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An Assessment of the Levels of Stress Among Beginning Counselor Education Graduate Students, Students Beginning the Counseling Practicum and Students Graduating from their Program of Studies

Richard Christian Hoffman

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An Assessment Of The Levels Of Stress Among Beginning Counselor Education
Graduate Students, Students Beginning The Counseling Practicum And Students
Graduating From Their Program Of Studies

by

Richard Hoffman

Submitted in partial fulfillment of

the requirements for the degree

Doctor of Philosophy

Executive Counselor Education and Supervision Program

School of Education

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June, 2006

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AN ASSESSMENT OF THE LEVELS OF STRESS AMONG BEGINNING
COUNSELOR EDUCATION GRADUATE STUDENTS, STUDENTS BEGINNING
THE COUNSELING PRACTICUM AND STUDENTS GRADUATING FROM THEIR
PROGRAM OF STUDIES

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Abstract

The following study examines stress among graduate level counselor education students at different stages during their training program. The students were assigned to three groups according to training level: (1) beginning, (2) practicum, and (3) graduating. The Stress Profile (Nowack, 1999) was administered to the students (N= 58). Three constructs were chosen from the survey: (1) stress, (2) cognitive hardiness, and (3) psychological well-being. The constructs were developed using the theoretical framework of Lazarus's (1999) theory of appraisal and stress. These variables were compared among the students to determine if a difference in stress levels exists at different times during their training. The beginning students demonstrated a significantly higher amount of psychological well-being when compared to the graduating students. Although the survey did not demonstrate significance on the measure of stress and cognitive hardiness, the data displays a directional trend of increasing stress as the students progress through their training program. Implications for counselor education training and mental health professionals, as well as limitations and a need for future research are discussed.

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TABLE OF CONTENTS

	Page
Chapter I: The Problem	1
Statement of the Problem.....	5
Rationale.....	7
Research Question	8
Significance	9
Hypothesis	10
Definitions.....	11
Summary	13
Chapter II: Literature Review.....	14
Sources of Stress	14
Stress, Appraisal and Coping.....	22
Stress and Appraisal.....	26
Cognitive Hardiness.....	28
Psychological Well-Being.....	29
Profession Specific Studies Related to Stress.....	32
Conclusions.....	36
Chapter III: Method	37
Research Questions.....	37
Research Design	37
The Instrument.....	39
Research Population	44
Process for Data Collection.....	44
Analysis Plan	45
Summary	45
Chapter IV: Results	46
Hypothesis I.....	46
Hypothesis II.....	47
Hypothesis III	48
Summary	50
Chapter V: Discussion.....	51
Results for Psychological Well Being.....	51
Results for Stress	54
Results for Cognitive Hardiness	54
Limitations	56
Conclusions.....	57

Recommendations for Future Research.....	58
References	61
Appendices.	69
Appendix A: Beginning Students' Scores.....	70
Appendix B: Practicum Students' Scores.	72
Appendix C: Graduating Students' Scores.	74
Appendix D: Descriptive Statistics of Stress Data	76
Appendix E: Statistical Analysis of Stress Data.....	79
Appendix F: Post Hoc Analysis of Significance	81

LIST OF TABLES

Table 1: Analysis of the Data for Stress.....	47
Table 2: Analysis of the Data for Cognitive Hardiness	48
Table 3: Analysis of the Data for Psychological Well-Being	49
Table 4: Multiple Comparisons of the Beginning, Practicum, and Graduating Students on Psychological Well-Being	49

CHAPTER I

THE PROBLEM

Stress comes from four basic sources: the environment, social stressors, physiological conditions or changes, and thoughts (Davis, Eshelman, & McKay, 2002). It is reasonable to suggest that virtually every person succumbs to stress, because of the wide ranging domain of these basic sources. Because of the potential effects of stress, any group of persons can become concerned with how to manage stress effectively. However, counseling students may have a greater stake in the management of stress. The old proverb, "physician heal thyself", hints at an interesting problem in our profession. The public may sense hypocrisy when sold a solution to a problem, which the counselor cannot apply to his or her own life. One of the first lessons learned by a counselor is that they are just as human as the people they are serving. Because of this reality, counselors face some of the same everyday challenges that their clients face. Do counselors use the skills that they are taught during their training when they encounter challenges in their own lives? Are counselors able to more effectively manage stressful aspects of their lives, through their training that they will use for their clients well-being? Building effective relationships with clients requires trust. What better trust builder could exist, than to demonstrate the solution to a client's problem through self-example. When the public can observe that a professional has used his or her own product successfully, it shows confidence that the same is attainable for their clients. My interest in studying stress is to

learn if exposure to psychological theory and technique results in improved self-management. Does a counselor's training enable him or her to manage life events more effectively? The following is a brief discussion on how examining stress can be a starting point for discovering if there are differences in the way a counselor copes with life events.

Stress can have a wide ranging impact on any individual in a diversity of situations. Walter B. Cannon first described the "flight or fight response" which he theorized was an evolutionary survival mechanism, present in every living organism, including human beings. The result of the "fight or flight" response is a series of physiological changes that help an individual defend against any perceived or real threat (Davis et al, 2002). This response serves the individual well during an actual threat, for example, avoiding an oncoming car in traffic. However, the defense mechanism is also activated in perceived threats, for example, thinking about an upcoming exam that is a week into the future, or imagining bills that are due at the end of the month. In today's culture, there are many stimuli such as these in the environment that can trigger a stress response. Therefore, stress can affect the life of any individual at almost any given time.

Chronic or persistent stress can occur when stressors are more frequent and constant. The syndrome of chronic stress can have a significant impact on the health of any individual (Davis et. al, 2002). Hans Selye studied the physical components of the stress response to discover that any imagined or real problem stimulated vital organs of the body. After periods of consistent stress, this

stimulation can overwork vital organs and throw the body's system out of balance. Consequently, the long-term negative effects of stress can result in disease. Researchers suspect that over stimulation caused by stress can influence the skeletal-muscular, cardiovascular, or gastrointestinal systems (Davis et al., 2002). It is suspected that the symptoms of stress are apparent on these systems in the case of muscle tension, fatigue, hypertension, migraine headaches, ulcers, chronic diarrhea (Davis et al., 2002). Furthermore, stress can cause suppression of the reproductive system, impairment of the body's natural healing processes, suppression of the immune system, depression, and possibly an accelerating of the aging process (Davis et al., 2002). Since stress can affect the functioning of the body's organs, it is significant on one's overall health. Moreover, stress can be managed and chronic stress can be prevented. This adds heuristic value to the study of stress because an individual's response to it can be the difference between coping effectively and a serious medical condition.

Researchers have identified that certain types of people have the innate ability to handle stress more effectively than others (Davis et al, 2002). Popular terms such as "Type A" or "Type B" personalities have been used to acknowledge that people have ingrained ways of reacting to challenges or stressors in the environment. Despite data that demonstrates ingrained tendencies of coping with stress, individual change and personal growth is possible. It has been discovered that with proper training, people of any personality, even if there is an innate vulnerability, can develop effective

strategies to change the way they react to stress. For example, individuals who develop good social support systems, exercise regularly, and maintain a healthy diet are less prone to the negative aspects of stress (Davis et al, 2002).

Furthermore, many different techniques for invoking a “relaxation response” have been demonstrated to counteract a pervasive exposure to stress (Davis et al, 2002). For that reason, it can be assumed that even people who are predisposed to stress can change their pattern of responding, and thus avoid potentially life threatening conditions. Additionally, there are many other potential benefits to learning effective stress management such as increased quality of life, work productivity, and the possibility for increasing the life span.

In the above review, it has been posited that stress can occur in any environment, have a significant impact on an individual, and stress can be managed. From this point, conclusions can be drawn to demonstrate the value of studying stress in student counselors.

In some sense, a counselor can be viewed as a salesperson. The public will come to a professional hoping that counseling will provide help for their emotional or life struggle. For the counselor, it is valuable to sell the product of counseling to others. One of the most effective product advertisement for counselors may be through personal example. Do counselors apply the same psychological principles to their own lives? With the many techniques and theories that are taught to the counselor in training, it will be interesting to discover if the student’s exposure to these procedures actually produces

measurable results in their own life management skills. Studying stress provides an opportunity to observe if a counselor begins to benefit from the psychological training that they will soon “sell” to the consumer or client. In conclusion, the three aspects that make stress worth studying in the following dissertation are: (1) stress affects all individuals in some capacity, (2) the impact of stress on the body is significant to overall health, (3) it is an issue that counselors will both experience during training and help clients in their professional career. Thus, if training in the psychological principles of counseling has the ability to improve functioning, it is another validation for others to seek help in a product that has a proven impact.

Statement of the Problem

The focus of the current study is to determine if there is a difference in the level of stress among counselor education students at different stages of a training program. According to Nowack (1999), “stress is defined as the experience of major and minor irritants, annoyances, and frustrations of daily living” (p. 15). In the daily life of a counselor education student, there are academic challenges, novel situations, and career changes that will take place. These are only a few of the possibilities that can serve as irritants, annoyances and frustrations for the developing student. They will also struggle with other issues that are common to all individuals such as health challenges, changing social support networks, problems at work, problems with finances, and problems with family and friends. The counseling student will face many

challenges during his or her training program, which will have the potential to cause stress.

