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## Psychological Capital: An Internal Resource for Counseling Students Coping with Academic and Clinical Stress

Abbas Javaheri

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**PSYCHOLOGICAL CAPITAL: AN INTERNAL RESOURCE  
FOR COUNSELING STUDENTS COPING WITH  
ACADEMIC AND CLINICAL STRESS**

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A Dissertation

Presented to

The Faculty of the School of Education

The College of William & Mary in Virginia

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In Partial Fulfillment

Of Requirements for the Degree

Doctor of Philosophy

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by

Abbas Javaheri

March 2017

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Approved March 2017 by

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## Dedication

This research is dedicated to my younger brother, Mohammad Hossein, who passed away at the age of 22 on the day I defended this dissertation. Despite his young age, he taught me the deeper meaning of love and dedication of family by sacrificing his desires to support his brother and sister. May God bless his soul, and reward him for his short but meaningful life...Insha'Allah.

## Table of Contents

Dedication .....	iii
Acknowledgments .....	viii
List of Tables .....	ix
List of Figures .....	x
Abstract .....	xi
CHAPTER ONE: INTRODUCTION.....	2
Statement of the Problem .....	4
Current Approaches to Address the Problem .....	5
Shortcomings of the Current Approaches.....	6
An Approach that Recognizes the Individual Differences .....	7
Justification for the Study .....	7
Purpose of the Study.....	8
Overview of the Study .....	9
Theoretical Framework: Positive Psychology .....	10
Definition of Terms.....	11
Limitations .....	12
Summary.....	13
CHAPTER TWO: REVIEW OF LITERATURE.....	14
A Transactional Model of Stress.....	14
Academic Stress and Students' Mental Health .....	15
Stress for Counseling Student.....	17
Increased Coursework.....	20

Clinical Challenges .....	21
Evaluation Process .....	24
Current Approaches to the Problem .....	25
Current Approaches to Address Stress for Students .....	25
Current Approaches for Counseling and Counseling-Related Students .....	26
The Shortcomings of the Current Approaches .....	30
Differences in Psychological Characteristics .....	31
Role of “Self” in Self-Care .....	35
Psychological Capital: An Individualized Recourse for Counseling Students.....	36
What is Psychological Capital? .....	36
PsyCap in Helping Professions .....	42
PsyCap in Academic Settings .....	44
Summary .....	47
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>48</b>
Population and Sampling Procedure.....	48
Data Collection .....	49
Instrumentation .....	49
Research Questions and Hypotheses .....	52
Data Analysis .....	54
Ethical Considerations .....	54
<b>CHAPTER FOUR: RESULTS .....</b>	<b>56</b>
Description of the Study .....	56
Demographic Information.....	57

Descriptive Statistics for the Research Instruments .....	63
Academic PsyCap Questionnaire (A-PCQ) .....	63
Lakaev Academic Stress Reaction Scale-2 (LASRS-2) .....	64
Mental Health Professionals Stress Scale (MHPSS) – Modified .....	64
Mental Health Continuum- Short Form .....	65
Overall Stress .....	66
Statistical Analysis of Research Questions and Hypotheses .....	67
Hypotheses One, Two, and Three.....	68
Hypothesis Four .....	69
Hypothesis Five .....	69
Hypothesis Six .....	70
Hypothesis Seven.....	71
Hypothesis Eight .....	72
Hypothesis Nine.....	73
Mediation Analyses .....	74
Summary .....	81
CHAPTER FIVE: DISCUSSION AND CONCLUSION .....	84
Overview of the Study .....	84
Discussion.....	86
Descriptive Results .....	86
Research Questions and Hypotheses .....	89
Hypotheses One, Two, and Three.....	90
Hypothesis Four .....	91

Hypothesis Five .....	92
Hypothesis Six, Seven, Eight, Nine .....	93
PsyCap: An Internal Resource for Coping with Stress .....	94
Examination of Findings within the Proposed Model .....	98
Implications.....	100
Implications for Counselor Education .....	101
Implications for Counseling Practice .....	103
Future Research .....	104
Informed Critiques and Limitations.....	106
Conclusion .....	109
Appendices .....	111
References .....	121



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## List of Tables

Table	Name	
4.1	Race/ Ethnicity .....	59
4.2	Self-Care Practices .....	62
4.3	Descriptive Statistic for the A-PCQ, LASRS-2, MHPSS, and MHC-SF .....	65
4.4	Main Life Stressors Identified by Participants .....	66
4.5	Pearson Correlations among AS, CS, PsyCap, and MH .....	69
4.6	Mean Scores by Program Specialties .....	70
4.7	One-way ANOVA of Variables by Program Specialties.....	71
4.8	Mean Scores by Race/ Ethnicity .....	71
4.9	One-way ANOVA of PsyCap, Stress, and Mental Health by Race/Ethnicity .....	72
4.10	Mean Scores by Program Settings .....	72
4.11	One-way ANOVA of Variables by Method of Delivery .....	73
4.12	Mean Scores of Full-time and Part-time Students .....	73
4.13	Correlations among AS, CS, PsyCap, MH, PsyCap*AS, and PsyCap*CS .....	74
4.14	Coefficients for Mental Health .....	75
4.15	Collinearity Diagnostics .....	76
4.16	Coefficients for Mental Health as the Dependent Variable .....	77
4.17	Coefficients for Predicting Mental Health.....	78
4.18	Coefficients for Predicting Academic Stress .....	78
4.19	Coefficients for Predicting Mental Health .....	79
4.20	Mediation Analyses: Academic Stress as the Partial Mediator .....	79

## List of Figures

### Figure Name

4.1	Race/ Ethnicity .....	59
4.2	Participants Enrollment .....	61
4.3	Self-Care Practices .....	62
4.4	Mediation Model .....	78
4.5	Total Effect of PsyCap on Participants' Mental Health .....	80
4.6	Mediation Model Including the Indirect and Direct Effects .....	80
5.1	Initial Hypothesized Mediation Model .....	96
5.2	Final Mediation Model .....	99

**PSYCHOLOGICAL CAPITAL: AN INTERNAL RESOURCE FOR COUNSELING  
STUDENTS COPING WITH ACADEMIC AND CLINICAL STRESS**

**Abstract**

Counseling students in CACREP-accredited counseling programs are facing a compound form of stress which is comprised of both academic and clinical stressors, and is negatively impacting their mental health. The current approaches for promoting their psychological wellbeing and mitigating the negative effects of stress (i.e., self-care strategies) seem to fail to consider the differences between students' psychological resources and how students are benefiting from them in coping with stressors. Unlike the current approaches, the construct of *psychological capital (PsyCap)* that has been operationalized as individuals' level of hope, optimism, self-efficacy and resilience, does recognize the differences in how individuals perceive and cope with stress. Given the uniqueness of the training stressors for counseling students, their vulnerability to those stressors, and the importance of their effectiveness in working with clients, the present study sought to explore the relationships among PsyCap, academic and clinical stress, and mental health in a national sample of 216 masters-level counseling students in CACREP-accredited counseling programs. The results of this study indicated that counseling students with higher levels of PsyCap reported experiencing lower levels of academic and clinical stress and higher levels of mental health. Additionally, the findings identified PsyCap as a predictive variable for participants' mental health, and revealed that the positive effects of PsyCap were partially mediated by participants' perceived academic stress. The outcome of this study provides insight into understanding the issue of stress and self-care for counseling students, and offers implications for counselor educators and practitioners.

*Keywords:* psychological capital, PsyCap, self-care, counseling students, academic stress, clinical stress, CACREP

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**PSYCHOLOGICAL CAPITAL: AN INTERNAL RESOURCE  
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## CHAPTER ONE

### Introduction

Stress, and more specifically, *academic stress*, has proven to negatively impact university students' physical and psychological health and their academic performance (Gupchup, Borrego, & Konduri, 2004; McKinzie, Altamura, Burgoon, & Bishop, 2006; Misra & McKean, 2000; Robotham, 2008; Robotham & Julian, 2006). Counseling students, in particular, are required to take on a clinical role as part of their professional training and are evaluated based on their clinical skills in addition to their academic performance. This requirement leads them to confront clinical stressors in addition to their academic stress, and negatively affects their mental health (Byars, 2005; Parker, 2014; Skovholt & Rønnestad, 2003). Moreover, the new requirements set forth by the Council for Accreditation of Counseling and Related Education (CACREP, 2016) have increased over the last decade (Bobby, 2013) and may exacerbate the issue (Yager & Tovar-Blank, 2007). In addition to their own psychological wellbeing, the negative impact of the academic stress on counseling students can also affect their counseling effectiveness in working with clients (Enochs & Etzbach, 2004; Lawson, 2007).

