPCs) in Virginia*. The chapter's sections address (a) historical background of stress, (b) theoretical perspectives of stress, (c) occupational stress, burnout, and self-care of LPCs in Virginia, (d) contributing factors of occupational stress, strain, and coping (e) demographic variables of occupational stress, strain, and coping, and (f) the Occupational Stress Inventory-Revised (OSI-R) (1998).

Historical Background of Stress

It is critical to understand the effects of stress on the mind and body in order to develop effective coping strategies for stress (Arden, 2002). Arden emphasized the importance of recognizing job stress and its affect on one's body, thoughts, emotions, and interactions with people (p. 9). Stress has been studied and is known to affect the normal equilibrium in the human body. Many of us may not be able to understand the bodily processes involved in normal equilibrium but may know that bodily functions do work to maintain physiological equilibrium and integration in the body (Carson, Butcher, & Mineka, 1998). This process is described as homeostasis where mechanisms for ensuring normal blood chemistry, for maintaining constant body temperature, and for combating invading microorganisms strive to preserve steady states to maintain physiological activity within a range essential to efficient functioning and survival (Caron, Butcher, & Mineka, p. 76). Environmental and physical stressors impact homeostasis in many forms. For example, a person injured in an automobile accident will have to adjust to the physical and psychological effects of that injury. Similarly, a person who loses a spouse in his or her later years will have to adjust to a different living environment.

Cannon (1939) is recognized for coining the term homeostasis and its state as "the brain and nerves, the heart, lungs, kidneys and spleen, all working cooperatively" (p. 24). Because of Cannon's initial interest in the activity of the digestive system, he studied the autonomic system, the adrenals, chemical transmission of the nerve impulse, emotional expression, among others (Brooks, C. M., 1975). The effectiveness of these studies identified Cannon as having wisdom of the body (1939) and understanding the many body responses involved in maintenance of homeostasis. Moreover, Cannon (1939) is known for the concept of "the emergency function" (p. 85) when one responds to fight or flight as a defense reaction to stress.

Selye (1956, 1976b) was able to benefit from Cannon's work in examining responses to a variety of stimuli (response-based approach). A Canadian physiologist, Hans Selye, approached the study of stress in a medical context. Moreover, Selye (1976) reported that all stress reactions are not unhealthy; there is distress and eustress. Distress involves unwanted stressor situations. Conflicts, pressures, and frustrations are areas that represent stressors producing distress (Carson

et al, 1998). However, eustress is a different stress that promotes growth, motivation, and positive experiences. For example, a wedding brings much joy but the response to the preparation can manifest similar stress responses as in distress.

Selye's (1956, 1976b) interest in a typical person's general response to stress is understood in a model called the General Adaptation Syndrome (GAS). The GAS is a model that helps explain the course of biological decompensation under excessive stress (Selye 1956, 1976b). Decompensation is a lowering of adaptive functioning (Carson et al., 1998). Carson et al. discussed the body's response to sustained and excessive stress as going through three phases: (a) alarm reaction, in which the body's defensive forces are called to arms by the activation of the autonomic nervous system; (b) stage of resistance, in which biological adaptation is at the maximum level in terms of bodily resources used; and (c) exhaustion, in which bodily resources are depleted and the organism loses its ability to resist so that further exposure to stress can lead to illness and death.

Psychological decompensation has the same phases as biological decompensation and is important for understanding the impact of stress on psychological functioning (Carson et al., 1998). During the alarm and mobilization phase, a person's resources for coping with a stressor are alerted and mobilized. One probably experiences emotional arousal, increased tension, and more efforts to be in control with continuous anxiety and tension as symptoms that can surface within the individual. In the phase of resistance, people are able to find some way of dealing with stress so they can maintain their psychological functioning. Unfortunately, in the resistance phase there is minimal achievement, and symptoms of strain and even mild reality distortions are evident. Finally in the exhaustion phase, a person's ability to adapt through continued stress is depleted and the resources they used in the resistance phase actually begin to fail.

Theoretical Perspectives

Definitions of Stress

Stress is a term with different meanings and applications specific to discipline. However, the response and stimulus paradigm is most likely considered a common guideline used by many who investigate stress. A response-based approach views stress as a dependent variable (Cox, 1985) responding to stimuli and viewed from a physiological perspective (diagnosed/treat symptoms but not their causes). The work of Hans Selye in the 1930s and 1940s marked the beginning of this approach to the study of stress (Cooper, Drewe, & O'Driscoll, 2001,). Stimulus-based stress is considered an independent variable (Cox, 1985) that prompts some response from a person who experiences stress. Identifying potential sources of stress is the central theme of this model (Goodell, Wolf, & Rogers, 1986). The stimulus-based model has its roots in physics and engineering, the analogy being that stress can be a force exerted which in turn results in a demand reaction, thus creating distortion (Cooper et al, 2001).

Critics of the response and stimulus paradigm reported that definitions related to the response and stimulus paradigm tend to ignore the external conditions that lead to stressful experiences. For example, the individual differences, and perceptual and cognitive processes were ignored (Cox, 1990; Sutherland & Cooper, 1990). Furthermore, other approaches, such as the interactional approach considered the interaction between two variables as an ongoing relationship between the individual and the work environment (Cooper et al., 2001), and the transactional model of stress was a view that took into account the dynamic stress process itself. The interactional and transactional modalities of stress were used by Osipow (1987, 1998) because of their evaluative components when investigating stress.

Understanding Appraisal and Stress

Examining the appraisal component of stress from a transactional perspective (Lazarus, 1966) involves an initial appraisal of the person's encounter with stress that signals harm, threat or a challenge. Next a secondary appraisal begins that identifies coping resources to deal with the assessed stressful encounter (Lazarus, 1991). Lazarus and Folkman (1984) are noted for distinguishing between these two appraisals. Importantly, the stress coping process is comprised of these two appraisals (Dewe, Cox, & Ferguson, 1993). The appraisal process is most likely important for understanding job performance expectations. If job demands are higher than perceived resources for coping, then negative performance expectations are created (Dewe et al., 1993). However, if job demands are not higher than perceived coping resources, then positive performance expectations will result. (Driskell & Salas, 1996).

A Model of Stress and Performance

The determinants and consequences of stress (Driskell & Salas, 1996) are defined in a four-stage model. The model identifies how (a) environment stimulus becomes salient (i.e., time pressure, task load, threat), (b) it acquires a positive or negative valence through the appraisal process (evaluation of the extent of the threat and resources to meet demand), (c) this leads to the formation of performance expectations (positive or negative), (d) and these in turn determine a number of physiological, cognitive, emotional, social consequences, and performance (stress outcomes). Thus, coping resources are critical for LPCs unmet job demands.

Occupational Stress Theories

The person environment (P-E) fit theory (Caplan, 1983) is commonly discussed in the literature (Edwards, 1991; Edwards & Cooper, 1988) and relates to the occupational stress and strain concepts in the OSI-R. The model proposed that strain occurs in a person when the relationship between the person and the environment is out of equilibrium (Cooper et al., 2001). So, a lack of fit between the characteristics of a person (e.g., abilities, values) and the environment (e.g. demands) can lead to unmet individuals needs or unmet job demands which result in strain. Similarly, French (1976) viewed occupational stress as an experience based on a person's subjective view of the environment as well as an objective environment that could be measured. This subjective-objective model mirrors the P-E fit model because a person experiences stress because of a poor person-environment fit. French proposed that the characteristics of a job that can hinder an individuals' well being defines occupational stress.

Occupational Stress, Burnout, and Self-Care of LPCs in Virginia

Commonwealth of Virginia and Mental Health

When compared to other states in spending for mental health services/treatment, Virginia is 47th. This means that 46 other states spend more money on mental health than Virginia (J. Smith, personal communication, December 10, 2003). Virginia held the status of 47th before Governor Warner began making state cuts in the latter part of 2002. Beginning with state cuts in 2002, at least a million will be cuts from mental health services in Virginia over the next 2-3 years (approximately $800,000 has already been cut). Monies for the state hospitals are inadequate. The hospitals will probably be trying to manage the needs of the community on fewer resources from the state.

Advocacy

In 2003 the Virginia Association of Clinical Counselors (VACC) and the Virginia Counselor Association (VCA) split as a united front for LPCs. Steve Strosnider (personal communication, December 2, 2003) is a LPC in Virginia who understands this split as

deleterious to the counseling profession. VACC was the group responsible for 3rd party legislation for counselors in the world and was designed to meet LPC needs, including Medicaid. Since 1994, LPCs in Virginia have been eligible for Medicaid. Therefore, this split will not benefit advocacy initiatives for LPCs in Virginia. An advocacy role from VACC is needed for LPCs to produce a systemized service that provides resources to cope with the financial inadequacies of their jobs and theoretical conflicts with society's model of mental health care. The LPCs in small geographical areas in Virginia may have even less coping resources than those in larger areas because they may feel isolated. The larger picture for LPCs reduction in stress is to increase advocacy in the profession (Steve Strosnider, personal communication, December 10, 2003). For example, there is minimal advocacy in the government for LPCs compared to Licensed Independent Social Workers (LISWs). For example, at one time, LISWs were getting $5 more per hour than LPCs. Medicaid has always paid LISWs more. Currently, this pay differential has changed to include equal pay LPCs.

Medical Model

Society's approach to medical treatment has been the medical model of diagnosing to cure. Many LPCs have adopted this model and have not benefited financially when compared with other mental health providers such as social workers. When evaluating the prestige of mental health professionals, LPCs have the lowest rank when compared to licensed social workers, psychologists, and psychiatrists (Steve Strosnider, personal communication, December 10, 2003). Today, socio-cultural values emphasize that out-of-pocket expenses are expected for some services and not for others. For example, lawyers and veterinarians do not have 3rd party payment for clients they serve. According to Strosnider, an implied moral message from society is "Forfeiting your mental happiness in life is okay because the cost is not affordable." The medical model can provide a limited or inappropriate mental health response to a comprehensive mental health problem. Mr. Strosnider stated this model was a mistake for LPCs to adopt because the medical model is incongruent with holistic counseling approaches.

Third Party Payments

Since 1995, reimbursement fees through third party payment have not increased for LPCs; however, taxes and expenses are on the rise. LPCs currently receive a 36% discount fee for Managed Care; however, the discount was 40% before 1994. Financial matters are very important to LPCs. Because of the unbalanced pay structure for LPCs with managed care, some choose an autonomous route working for themselves. This is challenging because working on a "fee for service" basis even offering a discount is not always a guaranteed method of receiving income in private practice. Fortitude is needed by LPCs to confront reimbursement issues. It appears many counselors are not trained in business. Therefore, reimbursement training as well as training for running a business is sorely needed and can impact the stress of LPCs. These financial factors among others are considered stress factors by many LPCs in Virginia.

In the New River Valley and Roanoke, Virginia areas Medicaid and Health Maintenance Organizations (HMOs) exist and both pay minimally to the clinician. Medicaid represents clients who are usually more difficult to work with. For example, the clients often do not show up or call to cancel appointments. There are also multiple family issues than those with commercial insurance holders. This population probably has more layered stressors, such as socio-economics and complex relationship issues. Toward the end of 2003, the Department of Medical Association Services (DMAS) finally has informed consent with a clause that allows the no-show Medicaid client to be billed. This is important and a bonus to clinicians who were against

taking Medicaid clients since July 2003 because the no-show client could not be billed. The clients are also more motivated to show up knowing they can be billed for a no-show.

Unfortunately, society, through the services of managed care, directs counselors on a narrow path to providing care to clients. Small and Barnhill (1998, 77) reported that managed care companies dehumanizes what should remain a human service (counseling). Furthermore, many caring clinicians have been devastated being forced into a market-driven environment (Small & Barnhill, 1998, 77). LPCs can be instructed to diagnose a client in the first session. The client has insurance coverage for minimal sessions even if continued treatment is recommended from the therapist. Thus, it would seem that stress in the form of role responsibility is inevitable for LPCs.

Paperwork

Juliann Smith (personal communication, December, 10, 2003) is a Mental Health Case Manager in Virginia and an LPC experiencing the Managed Care Health System. According to Juliann Smith's work experience with LPCs, paperwork is identified as the biggest stressor because each managed care administration has its own treatment plan for each insurance company an LPC contracts with. Therefore, one form is probably needed to significantly reduce the clinician's job stress. Overall, counselors tend to see fewer clients with more paperwork. This is unfortunate because many clients may not receive the necessary comprehensive treatment because LPCs are inundated with processing claims and limited to a specific number of sessions. For example, when a client is scheduled to seek counseling after being discharged from inpatient services but has to wait for a clinician's opening, the inpatient services at some agencies can be repeated because the client has relapsed without effective follow-up services. The cyclical affects of non-communication between some medical agencies and counseling agencies can make the transition to counseling complicated and frustrating for some clients.

Counselor Burnout

The concept of burnout was introduced by, Bradley (1969) in a research paper on probation officers. However, the term itself originated in 1974 by Freudenberger who was a practitioner at a community agency focusing on drug abuse (Skovholt, 2001). In the early 1980s, the topic of *burnout* became increasingly studied among human service professionals (Cherniss, 1980). Furthermore, it is estimated that 2,500 papers have been published on job burnout over a 20-year period, primarily among human service professionals (Schulz, Greenley, & Brown, 1995).

Burnout, a manifestation of job-related strain, is a product of the interaction between environmental factors (demands) and individual perceptions and behaviors (such as coping) (Cooper, Dewe, & O'Driscoll, 2001). Maslach (1993), one of the leading burnout researchers, reported that it "is now recognized as an important social and individual problem" (p. 19). The Maslach Burnout Inventory (Maslach & Jackson, 1981) identifies burnout with three subscales: emotional exhaustion, depersonalization, and lack of personal accomplishment. There is substantial empirical evidence identifying personal ill health, absenteeism, turnover, and reduced productivity as cost factors related to job-related burnout (Cordes & Dougherty, 1993). Because of the nature of the counseling experience, the psychological effects on LPCs are increasingly important. Some clinicians in agencies may feel they cannot continue in their professions or want to get out and begin private practice with "fee for service." However, while working solo yields less support it does provide more autonomy. LPCs in agencies have more levels of support; thus, they may have different stressors than LPCs in private practice. Moreover, with a significant

proportion of burnout research on human service professionals, counselors can identify more readily resources to address their concerns.

With the managed care system asserting unavoidable demands on mental health professionals, the ability to cope and prevent burnout seems impossible. Furthermore, it appears mental health professionals in Virginia may have the propensity to experience burnout, especially without a support system providing resources to match their personal and professional needs. Attrition, poor performance, and burnout tend to manifest stress for LPCs and need to be researched more.

Counselor Self-care

It can be understood that counselors' have a personal and professional responsibility to attend to occupational stress, psychological strain, and coping resources for their wellness. Dunn (1961) used the term "wellness" to define integrated functioning that is related to a person's effectiveness in his or her environment. Because the role of the counselor is to help others, concern with the welfare of the self is just as important (Seyle, 1974). Attention to all areas of stress relief, such as, having more fun to taking more breaks throughout the workday, need to be considered. Some counselors may realize when they participate in their wellness, they benefit physically and emotionally. These benefits may also help counselors become more effective in their work environment, mitigating stress. Coping strategies used to address the myriad of stressors that can arise for LPCs in Virginia are likely absent from mainstream mental health professionals' discussion. Due to the fact that little knowledge is provided for counselor self-care and wellness behaviors (Evans, 1997), research is sorely needed in this area.