During their graduate experience, students will also be exposed to many strategies for self examination and management. These strategies will demonstrate in many different ways how to develop behaviors that will lead to cognitive, emotional, and behavioral regulation. For instance, cognitive therapy that is popular in most training programs demonstrates techniques that could be useful for coping with thoughts that cause stress. Disputing irrational beliefs, changing language patterns that lead to distorted thinking, thought blocking, and positive imagery are just a few techniques that will become available to the student during their training. In addition, behavior strategies such as relaxation training, systematic desensitization, and assertion training will be demonstrated as common methods for dealing with challenging situations. The student will begin to understand the counseling proverb, "you create your own reality". Through training, the student will have the opportunity to understand mechanisms for change and to apply them to their own real life situations.

As the student progresses through his or her training, the following study will attempt to identify if there is a difference in the way a student experiences stress. The amount of stress may help demonstrate if a student actually learns to manage change at different stages of the training program. Since counseling students are exposed to both stress, and training to manage stress, it will be interesting to determine if this condition creates an opportunity for improved

self management. Through the measurement of perceived levels of stress, differing health habits, personality type, cognitive tendencies, coping style, and overall psychological well being, it is possible to determine an overall level of stress within the individual student (Nowack, 1999). Measuring these factors can provide increased understanding about how a student is managing or not managing stressful situations. In addition, it can provide a better view of how prepared a student is in treating individuals as they progress through a training program. The perceived levels of stress, differing health habits, personality type, cognitive tendencies, coping style, and overall psychological well being are pertinent to any persons struggle to cope with stress. Therefore, the investigation of the current problem attempts to identify these factors in the counselor trainee and detect differences in the ways a student experiences stress.

Rationale

Studies have demonstrated that students in counselor education programs react differently to training at different experience levels (Ronnestad & Skovholt, 1993; Skovholt & Ronnestad, 1992). Most notably, there seems to be a dependence on the supervisor to provide structure, support, teaching, and technique focus in the beginning stages (Ronnestad & Skovholt, 1993). Moreover, the student's needs are observed as changing from the beginning of a graduate program to the end of the internship and graduation from a masters level program. There is a tendency for a shift from a need for rigid structure and direction to needing a more abstract, non-directive style of supervision toward

the end of graduate training (Ronnestad & Skovholt, 1993). Bernard (1979), states that because of the differences during training and later professional experience, a supervisor must adapt from being a teacher to becoming a consultant to better meet the counselor's experience-specific needs. Skovholt and Ronnestad (1992), view this progression as the development of the counselor toward increasing individualism. As anxiety subsides, the counselor is able to take more risks in reflection and practice, is open to more forms of feedback, and can perceive the process and practice of counseling more accurately.

Ronnestad and Skovholt (1993) cite "intense anxiety" as a factor in many of the beginning counseling students behavior in training programs. For any graduate student, initiating an advanced academic program can be a daunting task. Since this intense anxiety can be viewed as a major irritant to the individual, it could also be identified as stress. It is noted that this anxiety will subside as the counselor progresses through developmental stages (Ronnestad & Skovholt, 1993). Therefore, measuring stress allows an opportunity for insight into the development of the student. If a counselor has the ability to manage stress, it possibly could indicate an internalizing of counseling skill and technique, a progression through developmental levels, and an indicator of the overall psychological well being of the student as he or she moves through a training program.

Research Question

The research question is as follows: is there a difference in the level of

stress among counselor education students at different stages of a graduate level training program? Stress will be measured using the Stress Profile (Nowack, 1999). Students for this study will be Counselor Education students in a graduate program at Duquesne University.

Significance

Professionals, instructors, and students can benefit from the following study. Although proficiency in counseling is often observable during practice situations, students often try to conceal their inadequacy and their anxiety produced by insecurity and a threatening academic environment (Ronnestad & Skovholt, 1993). For this reason accurate measures on anxiety are difficult and demonstrate an, “unwillingness to indicate insecurity and the student’s need to maintain professional competence” (Ronnestad & Skovholt, 1993, p. 398). For the instructor, this presents challenges in the accurate assessment of the student’s progression in his or her training. Measuring stress as an indicator of anxiety and overall psychological well being could provide an accurate indicator of progression.

Students will benefit from stress measurement as an alternative developmental assessment. According to Ronnestad and Skovholt, “the supervisor must be sensitive to the effect of student anxiety on supervision” (1993, p. 398). Increasing knowledge of how students are coping with stress will allow more accurate training methods and may enhance the quality of the training experience for the student.

Professionals will benefit by gaining increased insight into the coping abilities of counselors at different developmental levels. If coping improves as skill in counseling improves, it could further validate counseling theory and technique as a support for a wide range of clients who are exposed to parallel types of stress in their everyday lives.

If there is not a significant difference in stress levels in students at different graduate program levels the results will benefit training programs. A demonstration that stress levels are not affected by the anxiety of a graduate program would allow programs to challenge students to take risks in their learning process. It could allow instructors to provide an environment that requires less dependence on structure and emphasizes reflection and personal growth. Ronnestad and Skovholt (1993) cite that training focused on a heavy amount of structure and rote learning of techniques resulted in students becoming "increasingly rigid" in their learning and practice (p. 397). If training programs could ethically move away from such structure earlier in the counseling program, it may provide for a more effective learning environment.

Hypotheses

There is no significant difference in stress levels among beginning counselor education students, practicum level counselor education students, and graduating counselor education students.

There is no significant difference in cognitive hardiness among beginning

counselor education students, practicum level counselor education students, and graduating counselor education students.

There is no significant difference in psychological well being among beginning counselor education students, practicum level counselor education students, and graduating counselor education students.

Definitions

Terms used for this study are defined below:

Beginning counselor education students – are defined to be graduate level students beginning their first semester in a training program in counselor education.

Cognitive hardiness – is generally defined as the degree to which an individual perceives life changes as opportunities for growth as opposed to life hardships (Nowack, 1999). During major life changes, individuals with a high level of “hardiness” perceive a high level of internal control over potentially stressful events (Nowack, 1999). For the purpose of this study, Cognitive Hardiness is defined as a raw score on the cognitive hardiness scale on the Stress Profile (Nowack, 1999).

Graduate level training program – is defined as an advanced degree program in counselor education that leads to a master’s degree with a major in counseling.

Graduating counselor education students - are defined to be graduate level students that are in the process of completing their supervised internship in a counselor education program and have completed and passed their

comprehensive exam process and will graduate within two weeks from the date of the evaluation.

Practicum level counselor education students - are defined to be graduate level students beginning a supervised field placement experience, practicing counseling with actual clients in a school, agency or community setting.

Psychological well-being – is generally defined by Nowack (1999) as an, “... overall experience of satisfaction and psychological equanimity during the preceding three months” (p. 18). For the purpose of this study psychological well being is defined as a raw score on the psychological well being scale on the Stress Profile.

Stress - is generally defined by Nowack (1999) as, “the experience of major and minor irritants, annoyances, and frustrations of daily living” (p. 13). For this particular study, stress is defined as the raw scores on the Stress scale on the Stress Profile.

Stress Profile – is an empirically validated inventory created by Nowack (1999) that measures 15 areas that are related to the phenomenon of stress in an individual.

Type A behavior – are generally defined as a set of responses that are typically attributed to a hard-driving, competitive, type personality that is typically prone to chronic stress that leads to health problems. For the purpose of this study, Type A behavior is defined as a raw score on the Type A behavior scale on the Stress Profile.

Summary of Chapter One

In chapter one, stress is introduced as a construct that can have a significant impact on any individual. In the literature, it is noted that some individuals have developed coping strategies that enable resistance to harmful or chronic stress. These strategies are present in counseling theories and may be learned by students who are attempting to master these counseling approaches. The study identifies a condition in which counseling students are experiencing pressure, and attempts to examine the level of stress in these individuals. Chapter one provides a basic definition of how stress will be measured. These measurements are proposed for counselor education students at different stages of their training to evaluate if there is a difference in the way they manage stress.

CHAPTER II

LITERATURE REVIEW

An Examination of Stress and its Implications

In support of the proposed research question, four areas of the available research on stress will be reviewed: (1) research on sources of stress, (2) studies on stress related to various coping responses and strategies (3) studies related to students and coping responses to stress, (4) studies that specifically outline stress and coping responses in counselor education students.

Sources of Stress

A large body of research exists on topics that measure the construct of stress. Thousands of studies have been conducted that identify various sources of stress. The following section reviews foundational theories and research that is relevant to the constructs of overall stress, cognitive hardiness, and psychological well-being. Although experts in the field of stress research such as Nowack (1999), offer many ways of conceptualizing sources of stress, the following discussion will present research and theory that support the constructs under consideration in the proposed research.