The current approach for addressing this problem is uniformly introducing counseling students to the need for and strategies of self-care. Physical exercise, mindfulness-based stress reduction activities, spiritual engagements, and seeking social support are some examples of self-care activities (Christopher, 2006; Christopher & Maris, 2010; O'Halloran & Linton, 2000; Richards, Campenni, & Muse-Burke, 2010; Schure, Christopher, & Christopher, 2008; Shapiro, Brown, & Biegel, 2007). What has been missing in the current approach, however, is recognizing the individual differences among counseling students in how they perceive and cope

with stress (Gupchup et al., 2004; Lambie, Smith, & Ieva, 2009; Lanham, Rye, Rimsky, & Weill, 2012; Yang, 2010).

The present study suggested a potential new approach for understanding the presented problem by introducing the higher order construct of *psychological capital (PsyCap)*, which recognizes psychological differences among individuals. Psychological capital is a construct rooted in the premise of positive psychology, and has been operationalized as individuals' level of hope, optimism, self-efficacy, and resilience (Fred Luthans, Youssef-Morgan, & Avolio, 2015). It has also proven to influence stress-perception, coping, and ultimately the level of mental health for college students and employees (Cheung, Tang, & Tang, 2011; Ding et al., 2015; Khan, Siraj, & Li, 2011; Knudson, 2015; Brett Carl Luthans, Luthans, & Jensen, 2012; Riolli, Savicki, & Richards, 2012; Selvaraj, 2015). Despite the importance of counseling students' mental health and the uniqueness of the stress they experience in CACREP-accredited counseling programs, no study had been done to investigate the influence of PsyCap on masters-level counseling students' perceived stress and mental health.

The current study investigated the relationship among psychological capital, perceived stress, and mental health for masters-level counseling students in CACREP-accredited counseling programs; it explored how psychological capital would influence students' perceived stress and ultimately, their mental health. Chapter one outlines the problem, justification for the study, an overview of the study, the theoretical framework, and definitions of terms used in this study. Chapter two is an extensive and critical review of the literature related to mental health of counseling students, their clinical training stressors, current approaches for addressing their stress, and the shortcomings of those approaches. Moreover, an overview of the construct of psychological capital and its influences on other constructs such as stress and mental health is



discussed in chapter two. Finally, in chapter three, the methodology and instruments employed in this study are presented.

### **Statement of the Problem**

Research indicates that academic stress can affect students' mental health and may contribute to a variety of psychological difficulties such as depression, anxiety, mood disorders, and even suicidality (Ang & Huan, 2006; McKinzie et al., 2006; Misra & McKean, 2000). In addition to common academic stress, counseling students in particular are exposed to clinical stressors during their practicum and internship experiences which are required by CACREP standards (Byars, 2005; Parker, 2014; Yager & Tovar-Blank, 2007). Stressors related to clinical aspect of counseling can significantly impact counselors-in-training and impede clinical training by weakening their decision-making and concentration capabilities (Christopher & Maris, 2010). Another source of stress for counseling students pertains to the evaluation process which has proven to be one of the academic stressors for university students (Yumba, 2008). Research shows that assessing counseling students' personal and professional development in particular would be even more complex and challenging (Hensley, 2003).

Skovholt and Rønnestad (2003) identified seven stressors that novice counselors struggle with: (a) experiencing severe anxiety associated with working with clients, (b) being observed and evaluated on clinical performance, (c) setting appropriate boundaries with clients, (d) lacking counseling self-efficacy, (e) having difficulty in case-conceptualization, (f) setting unrealistic expectations, and (g) needing consistent support. According to the authors, the effects of the aforementioned stressors were also moderated by a lack of clarity in clinical work (Skovholt & Rønnestad, 2003).

The literature suggests that the stressors of graduate training negatively affect the mental health of today's counselor education students. In a study by Byars (2005) on 57 students from a CACREP-accredited counselor education program, all of the participants showed moderate levels of depression and loneliness, and their pretest score average was "approximately two standard deviations above the norm mean and indicates extremely high levels of stress" (Byars, 2005, p. 144). Moreover, in a study by Parker (2014) on 257 counseling students who were enrolled in internships, more than 51% of participants reported feeling stressed to extremely stressed with regard to their internship site placement, maintaining their own mental health while being an intern, and the conflict between their internship and their other personal and professional roles (Parker, 2014). Even though it could be argued that some level of stress could facilitate students' development and growth, according to the author the mentioned stressors "do not appear to be intentionally created learning experiences by counseling programs and they are not uniform across all programs" (Parker, 2014, p. 29).

### **Current Approaches to Address the Problem**

A review of the literature indicates that predominant approaches for the issue of academic and clinical stress in counselor education programs are centered on the psychoeducational approach of introducing counseling students unilaterally to needs and strategies for *self-care* (Schure et al., 2008). Self-care has been defined as "self-initiated behaviors that promote good health and wellbeing" (Bickley, 1998; Christopher, 2006, p. 496; Myers et al., 2012). Some authors have suggested counselor education programs should incorporate a wellness model in their programs' curricula and teach students the signs and symptoms of stress-related difficulties as well as self-care strategies and techniques (Enochs & Etzbach, 2004; Myers et al., 2003; Newell & MacNeil, 2010; Roach & Young, 2007; Witmer & Young, 1996).

Self-care practices include but are not limited to: (a) physical exercise (Byars, 2005; Myers et al., 2012), (b) mindfulness-based stress reduction activities (MBSR; Christopher & Maris, 2010; McKinzie et al., 2006; Myers et al., 2012; Napoli & Bonifas, 2011; Shapiro, Brown, & Biegel, 2007) through yoga and different forms of meditation (Chrisman, Chambers Christopher, & Lichtenstein, 2008; Christopher, 2006; Leppma, 2011; Schure et al., 2008), (c) utilizing anxiety reduction and time management techniques in conjunction with leisure activities (Misra & McKean, 2000), (d) engaging in spiritual activities (Calicchia & Graham, 2006), (e) seeking social and emotional support (Calicchia & Graham, 2006; Ickes, Brown, Reeves, & Zephyr, 2015; Misra, Crist, & Burant, 2003; Myers et al., 2012; Witmer & Young, 1996), (f) receiving individual and group counseling (Byars, 2005; Enochs & Etzbach, 2004; Stecker, 2004), and (g) utilizing biofeedback techniques (Chandler, Bodenhamer-Davis, Holden, Evenson, & Bratton, 2001). Speaking to the significance of the issue, the American Counseling Association (ACA) has also initiated a campaign for promoting counseling students' wellness by providing support, treatment, and education for students with mental health conditions (Puig et al., 2012).

### **Shortcomings of the Current Approaches**

The major shortcoming of the current approaches is that they fail to consider the existence of potential differences among counseling students in their psychological resources for coping with academic and clinical stress. Research has identified factors that may influence susceptibility of individuals to stress, such as gender (Kumary & Baker, 2008; Misra et al., 2003), help-seeking tendency (Enochs & Etzbach, 2004), level of ego development (Lambie et al., 2009), level of attitude of gratitude (Lanham et al., 2012), and coping style (Yang, 2010). In other words, some of these factors may influence how individuals perceive or are affected by

stress. This notion is also consistent with the transactional conceptualization of stress in which psychological characteristics are an important factor as to how an individual would cope with a threat presented by the environment (Lazarus, 1966). In fact, according to the literature, the role of the *self* (i.e., an individual's psychological structure) would be even more significant than that of the environment in determining how an individual perceives and copes with stress (Lee, Lim, Yang, & Lee, 2011).

### **An Approach to Recognize the Individual Differences**

While the current approaches for addressing the issue of clinical and academic stress in counselor education programs fail to consider the individual differences among the students, there seems to be another approach to understand and potentially address this issue without overlooking the differences. Psychological capital (PsyCap) is a psychological construct rooted in the premise of positive psychology that has been defined based on one's psychological resources, and thus, unlike the current approaches, it does recognize the individual differences. PsyCap has been operationalized as one's level of hope, optimism, self-efficacy, and resilience (Fred Luthans, Avolio, Avey, & Norman, 2007). Research on university students and professional employees indicated that PsyCap influenced how they perceived and coped with academic and work-related stress. Previous studies have also established a relationship between individuals' PsyCap and their mental health. (Cheung, Tang, & Tang, 2011; Ding et al., 2015; Khan, Siraj, & Li, 2011; Knudson, 2015; Luthans, Luthans, & Jensen, 2012; Riolli, Savicki, & Richards, 2012; Selvaraj, 2015).

### **Justification for the Study**

The literature shows that both counseling students and their faculty believe that their mental health is a critical component of their counseling effectiveness, and the findings of the

literature support their belief (Lambie et al., 2009). “Counselors who are unwell (stressed, distressed, or impaired) will not be able to offer the highest level of counseling services to their clients, and they are likely to begin experiencing a degradation of their quality of life in other domains as well (physical, social, emotional, spiritual, etc.)” (Lawson, 2007, p.20). Moreover, counselor educators are required ethically to protect clients from impaired counseling students (Witmer & Young, 1996), and they could be held legally accountable in a case of malpractice (Enochs & Etzbach, 2004). Because of the influence of counselors’ wellness on the effectiveness of their work with clients, the ACA Code of Ethics (2014) requires counselors to monitor their psychological wellbeing, and in case of mental health difficulties, mandates them to seek assistance and stop providing counseling services for clients (Puig et al., 2012). Additionally, The Journal of Humanistic Counseling, Education, and Development (2007) dedicated an issue entirely to counselor wellness (Lawson, Venart, Hazler, & Kottler, 2007). The importance of counseling students’ mental health and the uniqueness of the stress they experience in CACREP-accredited counselor education programs coupled with the demonstrated potential of PsyCap to be an individualized psychological resource for student stress reduction justified a heuristic study to explore the relationships among PsyCap, stress (academic and clinical), and mental health for counseling students.