Occupational Stress Inventory and Contributing Factors

The domains of occupational adjustment include occupational stress, psychological strain, and coping resources (Osipow, 1998). In this section, the OSI-R and its three domains will be discussed. Each domain has scales that measure specific characteristics of the person or environment. Occupational stress research supporting the domains, scales, and subscales will be reported and occupational research relevant to the stress, strain, and coping will be highlighted when appropriate.

The first domain, occupational stress, is measured by the Occupational Roles Questionnaire (ORQ) and is comprised of six scales. The Personal Strain Questionnaire (PSQ) measures the domain of psychological strain and has four scales. The last domain, coping resources, has four scales that comprise the Personal Resources Questionnaire (PRQ). To provide clarity when discussing the scales and subscales the acronyms will be used. Furthermore, when discussing the general constructs of these scales, lower case letters will be used.

Occupational Stress Factors

The first major program of research investigating stress in organizations began at the University of Michigan's Institute for Social Research in the early 1960s (Jex, 1998). Osipow and Spokane (1981) contributed to occupational stress research by developing a measure to assess person-environment variables such as role overload and psychological strain across different occupational levels and work environment. The Occupational Roles Questionnaire (ORQ) measures the domain of occupational stress in the context of work roles (McLean, 1974). The six subscales of the ORQ will be defined and discussed in relation to the OSI-R.

Role Overload. Role Overload (RO) measures the extent to which job demands exceed resources (personal and workplace) and the degree to which the individual is able to accomplish workloads. Role overload occurs when "an employer may demand more of an employee than he

or she can reasonably accomplish in a given time, or the employee may perceive the demands of work as excessive" (Jex, 1998, p. 42).

In a study of licensed professional counselors in Virginia, RO scores were in normal ranges (Ryan, 1996). Trivette (1993) reported average range for Role Overload scores in a study of elementary school counselors as well. However, for counselors who reported higher stress scores overall, RO scores were significantly higher and correlated to the elevated stress scores.

Role Insufficiency. Role Insufficiency (RI) measures the degree to which an individual's training, education, skills, and experience are appropriate to the job requirements. Clemons (1988) found RI has a significant impact on job satisfaction of LPCs. This factor explained the largest amount of variance in his model.

Role Ambiguity. Role Ambiguity (RA) measures the degree to which priorities, expectations, and evaluation criteria are clear to the individual. Clemons (1988) found that as Role Ambiguity increased, overall job satisfaction decreased. Furthermore, Clemons (1998) report this subscale was the major factor in the variance in satisfaction with supervision.

Role Boundary. Role Boundary (RB) measures the degree to which the individual is experiencing conflicting role demands and loyalties in the work setting. Clemons (1988) reported RB had no significant effect on job satisfaction for LPCs. Trivette (1993) found RB scores increased significantly for those counselors reporting higher levels of overall job stress.

Responsibility. Responsibility (R) measures the degree to which the individual has, or feels, a great deal of responsibility for the performance and welfare of others on the job. Responsibility positively and significantly influenced overall job satisfaction for LPCs (Clemons, 1988). When school counselors served more than one type of school setting, their R scores were significantly higher than those serving one type of school setting (Trivette, 1993).

Physical Environment. Physical Environment (PE) measures the degree to which the individual is exposed to high levels of environmental toxins or extreme physical conditions. Clemons (1988) reported the PE subscale as both negative and positive variance based upon the facet of job satisfaction to which it was applied.

Occupational Strain Factors

Psychological strain is the domain measured by the Personal Strain Questionnaire (PSQ) composed of four scales. These scales reflect affective, subjective responses of various types. Inability to cope in the workplace and/or other settings, leads to strain in the individual (Osipow, 1998). The four areas measured by the PSQ include: (a) Vocational Strain (VS); (b) Psychological Strain (PSY); (c) Interpersonal Strain (IS), and (d) Physical Strain (PHS).

Vocational Strain. Vocational Strain (VS) measures the degree to which the individual is having problems in work quality or input. Attitudes toward work are also measured. In a study of women in various occupations, job satisfaction was significantly related to lower levels of role strain (Hemmelgarn & Laing, 1991).

Psychological Strain. Psychological Strain (PSY) measures the degree of psychological and/or emotional problems being experienced by the individual. Role Insufficiency, Role Boundary, and Responsibility subscales were found to significantly contribute to Psychological Strain in veterinary students (Osipow & Davis, 1988).

Interpersonal Strain. Interpersonal Strain (IS) measures the degree of disruption (e.g., withdrawal or aggressiveness) in interpersonal relationships. Osipow and Davis (1988) found Role Overload, Role Boundary, and Responsibility to be the best predictors of Interpersonal Strain. In a study of LPCs, there was a significant response that "stress at work impacts on stress in the rest of life" (Clemons, 1988, 124).

Physical Strain. Physical Strain (PHS) measures complaints about physical illness and/or poor self-care habits. In counselors, Role Ambiguity was related positively to number of physical symptoms reported (Pendergast, 1988).

Occupational Coping Factors

Coping resources is the third domain in the OSI-R with four scales that constitute the Personal Resources Questionnaire (PRQ). Newman and Beehr (1979) conducted a review that supports this model comprised of four scales. The four scales measured by the PRQ include: (a) Recreation, (b) Self-Care, (c) Social Support, and (d) Rational/Cognitive Coping.

Recreation. Recreation (RE) measures the degree to which the individual makes use of and derives pleasure and relaxation from regular recreational activities. In a study with elementary school counselors, those who were parents scored lower on recreation than did non-parents (Trivette, 1993).

Self-Care. Self-Care (SC) measures the extent to which the individual regularly engages in personal activities which reduce or alleviate chronic stress. Strain scores were lowered when high scores on Self-care were found to reduce the impact of Role Ambiguity and Responsibility (Osipow & Davis, 1988). Counselors who were older scored higher on Self-Care than younger ones (Trivette, 1993).

Social Support. Social Support (SS) measures the degree to which the individual feels support and help from those around him/her. 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).

Rational/Cognitive Coping. Rational/Cognitive Coping (RC) measures the degree to which the individual possesses and uses cognitive skills in the face of work-related stresses. Osipow and Davis (1988) found Rational/Cognitive Coping to be the least effective of the coping resources in moderating PSQ scores. LPCs reported a 44% relationship among the relationship of work stress to life stress (Clemons, 1988).

Demographic Variables of Occupational Stress, Strain, and Coping

The following section includes demographic variables used in Ryan's (1996) study that will be repeated in this study. Counselors described with these variables have been used in dissertation research (Clemons, 1988; Trivette, 1993; Ryan, 1996; Layne, 2001).

Age

Using the OSI in a study of elementary school counselors, age was a positive predictor of Recreation and Self-care on the PRQ (Trivette, 1993). Clemons (1988) reported age made a significant contribution to job satisfaction in LPCs, with older workers reporting more satisfaction.

Gender

Trivette (1993) noted no gender differences in his study with elementary school counselors. Clemons (1988) found gender made no contribution to general job satisfaction in LPCs. Conversely, in a study with university faculty, strain scores tended to decrease for males as they moved up in rank, but increased for females as they were promoted (Richard & Krieshok, 1989).

Ethnicity

A multidimensional model for wellness should include the influences of differences related to gender, race, culture, and economic status (Crose, Nicholas, Gobble, & Frank, 1992). Cultural implications for counselor stress are important for future research because most studies with LPCs and stress have a low percentage of people of color. In Clemons (1988) study of

LPCs, 93.6% of the respondents were white. Ryan (1996) also reported an overwhelming percentage of LPCs as white in her study

Practice Setting

LPCs work in diverse settings. Clemons (1988) identified 49.1% of LPCs as practitioners, either self-employed or employed by others. Ryan (1996) reported individual private practice as the highest percentage of work setting with 20.5%.

Experience

Experience contributed significantly to general job satisfaction according to Clemons (1988). However, Trivette (1993) found no significant differences regarding experience.

Number of Clients Seen Per Day

This variable has not been largely studied. Farber and Heifetz (1982) found that most psychotherapists felt they could see 4-6 clients per day before they were exhausted. Ryan (1996) reported the average range of client sessions per day as 4.78, with a range of 1-15.

Counselor's Number of Children

Trivette's (1993) study reported parents with one child scored higher on the subscales of strain than parents with two children. Further research of this variable is warranted.

Occupational Stress Inventory Revised

The revised edition of the Occupational Stress Inventory (OSI-R) (1998) is a concise measure of three dimensions of occupational adjustment: occupational stress, psychological strain, and coping resources and will be used in this study. Although the OSI-R is being used for replication of this study, other instruments were explored but not considered appropriate to use in this study. The *Job Stress Survey* identifies major sources of stress in the workplace measuring severity and frequency scales, stress index, and 10 item subscales (job pressure and lack of organizational support). The *Wellness Evaluation of Lifestyle Form* by Jane Myers and Tom Sweeney assesses and plans lifestyles.

The original OSI (1987) 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 to alleviate strain (Osipow, 1998).

This revision, OSI-R, updated and provided normative data for both gender and occupation categories (i.e., executive, professional, technical, administrative support, public service/safety, and agricultural/production/laborer); it also modified several existing items and generated new ones for each of the three OSI domains. The OSI-R separated the three domains with separate instruments.

The OSI-R 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 asses the perceived strain that may result from stress. The manifestations of strain are assessed by evaluating problems in work quality or

output, perceived psychological or emotional problems, 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. The coping responses include recreation, self-care, social support, and rational/cognitive coping.

Research Support

Convergent validity studies, correlational studies, treatment studies, and factor analyses of the stress, strain, and coping model are reported in the OSI-R manual. For example, Guetter (1997) collected data examining the concurrent validity of the OSI-R with the Employee Assistance Program Inventory. The correlations indicated that the EAPI is related to the OSI-R in predictable ways. All of the ORQ scales, except Responsibility (R) are significantly correlated with the EAPI scale measuring Work Adjustment (WA).

The OSI and OSI-R have also been used in dissertation research. Clemons (1988) used the Occupational Roles Questionnaire (ORQ) (formerly called Occupational Environment Scales) in a study of Licensed Professional Counselors in Virginia. Additionally, Ryan (1996) used the OSI in a study on occupational stress, psychological strain, and coping resources with Licensed Professional Counselors in Virginia. In a national study with elementary school counselors, Trivette (1993) used the OSI to assess their occupational stress, psychological strain, and coping resources. Layne (2001) used the OSI-R to determine the turnover intentions of rehabilitation counselors with the relationship of occupational stress, psychological strain, and coping resources.

Summary

This chapter addressed a review of the literature relevant to this study. The historical background of stress was discussed as well as the theoretical perspectives of stress, and information pertinent to the stress of LPCs in Virginia was provided. The demographic variables pertinent to this study as well as scales and subscales of the OSI-R were presented with literature support.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methods used to investigate the research questions in this study. This study was a direct replication of Ryan's (1996) study and the results compared for significance The research questions, description of the instrument, and the methods of data collection and analysis are included.

The researcher used the OSI-R and SPSS 12.0 for data analysis. Descriptive statistics were reported for the demographic variables. The three domains of the OSI-R were correlated for comparison of the OSI-R model from the manual. T-scores for the three domains were computed separately for males and females and compared to the norm guidelines in the manual. T-tests were used for demographic variables with two levels and ANOVAs were computed for variables with three or more levels. When significance was found for the overall stress, strain, or coping scores, descriptive statistics were examined for further analysis of selected subscales.

Research Questions

1. What are the levels of the ORQ subscales (stress factors) among LPCs in Virginia in this study?
2. What are the levels of the PSQ subscales (strain factors) among LPCs in Virginia in this study?
3. What are the levels of the PRQ subscales (coping resources) among LPCs in Virginia in this study?
4. According to the Occupational Roles Questionnaire (ORQ), are there significant differences in the levels of stress factors for Licensed Professional Counselors (LPCs) in Virginia in comparison to Ryan's (1996) study?
5. According to the Personal Strain Questionnaire (PSQ), are there significant differences in the levels of psychological and physical effects of stress (strain) for LPCs in Virginia in comparison to Ryan's (1996) study?
6. According to the Personal Resources Questionnaire (PRQ), are there significant differences in the levels of coping resources for LPCs in Virginia in comparison to Ryan's (1996) study?
7. Are occupational stress factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation to the following demographic variables: (a) age, (b) gender, (c) marital status, (d) ethnicity, (e) practice setting, (f) experience, (g) number of clients seen per day, (h) hours worked, and (i) number of children?
8. Are psychological strain factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation to the following demographic variables: (a) age, (b) gender, (c) marital status, (d) ethnicity, (e) practice setting, (f) experience, (g) number of clients seen per day, (h) hours worked, and (i) number of children?
9. Are coping resources significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation to the following demographic variables: (a) age, (b) gender, (c) marital status, (d) ethnicity, (e) practice setting, (f) experience, (g) number of clients seen per day, (h) hours worked, and (i) number of clients?
10. Do counselor self help and wellness behaviors mitigate occupational stress?

Sample

This study surveyed a sample of Professional Counselors licensed in the

state of Virginia. On March 10, 2004, the Virginia Department of Health Professions has a web based company located at http://www.vipnet.org that provided a list of all persons (2732) holding a license in Virginia as a professional counselor. This list, arranging from lowest to highest license number, is available via the website for a fee. Random sampling was used to select subjects in a way that all have an equal probability of being included and the selection of one subject has no influence on the selection of any other subject (Isaac & Michael, 1981).

Randomly choosing 360 names was achieved by the services of the web based company http://www.vip.net. After registration and payment of fee, the researcher was supplied with a sample of 360 randomly selected licensed professional counselors from a population of 2700.

According to Ryan's (1996) study, 14 respondents were retired and were unable to complete the materials. Replacement for those not participating in this research (13) because of retirement or relocation from Virginia was performed by pulling participants counseling license number from a hat for selection of new participants from the list.

As in Ryan's study, those subjects reporting having no occupation were not included in the sample.

Instrumentation

The Occupational Stress Inventory, Revised Edition (OSI-R) and an individual data form were the instrumentation for this study. The OSI-R (1998) was used for this study because the OSI (1987) Ryan (1996) used is no longer available.

Individual Data Form

An individual data form (see Appendix B) was developed to provide information on specific demographic variables. 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 treated as categorical data. According to Ryan (1996) 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 revised edition of the Occupational Stress Inventory (OSI-R) (see Appendix C) was developed by Osipow (1998) and was used for this study. The original research edition of the OSI was designed to develop an integrated theoretical model to link these three important dimensions, and develop generic occupational stress measures that would apply across different occupational levels and environments. 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, and Physical Environment.
2. Personal Strain Questionnaire (PSQ)- Vocational Strain, Psychological Strain, Interpersonal Strain, and Physical Strain.
3. Personal Resources Questionnaire (PRQ) – Recreation, Self-care, Social Support, and Rational/Cognitive Coping.