Although there are many ways to define the phenomenon of stress, four major categories are identified here for the purpose of the literature review: (1) Stress as an external factor acting on the individual, (2) Stress as a perception that occurs within the cognitive patterns of the individual, (3) Stress as it relates to a

managing response within the individual, which is usually referred to as coping, and (4) stress in its relation to the consequences that are experienced by the individual.

Early approaches to identifying psychological stress consisted of viewing this construct as a force acting upon the individual. Hans Selye, a foundational theorist in the field of stress research viewed stress as a stimulus. Selye (1956) referred to these external forces as *stressors*. Selye (1974) also provided additional definitions of stress: *distress*, which was negative or harmful sources of stress, and *eustress*, which was considered positive and motivating sources of stress. Selye's research was in response to even earlier physiologists such as Claude Bernard who discovered the process of "homeostasis" and Cannon (1932) that put forth term "flight or fight response" which suggested that stress was a result of a survival mechanism that provided natural protection from attacks (Lazarus, 1999). Holmes and Rahe's (1967), *Social readjustment scale* reflected the thinking of Selye (1956) and other similar theorists. This scale ranked 43 events that disturbed the homeostasis of the individual and attempted to predict a relationship between events and illness by measuring the amount of change or stress that would be required by the event. According to Lazarus (1993) this typifies a "stimulus" approach to stress, which has continued to draw interest especially as it becomes more possible to measure hormones, and other neurochemical responses that are involved in the above mentioned processes. An

example of this approach to stress can be found recently in Wallerstein (2003) in which genetic, and biological processes are examined to gain a deeper understanding of the biochemical processes involved in stress. The theories of Selye (1976), and Holmes and Rahe (1967), continue to be supported by researchers interested in physiological stress and the stimulus approach, however, they are beyond the scope of this discussion. The focus of this review will move to an examination of stimulus approach versus how an individual's thinking and coping processes interact with stimuli that occur in the environment. These theories also have gained much attention by theorists and researchers and will be described in the following discussion.

The disagreement of what constitutes stress continues to pervade the literature. House (1974), states that stress research can be viewed as a paradigm rather than a concept. The problem that may exist involves the number of viewpoints on stress. There are many ways that researchers have attempted to define the phenomenon. According to Hobfoll, Schwarzer, and Chon (1996), 29,000 research articles have been published since 1984. For this reason, it is important to identify a method of viewing stress that will allow a synthesis of the knowledge. The following examines typical studies that have been conducted in stress as it pertains to organizations.

Organizations have gained interest in measuring stress since World War II, due to the perception that excessive stress could lead to a "psychological

breakdown” and consequently result in an individual’s inability to continue working (Lazarus, 1993). As cognitive psychology emerged as a force in experimental research during the 1950’s, a shift in paradigm from physiological research to the consideration of psychological processes such as perception and coping provided many ways of measuring and approaching the stress phenomenon (Lazarus, 1993). Organizations have exploited these processes in the individual in an attempt to provide supportive workplaces and increase the consistency and productivity of their employees. Dolan and Tziner (1988) measured stress after a change in office equipment that is typical of a stimulus approach to stress. All typical stimulus-response research disregards the individual’s perception and coping mechanisms that occur in a stress situation. However, it may provide a utility to the organization, which is able to develop training to reduce the impact of such future changes in the workplace.

Haw (1982) studied women in the workplace and concluded that occupational activities were a significant source of stress. This review of literature identified a large amount of evidence for a relationship between workplace stress and physical health consequences. The identification of such physical consequences, demonstrate the need for research that will inform employers in supporting a healthy workforce.

Wright, Bengtsson, and Frankenberg, (1994) surveyed men and women in both white and blue collar jobs to identify different sources of stress and its

possible impact on health. Results suggest that the most important environmental factors were work regulations and the amount of autonomy in the person's job role. The study also suggests gender role differences, since women reported more symptoms of stress than did men. These gender based results were correlated with situational differences such as significantly less training and development, and less praise and recognition.

Elfring, Grebner, Semmer, and Kaiser-Freiburghaus (2005) reported findings that evaluated effects of stressful work environments. The research identified relationships such as chronic time pressures, increased sensitivities to certain events that decreased the coping ability of employees. These types of studies may be of help to employers to identify the many dysfunctional dynamics that have a connection to workplace stressors.

Billings and Moos (1982) measured social support at work and within worker's families as additional factors correlated with stress. They concluded that social support was able to moderate workplace stress. Ivancevich, Matteson, and Pretson (1982) found evidence that the amount of stress an individual experienced was associated with how that person's personality complemented his or her chosen work environment. Michailidis and Elwkai (2003), measured feelings about job duties, behavioral habits, sources of job pressure, and coping patterns of employees. The conclusions suggested that causes of stress were complex, and that the perception of the individual was related to the amount of

stress he or she would experience. These types of studies are just a small example of the factors that have been identified that interact with stimulus events in the environment. For example, Berkowitz and Perkins (1984), studied women in a farm working environment and discovered that work load and work role were not as important in determining stress as the amount of support provided by that person's family. This study represents a wide body of research that focuses on the family system as a mediating factor. Overall, this collection of studies demonstrates the usefulness of understanding stress not only in business organizations but any organization or group that attempts to understand the environment and how it impacts the individual. The research provides opportunities for improved management, productivity, and managing social situations. However the sheer amount of factors (which seem endless) in this body of research, create a problem in that there are many competing theoretical problems that threaten construct validity (Guglielmi & Tatrow, 1998).

Methodological issues in the research that have been identified include poor measurement methods, existence of many confounding variables, lack of theoretical frameworks, lack of measurement improvements (ex. using "homegrown" survey instruments that have not been tested adequately for validity and reliability), lack of methodological improvements, and a general lack of theory driven research (Guglielmi & Tatrow, 1998). Although a complete methodological and theoretical critique of this large body of research is beyond

the scope of this literature review, the general consensus of this review of research thus far is in agreement with the conclusions of Guglielmi & Tatrow, (1998). Guglielmi & Tatrow (1998) identified general models that pervaded the collective research in the educational field. These models are identified in the literature as the person-environmental fit model, demand-control model, effort-reward model, demands-supports-constraints model, effort-distress model (Guglielmi & Tatrow, 1998).

The *person-environmental fit model* attempts to identify the phenomenon of a “mismatch” or a poor fit between the person’s characteristics and the type of environment. When there is a poor fit, stimulus events will result in stress and negative consequences. The *demand-control model* identifies studies that have demonstrated an interaction between the amount of job demands and the autonomy in the worker’s defined role. This can be seen as an extension of the “mismatch” phenomenon that occurs in the previous model. In this model, an inverse relationship exists: as job demands rise and the individual’s autonomy in the environment decreases, the resulting stress increases. The *effort-reward model* identifies that when the amount of effort in an occupation exceeds the amount of benefits gained by occupational duties, the stress reaction in the individual increases. The *demands-supports-constraints model* is an extension of the demand-control model but identifies support as a significant interacting factor. Thus an increased amount of support to the individual in relational or tangible ways

results in a decrease in the amount of stress. Finally the *effort-distress model* identifies the differing amounts of distress that occur in the individual and lead to stress or overstress reactions within that individual. These models conclude that factors such as personal ability, need for autonomy, perceptions in effort and gain are factors in the resulting stress reaction (Guglielmi & Tatrow, 1998).

Essentially, the authors identify that the above mentioned models tend to be behavioral in nature, focusing on external forces in the environment as either decreasing and increasing stress. Guglielmi and Tatrow (1998) identified 40 articles that studied stress and identified evidence that occupational factors were associated with health problems, and decisions to leave the profession. Despite the available models of stress, these studies tended to be of poor quality methodologically, and provided a lack of theoretical basis to their research. Punch and Tuettemann (1990) is an example of a study that compares teacher stress to the stress level in a general population. A group of 574 secondary teachers in Australia were found to have twice the expected amount of stress when compared to the general population of the country. This aspect of the study is valuable in that it compares stimulus in the teaching environment. It has potential implications for understanding the unique ways of how a teacher copes with stress. However, the study approaches stress as a stimulus and notes external factors of stress. Although Punch and Tuettemann (1990) identify gender differences in the reporting of stress, it fails to present a clear theory or

mechanism to account for that difference. These types of shortcomings are an example of the aspects identified by Guglielmi and Tatrow (1998).

When considering these shortcomings (i.e. not being able to identify processes involved in individual differences of stress) the need is demonstrated for theory driven research to identify the possibility of differences in intrapersonal skills across different professions. According to Guglielmi and Tatrow (1998), "A shared theoretical framework would guide the choice of constructs and their operationalization and, as a result, would introduce some urgently needed consistency in measurement factors. The review of the literature by Guglielmi and Tatrow (1998) and examples such as Punch and Tuettemann (1990) demonstrate a need for theory- driven research that will improve future research used by in any organization or profession.

Stress, Appraisal, and Coping

Now that sources, factors, and some of the implications and uses of stress research have been discussed, the review of literature will shift its focus onto identifying a theoretical foundation in which the constructs of overall stress, cognitive hardiness, and psychological well-being are used in their measurement. This will set the stage for the final section of review in which levels of stress across mental health professionals will be evaluated.