### **Purpose of the Study**

The present study aimed to establish a relationship among the level of academic PsyCap, perceived stress, and mental health for masters-level counseling students in CACREP-accredited counseling programs. It aimed to establish PsyCap as a framework for understanding the individual differences in the way counseling students perceive and cope with stress by examining relationships among students’ assessed PsyCap, perceived stress levels, and mental health.

## **Overview of the Study**

A convenience sample of 216 masters-level students from CACREP-accredited counseling programs was selected, including all specialties such as clinical mental health, school, and marriage and family counseling. Participants were asked to complete an online-based survey via Qualtrics in order to be measured on their academic psychological capital, academic stress, clinical stress, and mental health. The electronic survey included: (a) an informed consent which explained the purpose and the process of the study in addition to the contact information of the researcher in case participants have questions or face technical issues; (b) a demographic information survey to capture the potential differences between subgroups of participants (e.g., gender, clinical engagement, etc.); (c) the Academic Psychological Capital Questionnaire (Brett Carl Luthans et al., 2012) to measure participants' academic PsyCap; (d) the Lakaev Academic Stress Reaction Scale (Lakaev, 2016) to measure participants' academic stress; (e) the modified version of the Mental Health Professionals Stress Scale (MHPSS; Cushway, Tyler, & Nolan, 1996) to measure participants' clinical stress; (f) the Mental Health Continuum- Short Form (Keyes, 2009); and (g) an open-ended question to identify participants' major source of stress.

A heuristic approach (i.e., cross-sectional) was implemented to meet the objectives of the study which were: (a) to investigate whether academic PsyCap had a meaningful relationship with perceived stress and mental health; (b) to determine the nature of relationships among the variables of interest (e.g., moderation, mediation, or prediction); and (c) to examine the differences between subgroups of participants in terms of gender, race/ethnicity, counseling specialty, and working with clients. Mediation, moderation, and regression analyses were employed in the data analysis process.

## **Theoretical Framework: Positive Psychology**

Positive psychology is a general term for an approach concerned about what makes life worth living (Seligman & Csikszentmihalyi, 2000). According to Seligman (2000), positive psychology centers on making the lives of individuals flourish and creating positive experiences for them. The field of positive psychology addresses three different yet interrelated domains. First, positive psychology emphasizes valued experiences such as satisfaction, wellbeing, hope, and optimism in the subjective domain (Diener, Lucas, & Scollon, 2006; Fredrickson, 2001; Seligman & Csikszentmihalyi, 2000). Second, it focuses on positive character strengths such as capacity for love, forgiveness, and interpersonal relationships (Park, Peterson, & Seligman, 2004b). Finally, it addresses virtues that elevate individuals at the societal level such as altruism and work ethic (Seligman & Csikszentmihalyi, 2000).

Positive psychology offers positive intervention strategies such as practicing optimistic thinking, writing gratitude letters, and replaying positive experiences (Rashid, 2009; Seligman, Rashid, & Parks, 2006). Positive intervention strategies aim to cultivate positive feelings, cognitions, and behaviors which lead to improvement in different domains of wellbeing (Sin & Lyubomirsky, 2009). The main goal of positive interventions is to build strengths and empower clients rather than “fixing” clients’ deficits, which distinguishes positive interventions from other strategies (Sin & Lyubomirsky, 2009). Through this approach, psychotherapy focuses on holistic mental health including both the presence of psychological wellbeing and the absence of mental disorders (Keyes, 2003).

While positive psychology was the underlying approach in this study, the relationships among the variables of interest in this study were examined through the Buffering Model of Stress (Cohen & Wills, 1985) lens. According to this model, using some resources (e.g., social

support) can serve as a buffer against stress, and may mitigate the effect of stress on individuals. This model is also consistent with the transactional model of stress (Lazarus, 1966), in which the effects of stress on individuals are determined not only by the severity of the stressful event (i.e., environmental threat), but also by their beliefs about their resources assisting them to cope with the threat.

### **Definition of Terms**

**Hope.** Snyder (2002) has defined hope as “a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p.287). The definition of hope includes two main components: “pathway thinking” and “agency thinking” (Snyder et al., 2002, p.258).

**Optimism.** This construct has been conceptualized as a psychological perspective that views positive events as the outcomes of more permanent, prevalent, and personal existing factors as opposed to regarding negative events as temporary, situational, and external (Seligman, 2011).

**Resilience.** Resilience has been defined as the psychological ability to positively adapt in the face of significant adversity and/or failure in order to maintain psychological wellbeing (Fred Luthans et al., 2015; S. Luthar, Lyman, & Crossman, 2014; S. S. Luthar, Cicchetti, & Becker, 2000; McCann et al., 2013; Tugade, Fredrickson, & Barrett, 2004).

**Self-efficacy.** This construct has been defined as the belief in one’s ability to perform a task or to execute a specified behavior successfully (Bandura, 1977).

**Positive psychological capital.** Luthans and his colleagues define this construct as:



An individual's positive psychological state of development that is characterized by: (a) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed, and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans et al., 2015, p.2). As opposed to trait-like characteristics that are not usually changeable, PsyCap is a state-like construct that can be improved (Luthans & Youssef, 2004; Luthans et al., 2015).

**Psychological wellbeing.** This construct consists of six dimensions: (a) finding meaning and purposeful direction in life, (b) self-acceptance, (c) having positive relationships with others, (d) thinking and acting autonomously, (e) having the intention for personal growth and development, and (f) having a sense of competence in choosing or creating context suitable to personal values (Ryff & Keyes, 1995).

### **Limitations**

One of the limitations of the positive psychology approach seems to be the lack of consistency for the definition of positive psychological constructs across different cultures. For example, an individual coming from an European-American cultural background may view autonomy and individual benefits as the requirements for happiness, while one from a more collectivist culture may perceive happiness as fulfilling obligations and group tasks and improving the sense of belonging to others (Branch & Javaheri, 2016). Due to the differences between these perceptions, positive interventions may be delivered insensitively to some cultures.

Some critics of positive psychology equate positive psychology with “happiology” (Peterson, 2006), or the study of happiness, but smiling and happiness are not the only indicators of a fulfilled life. In fact, individuals may not experience instant pleasure or happiness when they are working hard to reach their goals, yet their striving is of the interests of positive psychology (Peterson, 2006). Even though some critics of positive psychology assert that this approach is indifferent to suffering, one of the outcomes associated with positive interventions has been the elimination or reduction of symptoms related to various mental disorders such as depression or anxiety (Seligman et al., 2006).

### **Summary**

Counseling students in CACREP-accredited programs face a combination of academic and clinical stress, which may affect not only their mental health, but also their counseling effectiveness when working with clients. The current approach for addressing this issue is unilaterally introducing counseling students to the needs and strategies of self-care. However, these approaches fail to consider the individual differences among counseling students and their psychological resources for coping with stress. Psychological capital (PsyCap) has proven to influence stress-coping and mental health for university students and employees while recognizing the individual differences. The present study heuristically investigated the relationship among psychological capital, level of perceived stress, and mental health for masters-level counseling students in CACREP-accredited counseling programs. The next chapter will present a review of the literature providing the foundation for the study.

## CHAPTER TWO

### Review of Literature

This chapter includes an extensive and critical review of the literature regarding the stress experienced by students in counselor education programs and the effects of the stress on their mental health. Counselor educators' current approaches to address this issue and the shortcomings of those approaches will also be discussed. Finally, the construct of psychological capital (PsyCap) and its potential utility for understanding the issue of stress in counselor education programs will be introduced.

#### A Transactional Model of Stress

The construct of stress has been operationalized from multiple perspectives. Some scholars have viewed stress from a response-based perspective which highlights physiological responses, such as increased heart rate (as cited in Kardatzke, 2009; Selye, 1956; Wolff, 1953). Other researchers have focused on the role of stimuli that cause stress, including natural disasters and health problems (Holmes & Rahe, 1967; as cited Kardatzke, 2009). Finally, Lazarus (1966) has conceptualized stress as a transaction between a person and the environment. The process begins when a stimulus (i.e., stressor) represents a threat that activates a cognitive process for the person to assess the degree of harm or loss. This leads to a *secondary appraisal* in which the person evaluates his or her resources to cope with the stressor.

Three main factors determine the result of the stress evaluation: the degree of threat, the stimulus characteristics, and the person's psychological characteristics. Lazarus (1996) provides examples of the third factor: "motivation and general beliefs about the environment and one's resources for dealing with it [stress]" (p. 25). The second round of appraisal determines the

strategies an individual adopts to mitigate or eliminate the threat represented by the stressor, and is called coping (Lazarus, 1966).