The OSI-R's test materials included an item booklet, a hand-scorable rating sheet (Form HS), and two types of profile forms. The item booklet contained instructions to the respondent and the 140 OSI-R items. The remainder of the booklet was divided into three sections corresponding to the three questionnaires: the ORQ (6 scales, 10 items per scale), the PSQ (4 scales, 10 items per scale), and the PRQ (4 scales, 10 items per scale), and the PRQ (4 scales, 10 items per scale).

The rating sheet provided an area for demographic information about the respondents and for responses to the OSI-R items. The bottom page of the rating sheet contained information for scoring. Raw scores were transferred to the area provided at the bottom of the appropriate profile form and then plotted on the profile grid above. The profile grid provided a visual aid for interpretation. The profile form was not required, but used by this research and does facilitate the calculation of T-scores and the analysis of the pattern of OSI-R scores.

Norms. A sample of 983 participants comprised the normative data for the OSI-R. Efforts from 19 individuals assisted in obtaining a representative sample by collecting data from a variety of sites. The manual provides demographic characteristics of the OSI-R normative sample with respect to age, gender, ethnic group, marital status, educational level, and occupation.

Reliability. Two reliability estimates were conducted for the OSI-R. Lombard (1997) first analyzed test-retest reliability data by administering the OSI-R to a sample of 62 Air Force cadets over a 2-week period. The scale test-retest correlations ranged from a low .39 for Self-Care (SC) to a high of .74 for the total PSQ score. Only two correlations were less than .50, and all correlations between the two administrations were significant at the .01 level Freitag (2001) reports that the internal reliability estimates of the OSI-R are similar to those reported for the original Occupational Stress Inventory. However, the results from validity and reliability analyses of this revised version have improved specification of this instrument and established its general utility. The second reliability estimate used an internal consistency analysis with the normative sample. Alpha coefficients for OSI-R total questionnaire scores were .88 for ORQ, .93 or PSQ, and .89 for PRQ. Coefficients for individual scales ranged from .70 to .89. The manual provides coefficients for the original OSI which are comparable to the OSI-R.

Validity. Validity data for the OSI and OSI-R are derived from five principle sources: (a) convergent validity studies; (b) factor analyses; (c) correlational studies of and the relationships of the scales to variables of practical and theoretical importance; (d) studies using the scales as outcome measures following stress reduction treatment; and (e) studies of the stress, strain, and coping model employing comparison of selected criterion groups. According to Bailey (1994) convergent validity involves multiple measurement of the same concept. Wall (2001) reports that the majority of the 50 studies cited in the OSI-R manual evaluating the instrument's psychometric properties are based on the original OSI. Moreover, Wall (2001) cautions using the OSI-R as the only source of data. Layne (2001) successfully used the OSI-R as a measure of validity.

Furthermore, in order to compare the two OSI versions, data was collected on a sample of 45 highway patrol cadets using both the OSI and OSI-R (Elam, 1997). Each of the 17 correlation coefficients was equal to or greater than .63 and all were statistically significant. Because of the relatively high correlations between the OSI and the OSI-R, the author indicates that the two versions are similar enough to generalize validity from the original OSI to the OSI-R.

Data Collection

Data were collected for this study through the U.S. mail service. The sequence for data collection began with a pre-letter, initial survey distribution with a complimentary coffee packet, a postcard reminder, two follow-up mailings, and a follow-up phone call to a random selection of non-respondents. Dillman (2000) reported that "implementation procedures, such as multiple contacts, contents of letters, and incentives have a huge influence on response rates" (p.149). The survey materials were coded in order to record the returns.

Pre-letter

One week before the initial survey mailing, a pre-letter (see Appendix A) from the dissertation chair was sent to all members of the sample. The letter briefly introduced the researcher and described the purpose of the study, assured confidentiality, and encouraged participation.

Initial Mailing

The initial survey mailing began March 29, 2004. The mailing consisted of a cover letter (see Appendix A) assuring confidentiality, explaining the purpose of coding, and requesting participation in this study approved by the Virginia Tech's Internal Review Board. The OSI-R booklet, answer sheet, profile sheets, coffee packet, and a self-addressed, stamped envelope to return the materials were included as well.

Postcard Reminder

A postcard reminder (see Appendix A) was sent to all participants on April 12, 2004. The postcard was a reminder to those who had not responded and an appreciation to those who had. Any participants' who had not received a packet, were provided the opportunity to phone the researcher (collect) so a packet could be mailed to them.

First Follow-up Mailing

Approximately 3 weeks after the initial mailing on April 19, 2004, all non-respondents were sent another full survey packet.

Second Follow-up Mailing

The final mailing, a postcard follow-up, was sent to all non-respondents on May 8, 2004. A letter from the researcher was included (see Appendix A) reiterating the importance of contributing to the field counseling and helping this researcher receive the maximum return rate.

Phone Follow-up

A random sample of 10% of non-respondents was contacted by phone approximately two months after the initial mailing. The questions in the phone follow-up (see 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. These non-respondents were questioned why they had not responded to the survey. The majority of respondents reported not having enough time because they were too busy. No unusual pattern was noted.

Counselor Wellness

The *Wellness Evaluation of Lifestyle Form* by Jane Myers and Tom Sweeney assesses and plans lifestyles. According to Myers (1991), wellness "goes beyond an absence of illness but emphasizes a zest for life" (p. 185). Well-being of an individual is a balanced combination of physical, emotional, intellectual, social, and environmental factors (Ardell, 1997). It is understood that counselors often work from this paradigm of wellness with their clients to work on the presenting problem. Counselors' are to promote and facilitate wellness in the counseling

process helping clients (Myers, 1991). However, wellness behaviors that contribute to counselor self help typically are unknown (Evans, 1991).

Data Analysis

Data Management

The researcher entered the data using SPSS 12.0, hand scored the OSI instruments, and analyzed the data. Decisions regarding missing items were made in the context of least affecting the variance. Analysis was performed of group data only.

Analyses Procedures

Data were 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 subscales scores for each domain were added to form a total scale score for the three domains. Correlations were run between the ORQ, PSQ, and PRQ, and the job and non-job stress questions from the individual data form to determine the general relationship between what the respondents believed about their stress and what was measured by the OSI-R. Correlations were run among all subscales and domain scores for comparison to the scale inter-correlations in the OSI-R manual. Finally, correlations were calculated between the ORQ, PSQ, PRQ and the Data Form questions that yielded continuous data.
2. To answer research questions one through three, for each of the three domains, subscale totals, means, standard deviations, and T-scores were computed. The results were discussed relative to the interpretative guidelines provided in the manual. Because Ryan (1996) used the original OSI and this study used the OSI-R, t-tests were used to bridge the differences between the two sample means testing for significance.
3. To describe the levels of the subscales (research questions four-six), subscale totals and their T-scores were computed. These were discussed relative to the interpretative guidelines provided in the manual. Each demographic variable was compared to overall ORQ, PSQ, and PRQ scores and specific subscales. 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 were 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 to determine if variances were equal between levels. When significant differences (F value) were indicated ($p \leq .05$) between groups, a post hoc test was run.

Descriptive statistics were run for each subscale if the post hoc test indicates a difference in the overall level. The descriptive statistics were examined and T-tests run for only those subscales reporting significant differences. 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 $p \leq .05$.

Summary

This chapter outlined the research questions and described the procedures for selecting a random sample from the population. A description of the instrumentation used including norms, reliability, and validity were provided. Finally, the methods of obtaining and analyzing the data were discussed.

CHAPTER IV

RESULTS

The purpose of this research study was to survey the occupational stress, psychological gain, and coping resources of Licensed Professional Counselors in Virginia and compare results to Ryan's (1996) study.

This chapter summarizes the data collected, instruments used, and the statistical tests used. The response rates for each collection phase are reported first. The demographic data of the sample were collected from the Individual Data Form (IDF) and are comprehensively reported. The research questions and the data analysis procedures employed to address these questions are presented as well. The chapter concludes with a brief summary.

Survey Responses

Table 1 contains the response rates of each phase of the data collection process and their percentages of overall responses. The final response rate for this study was 63.52% (n=237) while Ryan (1996) reported a rate of 77.3% (n=320). Included in the response rates for both studies were persons with incomplete data who stated they were inappropriate participants (i.e., retirement or no longer in the counseling field) and those reporting not having time to participate. Other responses from participants included health problems or taking care of an elderly parent. Thirty-two responses were eliminated due to incomplete data compared to Ryan's nine. A random selection (10%, n=13) of five females and three males were contacted by phone while five persons were not able to be reached by phone. Besides not having enough time to participant in the study, there was no specific pattern evident in the reasons for not responding.

Table 1

Survey Response Rates

Step	Number returned	Percent of total
Initial mailing including postcard reminder	169	45.3
First follow-up mailing	47	12.6
Second follow-up mailing	11	2.94
Replacements	10	2.68
Total	237	63.52

Note. There were 360 possible participants in the initial mailing, and 13 in the replacement mailing.

Demographic Data Information

The Individual Data Form (IDF) was used to describe the sample. The demographic variables are presented in the order that they appear on the IDF. Some demographic variable results are presented in table format as well as within the discussion and identified as such.

Age

Participants ranged in age from 27 years to 78 years, with a mean of 49.79 years. Ryan (1996) reported similar age distribution with age ranges from 28 to 79 years and a mean of 47.23 years. Results are presented in Table 2.

Table 2

Age Distribution of Participants

Age Range	Number	Percent of Total
27-37	27	15.0
38-48	42	23.3
49-59	77	42.8
60-70	32	17.8
71-81	2	1.1
Total	180	100.0
Missing	3	
Total	183	

Gender

Female participation in studies with Virginia counselors supports findings in this study. Participants included 120 females (65.6%) and 63 males (34.4%). Ryan (1996) reported similarly with 154 females (59.7%) and 104 males (40.38%). In a study of LPCs by Clemons' (1988) female participation was 55.8%. In a study of rehabilitation counselors and the relationship of stress, strain, and coping resources by Layne (2001), 89% of the participants were female and 37% of the participants were male. Gender was not found to have a significant relationship with stress, strain, or coping resources in several studies(Layne, 2001; Trivette 1993). In a study on elementary school counselors and the relationship of stress, strain, and coping resources by Trivette (1993) 87.10% of the participants were female and 12.90% were males.

Marital Status

The highest percentage for marital status in this study and Ryan's' (1996) was married, 73.2% (n=134) and 76% (n=196), respectively. Divorce status was lower, 6.6 % (n=12) while Ryan (1996) reported 10.1% (n=26). The remaining marital status of never married, living with someone, separated, and widowed were 12% (n=22), 3.3% (n=6), 2.7% (n=5), and 2.7% (n=5), respectively. Ryan (1996) reported lower on never married, 7.8% (n=20), similarly for living with someone, 3.9% (n=10) and widowed, .8% (n=2).

Parental Status and Number of children

A total of 128 (69.9%) participants indicated they were parents and 55 (30.1%) reported they were not parents. Ryan (1996) reported 187 (72.5%) as parents and 71 (27.5%) as not. According to Table 3, 62% of the participants reported having two children.

Table 3

Participants' Number of Children

Number of children	Number of participants	Percent of total
0	53	29.0
1	24	13.1
2	62	33.9
3	37	20.2
4	5	2.7
5	1	.5
11	1	.5
Total	183	100.0

Ethnicity

White and African-American participants were the highest percentage ethnic groups, 93.4% (n=171), 3.8% (n=7) respectively. Similarly, Ryan (1996) reported 248 Whites and seven African-Americans. The Asian and "other" categories reported two participants each and Hispanic reported one. Ryan (1996) reported one Hispanic, Asian, and Lebanese participant.

Primary Work Setting

Private practice, either individual or with group affiliation, was chosen as the primary work setting by 40.5% (n=74) of the participants. Community mental health agency was chosen by 25.1% (n=46) of the participants, and 11 participants (6%) reported working in elementary, middle, or high school. Ryan (1996) reported similarly for private practice but less for community mental health agency, 17.4% (n=45). A complete listing for this study is presented in Table 4, Appendix D.

Additional Work Settings

A total of 59 (32.3%) of the participants reported working in more than one setting. Ryan (1996) reported 38% of the participants working in more than one setting.

Eight participants (4.4%) reported working in three settings while Ryan reported 8.5%. Table 5 presents the number and percentages of work settings reported.

For those participants reporting at least two settings, community mental health agency (n=13, 25%) was the most frequent additional setting. Ryan (1996) reported private practice (n=36, 36.7) as the most frequent additional setting. When at least 3 work settings were reported, individual private practice (n=3, 38%) was the most frequent response for this category while Ryan (1996) reported teaching counseling at a college or university (30.4%).

Table 4

Participants' Primary Work Setting

Setting	Count	Percent
Community Mental Health Agency	46	25.1
Elementary, Middle or High School	11	6.0
College or University Counselor Preparation	2	1.1
Outpatient Facility or Unit of Hospital	3	1.6
Private Practice with Group Affiliation	34	18.6
Other Public Agency	6	3.3
College or University Counseling Center	3	1.6
Inpatient Facility or Unit of Hospital	4	2.2
Individual Private Practice	40	21.9
Business/Industry	1	.5
Other	22	12.0
Missing	11	6.0
Total	183	100.0

Table 5

Report of Participants' Number of Work Settings

Number of settings	Count	Percent of total
One	122	66.7
Two	51	27.9
Three	8	4.4
Missing	2	1.1
Total	183	100.0

Weekly Work Hours

Licensed counselors reported an average of 38.8 hours per week. Hours spent working each week ranged from 3 to 68. The mode was 40 hours per week with the highest percentage of work hours as 29.2%. Ryan (1996) reported an average of 40.8 hours per week with the range of 2 to 80 working hours. The weekly work categories are presented in Table 6 and were set using the standard deviation of 13.26.

Professional Activities

Table 7 contains information regarding the average hours spent per week in various professional activities for the entire sample. As a group, professional counselors reported spending an average of 19.79 hours per week counseling. Similarly, Ryan (1996) reported 18.97 hours per week. In this study the activity of training was reported as the least average, 3.46 per week while Ryan (1996) reported similarly, 1.34. Compared to this study, Ryan reported a major difference in average hours spent weekly teaching, 1.64 and providing supervision, 2.41 versus 12.56 and 5.28, respectively.

Years Licensed

Participants had been licensed from 1 to 31 years compared to Ryan's' (1996) range of 1 to 19 years. In order to distinguish new and relatively newly licensed counselors from those with more substantial experience, category 1 consists of individuals who had been licensed 1-2 years. Participants licensed for 5.1-13 years report the highest percentage while Ryan (1996) reported 2.1-5 years. The mean for this variable was 10.22 years with a standard deviation of 8 years. Table 8 provides complete information.