The research of Lazarus (1999) represents a paradigm shift from looking at the phenomenon of stress as an "input-output" event to identifying it as a

cognitive process that interacts with events in the environment. Lazarus(1999) states, “a good way of thinking about stressful person-environment relationships is to examine the relative balance of forces between environmental demands and the person’s psychological resources for dealing with them (p. 58).” The following studies move past a *stimulus approach* to stress to investigate differences within the individual’s psychological resources that explain the differential impact that external forces have on the person (Lazarus, 1999). In a review of the literature, Lazarus (1999) defines the term of *appraisal* as the act of making an evaluation regarding the degree of threat that exists in a situation. This action by any person happens on a conscious or unconscious level and results in the triggering of stress. The author states that an individual must have something at “stake” in any given event for it to trigger stress. Something acting on the individual has to be *perceived* as having the potential to cause harm, loss, or a challenge. The individual’s values, goals, or beliefs about self, others, and the world interact with the event to cause stress. In addition, there is *secondary appraisal* (Lazarus, 1999), which is an evaluation of one’s coping strategies that are available in response to an event in which the individual is confronted. As an individual appraises his ability to act, an event is perceived on a continuum of *threat versus challenge*. As an event is perceived as more threatening based on constructs such as confidence, it has the potential to induce greater amounts of stress. Lazarus (1999) also states that environmental factors are regarded by the

person on a continuum which may compound or moderate stress such as “novelty-familiarity; predictability-unpredictability; clarity of meaning-ambiguity; and temporal factors, such as imminence, timing and duration” (p.77).

Theoretical concepts on coping have also been developed and widely studied. Lazarus (1984) defines coping as, “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141.) In relation to primary and secondary appraisal Kohn (1996) conceptualizes coping as a behavioral response or a style. It can be specific in nature (i.e. for a specific situation) or it can be related to the person’s style and employed consistently across many different situations (Kohn, 1996). Although the term “coping” is related to appraisal, it is also a separate construct that has implications for emotional consequences in the individual. Lazarus (1999) states “coping, along with appraisal is, in effect, a mediator of the emotional reaction” (p. 101). However, the predominant view is that appraisal prepares the way for coping in the individual’s interaction with the stressful event. Additional information on coping and its impressive support in the literature has been thoroughly documented (Lazarus, 1984, 1999; Zeidner & Endler, 1996), however it is beyond the scope of this investigation. Having prepared a basic understanding of how coping is related to appraisal, the literature review will concentrate on the study

of appraisal and how it relates to stress.

Many researchers have used the theory of cognitive appraisal to investigate the phenomenon of stress. Dewe (1991a) supports Gugliemi and Tatrow's assertion citing many conflicting findings in the stress research that suggest the stimulus approach to stress is inadequate. Dewe (1991a) focuses on methodology problems in workplace stress research stating "attempts should now be made to examine how workers themselves describe their working conditions rather than accepting as plausible *a priori* labeling of events as stressors" (p.78). Dewe (1991a) suggested, based on the theory of Lazarus (1999), that appraisal was a confounding factor in all types of stimulus-response research that attempts to identify stress. Dewe (1991b) developed measurement styles to identify appraisal habits of individuals. Measures involved the theory driven constructs of primary and secondary appraisal to consider the work stress relationship. Dewe (1991a, 1991b, 1992) found significant relationships between primary appraisal, coping and emotional discomfort. Dewe (1992) employed these methods again successfully to demonstrate a clear relationship between appraisal and stress. Dewe (1991a, 1991b, 1992) is an example of a shift in paradigm in the stress literature, but also demonstrates that a clear shift in methodology is needed to improve the measurement of the stress relationship. Paterson and Neufeld (1987) explains clearly the new paradigm of stress when stating, "environmental events or cues impinge on the individual; the individual

appraises these events or cues and may select a course of action in response; and as a consequence of appraisal, stress is produced” (p. 404). Many theorists have now been able to develop measures that focus on constructs that are developed from this defined theoretical base. This well needed shift in the literature has many potential benefits to the field of stress research. The following studies demonstrate support in the literature for appraisal’s effects on the constructs of stress, cognitive hardiness, and psychological well-being.

Stress and Appraisal

Nowack (1999) asserts that the construct of stress is primarily based on the measurement of appraisal as it relates to certain events. The following research identifies the overall relationship between stress and appraisal. First, Patterson and Neufeld (1987) determined that the nature of anticipatory stress depends on “the number of goals threatened, the importance of each goal, and the extent to which the goal will be unavailable should the event occur”(p.413). In essence, this research confirmed more complex aspects of appraisal theory (Lazarus, 1999). These findings demonstrate that the degree of commitment is correlated with the intensity of the perceived threat in any given situation. Long, Kahn, and Schultz (1992) studied women in managerial positions by comparing the appraisal factor with three other possible mediating factors (environment, engagement coping, and disengagement coping) across three observable outcome variables (work performance, distress, and satisfaction). The study

indicated that marital and parental status was related to more positive appraisals. Also positive appraisals were observed in connection with constructive coping behaviors. Terry, Tonge, and Callan (1995) also found evidence that situational appraisals were more significant than the situation itself in how subjects managed stress. Law, Logan, and Baron (1994) examined the secondary appraisal construct by studying the perceived amount of control that subjects had during dental treatment. The investigators discovered elevated stress stemming from a high need for control and a low perceived amount of control in the observed setting. Kanner, Coyne, Schaefer, and Lazarus (1981), developed self report measurements that measured appraisal through "hassles" and "uplifts" scales which were administered to middle aged adults. According to Kanner et al. (1981), "Hassles are irritating, frustrating, and distressing demands that to some degree characterize everyday transactions with the environment" (p.3). Conversely, uplifts are classified as, "...positive experiences such as joy derived from manifestations of love, relief at hearing good news, the pleasure of a good night's rest, and so on" (Kanner et al., 1981,p. 6). These constructs were compared to traditional "life events" scores of the same individuals and it was determined that hassles, a construct based on perception, was a better predictor of stress related symptoms when interacting with the factors of persistence and severity. Daily hassles and uplifts were also shown to discriminate in negative vs. positive measures of affect, respectively. Monroe

(1983) also concluded that minor daily *hassles* were a better predictor of psychological symptoms than the major life events scale. Peeters, Buunk, and Schaufeli (1995) examined appraisals related with stressful events and selected five factors: (1) controllability, (2) uncertainty, (3) threat to self-esteem, (4) predictability, and (5) frequency and studied their significance. The appraisal of controllability was the dominating factor found in many of the hassles that were investigated in a work place setting. These research findings present evidence for a significant relationship between appraisal tendencies and the measurement of stress. Now the construct of cognitive hardiness will be reviewed as it relates to the stress research.

Cognitive Hardiness

Nowack (1986) developed the term *Cognitive Hardiness* which he used to identify employees who had superior coping abilities. Nowack (1986) states, "it is increasingly clear that these employees can be characterized reliably and that they are more productive and healthy in the face of work and life stress than their less resistant counterparts" (p.116). Research has followed that has reliably identified characteristics of individuals who are resistant to stress. Nowack (1999) cites Kobasa's (1979) identification of three stable types of appraisals that mediated cognitive hardiness: commitment versus alienation, control versus helplessness, and challenge versus threat. When an individual demonstrated tendencies toward the first of the three appraisal comparisons he or she was able

to cope more effectively in situations as compared to their counterparts that employed the latter type of appraisals. Kobasa, Maddi, and Kahn (1982) extended the research on hardiness to demonstrate that individuals who met criteria for being “hardy” were observed to have a decrease in physiological symptom during stressful life periods. Long et al. (1992) discovered, “women managers who maintained traditional lifestyles (married with children) and traditional beliefs appraise occupations as less threatening” (p.235). In this study marriage was identified as a buffer that allowed women to be more “hardy”. Tomaka and Blascovich (1994) found that individuals who held “just world beliefs” when appraising the given experimental laboratory tasks were able to moderate several aspects of stress more effectively according to self report. Also, the “just world belief” was related to viewing the task as a challenge versus a threat. These studies represent factors that have presented individuals with situations that are on a challenge vs. threat, commitment versus alienation, or control versus helplessness continuum. There is a need for continued research in how a person develops cognitive hardiness, and how difference occurs in the development of appraisals that contribute to this construct.

Psychological Well-Being

The *psychological well-being* construct is formally identified by Nowack (1999) as, “...derived following a review of self-assessment instruments measuring psychological distress and well-being” (p. 22). Many studies have

shown a connection between appraisal habits, psychological distress, and physical well-being.

Tomoka, Blascovich, Kibler, and Ernst(1997) expanded the threat vs. challenge research to examine its effects on physiological responses. This research used simple tasks to measure the stress reactions of individuals. Using self-report, autonomic nervous system measurements, cardiovascular measures, and observed responses, it was determined that threat appraisals related positively to stress reactions, and cardiovascular activity. Researchers were able to manipulate physiological responses by changing the instructional set between threat and challenge conditions. Challenge appraisals were more strongly correlated with an increase in the quality of performance on the tasks.