Research shows that stress can lead to a variety of physical difficulties such as tension headaches, coronary heart disease, influenza, irritable bowel syndrome, rheumatoid arthritis, and cancer (as cited in Kardatzke, 2009; Seaward, 2013). It also makes the body more prone to infections and autoimmune diseases (Graham, Christian, & Kiecolt-Glaser, 2006; as cited in Kardatzke, 2009). In addition to the physical impact, research has indicated a meaningful correlation between psychological disorders (e.g., depression, anxiety, substance abuse, and suicidality) and environmental stressors ranging from acute instances, such as abuse and rape, to chronic stressors, such as financial problems (Seaward, 2013).

### **Academic Stress and Students' Mental Health**

Academic stress, in particular, has proven to be correlated with physical and mental difficulties among university students. A study conducted on 64 first-year dental school students demonstrated a negative effect of academic stress on the students' immune function. The students' level of perceived stress and their salivary Immunoglobulin A (IgA) secretion rate were measured five times—two times at the beginning and the end of a semester when the students were experiencing a low level of stress, and three times coinciding with important exams during the semester. The result of the study indicated that the rate of IgA secretion was negatively correlated with the students' level of perceived stress (Jemmott et al., 1983).

Research indicates that academic stress can affect students' mental health and may contribute to a variety of psychological difficulties such as depression, anxiety, mood difficulties, and even suicidality (Ang & Huan, 2006; McKinzie et al., 2006; Misra & McKean, 2000). A quantitative study by McKinzie and her colleagues (2006) on 65 psychology graduate

students showed that negative mood, exercise habits, and sleep patterns significantly correlated to the students' level of stress and were also identified as predictive variables for the level of stress in the regression model suggested by the authors. From the implications of the study, the authors encouraged the inclusion of stress-management interventions in helping-profession programs. They also suggested providing the opportunity of peer mentorship for students, especially during their first year. To strengthen their study, the author included power analyses in the result section, and they also presented the psychometrics of the instruments they used in their study. In terms of the demographics of the sample, although the number of female participants ( $n = 49$ ) was about three times the number of male participants ( $n = 16$ ), the sample seemed to be reflective of the common proportion of female-to-male enrollment in psychology programs. However, a shortcoming of the study lies in the fact that since the regression model included three predictive variables, a sample size of at least 30 participants would be needed for *each* predictive variable. Another shortcoming is that all participants were selected from two universities in the New York City metropolitan area, which may have limited the generalizability of the results. In addition, the model specification was lacking, as the authors did not present the theoretical criteria for including the variables in their regression model. Finally, the results only indicated a correlational relationship; therefore, experimental studies would be necessary to infer a causal relationship between variables. Despite these shortcomings, the findings yielded salient themes regarding the relationship between stress and negative mood.

In a meta-analysis conducted by Pulido-Martos (2011) and his colleagues, stress was identified as a significant factor that impacted the wellbeing and academic performance of nursing students (Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2011). In fact, multiple studies suggest that stress is one of the significant predictors of wellbeing among all college students

(Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Nelson, Dell'Oliver, Koch, & Buckler, 2001). The effect of academic stress on students' psychological wellbeing does not seem to be limited to American students; the result of a comparison study of stress, coping, and psychological well-being among Chinese, Korean, Taiwanese, and American graduate students indicated that higher levels of family, environmental, and academic stress in graduate students are associated with maladaptive coping behaviors which, in turn, are negatively correlated with their psychological well-being (Yang, 2010). A study by Ang and Huan (2006) showed that academic stress and suicidal ideation were positively correlated among high school students. Although some of the components of academic stress for high school students may be different than that of university students (i.e., undergraduate and graduate level), the nature of academic stress seems to be the same in both populations.

### **Stress for Counseling Students**

The findings of a cross-sectional study by Gnilka (2010) on 232 masters-level counseling students indicated that the constructs of *working alliance* and *supervisory working alliance* were negatively correlated with participants' level of perceived stress. These two constructs also proved to be positively correlated with participants' scores on their *coping resources*. According to Gnilka (2010), counseling students' level of stress and their coping resources are of the main factors that could influence their personal development. The results of this study shed light on the relationships between these two constructs and two other important concepts in the counseling field – working alliance and supervisory working alliance. The findings would assist counseling students as well as counselor educators to serve clients and supervisees more effectively by gaining further awareness regarding the stressors they face and the coping resources they use to deal with those stressors. A limitation of the study lies in the fact that only

71.1% ( $n = 165$ ) of participants were selected from CACREP-accredited programs. Also, the inclusion of 48 credit programs as well as specialties that are no longer recognized by CACREP (e.g., community counseling) would limit the generalizability of the results to 60 credit CACREP-accredited programs. The gender ratio (i.e., the number of female participants to male participants) in the sample was 200:30, and although this proportion may reflect the gender ratio in the counseling field, extrapolation of the results to other institutions with significantly different demographics would warrant caution. Implementation of self-report method of data collection could affect the objectivity of measurement, and utilizing a cross-sectional approach would only indicate correlations among variables and further investigation would be needed to prove causality. Despite these limitations, one of the strengths of this study is that the author presented the psychometrics of the utilized instruments, all of which have high reliability: the Working Alliance Inventory - Short Form (WAI-S; Tracey & Kokotovic, 1989) with an internal consistency of .95; the Supervisory Working Alliance Inventory - Trainee Version (SWAI-T; Efstation & Patton, 1990) with an internal consistency of .96; and the Perceived Stress Scale – Short Form (PSS; Cohen, Kamarck, & Mermelstein, 1983) with a reliability coefficient of .82 and an internal consistency of .86. This study also provides useful information with respect to counseling students' coping resources and perceived stress.

In a study by Smith et al. (2007) on 204 masters-level counseling students from nine counseling programs in five different states, 16.8 % of participants reported significant difficulty in their interpersonal relationships, and 14.2% reported having mental health problems such as depression, anxiety, and mood difficulties. Although the results did not show that the majority of participants were experiencing higher levels of psychological distress than the common population, the authors recommended that more research would be needed for investigating the

stress level of counseling students. Given that the sample of the study consisted of 180 females and 24 males, and the majority of the sample were Caucasian ( $n = 136$ ), the extrapolation of the findings warrants caution for counseling institutions with significantly different demographics. Furthermore, the authors did not specify if all of the participants were selected from CACREP-accredited programs, which also may impact the generalizability of the results to CACREP-accredited programs. Although participants' awareness about mental conditions may have been a contributing factor for identifying mental health problems at higher levels than average, the results of this study call for further investigation regarding counseling students' level of psychological distress. However, the findings are nonetheless valuable as they highlight the issue of mental health for counseling students.

As the standards set forth by the Council for Accreditation of Counseling and Related Education Programs (CACREP) have evolved during recent decades, the academic and clinical requirements of counseling programs accredited by CACREP have been increasing for all counseling specialties (Bobby, 2013). The increased coursework requirements, clinical experiences (i.e. working with clients), supervisory specifications, and evaluative processes impose a unique form of stress on counseling students (Skovholt & Rønnestad, 2003), which is negatively impacting counseling students' mental health (Byars, 2005; Parker, 2014). Lack of knowledge in any of CACREP's (2016) common eight areas of curricular experience (i.e., professional counseling orientation and ethical practice, multicultural counseling, human development, career, counseling and helping relationships, group counseling, research and program evaluation, and assessment) is one stressor that counseling students are experiencing in particular (Parker, 2014; Skovholt & Rønnestad, 2003).



In a study by Byars (2005) on 57 counseling students from a CACREP-accredited program, all of the participants showed moderate levels of depression and loneliness, and their pretest score average was “approximately two standard deviations above the norm mean and indicates extremely high levels of stress” (Byars, 2005, p. 144). Since the author utilized convenience sampling, and all of the participants were recruited from the same counselor education program, the generalizability of the results warrants caution. Also, the use of self-report instruments may have affected the objectivity of the results. However, despite the limitations of the study, the findings highlight the potential risk for counseling students’ mental health.

### **Increased Coursework**

The new CACREP standards (2016) promote more consistent education among the different counseling specializations in terms of the minimum required number of credit hours students should take in order to complete a master’s level counseling degree. According to the revised set of 2016 CACREP standards, some of the entry-level degree specialty areas (e.g., addiction counseling, clinical mental health counseling, clinical rehabilitation counseling, and marriage, couple and family counseling) currently require a minimum of 60 semester credit hours or 90 quarter credit hours to complete the degree program. The remaining specialty areas (e.g., career counseling, college and student affairs counseling, and school counseling) currently require a minimum of 48 semester credit hours or 72 quarter credit hours. However, beginning July 1, 2020, all entry-level degree programs will require at least 60 semester credit hours or 90 quarter credit hours for all counseling specialties (CACREP, 2016). According to the group of counselor educators who advocated for the new standards, the new requirements are necessary for gatekeeping purposes, as the old standards would lead to insufficient preparation both

academically and clinically (Henriksen Jr., Wiesner III, & Kinsworthy, 2008). However, an opposing group of counselor educators believe that the increased credit hours are unnecessary and could make counseling degrees less desirable and more cost-prohibitive to prospective low-income students (Henriksen Jr. et al., 2008). Although the increase in the number of credit hours required for the completion of a master's degree in a CACREP-accredited program aims at solidifying the professional identity of counselors by unifying the standards and requirements (Bobby, 2013), it would also increase the dedicated time and effort needed for academic success.