Table 6

Participants' Weekly Work Hours

Hours Worked	Count	Percent
3-16	11	6.2
16.1-29	25	14.0
29.1-42	76	42.7
42.1-55	49	27.5
55.1.-68	17	9.6
Missing	5	100.0
Total	183	

Table 7

Participants' Average Weekly Hours in Professional Activities

Activity	Mean	Range
Counseling	19.79	0-59.0
Supervision	5.28	0-29.0
Training	3.46	0-31.0
Teaching	12.56	0-49.0
Administration	12.23	0-41.0
Consultation	5.18	0-29.0
Other	11.95	0-43.0

Table 8

Years Licensed as a Licensed Professional Counselor

Years	Count	Percent of total
1-2	34	18.7
2.1-5	29	15.9
5.1-13	62	34.1
13.1-21	37	20.3
21.1-29	15	8.2
29.1-31	5	2.7
Missing	1	100
Total	183	

Years Experience

Participants were asked to list the total number of years of experience each had in the counseling field. Part-time was established as 20 hours or less weekly, and full time was more than 20 hours weekly. The responses were in separate categories for part-time and full-time. The total years of experience was determined by adding ½ of the part-time experience to the full time experience. The range for years of experience was 1-40 while Ryan (1996) reported 2.5-35. The mean of 15 for years of experience for all participants was the same as Ryan's'. Table 9 provides complete information.

Table 9

Years of Experience as a Licensed Professional Counselor

Years Experience	Count	Percent of Total
1 - 9	51	27.9
9 - 17	57	31.1
17-25	40	21.9
25 - 33	24	13.1
> 33	11	6.0
Total	183	100.0

Work With Clients

Participants who reported working with clients totaled 86.3% of the sample versus 13.7% who reported not seeing clients. Ryan (1996) reported 91.7% and 8.9% respectively.

Number Days Clients Seen

Of those counselors who worked with clients, the mean number of days they did was 3.8 and 4.2 for Ryan (1996). The range was from 1-7 days, and 36.3% of the counselors reported seeing clients 5 days per week. Ryan's' sample reported seeing clients weekly at a higher percentage (48.2%). Table 10 presents the results.

Average Daily Client Sessions

Of the counselors who reported client contact, the average number of client sessions per day was 4.76, with a range of 1-13. Categories were established based on a mean of 4.76 (rounded to 4.5) and a standard deviation of 2.35. Ryan (1996) reported similarly to this study with approximately 70% of the participants having worked between 2.6 and 7.05 average client sessions per day. Complete information is provided in Table 11.

Table 10

Number Days Clients Seen by Licensed Professional Counselor

Days	Count	Percent of Total
1	8	5.1
2	20	12.7
3	27	17.2
4	38	24.2
5	57	36.3
6	6	3.8
7	1	6
Total	157	100.0

Table 11

Licensed Professional Counselors' Average Daily Client Sessions

Number Sessions	Count	Percent of total
< 2.35	29	19.0
2.6 – 4.7	38	24.8
4.71 – 7.05	70	45.8
7.06 – 9.4	9	5.9
9.41 – 11.75	4	2.6
>11.75	3	2.0
Total	153	100.0
Non -respondents	30	
Total	183	

Maximum Daily Client Sessions

The maximum daily client sessions participants reported are reported in Table 12. The range for this variable was 1-17 versus 1-24 reported by Ryan (1996). The category with the highest percentage (37.2) of maximum daily client sessions is 7-9 that is the same as Ryan's' (37.5). The average for this variable is 6.52 compared to 7.45 for Ryan.

Table 12

Licensed Professional Counselors' Maximum Number of Daily Client Sessions

Number Sessions	Count	Percent of Total
< 3	25	16.0
4 - 6	52	33.3
7 - 9	58	37.2
10 - 12	18	11.5
> 13	3	1.9
Total	156	100.0
Non-respondents	27	
Total	183	

Source of Clients and Percentage of Caseload

Participants responded to the source of clients and percentage of caseload by the categories (a) self-referred, (b) legally mandated, and (c) referrals by significant others. Table 13 reports the percentages of counselors' caseload in four percentage categories as well as the three client source categories.

Frequency calculations for each client source category provided percentages of the total number of clients seen. Clients who were self-referred accounted for 21.9% of the total number of clients seen by participants; Ryan (1996) reported 60.59%. Legally mandated clients were the highest percentage seen by counselors (49.2%) while Ryan reported this category as the lowest (11.45%). The percentage of clients' referred by significant others were the same as Ryan, 27.9%.

Table 13

Licensed Professional Counselors' Source of Clients and Percentage of Caseload

	Self-referred		Legally mandated		Referred by significant other	
Percent of caseload	Count	% of total	Count	% of total	Count	% of total
0%	36	19.7	90	49.2	51	27.9
.1 – 33.3%	45	24.6	62	33.9	81	44.3
33.4 – 66.6	35	19.1	6	3.3	26	14.2
66.7 - 100	67	36.6	25	13.7	25	13.7
Total	183	100	183	100.0	183	100.0

Licensed Professional Counselors' Job Related Stress

Participants were asked to rank their job related stress on a scale of 1 to 10 with 1 being the lowest and 10 being the highest. The responses were ranked into low, medium, and high categories using a mean of 4.9 and a standard deviation of 2.2. Low, medium, and high categories for job related stress of the participants represented 31.6% (n=55), 40.8% (n=71), and 27.6% (n=27.6) respectively. Ryan (1996) reported (a) 33.3% as low, (b) 31.8% as medium, and (c) 34.9% as high categories of reported job stress.

Licensed Professional Counselors' Non-job Related Stress

The non-job related stress question was asked on the same rating scale and responses were ranked using the same procedure as for job related stress. Ryan (1996) and this study both notes lower mean differences in the descriptive statistics. Low, medium, and high categories for non-job related stress of the participants represented 40.1% (n=69), 43% (n=74), and 16.9% (n=29). Ryan (1996) reported 35.7%, 36.8%, and 27.5% respectively.

Treatment

Participants who reported having received professional treatment for stress related problems totaled 52 (28.4%). Participants who reported not having professional treatment for stress related problems totaled 131 (71.6%). Ryan (1996) reported those who received professional treatment for stress related problems and those who did not, 82 (31.8%) and 176 (68.2%) respectively.

Results

The following three research questions guided this study:

1. What are the levels of the ORQ subscales (stress factors) among (LPCs) in Virginia in this study?
2. What are the levels of the PSQ subscales (strain factors) among LPCs in Virginia in this study?
3. What are the levels of the PRQ subscales (coping resources) among LPCs in Virginia in this study?

The levels of the subscale scores of the ORQ, PSQ, and PRQ were converted to T-scores and the mean scale scores are presented in Table 14. Male and female categories are in accordance with the guidelines in the OSI-R manual and T-scores are within normal ranges (Osipow, 1998). The percentage of T-scores falling two standard deviations above and below the mean scale scores are reported in Table D-1 for males and Table D-2 for females.

Table 14

T-Scores of Mean Scale Scores of ORQ, PSQ, and PRO by Gender

Scale and Subscales	T-scores males	T-scores females
ORQ (Stress)		
Role Overload	51	49
Role Insufficiency	42	42
Role Ambiguity	46	49
Role Boundary	43	43
Responsibility	49	50
Physical Environment	40	47
PSQ (Strain)		
Vocational Strain	46	45
Psychological Strain	44	47
Interpersonal Strain	46	48
Physical Strain	45	46
PRQ (Coping)		
Recreation	54	56
Self-care	60	59
Social Support	55	53
Rational/Cognitive	56	53

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

Research questions four, five, and six are:

4. According to the Occupational Role Questionnaire (ORQ) are there significant differences in the levels of stress factors for Licensed Professional Counselors (LPCs) in Virginia in comparison to Ryan's (1996) study?
5. According to the Personal Strain Questionnaire (PSQ), are there significant differences in the levels of psychological and physical effects of stress (strain) for Licensed Professional Counselors (LPCs) in Virginia in comparison to Ryan's (1996) study?
6. According to the Personal Resource Questionnaire (PSQ), are there significant differences in the levels of psychological and physical effects of stress (strain) for Licensed Professional Counselors (LPCs) in Virginia in comparison to Ryan's (1996) study?

The Pearson r correlation analysis and the table of results (Table 34) are used to answer research questions four, five, and six. The results are presented in Table 15 including a correlation analysis of job related stress, non-job related stress, and the OSI-R scales. The correlation scale scores of the OSI-R in this study report ORQ (stress) and PSQ (strain) were positively correlated (.54). The PRQ (coping) was negatively correlated with both the ORQ (-.42) and the PSQ (-.56). Ryan (1996) reported similar findings; however, a higher positive correlation was reported for ORQ and PSQ (.62). The OSI-R manual provides the reliability expected for the correlation of the OSI-R scales. As anticipated, the OSI-R reports that the PRQ was negatively correlated with the ORQ (-.33) and PSQ (-.54). This model reveals that high levels of coping were correlated with low levels of strain and stress. The job stress questions from the Individual Data Form were positively correlated with the ORQ (stress) (.47) and the PSQ (strain) (.35).

Analysis of Levels of Demographic Data and OSI-R Scales

Research questions seven, eight, and nine are:

7. Are occupational stress factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation 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?
8. Are psychological strain factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation 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?
9. Are coping resources factors significantly different for LPCs in Virginia when compared to Ryan's (1996) study in relation 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?

Each demographic variable was examined for levels of stress, strain, and coping and are presented in Table 34. Descriptive statistics were run for all variables as well as homogeneity of variance tests. The demographic variables are discussed in the order they appear on the Individual Data Form.

Table 15

Correlation of Occupational Stress Inventory Scales and Job Stress/Non-Job Stress Questions

		ORQ	PSQ	PRQ	Job stress	Non-job stress
ORQ	Pearson Correlation	1				
	Sig. (2-tailed)	.				
PSQ	Pearson Correlation	.541(**)	1			
	Sig. (2-tailed)	.000	.			
PRQ	Pearson Correlation	-.420(**)	-.563(**)	1		
	Sig. (2-tailed)	.000	.000	.		
Job stress	Pearson Correlation	.474(**)	.353(**)	-.256(**)	1	
	Sig. (2-tailed)	.000	.000	.001	.	
Non-job stress	Pearson Correlation	.093	.492(**)	-.380(**)	.236(**)	1
	Sig. (2-tailed)	.222	.000	.000	.002	.

** Correlation is significant at the 0.01 level (2-tailed).

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

Age

Age was coded 1, 2, 3, 4, and 5 for the age categories 27-37, 38-48, 49-59, 60-70, and 71-81, respectively. Analysis of Variance (ANOVA) tests for age level and the ORQ, PSQ, and PRQ were performed. A significant difference in variance ($p<.05$) was found for the PSQ (Strain) as shown in Table 16. Tables D-3, and D-4 report no differences for the ORQ (Stress), and the PRQ (Coping) (see Appendix D).

Gender

Females are coded 1 and males coded 2 for the variable gender. T-test results for differences on the ORQ (Stress), PSQ (Strain), and PRQ (Coping) are presented in Table 17. Ryan (1997) and this study reported that males scored significantly higher than females resulting in having more stress.

Marital Status

Marital status was coded 1=Separated, 2=Married, 3=Widowed, 4=Divorced, 5=Never Married, and 6=Other (living with someone). Descriptive statistics were run and homogenous variances were found for the ORQ, PSQ, and PRQ. Testing for difference using ANOVA indicated no difference in levels for the ORQ (Stress), PSQ (Strain) and the PRQ (Coping) (Table 5, Appendix D). Ryan (1996) indicated a significant difference in variances for the PSQ (Strain).

Table 16

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

Source	SS	df	MS	F	Significance
Age	4995.417	4	1248.854	4.142*	.003
Error	52767.894	175	301.531		
Total	57763.311	179			

*p<.05

Note. Ryan (1996) found significant strain differences on Age Levels 1&5, 1&4, and 1&3. Jackson found significant strain differences on Age Levels 2&4, and 3&4.

Table 17

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

	Female		Male			
Scale	M	SD	M	SD	df	t
ORQ	116.98	27.17	124.25	21.33	181	-1.845
PSQ	74.13	19.81	70.08	14.09	181	1.44
PRQ	146.43	18.60	143.98	15.44	181	.895

P<.05

Parental Status

The question on parental status was coded 1=parent and 2=not a parent. T-tests results for this study reported no significant differences in ORQ (stress), PSQ (strain), or PRQ (coping) with parental status (see Appendix D, Table 6). Ryan (1996) reported the same results.

Number of Children

The number of children reported by participants was coded as the actual number of children. The number of children reported was 0, 1, 2, 3, 4, 5, and 11. ANOVA results reported no significant differences in ORQ (stress), PSQ (strain), and PRQ (coping) with the number of children participants reported (Table 7, see Appendix D). Ryan (1996) reported no significant differences for this variable as well.

Ethnicity

Ethnicity was coded 1=Hispanic, 2=African-American, 3=White, 4=Asian, 5=Native American, and 6=Other. ANOVA results yielded significant results for ethnicity, unlike Ryan (1996). Table 18 reports significance in Stress (ORQ) and Coping (PRQ) when compared with ethnicity. Although ethnicity was based on a small sample size, the homogeneity of variance test

did not yield significance Thus, the reported ANOVA significance cannot be due to small sample size. Psychological Strain (PRQ) did not result in significant differences with ethnicity (Table 8, see Appendix D).

Table 18

Analysis of Variance of Occupational Roles Questionnaire (Stress) and Personal Resources Questionnaire (PRQ) for Ethnicity of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
ORQ	Ethnicity	4	7824.33	1956.08	3.15
	Error	178	110423.38	620.35	
	Total	182	118247.71		
PRQ	Ethnicity	4	2962.42	740.60	2.47
	Error	178	53271.83	299.28	
	Total	182	56234.26		

Primary Work Setting

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

An ANOVA was run for the ORQ, PSQ, and PRQ and the results are presented in Table 19. The table indicates a significant difference in the means of primary work settings for the ORQ, PSQ, and the PRQ. Community Mental Health Agency, Individual Private Practice, and Private Practice with Group Affiliation had the highest percentage within the primary work setting variable, 25%, 21%, and 18% respectively.

Table 19

Analysis of Variance of Occupational Roles Questionnaire (Stress), Psychological Strain Questionnaire (PSQ), and Personal Resources Questionnaire (PRQ) for Primary Work Setting of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
ORQ	Work Setting	11	37467.76	3406.1	7.21*
	Error	171	80779.95	472.39	
	Total	182	118247.71		
PSQ	Work Setting	11	7213.35	655.76	2.13*
	Error	171	52514.05	307.10	
	Total	182	59727.41		
PRQ	Work Setting	11	9260.74	841.88	3.06*
	Error	171	46973.51	274.69	
	Total	182	56234.26		

*p <.05

Participants who worked in the Community Mental Health Agency setting yielded differences from the Individual Private Practice on all the ORQ subscales except RA (role ambiguity) and PE (physical education) (Table 20). Ryan (1996) reported similar mean differences on all the ORQ subscales except PE (physical education). Furthermore, Individual Private Practice yielded significant results on ORQ (stress) with Other Public Agency (Table 21) and School (Table 22) but not with College Counseling Center (Table D9).