Hemenover and Dienstbier (1996) were also able to demonstrate the ability to manipulate affective and performance responses by introducing threat vs. challenge conditions in which subjects with negative style appraisals experienced increased anxiety and decreased performance. Bombadier, D'Amico, and Jordan (1990) demonstrated that adjustment to chronic illness was affected by appraisal in a sample of 101 patients admitted to a multidisciplinary medicine and psychiatric unit. Turner, Clancy, and Vitaliano (1987) studied 85 subjects who suffered from chronic lower back pain. The average duration of pain was approximately four years. Appraisals that resembled seeing chronic pain as a challenge was a significant factor in the employment of effective coping

strategies that moderated the effect of the chronic pain. Negative appraisals were associated with self-blame, which may have exacerbated pain symptoms. Landreville and Vezina (1994), demonstrated that poor psychological well-being (high depressive symptoms) were correlated with threat appraisals and poor coping to the subject's diagnosed physical illness. Tomaka and Blascovich (1994) found that physiological patterns correlated to challenge appraisals, were less detrimental to health when compared with patterns associated with threat appraisals. Landreville, Dube, Lalande, and Alain (1994), found that appraisal of a personal disability was associated with an increase of depressive symptoms in a population of 225 elderly patients. Ironson, Antoni, and Lutendorf (1995) reviewed the literature pertaining to psychological interventions and its effect on patients suffering from cancer and Human Immunodeficiency Virus (HIV). The authors concluded that cognitive behavioral techniques, hypnotic techniques, and imagery among other interventions were associated frequently with improved survival in cancer patients.

These techniques are relevant because the interventions had the potential to change the patients' cognitive patterns that were directly related to appraisal habits, thus showing a relationship to appraisal and well-being. The research that shows a relationship between appraisal and stress, cognitive hardiness, and psychological well-being provides a theoretical framework that can be used to take measurement in diverse settings. To date, no comparisons have been

employed between different professions or populations to see if differences exist between groups. In addition, no research has been done to determine if appraisal habits of an individual can be changed through intervention. Now that appraisal and its relationship to stress, cognitive hardiness, and psychological well-being has been considered, literature will be explored in the professions of counseling and related professions and implications for further study will be discussed.

Profession specific studies related to stress

Although there is an impressive amount of research on stress and a great amount of evidence regarding appraisal and the constructs of stress, cognitive hardiness, and psychological well-being, no research has been identified that investigates these issues in counselor education students in a master's level training program. The following review of literature contains selected findings that may be relevant to future research with the counselor education student population.

Literature is available that demonstrates potential adverse psychological effects of exposure to the mental health profession. Collins and Long (2003), reviewed the literature pertaining to the negative effects that occur when mental health workers are exposed to patients who have been traumatized. Collins and Long describe the process of secondary traumatic stress in which the mental health worker experiences psychological symptoms of *cognitive shift*, which is a

change in perceptual habits after exposure to a client. The subjects felt a loss of control, and a heightened sense of vulnerability. Relational disturbances, burnout, fatigue, over-identification, and negative emotional reactions to the client have also been documented in these cases. Collins and Long (2003) conclude, "health care workers who work with trauma victims are subject to significant stress and are vulnerable to what is now known as 'secondary trauma'" (p.423). Collins and Long (2003) determined that mental health professionals who had a significant history of stressful or critical life events were more susceptible to these types of reactions. Collins and Long (2003) employs a stimulus approach to conceptualizing the problem of secondary trauma. Thus, the research does not identify individual differences that account for why some mental health workers are traumatized and some are not. This type of stimulus approach has also been noted by Edwards, Burnard, Coyle, Fothergill, and Hannigan (2000), in their review of community mental health nursing studies. The authors reviewed 19 studies pertaining to community mental health teams and the factors of stress and burnout rates among professionals. They determined that workload and administration, time management, inappropriate referrals, safety issues, role conflict, role ambiguity, lack of supervision, time constraints, and general working conditions were significant factors in stress and burnout in this population (Edwards et al., 2000). Coyle, Hannigan, Fothergill, and Burnard (2005), reviewed the literature of stress on mental health social

workers. The examination was based on a three part model of stress: (1) stressors, (2) moderators of stress process, and (3) stress outcomes. The authors identified 52 studies that were relevant to this model. The results demonstrated that social workers experienced a significantly high level of stress in the majority of the studies that were reviewed. However, the authors were able to identify no studies that looked at moderators to the stress process. Surprisingly, stress management or other interventions were also absent from this body of research (Coyle et al., 2000).

Studies have also been conducted on stress and students in professions parallel to the counselor education profession. Tully (2004) compared sources, levels, and ways of coping with stress among 35 nursing students. Three self-report questionnaires were used to determine stress and coping tendencies in these students. Reports found that second year students scored higher in the stress inventory than first year students. Levels of "distress" were found to be high according to the General Health Questionnaire. The findings also indicated a significantly high level of distress as students progressed through the training levels. Similar conclusions were also found in other psychiatric nursing students cited by the authors, (Firth, 1986; Jones & Johnston, 1997; Keltner & Leung 1995; Lindop, 1989, 1999; Mahat, 1998; Parkes, 1985), which found students stress as significantly high. These findings are explained by an increase in demand as students progress through the program. Tully, (2004) also suggests that

secondary appraisal may come into play when citing that “students expected more from themselves as they progress through the program”. Although these interpretations are made from the self report data, the author does not suggest any theoretical basis that would allow us to understand if appraisal was being measured or what kind of appraisal styles were specifically employed. Despite the theoretical differences in Tully (2004), this study provides a good baseline for comparison of counselor education students at different levels of training.

Shapiro, Shapiro, and Schwartz, (2000) reviewed 600 studies addressing stress in medical education programs. Shapiro et al. (2000) identified 24 studies that reported on interventions to stress. These programs were helpful in reducing stress in students. In some instances, these programs were integrated into the curriculum of the training programs. According to Shapiro et al. (2000), the students demonstrated “...improved immunologic functioning, decreases in depression and anxiety, increases in spirituality and empathy, enhanced knowledge of alternative therapies for future referrals, and improved knowledge about stress...” (p. 752). These findings are impressive in that they show many potential benefits in studying stress, and learning more about what moderates stress. In addition, it demonstrates that appraisal and coping habits may be able to respond to intervention efforts that can be placed in the curriculum of training programs.

Conclusions

Extensive research has been conducted on stress and related topics. The topic continues to be of importance and interest to contemporary researchers. The theoretical foundation presented by Lazarus (1999) provides an ideal framework for conceptualizing the process of stress and its implications. Specifically, appraisal and coping are theoretical concepts that have been empirically validated in the literature over the past 30 years. However, stress research in mental health contexts continues to be focused on a stimulus approach that widely ignores mediating processes involved in stress and its negative consequences. Research has been reviewed in this discussion that demonstrates a need for studying stress and its mediating factors in counselor education students. To date, no studies have focused on appraisal and its relation to stress in counselor education students. As demonstrated in the literature review, many health professionals and students suffer from stress and could benefit from a deeper understanding of how stress occurs and how to manage it. This review demonstrates a need for additional research in the moderating principle of appraisal and how these behavioral patterns occur in counselor education students.

CHAPTER III

METHOD

This study examines the differences in stress levels, cognitive hardiness, and psychological well being of counseling students at different stages of a graduate level counselor education program. The data on Stress, cognitive hardiness, and psychological well being are collected from students (a) beginning the first semester of a counselor education program, (b) beginning their practicum experience in a counselor education program, (c) enrolled in the internship phase of their counselor education program. The assessment instrument that is used to collect data is The Stress Profile, created by Kenneth Nowack. The method and research design closely follow an idea developed by Welburn (2002), in studying graduate level students in a counselor education program.

Research Question

The research question for this study examines students in a counseling program and the differences in stress, cognitive hardiness, and psychological well-being. Is there a significant difference in stress levels, cognitive hardiness, and psychological well being among beginning counselor education students, practicum level counselor education students, and graduating counselor education students.

Research Design

The research design is a static group comparison that involves three

groups with a post-test only design, which is described by LaFountain and Bartos (2002). The Stress Profile is used as an individual assessment instrument to measure stress, cognitive hardiness, and psychological well-being. Three groups are identified in the research question above as (a) beginning counselor education students, (b) practicum level students and (c) internship level students. These groups will share a similar environment (i.e. a CACREP accredited counselor education program at Duquesne University) and be assessed at different points in their training development.

There are several limitations that are caused by the use of non-equivalent groups in this quasi-experimental design. These limitations are described Lafountain and Bartos (2002) as threats to validity in the forms of Selection, Mortality, interaction of selection and Maturation, and interaction of selection and the treatment. According to Heppner, Kivlighan, and Wampold (1999), this design contains weaknesses in attributing the result of observations to the independent variable, and the effects of confounding variables present in the group due to the absence of random assignment. Since there is no pre-testing, it does not allow for regression analysis to define differences in the group and control for confounding variables. Despite these limitations, the results can still be generalized to similar academic and professional settings and provide data about coping tendencies among counseling students at different training stages. This study will also yield data that will be of a heuristic value and compel more research in the area of stress and counselor development.