### **Clinical Challenges**

In addition to the coursework requirements, the clinical requirements (e.g., minimum required clinical hours of direct interaction with clients for the completion of practicum and internship courses) in counselor education programs have also been increased in the recent decades to provide increased opportunities for counseling students to receive the clinical experience they need to begin their professional careers (Bobby, 2013; CACREP, 2016). The literature suggests that the negative impact of stress on mental health practitioners contributes to burnout and mental health conditions such as depression, anxiety, decreased job satisfaction, low self-esteem, relationship disruption and feelings of loneliness and isolation (Butler & Constantine, 2005; Figley, 2002; Lushington & Luscri, 2001; Mann, 2004; Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012; Shapiro et al., 2007). Stress may also affect clinical effectiveness by limiting counselors' concentration and attention (Skosnik, Chatterton Jr., Swisher, & Park, 2000).

The literature indicates that the clinical-related stress not only affects professional counselors, but also may negatively impact counselors-in-training as well. The clinical experiences in counseling programs can impose significant stress on counseling students that is

equal to the symptoms professional counselors may experience as the result of clinical work (Park, 2014). The findings of a study by Puig and colleague (2012) on mental health professionals indicated a negative relationship between wellness and the feeling of incompetency. The authors asserted that “feelings of incompetence may be of particular concern for mental health professional trainees as they begin to develop their clinical skills,” and thus their “wellness may also be affected negatively” (Puig et al., 2012, p.106).

Clinical aspects of counseling programs impose “unique developmental challenges” (Kardatzke, 2009, p.37) on counselors-in-training, which increase the risk of impairment for counseling students (Byars, 2005; Yager & Tovar-Blank, 2007). Skovholt and Rønnestad (2003) have identified seven stressors for novice clinical practitioners facing the ambiguity of clinical practice and having to take on a new role that offers different challenges than previously experienced: “acute performance anxiety, the illuminated scrutiny of professional gatekeepers, porous or rigid emotional boundaries, the fragile and incomplete practitioner-self, inadequate conceptual maps, glamorized expectations, and an acute need for positive mentors” (p.45). The challenges counseling students face, however, may change as they progress in their clinical training. For example, entry-level students may express higher levels of anxiety, whereas more advanced students who are completing their internship courses may experience tension in their supervisory relationships (Rønnestad & Skovholt, 1993), particularity when facing cross-cultural issues (Daniels, D’Andrea, & Kim, 1999).

In a study by Parker (2014) on 257 counseling students who were enrolled in internships, more than 51% of participants reported feeling stressed to extremely stressed with regard to their internship site placement, maintaining their own mental health while being an intern, and the conflict between their internship and their other personal and professional roles (Parker, 2014).

Moreover, 42% of participants reported feeling stressed to extremely stressed about acquiring the required direct clinical hours within the timeframe allowed by their universities, 30% of participants ranked the pressure of impressing their on-site supervisor, stressful to extremely stressful, and finally, 29% of participants reported feeling stressed to extremely stressed with regard to acquiring their group counseling hours (Parker, 2014). Even though it could be argued that some level of stress could facilitate students' developmental growth, according to the author the aforementioned stressors "do not appear to be intentionally created learning experiences by counseling programs and they are not uniform across all programs" (Parker, 2014, p. 29). In this study the author developed a survey instrument and utilized it to assess counseling students' stressors as they relate to their internship experience. Even though the sample size seems to be enough for the purpose of conducting principle component analyses, the inclusion of participants who had already graduated (within a timeframe of six years) may have affected the homogeneity of the sample, since the graduated participants may have not been able to recall the stressors as clearly and accurately as current students. One of the strengths of this study was utilizing a focus group following the construction of the survey to ensure they had included all needed aspects in the survey and to provide feedback regarding the wording of the items (Ritchie, Lewis, Nicholls, & Ormston, 2013). Also, receiving supervision from a team of experts in the survey design process seems to strengthen the methodology. As far as limitations, the inclusion of participants ( $n = 13$ ) from non-CARCREP programs, Community Counseling programs (which no longer exist under CACREP specialties), and 48 credit hour programs ( $n = 93$ ) seems to limit the generalizability of the findings to 60 credit hour CACREP programs. Also, the self-reporting method of data collection and administration of a convenience sample are other limitations of the study. The results of the cross-sectional analyses indicated a correlation between variables, and

to prove causal relationships, further experimental studies would be necessary. Despite the above limitations, this study provides insight into the significance of clinical stressors and their negative effects on counseling students' mental health.

### **Evaluation Process**

Education-related literature indicates that *evaluation* procedures have proven to be a stress-provoking process for university students (Lyndon, Strom, Alyami, & Yu, 2014; Yumba, 2008). Research shows that assessing counseling students' personal and professional development, in particular, would be even more complex and challenging (Hensley, 2003). Students are being evaluated on multiple domains throughout their trainings. According to the CACREP standards, the evaluation of counseling students would be based both on the knowledge they acquire by taking the required courses and also on the counseling competence they demonstrate in working with clients at practicum and internship sites (CACREP, 2016). Counseling students are also being consistently evaluated on their professional dispositions (CACREP, 2016), and any deficiencies in their non-academic professional performance may lead to remedial consequences (McAdams III, Foster, & Ward, 2007). The literature suggests that each of the evaluative processes in counseling programs could be significantly stressful (Skovholt & Rønnestad, 2003). What makes these processes even more stressful for counseling students is a lack of clear and consistent criteria for their personal and professional assessments (Enochs & Eitzbach, 2004).

Despite these findings, Myers and her colleagues (2003) found that counseling students had higher levels of psychological wellbeing than did students in other programs (Myers, Mobley, & Booth, 2003); however, their sample was selected only from students who are in their

first year of study and thus not dealing with internship stressors. Furthermore, the authors did not specify if their sample was selected from CACREP-accredited programs.

In sum, a review of the literature suggests that the combination of the stress associated with intensive coursework, clinical experiences, evaluation processes, and self-development challenges for a new clinical and professional role imposes a compound form of stress on counseling students. This stress may negatively impact their mental health and consequently reduce their effectiveness in working with clients successfully. Byars (2005) summarizes these points: “Couple the stress inherent in graduate school with the stress involved in being a counselor, and it becomes obvious that counseling students are at a high risk for stress, stress related illnesses” (p.6).

### **Current Approaches to the Problem**

Considering the significant impact of the compound stress on counseling students, current approaches for understanding and addressing this problem are presented in this section, including recommendations and interventions for how students, particularly counseling students, should cope with stress.

### **Current Approaches to Address Stress for Students**

A review of the literature shows evidence of the effectiveness of cognitive, behavioral, and also mindfulness stress reduction interventions (e.g., progressive muscle relaxation, EMDR, cognitive-behavioral stress management (CBSM), and bio-feedback aided relaxation training) for the purpose of mitigating the effects of stress on students’ psychological wellbeing (Misra & McKean, 2000; Regehr, Glancy, & Pitts, 2013). Misra and McKean (2000) conducted a study on 249 undergraduate students measuring their level of anxiety, academic stress, time management, and leisure satisfaction. According to the regression model presented, time management skills

seem to serve as a stronger buffer on academic stress than leisure satisfaction behaviors. The authors also found that the female participants scored significantly higher in their time management skills than did their male counterparts; they also had higher levels of anxiety and academic stress. The result of the multivariate regression analyses identified anxiety, leisure satisfaction, and time management as the predictive variables of academic stress. Based on these findings, the authors recommended time management practices, anxiety reduction practices, and leisure activities, as effective strategies for coping with academic stress (Misra & McKean, 2000). The sample of the study seems to be large enough to be utilized in a regression analysis and for the purpose of comparing the differences between gender and race; particularly, the non-white group would have been too small to be used in the analysis of variance had the sample size not been large enough. The authors clearly explained the considerations for their analysis such as the alpha correction method they used (i.e. Bonferroni) and all the required steps for conducting a regression analysis. They also acknowledged the limitations of their study, such as concerns regarding the validity of self-report measures and the inherent limitations of correlation analyses for proving causal relationships.

### **Current Approaches for Counseling and Counseling-Related Students**

A review of the literature suggests that the overarching solution for the issue of stress for counseling students has been introducing students to the concept and strategies of *self-care* and how self-care could serve as a buffer for stress and decrease the risk of burnout (Chrisman et al., 2008; Christopher & Maris, 2010; Leppma, 2011; Myers et al., 2012; Napoli & Bonifas, 2011; Richards et al., 2010; Schure et al., 2008). Self-care has been defined as “self-initiated behaviors that promote good health and wellbeing” (Bickley, 1998; Christopher, 2006, p. 496; Myers et al.,

2012). Richard (2010) and her colleagues have identified four major domains in which self-care could be conceptualized: physical, psychological, spiritual, and support (Richards et al., 2010).