Table 20

T-test of Primary Work Setting, Community Mental Health Agency, and Individual Private Practice for ORQ (Stress) Subscales

	Primary work setting					
	Mental health agency		Individual private practice			
	M	SD	M	SD	df	t
Role Overload	27.80	7.28	21.23	6.30	84	4.44*
Role Insufficiency	21.24	5.67	15.73	3.74	84	5.24*
Role Ambiguity	19.93	6.13	19.41	5.78	78	.386
Role Boundary	20.09	5.24	14.38	4.47	78	5.12*
Responsibility	27.43	7.41	22.92	5.33	80	3.08*
Physical Environment	15.61	3.45	15.64	3.85	83	-.041

* $p<.05$

Table 21

T-test of Primary Work Setting, Individual Private Practice, and Other Public Agency for ORQ (Stress) Subscales

	Primary work setting: Individual private practice		Primary work setting: Other public agency			
	M	SD	M	SD	df	t
Role Overload	21.23	6.30	27.00	9.65	44	-1.95
Role Insufficiency	15.73	3.74	25.33	9.95	44	-4.52*
Role Boundary	14.38	4.47	23.50	8.46	38	-3.98*
Responsibility	22.92	5.34	31.33	12.23	40	-2.89*

* p<.05

Table 22

T-test of Primary Work Setting, Individual Private Practice, and School for ORQ (Stress) Subscales

	Primary work setting: Individual private practice		Primary work setting: School			
	M	SD	M	SD	df	t
Role Boundary	14.38	4.47	20.27	4.69	43	-3.76*
Responsibility	22.92	5.34	23.45	5.20	45	-.294

* p<.05

Private Practice with Group Affiliation was significantly different in means on levels of stress from Community Mental Health Agency (Table 23). Participants who reported working at Other Public Agencies indicated more stress on a few subscales than those working in a Group Private Practice.

Table 23

T-test of Primary Work Setting, Community Private Practice Group, and Mental Health Agency ORQ (Stress) Subscales

	Primary work setting					
	Private practice group		Mental health agency			
	M	SD	M	SD	df	t
Role Overload	21.94	6.48	27.80	7.28	78	-3.73*
Role Insufficiency	14.68	3.91	21.24	5.67	78	-5.80*
Role Ambiguity	18.13	5.63	19.93	6.13	76	-1.33
Role Boundary	14.85	3.62	20.09	5.24	77	-4.95*
Responsibility	24.88	5.83	27.43	7.41	78	-1.66
Physical Environment	13.15	2.32	15.61	3.45	78	-3.59*

* $p<.05$

There were no significant mean differences in stress when comparing participants working in a College Counselor Preparation program versus Community Mental Health Agency. However, Ryan (1996) reported significant differences.

The PSQ (Strain) subscale results did not yield significant mean differences when comparing participants working in a College Counselor Preparation program with those in a Community Mental Health Agency or Other Public Agency. However, results presented in Table 24 show less strain for primary work settings in Individual Private Practice with those in either Other Public Agency or Community Mental Health Agency.

Participants who reported their primary work setting as Community Mental Health Agency scored significantly lower on the PRQ (Coping) subscales than did participants in Individual Private Practice (Table 25). Thus, counselors working in mental health agencies

reportedly used coping skills less and/or perceived less coping resources than those in private practice. Ryan (1996) reports similar results.

Number of Work Settings

The participants' responses for this variable were coded 1, 2, and 3. These codes represent the actual number of work settings reported. ANOVAs for the ORQ (stress), PSQ (strain), and PRQ (coping) were run and indicated a significant difference in the means among the number of work settings (Table 26). Ryan (1996) reported no differences in the means among the number of work settings.

Weekly Work Hours

Participants' weekly work hours were coded 1=3-16, 2=16.1-29, 3=29.1-42, 4=42.1-55, 5=55.1-68. The ORQ, PSQ, and PRQ scales were tested for differences between weekly work hours' levels with ANOVAs. Table D-10 presents the results of the PSQ (strain) scale that yielded no difference in means for stain and levels of weekly work hours. ANOVA results indicate a significant difference in means for the ORQ (stress) and PRQ (coping) (Table 27) scales with levels of weekly work hours.

Table 24

T-test of Primary Work Setting, Individual Private Practice, and Other Public Agency for PSQ (Strain) Subscales

Primary work setting

	Individual private practice		Other public agency			
Strain subscale	M	SD	M	SD	df	t
Vocational	14.20	4.23	19.83	6.82	44	-2.80*
Psychological	16.33	5.23	24.33	9.67	44	-3.10*
Physical	17.73	5.77	24.00	8.41	44	-2.33*

	Individual private practice		Community mental health agency			
Strain subscale	M	SD	M	SD	df	t
Vocational	14.20	4.23	16.89	3.65	84	-3.17*
Psychological	16.33	5.23	19.50	6.00	84	-2.60*

*p<05

Table 25

T-test of Primary Work Setting, Individual Private Practice, and Community Mental Health Agency for PRQ (Coping) Subscales

	Primary work setting					
	Individual private practice		Mental health agency			
Coping subscale	M	SD	M	SD	df	t
Recreation	32.88	6.03	28.28	7.98	84	2.97*
Self-care	35.70	6.83	31.65	5.60	84	3.02*
Social Support	45.33	4.44	43.59	5.97	84	1.51
Rational Cognitive	39.67	4.03	38.00	6.02	84	1.49
	Individual private practice		Other public agency			
Coping subscale	M	SD	M	SD	df	t
Recreation	32.88	6.03	24.00	7.40	44	3.27*
Self-care	35.70	6.83	30.83	8.04	44	1.59
Social Support	45.33	4.44	39.17	11.43	44	2.47*

*p<.05

Table 26

Analysis of Variance of Occupational Roles Questionnaire (Stress), Psychological Strain Questionnaire (PSQ), and Personal Resources Questionnaire (PRQ) for Number of Work Settings for Licensed Professional Counselors

Scale	Source	df	SS	MS	F
ORQ	Number of Work Settings	4	12781.63	3195.41	7.72
	Error	100	41394.22	413.94	
	Total	104	54175.84		
PSQ	Number of Work Settings	4	4076.95	1019.23	3.97
	Error	100	25666.89	256.67	
	Total	104	29743.84		
PRQ	Number of Work Settings	4	3394.24	848.56	2.56
	Error	100	33156.96	331.57	
	Total	104	36551.20		

Table 27

Analysis of Variance of Occupational Stress Questionnaire (ORQ) and Coping Resources Questionnaire (PRQ) for Levels of Weekly Work Hours of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
ORQ	Weekly Work Hours	4	18298.42	4574.61	8.59*
	Error	173	92061.98	532.15	
	Total	177	110360.40		
PRQ	Weekly Work Hours	4	2822.46	705.61	2.45*
	Error	173	49806.52	287.90	
	Total	177	52628.99		

*p<.05

A Tukey's "post hoc" test indicated significant differences between levels 2 and 4 and levels 2 and 5 (Table 28) for the ORQ (stress). Thus, t-tests were run and significant stress differences were found among the means of levels 2 and 4 as well as 2 and 5. Counselors who worked 42.1-55 hours per week scored significantly higher on Role Overload, Role Boundary, and Responsibility subscales than did counselors working 16.1-29 hours per week. Likewise, counselors who worked 55.1-68 hours per week scored significantly higher on the same three subscales than did counselors working 16.1-29 hours. Ryan (1996) reported the same results for the ORQ scale and these levels of weekly work hours.

Table 28

T-test of Weekly Work Hours Levels Two and Four for ORQ (Stress) Subscales

	Level 2 (16.1-29)		Level 4 (42.1-55)			
Stress subscale	M	SD	M	SD	df	t
Role Overload	20.36	7.21	25.65	6.22	72	-3.28*
Role Ambiguity	17.59	5.02	19.13	5.77	66	-1.07
Role Boundary	14.38	3.54	18.75	6.27	67	-2.98*
Responsibility	21.27	3.59	25.63	6.81	69	-2.82*

	Level 2 (16.1-29)		Level 5 (55.1-68)			
Stress subscale	M	SD	M	SD	df	t
Role Overload	20.36	7.21	28.41	5.94	40	-3.80*
Role Ambiguity	17.59	5.02	20.35	7.79	37	-1.34
Role Boundary	14.38	3.54	19.00	5.83	36	-3.01*
Responsibility	21.27	3.59	28.41	7.03	37	-4.13*

*p<.05

Years Licensed

The number of years that participants reported being licensed was coded 1=1-2, 2=2.1-5, 3=5.1-13, 4=13.1-21, 5=21.1-29, 6=29.1-31 years. ANOVA results yielded significant results for the PSQ (strain) scale (Table 29) and number of years licensed. The scales ORQ (stress) and PRQ (coping) did not yield significant results for number of years licensed. Ryan (1996) reported no differences for all three scales.

Table 29

Analysis of Variance of Psychological Strain Questionnaire (PSQ) for Years Licensed of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
PSQ	Years Licensed	5	5555.31	1111.06	3.61*
	Error	176	54164.56	307.75	
	Total	181	59719.87		

*p<.05

Years Experience

Participants responses for years of experience was coded 1=1-9, 2=9-17, 3=17-25, 4=25-33, 5=>33 years. As shown in Table D12, the ORQ (stress), PSQ (strain), and PRQ (coping) scales did not yield significant results. Ryan (1996) yielded the same results for years of experience.

Number of Days Per Week Clients Seen

Participants responded to number of days per week clients were seen. The responses to number of days per week were coded 1=1-2, 2=3, 3=4, 4=5-7. ANOVA results yielded significant mean differences for the PRQ (coping) (Table 30) while the ORQ (stress) and PSQ (strain) (Table D13) did not. The result of the "post hoc" Tukey did not yield significance between any of the four levels. Ryan (1996) reported significance for the ORQ and PRQ scales.

Average Daily Client Sessions

ANOVA results for the ORQ (stress), PSQ (strain), and PRQ (coping) are provided in Table D14 indicating no differences in means on the levels of average daily client sessions. Ryan (1996) reported significance in mean differences for only the ORQ (stress).

Maximum Daily Client Sessions

The maximum daily client sessions reported by the participants were coded as 1=<3, 2=4-6, 3=7-9, 4=10-12, 5=>13. As seen in Table 31, ANOVAs yielded significant mean differences on levels of maximum number of daily client sessions for the ORQ (stress), PSQ (strain), and the PRQ (coping) scales. Ryan (1996) reported significance only for the ORQ (stress) scale.

Table 30

Analysis of Variance of Personal Resources Questionnaire (PRQ) for Number of Days Clients Seen Per Week

Scale	Source	df	SS	MS	F
PRQ	Number of Days Seen	3	2477.71	825.90	2.80*
	Error	153	45159.17	295.16	
	Total	156	47636.89		

*p<.05

Table 31

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire for Levels of Maximum Daily Client Sessions of Licensed Professional Counselors

Scale	Source	SS	df	MS	F
ORQ	Maximum Daily Sessions	7152.60	4	1788.15	3.34*
	Error	80741.88	151	534.71	
	Total	87894.48	155		
PSQ	Maximum Daily Sessions	3042.29	4	760.57	3.00*
	Error	38182.54	151	252.86	
	Total	41224.84	155		
PRQ	Maximum Daily Sessions	6766.84	4	1691.71	6.37*
	Error	40106.30	151	265.61	
	Total	46873.14	155		

*p<.05

Referral Source of Clients

Participants estimated the percentage of the referral source of their clients. Clients were identified as self-referred, legally mandated, and referred by a significant other (spouse, parent, employer, etc.). Categorical percentages for these referral sources were coded as 1=0%, 2=.1-33.3%, 3=33.4%-66.6%, and 4=66.7-100%. As seen in Table 32, ANOVAs yielded significant mean differences on referral source of clients and the ORQ (stress), PSQ (strain), and PRQ (coping resources) scales. Participants who had 66.7%-100% (Level 4) of self-referred clients scored significantly lower on the stress subscales of Role Overload, Role Ambiguity, Role Boundary, and Responsibility subscales than did participants who did not work with any self-referred clients. Ryan (1996) reported significance only for the ORQ (stress) scale and subscales Level 1 and Level 4.

Table 32

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire for Percentages of Self-referred clients

Scale	Source	SS	df	MS	F
ORQ	Self-referred clients	13972.87	3	4657.62	7.99*
	Error	105274.85	179	582.54	
	Total	118247.72	182		
PSQ	Self-referred clients	2958.24	3	986.08	3.11*
	Error	56769.17	179	317.15	
	Total	59727.41	182		
PRQ	Self-referred clients	4962.21	3	1654.07	5.77*
	Error	51272.06	179	286.44	
	Total	56234.26	182		

*p<.05

Note. Jackson (2004) found significant stress differences on levels 1 and 3 and 1 and 4. Ryan (1996) found significant stress differences on levels 1 and 2 and 1 and 4.

ANOVA results of the levels of percentages for legally mandated referred clients and only the ORQ (stress) scale (Table 33) yielded significant mean differences. Although Ryan (1996) yielded significant results on the ORQ as well there were percentage differences of stress levels compared to this study.

Table 33

Analysis of Variance of Occupational Roles Questionnaire (ORQ) for Percentage of Legally Mandated Clients

Scale	Source	df	SS	MS	F
ORQ	Legally mandated clients	3	12337.65	4112.55	6.95*
	Error	179	105910.07	591.68	
	Total	182	118247.72		

*p<.05

Note. Jackson (2004) found significant stress differences on percentage levels 1 and 4 and 2 and 4. Ryan (1996) found significant stress differences on percentage levels 1 and 3 and 2 and 3.

Clients Referred by a Significant Other did not yield significant mean differences on the ANOVA test for any of the OSI scales (Table D16). Ryan (1996) reported the same.

Stress Related Treatment

Participants responded yes (code 1) or no (code 2) to stress related treatment. As shown in Table D 17, t-test results indicate no significant differences in response to stress related treatment for the ORQ (stress), PSQ (strain), and PRQ (coping) scales. Ryan (1996) reported significant differences for PSQ and PRQ scales. Participants reported the medication, individual therapy, stress management, cognitive behavioral and solution focused therapy as the type of professional psychological treatment for stress related problems Ryan (1996) did not request this information from participants

Summary

This chapter has provided a presentation of the data analysis results. The survey response rate was 63.52%. All T-scores on the OSI scales for females and males were in the normal range. The majority of the participants were white, married, females with two children with an averaged age of 49 years old. Private practice was identified as the primary work setting with an average of 19.79 hours per week spent counseling. Fifteen years was the average level of experience and ten years was the average years licensed. Variables that had no significant differences in level of stress, strain, or coping were marital and parental status, number of children, years experience, average daily client sessions, and stress related treatment. Variables that had significant

differences on the levels of stress, strain, and coping were gender, primary work setting, number of work settings, maximum daily client sessions, and referral source of clients. Demographic variables that contributed to differences in levels of stress only included ethnicity and weekly work hours. Demographic variables that contributed to differences in scores of strain only included age and years licensed. Demographic variables that contributed to differences in scores of coping were weekly work hours, number of days per week clients seen.