The Instrument

The Stress Profile (Nowack, 1999) is employed in this study for measuring stress as expressed in the three measurement scales: (a) stress, (b) cognitive hardiness, and (c) psychological well-being. The instrument was developed by Ken Nowack to provide a comprehensive, yet brief assessment that would include all the areas of stress that have been indicated as factors in the stress-illness relationship. The Stress Profile assesses 15 areas related to chronic stress problems. The fifteen areas that the instrument measure are: Stress, Health Habits, Exercise, Rest/Sleep, Eating/Nutrition, Prevention, ARC Item Cluster, Social Support Network, Type A Behavior, Cognitive Hardiness, Positive Appraisal, Negative Appraisal, Threat Minimization, Problem Focus, and Psychological Well-Being.

The Stress Profile is designed to provide information regarding psychosocial factors of the respondent that are factors in the stress-illness relationship. The instrument is useful in making assessments and treatment decisions with an individual who is experiencing health or emotional problems where stress may be a factor. It has been developed for use by psychiatrists, psychologists, physicians, health educators, and organizational health awareness programs. The Stress Profile is designed for routine use in a variety of settings including organizations, outpatient clinics, hospitals, and medical practices.

The Stress Profile is a self-scoring 123-item inventory that requires 20 to 25 minutes to administer. The respondent is provided with a Stress Profile Booklet

and Answer sheet for marking responses to the inventory items. The Inventory consists of eight parts. The first seven parts provide statements and a Likert style response choice that ranges from (1) Never to (5) Always, (1) Not at all Satisfied to (5) Extremely Satisfied, and (1) None of the Time to (5) All of the Time. In addition, some Likert scale items permit a sixth choice of "Not Applicable" in assessing situations that may not apply to some individuals. There is one item that surveys for amount of cigarette smoking using a 1 – 5 scale. In the eighth part of the inventory, the respondent is asked to answer five true or false statements. Responses to the 123-survey yields a T-score for the fifteen subscales in the Stress Profile. T scores have a mean of 50 and a standard deviation of 10. Scores of 40T to 59T are considered average, 60T and above are considered high, and 39T or below considered low. These scales reflect the level at which the stress factors indicated in the subscale are present in the life of the individual.

The fifteen subscales (listed above) that the inventory will yield a T-score for can be used to provide a diagnosis, for planning of health services, or simply to provide to an individual to raise awareness of his or her coping style. The subscale descriptions used for interpretation of results found in Nowack (1999) are as follows:

(1) Stress - This subscale indicates the presence of irritants, annoyances, and frustrations that are present in the daily living of the individual. High T scores represent a perception of high levels of work or life stress over the past three months.

(2) Health Habits – This subscale indicates a group of behaviors that when practiced are related to both physical and psychological well-being. A high score on this scale indicated that the respondent is practicing these behaviors on a regular basis.

(3) Exercise – This subscale consists of three inventory items and reflects the level and frequency of exercise performed on a regular basis. A high T score on this scale represents individuals that exercise more frequently and would be associated with positive health outcomes.

(4) Rest/Sleep – This subscale consists of five items that measure the frequency in which the respondent attains adequate rest on a regular basis. High T scores indicate good sleep hygiene and a person who experiences adequate amounts of sleep.

(5) Eating/Nutrition – This subscale consists of five items that measure the frequency in which the respondent practices a pattern of eating well-balanced meals. A high T score indicates an individual who demonstrates a disciplined and careful pattern of healthy food choices.

(6) Prevention – This subscale consists of 11 items that measure the frequency of the respondent's ability to avoid situations that may lead to health or medical problems. A high T score indicates an individual that practices preventative health habits on a regular basis.

(7) ARC – is a three item scale that asks directly about substance abuse. Positive responses to these items indicate the respondent's use of alcohol, drugs,

or cigarette smoking.

(8) Social Support Network – This subscale consists of 15 items that provide a measure of the respondent's perception of the amount of emotional support that is readily available through others in his or her environment on a regular basis. A high T score indicates a high level of satisfaction with the social support network of the respondent.

(9) Type A Behavior – This subscale consists of 10 items that indicate the presence of tendencies performed by the respondent, such as internalized anger, expressed anger, time urgency, working quickly and impatience items that are indicative of a Type A personality. A high T score indicated that the respondent demonstrates these behaviors in when faced with life or work challenges.

(10) Cognitive Hardiness – This subscale consists of 30 items that indicate the style of attitudes, beliefs, and attributions that the respondent holds toward life and work. A high T score indicates that the respondent faces difficult challenges in life and work with a positive and constructive set of attitudes, beliefs, and attributions.

(11) Positive Appraisal – This subscale of five items indicate the presence of supportive and encouraging self-talk used by the respondent to minimize stress. A high T score in this area indicates frequent use of this coping strategy.

(12) Negative Appraisal – This subscale consists of five items that

indicate the presence of self-blame, criticism, or catastrophic thinking in the perceptual tendencies of the respondent. A high T score in this area indicates frequent use of this coping strategy.

(13) Threat Minimization – This subscale consists of five items that indicate the amount of avoidance employed by the respondent to cope with problematic situations. A high T score in this area indicates frequent use of this coping strategy.

(14) Problem Focus – This subscale consists of four items that indicate the respondent's tendency to make proactive attempts at addressing stressors that are occurring in the environment. A high T score in this area would indicate an individual with a strong internal locus of control who uses problem-focused coping on a frequent basis.

(15) Psychological Well-Being – This subscale consists of 12 items that evaluate the respondent's overall perceived sense of psychological well being in the past 3 months. Individuals with a high T score are generally satisfied with themselves and experience enjoyment in their daily lives. These individuals may consider themselves as generally happy and well-adjusted individuals.

The Stress Index was developed using a norm group population of 146 individuals who were 20 to 55 years of age. Approximately 68% of the respondents were women. The majority of respondents were educated, and working in supervisory positions. Data obtained from this sample were used in inter-item correlations, item-scale correlations, multiple regression analyses,

factor analysis, and internal consistency reliability analyses. From the analyses, 121 items were developed for use in the Stress Profile. All items have .30 item-to-scale consistency or higher, and .65 internal consistency or higher. Test-retest reliability is .76 or above on the subscale T-scores. The items on the Stress profile were found to have significant predictive validity in follow up research to job performance scales and stress related health problems. A copy of the Stress Profiles psychometric properties can be found in the appendices.

Research Population

The research population in this study consists of graduate level students at Duquesne University enrolled in the Counselor Education Program in the School of Education. Students were recruited on a voluntary basis, and received informed consent about the nature of their involvement, the potential results of the study, the use of the results, and the confidentiality of results. The students were informed that they were free to withdraw their participation at any time during the study. Students were also provided with the researcher's contact information if follow up interpretation or clarification of the Stress Profile results was desired.

Process for Data Collection

Each graduate level counseling student was given a Stress Profile test packet, which contained a disposable Stress Profile Administration Booklet, and a pen. The administration was performed in a classroom setting that was prearranged by the administrator to correspond with a scheduled class time

during the student's semester.

The Stress Profile was given to three groups of students at specific times in their graduate training. Group One students were administered the Stress Profile during their first semester of enrollment in the graduate program. Group Two students were administered the inventory during their counseling practicum experience. Group Three was administered the survey during their counseling internship. The counseling internship students received the survey during their final class meeting at the completion of their internship. This design closely follows the data collection procedure developed by Welburn (2002).

Analysis Plan

The three hypotheses will be evaluated using the Analysis of Variance (ANOVA) technique. If there are significant differences, the Bonferroni Test will be employed as the post-hoc analysis technique.

Summary

This chapter describes the method for conducting the assessment. There are three hypotheses to be assessed and the statistical procedure will be ANOVA. *The Stress Profile* will be used as the dependent variable.

CHAPTER IV

RESULTS

The data collected (See Appendix A, B, and C) was analyzed using an ANOVA statistical procedure. The results of the data analyses are presented in this chapter. Each Hypothesis is restated and the results are presented within each section.

Hypothesis 1

There is no significant difference in stress among beginning counselor education students, practicum counselor education students and graduating counselor education students.

The ranges of the scores for each of the groups for Stress among Beginning Students was 41-65; for Practicum Students was 34-84; and Graduating Students 44-65. The Beginning Students had an average score of 53.09 with a standard deviation of 8.76. The average for the Practicum Students was 53.74 with a standard deviation of 12.02. The graduating students' average scores were 57.31 with a standard deviation of 5.06. The analysis of variance yielded an F-ratio of 1.86. This F-ratio is not significant at the .05 alpha level (see Table One). The hypothesis is accepted; there is no significant difference.