Within the physical domain, some studies emphasize the importance of engagement in consistent *physical exercise* (e.g., going to the gym on a regular basis) (Byars, 2005; Myers et al., 2012). In addition, some researchers suggest sleep regulation activities for improving physical and psychological health (Myers et al., 2012). As far as the psychological domain, a great body of literature suggests the incorporation of a *wellness model* in counseling programs to help students cope with stress in effective ways. Teaching students the signs and symptoms of stress-related conditions as well as strategies and techniques for self-care have been introduced in the literature as a preventive approach to address the issue of counseling students' psychological wellbeing (Enochs & Etzbach, 2004; Myers et al., 2003; Newell & MacNeil, 2010; Roach, 2005; Roach & Young, 2007; Witmer & Young, 1996; Yager & Tovar-Blank, 2007). In addition to educating counseling students about the symptomology of stress-induced difficulties, discussing the ACA Code of Ethics' concept of wellness in counseling courses could also be a part of this model as it connects the concepts of self-care and ethical practice (Yager & Tovar-Blank, 2007).

Teaching self-care through *mindfulness and mindfulness-based stress reduction (MBSR)* activities has been another approach for helping counseling students cope with stress (Christopher & Maris, 2010; McKinzie et al., 2006; Myers et al., 2012; Napoli & Bonifas, 2011; Shapiro et al., 2007). The primary goal in mindfulness is for students to become more aware of their thoughts, emotions, and the present moment so that they can deal with negative thoughts and emotions more effectively (as cited in Christopher, 2006; Kabat-Zinn et al., 1992). For example, Christopher (2006) has developed a graduate course in a counseling program entitled "Mind/Body Medicine and the Art of Self-Care" (Christopher, 2006, p. 496). The goal of the



course was to introduce mindfulness practices and self-care strategies for counseling students. Mindfulness could be taught through Yoga or different types of meditation (Chrisman et al., 2008; Schure et al., 2008). Among different kinds of meditation, Loving-Kindness meditation (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008), which is rooted in positive psychology, has proven to be effective in improving students' perceived problem-solving skills and social-support appraisal (Leppma, 2011).

Schure (2008) and his colleagues conducted a qualitative study to explore the effect of teaching meditation, Hatha yoga, and Qigong to counseling students. During the four years of data collection, 33 counseling students from different tracks (e.g., mental health, marriage and family, and school counseling) participated in the study. Participants who had taken a three-credit mindfulness-based stress reduction (MBSR; Kabat-Zinn et al., 1992) course completed a reflection assignment to answer the overarching research questions. The data was qualitatively analyzed using cross-case analysis. The results yielded an improvement in the participants' physical, mental, emotional, and spiritual aspects of their lives. The findings also indicated positive changes in the therapeutic relationships between the students and their clients (Schure et al., 2008). The authors clearly explained the data analysis processes and the procedures they implemented to ensure the trustworthiness and inter-rater reliability of their research. Since their approach was inductive and their goal was to capture the experience of participants, conducting semi-structured interviews (instead of asking participants to complete a reflection journal) may have been more effective in terms of the depth and details of the information collected. Also the authors did not mention if the sample was selected from a CACREP-accredited counseling program, which would limit the generalizability of the results to CACREP programs. In spite of

the limitations, the findings provide useful information with regard to one of the common approaches for addressing counseling students' self-care.

Introducing counseling students to personal and *group counseling* services (Byars, 2005; Enochs & Etzbach, 2004; Stecker, 2004; Yager & Tovar-Blank, 2007) and educating them about challenges associated with clinical work (as cited in Enochs & Etzbach, 2004; Witmer & Young, 1996) have been suggested by the literature to be effective self-care strategies for improving their mental health. In addition to the aforementioned interventions, other stress-reduction methods, such as *Biofeedback-Assisted Relation Training*, have also been recommended in the literature for improving the sense of psychological wellbeing in counseling students (Chandler, Bodenhamer-Davis, Holden, Evenson, & Bratton, 2001). Furthermore, engagement in *spiritual activities* (Calicchia & Graham, 2006; S. Graham, Furr, Flowers, & Burke, 2001) and receiving social and emotional support (Calicchia & Graham, 2006; Myers et al., 2012), especially from family members, close friends, professors, and supervisors, have proven to be contributing to counseling students' psychological wellbeing (as cited in Kardatzke, 2009; Witmer & Young, 1996). Although the clinical supervision throughout the course of a counseling program would be considered one of the resources for providing support for counseling students, the nature of a supervisory relationship seems to be more evaluative than empathic, as it centers on professional gatekeeping, assessing *clients'* needs and improving supervisees' clinical skills (Bernard & Goodyear, 2014) rather than counseling students' mental health.

Nelson (2001) and her colleagues conducted a quantitative study on 53 doctoral students in a clinical psychology program, measuring their stress, psychological health, coping style, and social support. The results demonstrated that more successful students (i.e., those who had higher GPAs) were less stressed, had higher scores on health, deployed more positive and fewer

negative coping behaviors, and had greater social support (Nelson et al., 2001). The study highlights the potential positive role of *social support* in coping with stress. Considering the number of predictive variables in the study (i.e.  $n = 6$ ), the sample of 53 students seems small to satisfy the statistical assumptions for conducting a multivariate regression analysis. In addition, all the doctoral students were selected from a single clinical psychology program; and this limitation may be considered a threat to the external validity of the study and generalizability of the results. Finally, the perceived stress for the doctoral students who participated in the study may be different than that of masters-level counseling students due to program differences and the varying developmental levels of the students. Despite the limitations, the outcome of this study provides valuable information with regard to the significant role of social support in participants' health and academic success. The findings of a recent study by Ickes and colleagues (2015) on 1,139 college students were consistent with Nelson's, and indicated social support as an important coping strategies for graduate and undergraduate students (Ickes et al., 2015).

In sum, research indicates that the majority of the interventions implemented by counselor educators for understanding and addressing the stress imposed on counseling students, center around the notion of self-care being introduced unilaterally to counseling students through psychoeducational approaches.

### **The Shortcomings of the Current Approaches**

Although the uniform approach of introducing counseling students to the need and strategies for self-care have proven to help them cope with stress to some extent, it does not take into consideration the significant differences among students as to how they *perceive* and *cope* with stress. Reviewing the literature, this section addresses the factors influencing individuals' susceptibility and vulnerability to stress.

## Differences in Psychological Characteristics

According to Lazarus's theory of stress (1966), one of the major factors that determines how an individual perceives and copes with a stressor (i.e., a threat) is the individual's psychological characteristics. Lazarus conceptualizes stress as an *interaction* between individuals and an environment that is presenting a threat. In addition to the degree of threat, the role of an individual's "psychological structure" (Lazarus, 1966, p.25) is highlighted in operationalizing the concept of stress. The findings in the literature are also consistent with the transactional view of stress. Research shows that the coping strategies implemented by students were correlated with how they *perceived* stress (Struthers, Perry, & Menec, 2000) which is partly determined by their psychological structure.

Injeyan (2011) and colleagues conducted a quantitative study on 355 genetic counselors to see if participants' personality traits would influence their susceptibility for compassion fatigue, which is considered to be the result of clinical stress. They measured participants' orientation of their locus of control, dispositional optimism, and their level of compassion fatigue. The result of the analyses yielded that higher risks of compassion fatigue among participants were correlated with an external locus of control and lower scores in optimism. In addition, highest risks of compassion fatigue were associated with moderate-to-high degrees of burnout and low-to-moderate scores in compassion satisfaction (Injeyan et al., 2011). In terms of the sampling process, the authors took into consideration the consistency of their sampling procedure by selecting participants who had the same level of educational background. Also, the sample size seems to be large enough to support the statistical assumptions for the number of predictive variables (i.e.,  $n = 2$ ) in the multivariate regression analysis. The psychometrics (i.e., internal consistency and reliability) of the instruments used in the study, the results of the

multivariate logistic regression analysis, and chi-square tests of independence were all presented in the manuscript. Finally, the authors acknowledged the statistical limitations of cross-sectional analyses (i.e., lack of evidence for proving causal relationships) and validity considerations due to the use of self-report instruments. Although the participants of this study were involved in a helping profession, the stressors for this population may be different than those of counseling students, and thus the generalizability of the results to counseling students may warrant extra consideration. In spite of the limitations, the findings of this study lend support to the notion that some of the individual differences such as the level of optimism may influence the negative effects of clinical stress on participants.