Table 34A

Summary of Significant Results: Occupational Stress, Psychological Strain, and Coping Resources for Licensed Professional Counselors in Virginia

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Current study Jackson (2004)
T-Scores of mean scale scores	14		ORQ, PSQ, and PRQ		Normal ranges
Correlation	15		ORQ & PSQ		Positively correlated
Correlation	15		PSQ & PRQ		Negatively correlated
Correlation	15		PRQ & ORQ		Negatively correlated
Correlation	15	Job Stress	ORQ		Positively correlated
Correlation	15	Job Stress	PSQ		Positively correlated
ANOVA	16	Age Level	PSQ		Significant differences
ANOVA	16 note	Age	PSQ		Jackson found Significant Strain differences Age Levels 2 & 4, 3 &4
ANOVA	19	Primary Work Setting	ORQ		Significant differences
ANOVA	19	Primary Work Setting	PSQ		Significant differences
ANOVA	19	Primary Work Setting	PRQ		Significant differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RO	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RI	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RB	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	R	Differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	RI	Differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	RB	Differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	R	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Current study Jackson (2004)
T-test	22	Individual Private Practice & School	ORQ	RB	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RO	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RI	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RB	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	PE	Differences
T-test	24	Individual Private Practice & Mental Health Agency	PSQ	VS	Differences
T-test	24	Individual Private Practice & Mental Health Agency	PSQ	PSY	Differences
T-test	24	Individual Private Practice & Other Public Agency	PSQ	VS	Differences
T-test	24	Individual Private Practice & Other Public Agency	PSQ	PSY	Differences
T-test	24	Individual Private Practice & Other Public Agency	PSQ	PHS	Differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	RE	Differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	SC	Differences
T-test	25	Individual Private Practice & Other Public Agency	PRQ	RE	Differences
T-test	25	Individual Private Practice & Other Public Agency	PRQ	SS	Differences
ANOVA	27	Levels of Weekly Work Hours	ORQ PRQ		Significant differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	RO	Differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	RB	Differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	R	Differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	RO	Differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	RB	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Current study Jackson (2004)
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	R	Differences
ANOVA	30	Level of Number of Days	PRQ		Significant differences
ANOVA	31	Maximum Daily Client Sessions	ORQ		Significant differences
ANOVA	31	Maximum Daily Client Sessions	PSQ		Significant differences
ANOVA	31	Maximum Daily Client Sessions	PRQ		Significant differences
ANOVA	31	Maximum Daily Client Sessions	ORQ		Jackson found Significant Stress differences Sessions Levels 1 & 3, 1 &4
ANOVA	32	Percentage of Self-referred clients	ORQ		Significant differences
ANOVA	32	Percentage of Self-referred clients	PSQ		Significant differences
ANOVA	32	Percentage of Self-referred clients	PRQ		Significant differences
ANOVA	32 note	Percentage of Self-referred clients	ORQ		Jackson found Significant Stress differences Sessions Levels 1 & 3, 1 &4
ANOVA	33	Percentage of Legally Mandated Clients	ORQ		Significant differences
ANOVA	33 note	Percentage of Legally Mandated Clients	ORQ		Jackson found Significant Stress differences Sessions Levels 1 & 4, 2 &4
ANOVA	Table 18	Ethnicity	ORQ,PRQ		Significant differences
ANOVA	Table 26	Number of Work Settings	ORQ,PSQ,PRQ		Significant differences
ANOVA	Table 29	Years Licensed	PSQ		Significant difference

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

In this chapter, the results of this study are summarized. A review of the methodology is discussed followed by research results. Implications for the counseling profession are explored as well as recommendations for future research.

Methodology

The purpose of this study was to provide current information on the levels of occupational stress, psychological strain, and coping resources for licensed professional counselors in Virginia. A replication of Ryan's (1996) study was performed and the results compared for significance. Participants were a random sample (n=360) of Licensed Professional Counselors (LPCs) in Virginia taken from total sample of 2732 The response rate was 63.52 (n=237) with 183 responses of complete data. Ryan (1996) had a response rate of 77.3 (n=320), and 258 usable responses.

Beginning March, 2004, participants received (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 for 10% of non-respondents. The Occupational Stress Inventory Revised (OSI-R), Individual Data Form, and postage paid envelopes were included in the mailings. These procedures were also used by Ryan (1996) in her study

The researcher used SPSS 12.0 for data analysis. Descriptive statistics were reported for the demographic variables. The three domains of the OSI-R are (a) Occupational Roles Questionnaire (ORQ) (Stress), (b) Personal Strain Questionnaire (PSQ) (Strain), and (c) Personal Resources Questionnaire (PRQ) (Coping) and were correlated for comparison of the OSI-R model from the manual. T-scores for the three domains were computed separately for males and females and compared to the norm guidelines in the manual.

T-tests were used for demographic variables with two levels and ANOVAs were computed for variables with three or more levels. When significance was found for the overall stress, strain, or coping scores, descriptive statistics were examined for further analysis of selected subscales.

Summary of Research Results

Information from the Individual Data Form (IDF) provided demographics about the sample and was analyzed for levels of stress, strain, and coping. The majority of the participants were white (93.4%), married (73.2%), female (65.6%), parents (69.9%) of two children (33.9%), adults averaging 49 years old. Ryan (1996) reported similar results.

The participants reported private practice, either individual (21.9%) or group affiliation (18.6%), as the primary work-setting and averaged 19.79 hours per week, 4 days a week counseling clients. Fifteen years was the average level of experience and ten years was the average years licensed. Ryan (1996) reported similar results.

Those participants who worked with clients totaled 86.3% compared to Ryan's' (1996) 91.7%. The average number of daily client sessions was 4.76 and the maximum number of daily client sessions was 6.52. The participants' reported most (49.2%) of the clients' source of referral were legally mandated compared to Ryan's' (1996) self –referred (60.59%). Most (66.7%) worked in only one setting averaging 38.86 hours per week.

The results for the first three research questions are T-scores of subscale scores separated by gender per the OSI-R manual guidelines. The levels of the subscale scores of the ORQ, PSQ, and PRQ were totaled and converted to T-scores. The mean scale scores and standard deviations

were computed as well. Male and female categories were in accordance with the guidelines in the OSI-R manual and T-scores were within normal ranges (Osipow, 1998).

The results for questions three, four, and five address correlation of the main scales and compare them to the OSI-R manual results. The correlation scale scores of the OSI-R in this study report ORQ (stress) and PSQ (strain) were positively correlated (.54). The PRQ (coping) was negatively correlated with both the ORQ (-.42) and the PSQ (-.56). Ryan (1996) reported similar findings; however, a higher positive correlation was reported for ORQ and PSQ (.62).

The results of the last three questions are discussed in terms of stress, strain, and coping factors related to the study's demographic variables, and the results are compared to Ryan's' (1996) results. Stress levels for females were significantly less than males for Ryan's' (1996) study. Although this study did not report significant differences on stress, strain, or coping levels, there were significant differences on the subscale Responsibility. Ryan (1996) reported significance on the same subscale. While Ryan (1996) did not report significance on stress with the ethnicity variable, this study did

When examining work related variables, primary work setting reported significant results for stress, strain, and coping. As noted in Ryan's (1996) study, "Mental Health Agency and Other Public Agency" had the highest stress scores with all stress subscales involved. Individual private practice and with group affiliation reported the lowest stress scales.

Licensed Professional Counselors (LPCs) stress was influenced by the number of hours LPCs worked weekly. LPCs had lower subscale scores on Role Overload, Role Boundary, and Responsibility when compared to the number of hours worked than did those working above 42.1 hours per week. Ryan (1996) reported similar results.

There were no reported differences on any OSI-R scales for Average Daily Client Sessions but significant on stress for levels of Maximum Daily Client Sessions. Self-referred and legally mandated clients were referral sources reported as significant on the stress scale

The strain factor for the results of age in this study and in Ryan's' (1996) resulted in significant differences. Marital status was not reported as significant with strain or coping while Ryan (1996) found significant differences on martial status and strain subscales. Strain was the only variable found significant with years licensed for LPCs.

When examining stress, strain, and coping differences for those receiving treatment or not for stress related problems, there was significance. Ryan (1996) reported significance for strain on selected subscales. Number of work settings reported significant on stress, strain, and coping. Primary work setting and number of days clients seen per week yielded significant results in this study and Ryan' (1996) study.

Discussion

This replication study yielded significant results for stress, strain, and coping over time for LPCs in Virginia using the Occupational Stress Inventory Revised instrument (OSI-R) and the Individual Data Form (IDF). Akin to this study, Ryan (1996) and Trivette (1993) reported strong correlations between the ORQ (stress) and PSQ (strain) scales and the job stress questions. These findings validate that the instruments used are revealing job related stress as an influencing factor. Furthermore, comparing the results of this study to Ryans'(1996) and finding significant differences over time supports the need to continue this type of research for LPCs. Comparing the results of this study with possible future studies in other states strengthens the need for research with LPCs In the following sections, a discussion of demographic variables significance individually specific to stress, strain, and coping are provided.

Stress

Unlike Ryan's (1996) study, ethnicity was the only non-work related variable found to contribute to perceived stress of LPCs This finding is paramount for further study The literature is lacking in understanding ethnicity and the influence of stress for LPCs Evans (1997) does emphasize how counselors who work with people with cumulative stressors in their lives (i.e., people of color), significantly impact the stress level of the counselor's occupation But when examining LPCs of color in Virginia, there is little or no literature discussion The number for LPCs of color in this research has been small; so, research approaches that can increase the number of people of color in a sample may strengthen the discussion for ethnicity and stress for LPCs.

Weekly work hours was the only work-related variable contributed to stress alone for LPCs The findings, consistent to Ryans' (1996) yield that working more hours contribute to higher stress, specifically on Role Overload, Role Boundary, and Responsibility.

Strain

Age and years licensed are the variables that contributed to significant differences on strain. Age has consistently yielded significant differences on strain in previous research (Ryan, 1996; Clemons, 1988; Trivette, 1993). The understanding that younger counselors in age and years licensed perceive more stress because of inexperience seems reasonable The more experience a clinician has is likely to yield less strain about the counseling process.

Coping

Weekly work hours and number of days per week clients were seen yielded significant differences for coping As reported by Ryan (1996), working long hours and most days of the week contribute to less counselor self-care and/or recreation Evans (1997) emphasize more research is needed for counselor self-care and wellness behaviors.

Implications and Recommendations for the Counseling Profession

The variables of gender, primary work setting, number of work settings, maximum daily client sessions, and referral source of clients yielded significant differences on stress, strain, and coping for Licensed Professional Counselors (LPCs). This would suggest that LPCs encounter stress, strain, and coping from a broad scope of client context Because of LPCs range of client care, an important implication to emphasize is the need for counselor self-care to reduce risk of physical and psychological effects of stress. As previously mentioned, because of the nature of counseling, therapists need to monitor their client workload, the level of client pathology, and personal self-care (Hackney & Cormier, 2001) Reported physiological and psychological treatment (medication, counseling, stress management, cognitive behavioral therapy, and physical therapy) for counselors, may indicate self help strategies and wellness behaviors exist However, more research is needed to understand if counselors are actively pursuing wellness via prevention or responding to treatment after poor stress management.

Ethnicity reported significant differences on stress; age yielded significance on strain; and number of days clients were seen yielded significance for coping Unlike this study, Ryan (1996) did not report significant differences for the variable ethnicity An overwhelming percentage of participants were White in this study as well as in Ryan's study; however, significant differences on stress were reported for ethnicity in this study An important implication here suggests more investigation is warranted for the variable ethnicity to understand the influence of stress. The counseling profession would benefit from the following recommendations:

1. Because the counseling profession is predominantly female, one might consider addressing stress primarily for this group. However, examining and instituting resources that would benefit all LPCs stress, strain, and coping would be a better approach. As indicated in this research, males experience more stress than females on certain subscales. So, open stress management groups or classes as part of a larger curriculum that address needs of a specific gender would hopefully decrease levels of stress, strain, and coping.
2. The primary work setting, mental health agency and other public agency, undoubtedly reported higher stress than other settings such as private practice. Counselor Education programs offering more content on the stresses operating in mental health agencies besides the Community Counseling internship would increase awareness and dialogue about this setting. Moreover, all students in Counselor Education programs would gain exposure and provide strategies for stress reduction in LPCs in agency settings.
3. The referral source of clients affects the stress, strain, and coping of LPCs. Because the majority of LPCs in this study worked in mental health agencies, this is likely the primary setting affecting the stress of LPCs when examining referral source of clients. Furthermore, the legally mandated referral source yielded significant results for stress. It appears this population yields itself to more challenges with client and LPC because of the legal forces operating in the relationship; caseload should be equally distributed among LPCs for this population. The counseling profession, specifically in agency work, would benefit from open training and stress management techniques specific to working with this population. Again, counselor education programs must educate students entering and remaining in the profession about special populations (legally mandated referrals) in certain settings (mental health agencies) that might affect the LPCs occupational stress.
4. Ethnicity yielded significant results of stress for LPCs in this study. The LPC community in Virginia has a small percentage of people of color (7%). Increasing the percentage of LPCs of color in Virginia would be a great initiative. Stress most likely manifests itself because of a small network of LPCs of color. The opportunity to network and provide dialogue about the stresses in this population is needed to attend to this concern Counselor education programs would benefit to educate all students about societal ills already operating in the lives of this population and how this impacts a dimension of stress on the job with clients.
5. Age is a variable that yielded significant results on strain. The sample in this study is primarily white females averaged 49 years old. Examining how age levels affect working with specific clients or work settings would yield insightful results for the counseling profession because younger or older counselors may have specific characteristics that warrant attention.
6. Coping and number of days LPCs see clients yielded significant results. Recognizing when self-care is needed is so important for LPCs. The giving of self to clients daily has to be monitored by LPCs or the ability to use coping strategies or recognize the need for them may get smaller and smaller.
7. Professional associations such as the American Counseling Association (ACA) can begin initiatives to address the potential that psychological and medical needs of LPCs in the organization that may be negatively affected by occupational stress For

example, administering LPCs the OSI-R (or another job stress instrument) for those attending the annual conference is a great way to gather and analyze data for the counseling profession.

Recommendations for Future Research

1. This research was more descriptive and very useful in a replication study. However, employing a statistical method that would examine interaction among dependent and independent variables might be beneficial.
2. The researcher collected specific data regarding the type and length of treatment for job or non-job related stress with respect to gender. Exploring and contributing to counseling literature on physical and mental treatment of LPCs in Virginia would provide useful data.
3. Investigating mental health professions (counselors, social workers, and psychologists) in Virginia to determine the composition of race and level of stress, strain, and coping, could be useful. There is such a small percentage of LPCs of color in Virginia that exploring other mental health professions with a larger percentage of diverse people could allow meaningful research to develop.
4. The emergence of managed care is paramount in the counseling profession. Implementing more research agendas that incorporate the voices of LPCs (qualitative study) on how managed care has affected their occupational environment and livelihood is drastically needed.
5. Data on demographic variables of clients (managed care, self-pay, ethnicity, gender, short/long term client) from LPCs would compliment future research on counselor/client relationships.
6. Using instruments that emphasize wellness versus pathology may yield meaningful results for understanding the LPC population

Summary

This chapter summarized the results of this study beginning with a discussion of the methodology. The research results are briefly summarized in the context of the research questions. Ryan's' (1996) research results were compared to this study and included in the discussion. Recommendations for the profession and future research considerations were provided.