Table 1*Analysis of the Data for Stress Among**Beginning, Practicum and Graduating Students*

Source	SS	df	MS	F	p
Between groups	1,929.67	3	643.22	1.86	.081
Within groups	19,020.10	55	345.82		
Total	20,020.10	58			

Hypothesis 2

There is no significant difference in Cognitive Hardiness among beginning counselor education students, practicum counselor education students and graduating counselor education students.

The ranges of the scores for each of the groups for Cognitive Hardiness among Beginning Students was 35-71; for Practicum Students was 35-64; and Graduating Students 33-58. The Beginning Students had an average score of 52.09 with a standard deviation of 10.37. The average for the Practicum Students was 47.89 with a standard deviation of 7.84. The graduating students' average scores were 48.88 with a standard deviation of 7.73. The analysis of variance yielded an F-ratio of 2.06. This F-ratio is not significant at the .05 alpha level (see Table Two). The hypothesis is accepted; there is no significant difference.

Table 2*Analysis of the Data for Cognitive Hardiness Among**Beginning, Practicum and Graduating Students*

Source	SS	df	MS	F	p
Between groups	2,793.37	3	931.12	2.06	.067
Within groups	24,860.00	55	452.00		
Total	27,653.37	58			

Hypothesis 3

There is no significant difference in Psychological Well-Being among beginning counselor education students, practicum counselor education students and graduating counselor education students.

The ranges of the scores for each of the groups for Psychological Well-Being among Beginning Students was 39-66; for Practicum Students was 35-64; and Graduating Students 39-62. The Beginning Students had an average score of 52.91 with a standard deviation of 7.79. The average for the Practicum Students was 48.84 with a standard deviation of 8.34. The graduating students' average scores were 47.75 with a standard deviation of 5.80. The analysis of variance yielded an F-ratio of 3.94. This F-ratio is significant at the .05 alpha level (see Table Three). The hypothesis is rejected; there is a significant difference.

Table 3*Analysis of the Data for Psychological Well Being Among**Beginning, Practicum and Graduating Students*

Source	SS	df	MS	F	p
Between groups	2,835.11	3	945.09	3.94	*.038
Within groups	13,192.30	55	239.86		
Total	16,027.41	58			

* There is a significant difference at the .05 alpha level

A post-hoc analysis, using the Bonfarroni method was employed. The multiple comparisons yielded no significant difference when comparing Beginning with Practicum Students or when comparing Practicum with Graduating Students. There was a significant difference between Beginning Students and Graduating Students; Beginning Students demonstrated significantly higher levels of Psychological Well-Being than Graduating Students (see Table Four).

Table 4*Multiple Comparisons of the Beginning, Practicum and**Graduating Students On Psychological Well-Being*

Comparison	Mean Comparison	df	t	p
Beginning with Practicum	52.91 with 48.84	40	1.58	.100
Beginning with Graduating	52.91 with 47.75	37	2.35	less than .001
Practicum with Graduating	48.84 with 47.75	33	0.45	.591

* The only significant difference is between the beginning and graduating students; beginning students have significantly higher "Psychological Well-Being" scores than graduating students.

Summary of Chapter Four

This chapter reported the results of the analysis of variance for stress, cognitive hardiness, and psychological well-being among three groups of students: 23 beginning counselor education students, 19 practicum counselor education students and 16 graduating counselor education students.

The three hypotheses concerning the constructs in question were examined. A significant difference was found for the main effect of student training level and psychological well-being. The post hoc analysis found that beginning masters level students reported significantly higher psychological well-being as compared to graduating masters level students.

CHAPTER V DISCUSSION

The following chapter will summarize the results presented in the previous chapter and draw conclusions supported by the related literature in the field of stress research. In addition, limitations of the current study will be considered and recommendations for future research will be suggested.

Results for Psychological Well-Being

The psychological well-being scale was developed by measuring positive affect and absence of distress in the self-report of the individual across 12 items of the instrument administered. The mean and range scores for *psychological well-being* between student training levels were as follows:

Beginning Students	M= 52.91	Range= 39-66
Practicum Students	M= 48.84	Range= 35-64
Graduating Students	M= 47.75	Range= 39-62

The significant effect of training level on the score of psychological well-being indicates that the graduating students are experiencing a higher level of autonomic arousal, distress, and dissatisfaction on a daily basis as compared to the beginning level student (see Appendix F). The significant difference found between the graduating and beginning student groups may be explained by developmental counselor themes expressed in Ronnestad and Skovholt (1993), which suggest that advanced students are experiencing mounting pressure due

to an ambivalent sense of confidence and professional uncertainty. Another explanation for the results on psychological well-being may be explained by the goal commitment factor (Lazarus, 1999). This theory states that primary appraisals are influenced by the strength of the goal commitments one has made to a certain situation. As the student approaches graduation and accepts more professional responsibility, he or she is also deepening the commitment to his or her career goal. Long et al. (1992) shows how such a commitment could influence a person to develop a "threat" appraisal stance, or a tendency to see the possibility of some potential damage to their career in the future when confronted with daily situations. Another consideration is that the student becomes more aware of affective and emotional responses and physical symptoms as his or her training progresses. Ronnestad and Skovholt (1993) suggest, "graduate student stress may be lessened through the positive values placed on self-awareness and emotional expression (i.e. students are told that these demands are difficult and are encouraged to express their fears)" (p. 398). It is possible that beginning students are experiencing on average the same (or more) level of psychological and physical distress as more experienced students but are less aware or less willing to acknowledge it. Thus, one of the limitations of this study may be the instrument, which relies on the student's perception of self. However, it is important to note that all three group mean scores for this sample of students fall near the median on the measure of psychological well-

being.

Although, the beginning level students demonstrated an overall higher level of psychological well being $M= 52.91$ as compared to the graduating students $M=47.75$, both scores fell within the average range (See Appendix D). Individuals with a mean score of 60 or greater were considered *relatively high* in well-being and measured at or above the 84th percentile. Individuals with a mean score of 40 or less are considered *relatively low* and measured at or below the 16th percentile as compared against the general population. Thus it can be assumed that all three groups demonstrated adaptable levels of psychological and physiological symptoms to the harm/loss, threat, and challenge events (Lazarus, 1999) that occur in daily living. These results when compared to studies of parallel professions as reported in Tully (2004), and Coyle et al. (2005), suggest promising appraisal and coping habits for counselor education students. For instance, Tully (2004) reported psychiatric nursing students experienced mounting distress from their first to second year of training, which was found to be at excessively high levels. Tully (2004) states:

The levels of distress reported in this study were significantly high, with all respondents scoring above the conventional cut off score of 5 on the GHQ. This suggests that those students are at risk of developing a physical or psychiatric illness" (p.46).

Coyle et al. (2005), also reported significantly high scores on its stress measures

when administered to professional social workers.

Results for stress

The mean scores for *stress* across student training levels were as follows:

Beginning Students	<i>M</i> = 53.09	<i>Range</i> = 41-65
Practicum Students	<i>M</i> = 53.74	<i>Range</i> = 34-84
Graduating Students	<i>M</i> = 57.31	<i>Range</i> = 44-65

The stress scale measured the occurrence of both minor and major irritants in the subject's daily living. The scale surveyed a diversity of life domains including: health, work, finances, family situations, and concerns about the environment and the world (Nowack, 1999). The results demonstrate no significant difference between the groups of students in their sensitivity and vulnerability to everyday minor irritants (see Appendix E). It is also noteworthy to notice that the average scores for all three groups fell within the normal range, which would suggest an average tendency of appraisals that allow the individual to be functional and secure in the face of training situations at each experience level (see Appendix D).

Results for cognitive hardiness

The mean scores for *cognitive hardiness* between student training levels were as follows:

Beginning Students	<i>M</i> = 52.09	<i>Range</i> = 35-71
Practicum Students	<i>M</i> = 47.89	<i>Range</i> = 35-64

Graduating Students $M= 48.88$ $Range= 33-58$

The cognitive hardiness scale measured appraisal habits that make one resistant to stress. Nowack (1999) states three categories of appraisals that measure cognitive hardiness, “(a) a view of commitment rather than alienation toward work and life, (b) a view of personal (internal) control over individual outcomes, and (c) a view of life change as a challenge rather than a threat” (p. 21).

According to the average group scores, each experience level of students demonstrated a comparable level of “hardiness” in their appraisal habits (see Appendix E). In addition, these mean scores fell within the average range which suggests an adequate level of cognitive functioning in primary and secondary appraisal habits that will most likely promote a buffer, or moderator in daily situations (see Appendix D).

Although significance in psychological well-being demonstrates support for a mounting pressure (Ronnestad and Skovholt, 1993) experienced by students, the directional trends of all three constructs (i.e. stress, cognitive hardiness, and psychological well-being) demonstrate this as well (see Appendix D). When examining the average scores across all three constructs, a general increase in stress, and a decrease in cognitive hardiness, and psychological well-being is observed in the students as they progress through their training. These results are not significant, however, they tend to demonstrate an overall directional trend of the data toward mounting pressure experienced by the

subjects. This demonstrates additional evidence for the above mentioned discussion that students may appraise their environment more negatively as training progresses due to factors such as an increasing goal commitment over time in the graduate training program.