The results of a study conducted by Lent and Schwarts (2012) on 340 professional counselors revealed that participants who scored higher in *extraversion*, *agreeableness*, and *conscientiousness*, and also scored lower in *neuroticism* were more likely to experience lower degrees of emotional exhaustion and depersonalization (Lent & Schwartz, 2012). The number of participants in this study was large enough to support the requirements of the analyses conducted in the study. Also, the criteria for recruiting participants, such as holding a state license and American Counseling Association membership, seems to have increased the homogeneity of the sample. However, the inclusion of practitioners with a doctoral degree in addition to masters-level participants may affect the consistency of the sampling procedure and generalizability of the results. Also, the applicability of the results to counseling students would warrant caution as they may face different stressors than professional counselors. The outcome of this study is nonetheless useful as it provides insight into the relationships between counselors' personality characteristics and their emotional exhaustion and depersonalization, which are considered to be

the results of clinical stressors. What follow are some of the personal characteristics that have been identified by previous research as factors influencing the effects of stress:

**Coping style.** *Problem-Focused Coping (PFC)* has been defined in the literature as a coping style that aims to mitigate a stressful event or its effects by active problem-solving. Individuals who feel efficacious tend to implement this type of coping style more frequently. On the other hand, *Emotion-Focused Coping (EFC)* is geared toward the management and *enduring* a stressful event (Lazarus & Folkman, 1984). According to the literature, students who tend to employ problem-focused coping score higher on their academic motivation and performance in comparison to those who engaged in emotional-focused coping style (Struthers et al., 2000); in other words, those who are inclined to implement problem-focused coping are less susceptible to experience the negative effects of stress. Also, students who tend to use more adaptive coping skills are more likely to experience lower levels of stress, and thus report higher levels of psychological well-being (Yang, 2010). Thus, it seems that the individual differences in coping style may influence individuals' susceptibility to stress.

**Ego development.** According to Loevinger's conceptualization of ego development (1976), the ego is a comprehensive and holistic personality construct which encompasses moral, cognitive, self, and interpersonal aspects of a character (Lazarus & Folkman, 1984). Research indicates that counselors at higher stages of *ego development* tend to cope with clinical stressors more effectively and thus achieve better outcomes working with clients. They are also more likely to engage in self-care activities than counselors who operate from lower levels of ego development (Lambie et al., 2009).

**Gratitude.** Gratitude is a positive psychology construct which is defined as the awareness and appreciation of positive aspects of one's life and taking the time to express

gratefulness for them (Park, Peterson, & Seligman, 2004). Gratitude is another psychological factor that has proven to have a significant role in moderating the effect of clinical stress for professional counselors. In the study conducted by Lanham and her colleagues (2012) on 65 mental health professionals, the participants' scores on gratitude were negatively correlated with their burnout scores (Lanham et al., 2012). The sample size in this study does not seem to be large enough to support the statistical assumptions for conducting regression analyses with three predictive variables. Also, since the participants were selected from case-managers, clinical administrators, psychologists, and social workers in addition to professional counselors, the generalizability of the results to counselors and counseling students in particular should warrant caution. Finally, the authors acknowledged the statistical limitations of employing cross-sectional analyses.

**Help-seeking attitudes and behavior.** Help-seeking is a construct that is defined as an active coping process for the purpose of obtaining external assistance to deal with a problem (Rickwood & Thomas, 2012). The literature suggests that some students are hesitant to seek counseling services because of the stigma associated with receiving mental health services (Stecker, 2004). They may mask their difficulties (Bradey & Post, 1991), which could exacerbate their condition (Enochs & Etzbach, 2004). Therefore, although some resources, such as counseling services, may be available for students who are in need, some of them may not feel comfortable reaching out for help.

**Gender.** A review of the literature by Kardatzke (2009) highlighted the moderating role of gender in relation to stress and physical and psychological wellbeing. In other words, the impact of stress may differ according to participants' gender. For instance, the results of a study by Gupchup (2004) and colleagues on doctoral pharmacy students showed that female

participants reported higher levels of stress than their male counterparts. They also reported experiencing higher levels of anxiety and depression (Kardatzke, 2009). Moreover, the results of a study by Nelson and colleagues indicated that female students were more likely to actively seek social support and cope with stress emotionally (Nelson et al., 2001). The findings of a study by Kumary and Baker (2008) also confirm the moderating role of gender on the effects of stress.

### **Role of “Self” in Self-Care**

Discussion from earlier in this section highlights the role of some of the psychological characteristics that can moderate the negative effects of stress. Consistently, the literature introduces the concept of “self” as the main predictive factor for psychological wellbeing among helping professions (Goldberg & Maslach, 1998) and identifies “self-analysis” as the precondition for self-care (Lee, Lim, Yang, & Lee, 2011, p.257). Despite the importance of environmental stressors, the majority of preventive interventions highlight the critical role of individuals (i.e., their psychological characteristics) –as opposed to the environment—in coping with stress and ultimately psychological wellbeing (Goldberg & Maslach, 1998). This notion is also supported by Lazarus’s theory of stress (1966), as he acknowledges the role of psychological structure in the secondary appraisal process: “secondary appraisal determines the form of coping process, that is, the coping strategy adopted by the individual in attempting to master the danger. The end results observed in behavior” (p. 25) However, most of the self-care strategies, as discussed previously, focus on individuals’ behaviors, although according to Lazarus, behavior is mainly the manifestation of one’s psychological appraisal.

In conclusion, the notion of self-care, which is uniformly introduced to counseling students, does not seem to take into consideration the psychological differences among the



students, or the ways in which they might perceive and cope with stress differently. Each of these differences can be viewed as a factor that may influence the negative impact of stress on students' mental health.

### **Psychological Capital: An Individualized Recourse for Counseling Students**

This section introduces psychological capital as an internal psychological resource that may help individuals cope with stress more effectively. Additionally, the significant impact of this construct within academic/ clinical settings and its potential applicability for understanding the issue of stress for counseling students is discussed.

#### **What is Psychological Capital?**

Psychological capital (PsyCap) is a higher-order construct rooted in the premise of positive psychology that has been studied and applied within the field of organizational behavior (Luthans & Youssef, 2007) and management (Luthans, Youssef-Morgan, & Avolio, 2015). This construct is comprised of validated and well-established constructs that have emerged mainly from the field of positive psychology. Luthans and his colleagues have defined this construct as:

*An individual's positive psychological state of development that is characterized by (a) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed, and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans et al., 2015, p.2).*

The first-order constructs of efficacy, hope, resilience, and optimism are introduced in more detail below:

**Efficacy.** Theoretically, the construct of self-efficacy is rooted in the Social Cognitive Theory (Bandura, 1989). According to this theoretical framework, self-efficacy is the belief in one's ability to perform a task or to execute a specified behavior successfully (Bandura, 1977). Based on this theory, one's self-efficacy would improve or change by the following learning sources: performance accomplishments (i.e., when an individual experiences achieving a goal successfully), vicarious experiences (i.e., learning how to achieve a goal by observing others' accomplishments), verbal persuasion (i.e. when one's motivation to achieve a goal is increasing as the result of receiving positive encouragements from others), and emotional arousal (i.e. how an individual interprets his or her physiological states such as anxiety or nervousness during performing a task) (Bandura, 1977). Research shows that improvement in one's self-efficacy can lead to performance improvement; that is, when individuals' beliefs and perceptions about their ability to perform a task or to achieve a goal improves, their actual performance tends to improve, and as the result they are more likely to perform successfully (Bandura, 1989).

Self-efficacy, efficacy, confidence, and self-confidence are terms used interchangeably in the literature addressing the construct of PsyCap (Selvaraj, 2015). The literature suggests that people with higher levels of efficacy tend to be self-selective in taking on challenging tasks, goal-oriented, highly motivated about their goals, and experience more positive emotions (Luthans et al., 2015), whereas individuals with low efficacy are more likely to experience more depression, anxiety, and stress (Luthans, Luthans, & Jensen, 2012).

A review of the literature related to self-efficacy and stress revealed a significant relationship between individuals' self-efficacy and their effectiveness in coping with stress (Houghton, Wu, Godwin, Neck, & Manz, 2012). For instance, a study on athletes indicated a significant positive correlation between participants' levels of self-efficacy and their effective

coping of stressful competition situations (Nicholls, Polman, Remco, Levy, & Borkoles, 2010). Self-efficacy was also identified among predictive variables for effective coping with work stress. Research shows that individuals with high self-efficacy tend to have a more proactive approach dealing with work stressors and employ problem-solving coping strategies in comparison to ones with lower levels of self-efficacy (Houghton et al., 2012). In addition, a study on professional school counselors showed that self-efficacy was also negatively correlated with the burnout rate among the participants (Gündüz, 2012).

**Hope.** Snyder, Rand, & Sigmon (2002) have proposed a definition of hope that is commonly cited in the literature during the recent decade. He defined hope as “a positive motivational state that is based on an interactively derived sense of successful (a) *agency* (goal-directed energy) and (b) *pathways* (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p.287). The definition of hope includes two main components: “pathway thinking” and “agency thinking” (Snyder et al., 2002. p.258). The first component is an individual’s ability to generate pathways (usually more than one) and redirect to a new pathway when faced with obstacles in order to achieve a goal. The sense of agency on the other hand is the motivational component of hope and signifies individual’s motivation to use the pathway(s) in order to achieve his or her goals. Hope is operationalized as the ability of an individual to demonstrate both of the two goal-oriented characteristics when approaching a goal (Snyder et al., 2002; Snyder, 2000).