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APPENDIX A

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Department of Educational Leadership & Policy Studies
College of Liberal Arts and Human Sciences
219 E. Eggleston Hall (0302), Blacksburg, VA 24061
Office phone: (540) 231-5642 Fax: (540) 231-7845
University Exemplary Department

March 22, 2004

Dear Licensed Professional Counselor:

I am writing to encourage your participation in a study being conducted by Angela DeCarla Jackson, a doctoral candidate at Virginia Tech.

Her study is designed to investigate the level of occupational stress, psychological strain, and coping resources among Licensed Professional Counselors in Virginia, compared to that found about 10 years ago in previous research conducted by Dr. Rhonda Ryan. Analysis will be done by group data only, and your individual responses will be kept strictly confidential.

Please assist Angela 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 valuable information for the continued development of counseling in Virginia.

Thank you, in advance, for your assistance.

Sincerely,

Thomas H. Hohenshil, Ph.D., LPC
Professor of Counselor Education

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Department of Educational Leadership & Policy Studies
College of Liberal Arts and Human Sciences
219 E. Eggleston Hall (0302), Blacksburg, VA 24061
Office phone: (540) 231-5642 Fax: (540) 231-7845

University Exemplary Department

March 29, 2004

Respond to:
1007 University City Blvd. F-13
Blacksburg, VA 24060

Dear Licensed Professional Counselor:

A few days ago you received a letter from Dr. 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 in Virginia and I am requesting your participation.

Along with this letter is a copy of the Revised Occupational Stress Inventory (OSI-R) Item booklet, Rating Sheet, an Individual Data Form. I would very much appreciate it if you complete the Rating Sheet and Individual Data Form. Please return all completed materials along with the OSI-R Item Booklet, in the enclosed pre-paid envelope by April 12, 2004.

This study has been approved by Virginia Tech's Internal Review Board, and your completion and return of the enclosed instruments will be considered to be your informed consent. Analysis of the data will be by group data only, and the individual responses will be kept strictly confidential and are numbered to keep materials together. If you wish to receive a copy of the results of the study, please note at the bottom of the information form.

Thank you, in advance, for your assistance.

Sincerely,

Angela DeCarla Jackson
Ph.D. Candidate
Virginia Tech

Enjoy the complimentary coffee!

April 12, 2004

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 please do so. 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 (540) 200-3670 and I will mail you the materials. Thank you so much!

Sincerely,

Angela DeCarla Jackson
Ph.D. Candidate
Virginia Tech

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Department of Educational Leadership & Policy Studies

College of Liberal Arts and Human Sciences
219 E. Eggleston Hall (0302), Blacksburg, VA 24061
Office phone: (540) 231-5642 Fax: (540) 231-7845

University Exemplary Department

April 19, 2004

Respond to:
1007 University City Blvd. F-13
Blacksburg, VA 24060

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.

Spring is here and hopefully you can enjoy this beautiful time of year. 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 questionnaire. Your individual responses will remain confidential and 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. You will not hear from me again after you return the materials.

If you have any questions, feel free to call me collect at (540) 200-3670. I look forward to hearing from you.

Sincerely,

Angela DeCarla Jackson
Ph.D. Candidate
Virginia Tech

Dear Licensed Professional Counselor,

I am again requesting your valuable input for success of my study on Occupational Stress in Licensed Professional Counselors. By now, you should have received a full packet of materials to complete and return. Only if you are retired, please complete just the data form and return along with any unused materials. If you have already completed and returned the materials, I sincerely thank you. If not, I urge you to do so by May 24, 2004.

If, for any reason, you need a new packet, please call me at (540) 200-3670 (collect, please) or email me at adj@vt.edu, and I will mail you the materials.

Thank you for your support.

Sincerely,

Angela DeCarla Jackson

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. Are you currently employed as a Licensed Professional Counselor?_____Yes _____No

If you answered YES, please go to question #6a.
If you answered NO, please go to question #6b.

6a.. What is your present work setting? (Check all that apply.)

_____Community Mental Health Agency _____Other Public Agency
_____Elementary, Middle, or High School _____College or University Counseling Ctr
_____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) _____

6b. Why did you leave the field of counseling?

_____Managed Care Administration _____Problems with supervisor/staff
_____Stress Related Problems ____Other (please describe) _____

7. Regarding your response to Question 6, please indicate how many hours per week you spend in each setting. Please indicate your primary setting. If you work in another setting, which one do you work in most?

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** 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 1to 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
If yes, use DSM IV categories where applicable.

Medical (Diagnosis) _____
Treatment method:

Time Frame: _____Recent _____Past _____Ongoing

Psychological (Diagnosis) _____
Treatment method:

Time Frame: _____Recent _____Past _____Ongoing

THANK YOU VER MUCH!!!

If you would like to make any comments or suggestions, please do so below

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 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 Ctr
_____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. 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 1-10, rank the level of your total job related stress as a counselor (1 is the lowest amount and 10 is the highest amount). _____

10. One a scale of 1-10, rank the level of your total **non-job related stress** (1 is the the lowest amount and 10 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

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.

APPENDIX D

Table D1

Means and Standard Deviations of T-Scores for Male Licensed Professional Counselors

OSI-R Subscales	Mean T-scores	SD
ORQ (Stress)		
Role Overload	51.44	10.51
Role Insufficiency	42.27	7.12
Role Ambiguity	46.15	8.79
Role Boundary	43.52	9.19
Responsibility	49.83	9.66
Physical Environment	40.86	3.53
PSQ (Strain)		
Vocational Strain	46.37	6.17
Psychological Strain	44.86	6.77
Interpersonal Strain	46.11	6.02
Physical Strain	45.90	6.81
PRQ (Coping)		
Recreation	54.37	9.72
Self-care	60.60	8.28
Social Support	55.60	7.60
Rational/Cognitive	56.86	7.28

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

Table D2

Means and Standard Deviations of T-Scores for Female Licensed Professional Counselors

OSI-R Subscales	Mean T-scores	SD
ORQ (Stress)		
Role Overload	49.04	10.31
Role Insufficiency	42.27	7.22
Role Ambiguity	49.14	9.29
Role Boundary	43.01	9.42
Responsibility	50.87	9.21
Physical Environment	47.76	6.13
PSQ (Strain)		
Vocational Strain	45.76	9.69
Psychological Strain	47.61	8.70
Interpersonal Strain	48.21	8.47
Physical Strain	46.54	7.83
PRQ (Coping)		
Recreation	56.27	10.77
Self-care	59.68	10.27
Social Support	53.11	8.47
Rational/Cognitive	53.82	8.28

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

Table D3

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

	Source	SS	df	MS	F
	Age	5212.913	4	1303.228	2.08
	Error	109650.61	175	626.575	
	Total	114863.53	179		
tot_orq	Between Groups	5212.913	4	1303.228	2.080
	Within Groups	109650.614	175	626.575	
	Total	114863.528	179		

Table D4

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

Source	SS	df	MS	F
Age	2137.165	4	534.291	1.77
Error	52823.146	175	301.847	
Total	54960.311	179		

Table D5

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire and Marital Status

Scale	Source	SS	df	MS	F
ORQ	Marital Status	5748.38	5	1149.67	1.80
	Error	112499.33	177	635.58	
	Total	118247.71	182		
PSQ	Marital Status	2334.20	5	466.84	1.44
	Error	57393.20	177	324.25	
	Total	59727.41	182		
PRQ	Marital Status	955.20	5	191.04	.61
	Error	55279.06	177	312.31	
	Total	56234.26	182		

P<.05

Note. There is no significance for any of the OSI scales.

Table D6

T-test for Parental Status and Occupational Roles Questionnaire (ORQ), Personal Strain Questionnaire (PSQ), and Personal Resources Questionnaire (PRQ)

	Parent		Not Parent			
Scale	M	SD	M	SD	df	t
ORQ	118.42	25.04	121.96	26.56	181	-.861
PSQ	72.27	17.48	73.81	19.62	181	-.528
PRQ	145.17	17.69	146.56	17.43	181	-.490

Table D7

Analysis of Variance of Occupational Roles Questionnaire (Stress), Psychological Strain Questionnaire (Strain), and Personal Resources Questionnaire (Coping) for Participants' Number of Children

Scale	Source	df	SS	MS	F
ORQ	Number of children	6	1249.84	208.30	.313
	Error	176	116997.87	664.76	
	Total	182	118247.71		
PSQ	Number of children	6	1244.07	207.34	.624
	Error	176	58483.33	332.29	
	Total	182	59727.41		
PRQ	Number of children	6	434.21	72.36	.228
	Error	176	55800.04	317.04	
	Total	182	56234.26		

Table D8

Analysis of Variance of Psychological Strain Questionnaire (Strain) and Ethnicity of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
PSQ	Ethnicity	4	1709.69	427.42	1.31
	Error	178	58017.71	325.94	
	Total	182	59727.41		

Table D9

T-test of Primary Work Setting Individual Private Practice and College or University Counseling Center for ORQ (Stress) Subscales

	Primary work setting					
	Individual private practice		College counseling center			
	M	SD	M	SD	df	t
Role Overload	21.23	6.30	18.333	4.73	41	.775
Role Insufficiency	15.73	3.74	18.00	7.00	41	-.960
Role Ambiguity	19.41	5.78	20.00	12.17	35	-.155
Role Boundary	14.38	4.47	14.33	2.08	35	.019
Responsibility	22.92	5.34	22.33	6.43	37	.180

* p<.05

Table D10

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

Scale	Source	df	SS	MS	F
PSQ	Weekly Work Hours	4	2547.43	636.86	2.10
	Error	173	52300.94	302.31	
	Total	177	54848.38		

Table D11

Analysis of Variance of Psychological Strain Questionnaire (PSQ) for Years Licensed of Licensed Professional Counselors

Scale	Source	df	SS	MS	F
ORQ	Years Licensed	5	5894.94	1178.99	1.85
	Error	176	111929.65	635.96	
	Total	181	117824.59		
PRQ	Years Licensed	5	2216.75	443.35	1.45
	Error	176	53631.62	304.72	
	Total	181	55848.38		

*p<.05

Table D12

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire for Years Experience of Licensed Professional Counselors

Scale	Source	SS	df	MS	F
ORQ	Years Experience	4195.45	4	1048.86	1.637
	Error	114052.26	178	640.74	
	Total	118247.72	182		
PSQ	Years Experience	1475.23	4	368.81	1.13
	Error	58252.18	178	327.26	
	Total	59727.41	182		
PRQ	Years Experience	182.74	4	45.69	.145
	Error	56051.52	178	314.90	
	Total	56234.26	182		

P<.05

Note. There is no significance for any of the OSI scales.

Table D 13

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire for Levels of Average Daily Client Sessions of Licensed Professional Counselors

Scale	Source	SS	df	MS	F
ORQ	Average Daily Sessions	3963.92	5	792.78	1.43
	Error	81354.79	147	553.43	
	Total	85318.72	152		
PSQ	Average Daily Sessions	1108.12	5	221.62	.817
	Error	39882.09	147	271.31	
	Total	40990.21	152		
PRQ	Average Daily Sessions	2407.69	5	481.54	1.61
	Error	43861.84	147	298.38	
	Total	46269.53	152		

Note. There is no significance for any of the OSI scales.

Table D14

Analysis of Variance of Psychological Strain Questionnaire (PSQ) and Personal Resources Questionnaire (PRQ) for Percentage of Legally Mandated Clients

Scale	Source	df	SS	MS	F
PSQ	Legally mandated clients	3	2388.02	796.00	2.49
	Error	179	57339.39	320.33	
	Total	182	59727.41		
PRQ	Legally mandated clients	3	786.66	262.22	.847
	Error	179	55447.61	309.76	
	Total	182	56234.26		

Note. Scales did not yield significant results.

Table D 15

Analysis of Variance of Occupational Resource Questionnaire, Psychological Strain Questionnaire, and Coping Resource Questionnaire for Clients' Referred by Significant Others

Scale	Source	SS	df	MS	F
ORQ	Referral significant other	4571.79	3	1523.93	2.40
	Error	113675.92	179	635.06	
	Total	118247.72	182		
PSQ	Referral significant other	1774.87	3	591.62	1.83
	Error	57952.54	179	323.76	
	Total	59727.41	182		
PRQ	Referral significant other	1983.12	3	661.04	2.18
	Error	54251.14	179	303.08	
	Total	56234.26	182		

Note. There is no significance for any of the OSI scales.

Table D 16

T-test for Stress Related Treatment and Occupational Roles Questionnaire (ORQ), Personal Strain Questionnaire (PSQ), and Personal Resources Questionnaire (PRQ)

	Treatment					
	Yes		No			
Scale	M	SD	M	SD	df	t
ORQ	117.85	22.60	120.14	26.60	181	-.547
PSQ	76.04	18.17	71.43	17.99	181	1.55
PRQ	146.52	17.36	145.22	17.71	181	.449

Note. All scales reported no significant differences in the OSI scales and among those who had related treatment and those who did not.