Limitations

Several limitations exist in the current research. The instrument used in the current study relies on self-report to identify the functioning level of the subject on stress, cognitive hardiness, and psychological well-being. According to Lazarus (1999), a lack of awareness in unconscious appraisals may distort the self-reporting of an individual. This may cause errors in the measurements used in this study. In addition, students may be reluctant, despite informed consent that insured anonymity, to consciously acknowledge weaknesses, while in an environment that is evaluating their performance on related measures.

In addition to response bias, an issue with generalizing the results of the study to other groups is present. First, the sample was predominantly female which was due to the typical enrollment demographic of the sample pool. Of the total returned surveys there were 6 male participants, 47 female participants, and 5 respondents who failed to indicate their gender. Results from past studies suggest gender differences may exist in appraisal and coping tendencies (Long et al., 1992). It would be helpful to increase the pool of subjects and the representation of gender in the sample to insure that the results generalize to the

typical counselor education student.

Finally, although the instrument proposes to measure the level to which students deal with daily hassles, it does not allow us to measure factors of physiological arousal that is important to measuring the respondents true level of well-being. More accurate instrumentation that measures physiologic response in connection to minor irritants may give a more accurate reading on the subject's level of psychological well-being.

Conclusions

Lazarus and Folkman (1984) state, "in order to understand variations among individuals under comparable conditions, we must take into account the cognitive processes that intervene between the encounter and the reaction, and the factors that affect the nature of its mediation" (p. 23). The current research contributes to the research on stress and the cognitive process of appraisal that mediates it. The results demonstrated a significant difference in irritation and the dissatisfaction experienced between the beginning level and graduating students. However, it is interesting that a comparison indicates a lack of high levels of distress, negative appraisals, or dysfunctional mediators in all the groups surveyed. Tully (2004) and Coyle et al. (2005) suggest a level of stress confronts mental health professionals on an increasing or additive level from the time their academic training begins. These results are supported by similar studies that were conducted with psychiatric nursing students (Firth, 1986; Jones

& Johnston, 1997; Keltner & Leung 1995; Lindop, 1989, 1999; Mahat, 1998; Parkes, 1985). Most dramatically, Tully (2004) shows sharp increases of stress in psychiatric nursing students to a level that places them at risk for affective disorder or physical illness. The results of the students surveyed in the present group of counselor education students may suggest that they are functioning at a healthier level both cognitively and physically than other students in typical mental health professions. Hopefully, one of the processes that can explain why the students function on such a level is due to the training and culture of counseling education programs. However, more research is required to understand why this group of students demonstrates these types of appraisal patterns.

Recommendations for future research

Based on the current findings, future studies should continue to investigate students at different levels of training in counselor education programs to learn more about apparent differences in psychological well-being. Ronnestad and Skovholt (1993) suggest a “pervasive anxiety” occurs in beginning level students that affect their learning process and the way they deal with their clients. It would be an advantage to understand to a greater degree how stress and its mediating factors play a role in beginning counselor anxiety. In addition, studies should be conducted to ascertain if interventions could be infused into the curriculum to help students change the way they deal with

stress and its consequences. Results found in Shapiro et al. (2000) suggest that not only are these types of interventions a benefit to the student, but they help them learn to intervene with others who will struggle with the same types of issues.

Future research may utilize a longitudinal approach to follow students as they progress through each level of the training program. This approach may have an advantage to the current design, in which it will allow the research to identify students who are unable to finish the program. If significant differences can be found in this population (i.e. students who drop out of training), it may be possible to develop screening instruments for students as they enter a training program.

Future research should seek to learn more about stress and differences among groups of professionals. Comparing the current results to other types of training programs such as management, industrial, medical, or educational programs may demonstrate differences in appraisal habits across different types of programs. This can be useful in understanding how different training may encourage different patterns of perception and behavior of individuals. Moreover, comparing professions such as psychiatric nursing, psychiatry, social work, and counselor education could be useful in identifying any differences that exist in students engaged in these training programs. Finding differences in these groups would be especially valuable to programs that include training in

changing cognitive appraisal habits and could inform future curriculum that would enhance these skills were needed. When comparing the current results with Tully (2004) it indicates the possibility that differences exist in how students deal with stress between different training programs. However it is difficult to make a valid comparison due to the use of different instruments to determine the outcome measure of stress. Discovering differences may benefit educators in structuring programs that better support the student as he or she progresses through the program.

Future studies may increase the understanding of appraisal and its relationship to stress by using multiple measurements to reduce inaccuracies created by an over-reliance in self-report measures. For example Tomaka et al. (1997) measured physiological responses, recorded cognitive appraisal ratio, and measured task performance to measure cognitive appraisal and physiological response. These types of measures would enhance the validity of measuring variables such as psychological well-being.

Finally, much work continues to be done in determining the complex interaction that occurs between the individual and the environment, and the associated factors that moderate the process. Additional research in the areas of appraisal, coping, and other moderating processes is needed to further clarify a theory regarding the physical and psychological consequences of stress.

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Appendices

Appendix A
Beginning Students' Scores

Beginning Students' Scores

Student	Stress	Cognitive Hardiness	Psychological Well-Being
1	60	43	43
2	46	46	49
3	56	46	56
4	56	43	51
5	54	57	65
6	41	63	54
7	70	55	48
8	44	71	66
9	54	54	54
10	75	71	56
11	56	56	56
12	39	61	60
13	56	41	53
14	54	51	40
15	52	47	54
16	54	63	63
17	54	35	43
18	65	40	43
19	44	49	50
20	49	54	58
21	49	66	63
22	49	50	53
23	44	37	39

Appendix B
Practicum Students' Scores

Practicum Students' Scores

Student	Stress	Cognitive Hardiness	Psychological Well-Being
1	46	56	50
2	57	49	50
3	52	49	50
4	44	48	37
5	65	57	48
6	84	39	50
7	44	42	64
8	65	54	54
9	58	43	39
10	34	35	39
11	36	51	58
12	39	54	56
13	52	52	58
14	63	43	35
15	58	45	43
16	58	55	60
17	63	35	39
18	54	39	45
19	49	64	54

Appendix C
Graduating Students' Scores

Graduating Students' Scores

Student	Stress	Cognitive Hardiness	Psychological Well-Being
1	58	57	56
2	56	39	43
3	60	58	43
4	56	45	45
5	63	51	46
6	58	49	48
7	54	54	51
8	56	44	48
9	65	48	39
10	56	53	54
11	54	54	46
12	60	33	42
13	65	54	44
14	58	43	62
15	54	51	49
16	44	49	48

Appendix D

Descriptive Statistics of Stress Data

Descriptive Statistics of Stress Data

Descriptive Data for Well -Being Among Beginning, Practicum and Graduating Students

Group	Mean	Standard Deviation	Range
Beginning	52.91	7.79	39-66
Practicum	48.84	8.34	35-64
Advanced	47.75	5.80	39-62

Descriptive Data for Stress Among Beginning, Practicum and Graduating Students

Group	Mean	Standard Deviation	Range
Beginning	53.09	8.76	41-65
Practicum	53.74	12.02	34-84
Advanced	57.31	5.06	44-65

**Descriptive Data for Cognitive Hardiness Among
Beginning, Practicum and Graduating Students**

Group	Mean	Standard Deviation	Range
Beginning	52.09	10.37	35-71
Practicum	47.89	7.84	35-64
Advanced	48.88	8.34	33-58

Appendix E

Statistical Analysis of Stress Data

Statistical Analysis of Stress Data

Analysis of the Data for Stress Among Beginning, Practicum and Graduating Students

Source	SS	df	MS	F	p
Between groups	1,929.67	3	643.22	1.86	.081
Within groups	19,020.10	55	345.82		
Total	20,020.10	58			

Analysis of the Data for Cognitive Hardiness Among Beginning, Practicum and Graduating Students

Source	SS	df	MS	F	p
Between groups	2,793.37	3	931.12	2.06	.067
Within groups	24,860.00	55	452.00		
Total	27653.37	58			

Analysis of the Data for Psychological Well Being Among Beginning, Practicum and Graduating Students

Source	SS	df	MS	F	p
Between groups	2,835.11	3	945.09	3.94	*.038
Within groups	13,192.30	55	239.86		
Total	16,027.41	58			

* There is a significant difference at the .05 alpha level

Appendix F

Post Hoc Analysis of Significance Multiple Comparisons of the Beginning,
Practicum and Graduating Students on Psychological Well-Being

**Post Hoc Analysis of Significance Multiple Comparisons of the Beginning,
Practicum and Graduating Students On Psychological Well-Being**

Comparison	Mean Comparison	df	t	p
Beginning with Practicum	52.91 with 48.84	40	1.58	.100
Beginning with Graduating	52.91 with 47.75	37	2.35	less than .001
Practicum with Graduating	48.84 with 47.75	33	0.45	.591

* The only significant difference is between the beginning and graduating students; beginning students have significantly higher "Psychological Well-Being" scores than graduating students.