Table D 34

Results Summary of a Replication Study: Occupational Stress, Psychological Strain, and Coping Resources for Licensed Professional Counselors in Virginia

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
T-Scores of mean scale scores	14		ORQ, PSQ, and PRQ		Normal ranges	Normal ranges
Correlation	15		ORQ & PSQ		Positively correlated	Positively correlated
Correlation	15		PSQ & PRQ		Negatively correlated	Negatively correlated
Correlation	15		PRQ & ORQ		Negatively correlated	Negatively correlated
Correlation	15	Job Stress	ORQ		Positively correlated	Positively correlated
Correlation	15	Job Stress	PSQ		Positively correlated	Positively correlated
ANOVA	16	Age Level	PSQ		Significant differences	Significant differences
ANOVA	Appendix D 3&4		ORQ & PRQ		No differences	No differences
ANOVA	16 note	Age	PSQ		Ryan found Significant Strain differences Age Levels 1 &5, 1 &4, 1 & 3	Jackson found Significant Strain differences Age Levels 2 & 4, 3 &4
T-test	17	Gender	ORQ		Differences	No differences
T-test	17	Gender	PSQ		No differences	No differences
T-test	17	Gender	PRQ		No differences	No differences
ANOVA	Appendix D	Marital Status	ORQ		No differences	No differences
ANOVA	Appendix D5	Marital Status	PSQ		Significant differences	No differences
ANOVA	Appendix D5	Marital Status	PRQ		No differences	No differences
ANOVA	19	Primary Work Setting	ORQ		Significant differences	Significant differences
ANOVA	19	Primary Work Setting	PSQ		Significant differences	Significant differences
ANOVA	19	Primary Work Setting	PRQ		Significant differences	Significant differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RO	Differences	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RI	Differences	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RA	Differences	No Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	RB	Differences	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	R	Differences	Differences
T-test	20	Mental Health Agency & Individual Private Practice	ORQ	PE	No differences	No differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	RO	Differences	No differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	RI	Differences	Differences
T-test	21	Individual Private Practice & Other Public Agency	ORQ	RB	Differences	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
T-test	21	Individual Private Practice & Other Public Agency	ORQ	R	Differences	Differences
T-test	D9	Individual Private Practice & College Counseling Center	ORQ	RO	Differences	No differences
T-test	D9	Individual Private Practice & College Counseling Center	ORQ	RI	Differences	No differences
T-test	D9	Individual Private Practice & College Counseling Center	ORQ	RA	Differences	No differences
T-test	D9	Individual Private Practice & College Counseling Center	ORQ	RB	Differences	No differences
T-test	D9	Individual Private Practice & College Counseling Center	ORQ	R	Differences	No differences
T-test	22	Individual Private Practice & School	ORQ	RB	Differences	Differences
T-test	22	Individual Private Practice & School	ORQ	R	Differences	No differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RO	Differences	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RI	Differences	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RA	Differences	No differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	RB	Differences	Differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	R	Differences	No differences
T-test	23	Private Practice Group & Mental Health Agency	ORQ	PE	No differences	Differences
T-test	24	Individual Private Practice & Mental Health Agency	PSQ	VS	Differences	Differences
T-test	24	Individual Private Practice & Mental Health Agency	PSQ	PSY	Differences	Differences
T-test	24	Individual Private Practice & Other Public Agency	PSQ	VS	Differences	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
T-test	24	Individual Private Practice & Other Public Agency	PSQ	PSY	No differences	Differences
T-test	24	Individual Private Practice & Other Public Agency	PSQ	PHS	Differences	Differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	RE	Differences	Differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	SC	Differences	Differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	SS	No differences	No differences
T-test	25	Individual Private Practice & Mental Health Agency	PRQ	RC	Differences	No differences
T-test	25	Individual Private Practice & Other Public Agency	PRQ	RE	Differences	Differences
T-test	25	Individual Private Practice & Other Public Agency	PRQ	SC	No differences	No differences
T-test	25	Individual Private Practice & Other Public Agency	PRQ	SS	Differences	Differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
ANOVA	27	Levels of Weekly Work Hours	ORQ PRQ		Significant differences	Significant differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	RO	Differences	Differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	RA	No differences	No differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	RB	Differences	Differences
T-test	28	Levels 2 & 4 of Weekly Work Hours	ORQ	R	Differences	Differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	RO	Differences	Differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	RA	No differences	No differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	RB	Differences	Differences
T-test	28	Levels 2 & 5 of Weekly Work Hours	ORQ	R	Differences	Differences
ANOVA	30	Level of Number of Days	ORQ		Significant differences	No differences
ANOVA	30	Level of Number of Days	PSQ		No differences	No differences
ANOVA	30	Level of Number of Days	PRQ		Significant differences	Significant differences
ANOVA	Appendix D T13	Average Daily Client Sessions	ORQ		Significant differences	No differences
ANOVA	Appendix D T13	Average Daily Client Sessions	PSQ		No differences	No differences
ANOVA	Appendix D T13	Average Daily Client Sessions	PRQ		No differences	No differences
ANOVA	31	Maximum Daily Client Sessions	ORQ		Significant differences	Significant differences
ANOVA	31	Maximum Daily Client Sessions	PSQ		No differences	Significant differences

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
ANOVA	31	Maximum Daily Client Sessions	PRQ		No differences	Significant differences
ANOVA	31	Maximum Daily Client Sessions	ORQ		Ryan found Significant Stress differences Sessions Levels 1 & 3, 2 & 3	Jackson found Significant Stress differences Sessions Levels 1 & 3, 1 &4
ANOVA	32	Percentage of Self-referred clients	ORQ		Significant differences	Significant differences
ANOVA	32	Percentage of Self-referred clients	PSQ		No differences	Significant differences
ANOVA	32	Percentage of Self-referred clients	PRQ		No differences	Significant differences
ANOVA	32 note	Percentage of Self-referred clients	ORQ		Ryan found Significant Stress differences Sessions Levels 1 & 2, 1 & 4	Jackson found Significant Stress differences Sessions Levels 1 & 3, 1 &4
ANOVA	33	Percentage of Legally Mandated Clients	ORQ		Significant differences	Significant differences
ANOVA	Appendix D14	Percentage of Legally Mandated Clients	PSQ		No differences	No differences
ANOVA	Appendix D14	Percentage of Legally Mandated Clients	PRQ		No differences	No differences
ANOVA	33 note	Percentage of Legally Mandated Clients	ORQ		Ryan found Significant Stress differences Sessions Levels 1 & 3, 2 & 3	Jackson found Significant Stress differences Sessions Levels 1 & 4, 2 &4

Statistical test	Table	Demographic variable(s)	OSI-R variable(s)	Sub-scale	Prior results Ryan (1996)	Current study Jackson (2004)
ANOVA	Appendix D T15	Clients referred by Significant Other	ORQ PSQ PRQ		No differences	No differences
T-test	Appendix D T16	Stress Related Treatment	ORQ		No differences	No differences
T-test	Appendix D T16	Stress Related Treatment	PSQ		Differences	No differences
T-test	Appendix D T16	Stress Related Treatment	PRQ		Differences	No differences
	T-scores Appendix D Table 1	Males	ORQ, PSQ, PRQ		Same format	Same format
T-test	Appendix D Table 6	Parental Status	ORQ, PSQ, ORQ		No differences	No differences
ANOVA	Appendix D Table 7	Number of Children	ORQ,PSQ,PRQ		No differences	No differences
ANOVA	Table 18	Ethnicity	ORQ,PRQ		No differences	Significant differences
ANOVA	Appendix D Table 8	Ethnicity	PSQ		No difference	No difference
ANOVA	Table 26	Number of Work Settings	ORQ,PSQ,PRQ		No difference	Significant differences
ANOVA	Appendix D Table 10	Weekly Work Hours	PSQ		No difference	No difference
ANOVA	Table 29	Years Licensed	PSQ		No difference	Significant difference
ANOVA	Appendix D Table 11	Years Licensed	ORQ,PRQ		No difference	No difference
ANOVA	Appendix D Table 12	Years Experience	ORQ,PSQ,PRQ		No difference	No difference

VITA

ANGELA DECARLA JACKSON

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EDUCATION

Ph.D., Counselor Education, December 2004
Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Master of Education, Community Counseling, December 1999
Kent State University, Kent, Ohio

Bachelor of Science, Industrial Management, January 1988
The University of Akron, Akron, Ohio

PROFESSIONAL EXPERIENCE

Virginia Polytechnic Institute and State University, *Blacksburg, Virginia*
Assistant Director for Learning Assistance Programs, The Center for Academic Enrichment and Excellence (CAEE), January 2005 – present

Assist with the development and implementation of programs designed to facilitate the academic success of 21,000 undergraduates; develop and present academic skills workshops; teach EDCI 1004, College Success Strategies, a 3-credit course; supervise and mentor undergraduate and graduate assistants; maintain and report data on courses and programs; revise and update programs and courses as needed and develop new curriculum; involvement with the VT Summer Orientation Program; represent CAEE on various university committees.

Virginia Polytechnic Institute and State University, *Blacksburg, Virginia*
Graduate Research Assistant, Multicultural Academic Opportunities Program (MAOP), August 2004 – December 2004

Assist with the development and implementation of programs designed to facilitate the academic success of undergraduate and graduate students in the Multicultural Academic Opportunities Program; MAOP programs are the Undergraduates Scholars Program, Mid-Eastern Alliance for Minority Participation, Graduate Scholars Program, Summer Research Internship, and Program Peer Mentoring Program; specific responsibilities are to coordinate the Peer Mentoring Program, plan initiatives that

support the academic, social, and cultural development of students; plan, organize, and facilitate meetings that promote students' academic goals; provide academic counseling; refer students to academic support services as needed; assist with the planning and implementation of Summer Research Internship Program.

Virginia Polytechnic Institute and State University, *Blacksburg, Virginia*
Graduate Assistant, Counselor Education Program Area, August 2001 – May 2004

Conducted literature reviews for research articles, publications, and research projects for faculty; co-taught various counseling graduate courses (e.g., Orientation to Professional Counseling, Legal & Ethical Issues in Counseling via interactive TV); supervised master students' of practicum courses; convened international student groups to discuss perception of American culture; and conducted research for submission of manuscripts to *Multicultural Perspectives*.

Kent State University, *Kent, Ohio*
Graduate Assistant, Research and Graduate Studies, September 1997 - December 1999

Researched citations on the Internet of about 75 Business Administration professors' work and performed a correlation test (*t*-test) on the data. Analyzed and coded 500 survey sheets for Orientation for New Teaching Assistants Program (ONTAP). Developed programs for Black Graduate Students Association (BGSA), such as NPR talk show host, Tavis Smiley. Initiated and participated in the administration of fund-raisers (i.e., raised $3000 for speaker fees via letters, phone calls, interviews, and use of decision-making skills).

Kent State University, *Kent, Ohio*
Program Coordinator, The Division of Research and Graduate Studies, January 2000 - June 2002

Kent State representative for the STARS (Student Achievement in Research & Scholarship) program; this is an Ohio statewide mentoring program for undergraduate students of color. Submitted annual reports and managed operating budget of $20,000 for ten students. Initiated projects that promoted future academic careers for the students, such as, research and study skills workshops, and graduate school campus visitations. Additional responsibilities included graduate recruitment and coordinating Kent State's Graduate School Information Fair.

Banc One, National Association, *Richfield, Ohio*
Assistant Manager/Financial Sales Rep/Licensed Annuity Representative, April 1992-August 1997

Managed staff of six people and the daily bank operations that included achieving sales goals. Sold over $100,000 in annuities in less than a year of receiving my license. Applied daily skills of coaching, debriefing, leadership, teamwork, marketing, sales goals techniques, telemarketing calls, and organizational techniques to staff.

Banc One, National Association, *Richfield, Ohio and Akron, Ohio*
Financial and Customer Service Representative/Collections Clerk
Cleveland, Ohio, October 1987- March 1992
Worked with financial clients to determine current and future banking needs. Assisted with the development of sales strategies to reach my individual, as well as, branch sales goals. Retrieved monies for overdrawn check items and produced monthly reports.

INTERNSHIP EXPERIENCES

Virginia Polytechnic Institute and State University, *Blacksburg, Virginia*
Teaching Internship, Counselor Education Program Area, January – May 2003

Counseling Diverse Populations Course – Effectively impacted cultural awareness, clinical skills, and ethical responsibility of Master students working with diverse populations. Created a learning environment that is engaging, creative, challenging, and productive.

Clinical Internship, Counselor Education Program Area, September – December 2002

Mental Health Association of the New River Valley- Provided individual counseling with clients at pro-bono clinic. Treatment modalities included goals for self-esteem growth, co-dependency work, and relationship issues.

Teaching Internship, Counselor Education Program Area, January - May 2002

Internet Based Career Development Course – Navigation of major sources of career and educational information available through the Internet. Managed and graded assignments for 22 graduate students. Accessed major print, electronic, and community resources related to career development to effective course discussion with students.

RESEARCH INTERESTS

- Occupational Stress and Psychological Strain of Licensed Professional Counselors
- Increasing cultural awareness and empowerment of underrepresented groups
- Race and Social Policy implications in public mental health laws for African-Americans
- Career Assessment Models for College-bound African-Americans in public high schools
- Relevancy of Racial Identity Models for African-American women

PUBLICATIONS

Bodenhorn, N., Jackson, A. D., & Farrell, R. (in press). Increasing personal cultural awareness through discussions with international students. *International Journal of Teaching and Learning in Higher Education.*

Jackson, A. D., (2002). Idea List.Org: Action without borders. *Career Planning & Adult Development Journal*, *18*, 77-80. (Website reviewer).

Bodenhorn, N., Farrell, R., & Jackson, A. D. (submitted for publication). Autobiography Book Clubs as a classroom method to increase cultural awareness. *Multicultural Perspectives.*

PROFESSIONAL PRESENTATIONS

"Beyond the Diagnosis: A Developmental Perspective on the DSM." Virginia Counseling Association, Williamsburg, Virginia, November, 2003. (with Gerard Lawson, Ph.D., Virginia Tech & Anna Epperson, Doctoral Candiate, Virginia Tech)

"Mapping Out Success for Teaching Multicultural Counseling Competence: Book Clubs and International Discussion Groups." Virginia Counseling Association, Williamsburg, Virginia, November, 2003. (with Nancy Bodenhorn, Ph.D., Virginia Tech)

"The Divorced African American Female Identity: Using Spirituality as a Form of Advocacy." American Counseling Association National Convention, San Diego, California. April, 1999.

"Culturally Competent Counseling for the Empowerment of African American Women." American Counseling Association National Convention, Indianapolis, Indiana, March 1998.

PROFESSIONAL LEADERSHIP/SERVICE

- Student Representative, ACA Human Rights Committee. ACA National Conference. Kansas City, Missouri. March 31-April 4, 2004.
- Seminar participant. Graduate Teaching Assistant Seminar: Preparation for Teaching. Virginia Tech. Blacksburg, Virginia. Spring, 2003.
- Workshop Participant. Publishing in Counseling Journals. *Writing Successful Grants.* Virginia Tech. Blacksburg, Virginia. Spring 2003.
- Faculty Search Committee Member. Counselor Educator, Virginia Tech. Blacksburg, Virginia. Summer 2002.
- Certificate of Completion. Virginia Tech. *Training in Human Subjects Protection.* Blacksburg, Virginia. October, 2001.

- Advocacy Workshop, Loss and Counselor Self-Care, and Faith Development Theory: A Growth-Oriented Approach to Religion and Spirituality. Conference Participant. Virginia Counselors Association, Richmond, Virginia, November, 2001.
- Workshop Participant. Introduction to Sex Counseling: Theory and Practice. Kent State University. Kent, Ohio. June, 1998.
- Interpreter**.** Historic Smithfield Plantation House, Virginia Tech. Supporting the historical slave experience via volunteering time as an interpreter/curator.
- New River Valley Counselor Association Multicultural Chair (Virginia). Fall 2002. Promote awareness and adherence to counselor ethical responsibility to promote the dignity and welfare of the clients we serve (ACA Code of Ethics).
- Fundraising Chair for Carole Joy Creation holiday cards and gift project (Blacksburg Alumnae Chapter). Fall 2003. Support black owned business; chapter sold over $1200 in two weeks.

PROFESSIONAL AFFILIATIONS

- American Counseling Association
- Counselors for Social Justice
- New River Valley Counseling Association
- Virginia Counselor Association
- Chi Sigma Iota, Tau Eta Kappa
- Delta Sigma Theta Sorority, Inc.

HONORS AND AWARD

- Southern Regional Educational Board Doctoral Scholar
- Chi Sigma Iota Counseling Honorary Society
- Alpha Kappa Mu Scholastic Honor Society , Mu Mu Chapter
- Who's Who Among College Students, Kent State University, 1999.
- Cultural Diversity Graduate Student Award, Kent State University, April, 1998.

REFERENCES

Nancy Bodenhorn, Ph.D.
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