As one of the sub-constructs of PsyCap, hope has proven to be correlated with more effective work performance, desired professional outcomes, employees’ sense of satisfaction, organizational promotion, and happiness in working environments (Luthans & Jensen, 2002; Luthans et al., 2015). Moreover, the literature suggests that hope is associated with athletic achievement and academic success, and it is negatively correlated with the sense of vulnerability

and lack of control (Snyder, 2000). Hope has also proven to help individuals tolerate challenging situations (Peterson, 2006). Research suggests particular interventions for improving hope that encompass teaching goal-setting skills and planning (i.e., generating multiple pathways) (Snyder, 2000).

According to Fredrickson (2001), individuals who experience higher levels of hope are more likely to exhibit positive affectivity, which is an empowering factor that broadens their perspective and thus enables them to see a wider range of resources to cope with adversities. This idea is consistent with the results of a study by Venning et al. (2011), which showed that hope was a predictive variable for psychological wellbeing and proved to have a larger predictive weight than mental illness for predicting the participants' mental health. Thus, hope was negatively correlated with mental disorders and psychological disturbance (Venning, Kettler, & Zajac, 2011).

**Resilience.** Resilience has been defined in the literature as the psychological ability to positively adapt in the face of significant adversity and/or failure in order to maintain psychological well-being (Fred Luthans et al., 2015; S. Luthar, Lyman, & Crossman, 2014; S. S. Luthar, Cicchetti, & Becker, 2000; McCann et al., 2013; Tugade, Fredrickson, & Barrett, 2004). As another component of PsyCap, resilience is defined as “the capacity to rebound, or ‘bounce back’ from adversity, uncertainty, conflict, [and] failure” (Luthans, 2002, p.702). This definition seems to be concordant with the notion of posttraumatic growth in that challenging situations may lead to some levels of growth rather than distress (Tedeschi, Park, & Calhoun, 1998).

Resilience has been conceptualized in the literature as more of the process of positive adaptation rather than a psychological trait or characteristic. Individuals who have the ability to adapt and bounce back in adverse situations tend to exhibit strength in making realistic plans and

taking necessary actions. They are also more likely to have a positive self-image and a problem-solving coping style (Luthans et al., 2015). According to Luthar et al. (2014), resilience is domain-specific construct similar to self-efficacy in that it is a task-specific construct. Moreover, like other sub-constructs of PsyCap, resilience is a state-like construct thus it can be taught, learned, and developed over time (Luthans et al., 2015).

Research shows that individuals with lower levels of resilience are less likely to recover from adversities and may even have difficulties in adapting to positive changes such as increased responsibilities which could be the result of a work promotion situation (Luthans & Youssef, 2007). According to Tugade and colleagues (2004), resilient individuals tend to have emotional stability when facing adversities, and positive emotions are the mediating factors that help them broaden their coping resources and maintain their psychological well-being by employing more effective coping skills when facing challenging situations. Additionally, McCann and colleagues (2013) proposed implementing resilience-promoting interventions for the purpose of mitigating the negative impact of stress on health professionals.

**Optimism.** Seligman (2011), one of the founders of the positive psychology movement (Seligman & Csikszentmihalyi, 2000), has defined this construct as a psychological perspective that views positive events as the outcomes of more permanent, prevalent, and personal existing factors as opposed to regarding negative events as temporary, situational, and external (as cited in Luthans et al., 2015). In other words, optimism is maintaining a positive-outlook about future events (Sharpe, Martin, & Roth, 2011). Similar to other sub-constructs of PsyCap, optimism has been conceptualized as a state-like construct that can be taught, learned, and developed. This is congruent with the term “learned optimism” which was coined by Seligman (2011).

Higher levels of optimism have proven to be correlated with life-satisfaction (Park, Peterson, & Seligman, 2004), and a variety of interventions have been proposed and proven to be effective for increasing optimism and consequently treating mental problems (Rashid, 2009). Moreover, research studies show the moderating role of optimism in how work stress negatively impacts individuals' psychological well-being and causes psychological disturbance such as depression and anxiety (Fred Luthans et al., 2015). According to the literature, possessing higher levels of optimism correlates to experiencing positive emotions, which has proven to assist students in coping with academic stress more effectively (Houghton et al., 2012). Optimism helps students implement the infusion of positive interpretation of ordinary events, positive appraisal, and problem-focused coping strategies (Fredrickson, 2001; as cited in Leppma, 2011; Tugade et al., 2004).

**PsyCap as a higher order construct.** Although the four constructs of self-efficacy, resilience, optimism, and hope have been operationalized individually; and the psychometric properties of the instruments for measuring each of them has been validated; the findings of previous research have indicated that PsyCap predicted performance and satisfaction more accurately than any one of its four individual components, thus providing psychometric support for PsyCap, as a higher order construct (Baron, Franklin, & Hmieleski, 2016; as cited in B. C. Luthans, Luthans, & Avey, 2014; F. Luthans et al., 2007)

As opposed to trait-like characteristics that are not usually changeable, PsyCap is a state-like construct that can be improved (Luthans & Youssef, 2004; Luthans et al., 2015). PsyCap is a relatively new recognition of an internal capital within individuals that is beyond traditional human resources such as economic capital (e.g., financial status), human capital (e.g.,

knowledge, skills, and experience), and social capital (i.e., one's personal and professional social network) (Luthans, Luthans, & Luthans, 2004).

### **PsyCap in Helping Professions**

Hope, efficacy, optimism, and resiliency are first-order constructs that have proven to influence the effects of stress in a variety of working environments (Luthans & Youssef, 2004). The higher-order construct of PsyCap, which is comprised of the four aforementioned constructs, has also proven to moderate the effects of stress, and consequently influence performance, attitude, and work life of individuals in different professions such as police officers and lawyers (Avey, Luthans, & Jensen, 2009; Avey, Richard, Luthans, & Mhatre, 2011; James B. Avey, Nimmicht, & Pigeon, 2010; Knudson, 2015; Nafei, 2015; Siu, Cheung, & Lui, 2014).

With regard to helping professions in particular, the literature highlights the roles PsyCap has taken in different studies. In a study by Cheung and colleagues (2011) on 246 schoolteachers in China, PsyCap not only correlated significantly to the level of emotional labor and burnout of participants, but it also played a *moderating* role in the relationship between them. Stated another way, emotional labor (as the predictive variable) has proven to have a greater negative impact on participants with lower levels of PsyCap, while individuals who exhibited higher levels of PsyCap experienced lower levels of burnout (Cheung et al., 2011).

In some other studies PsyCap has proven to have a *mediating* role. In a study by Shen and colleagues (2014) on 1210 university teachers in China, the authors employed hierarchical linear regression analysis to examine the role of PsyCap in the relationship between participants' occupational stress and their depressive symptoms. The results of the analyses revealed that PsyCap partially mediated the relationship between occupational stress and depressive symptoms among the participants. It seems that psychological capital had a protective role against

depressive symptoms (Shen, Yang, & Wang, 2014). Liu and colleagues (2012) examined the relationship between the same variables, but conducted their study on physicians instead. Their study yielded the same results for female physicians; however, PsyCap did not mediate the effect of occupational stress for the male participants (Liu, Chang, Fu, Wang, & Wang, 2012). Moreover, the results of a hierarchical analysis on 1,332 Chinese female nurses indicated that PsyCap partially mediated the relationship between burnout and work-family conflicts and was introduced as a resource for nurses to benefit from when facing stress (Wang, Chang, Fu, & Wang, 2012). Finally, in a study conducted by Roche and colleagues (2014), PsyCap partially mediated the effects of mindfulness on the mental well-being of a sample of 697 participants (Roche, Haar, & Luthans, 2014).

Some studies highlighted the role of PsyCap as a predictive variable for different dependent variables. A study by Ding and colleagues (2015) on 1,496 nurses revealed that PsyCap was one of the predictive factors for burnout and was also partially mediated by positive coping style (Ding et al., 2015). In another study by Laschinger and Fida (2014), the authors utilized structural equation modeling, and identified PsyCap as one of the predictive factors for workplace wellbeing and burnout among new graduates of nursing programs (Laschinger & Fida, 2014). PsyCap also proved to have a moderate-to-strong negative correlation with compassion fatigue amongst nurses working in acute care settings (Bao & Taliaferro, 2015).

Although a review of literature suggests the significant role of PsyCap within the context of helping professions, very few studies have been conducted on mental health professionals to address the role of PsyCap in the counseling and counseling-related fields. Recently, Koller and Hicks (2016) conducted a study in Australia, and compared a group of 56 mental health professionals and a group of 78 participants who were not involved in mental health in terms of



their level of PsyCap, psychological wellbeing, and coping style. The results of the study showed that mental health professionals scored higher on hope and optimism. They also scored significantly higher on psychological well-being and their ability to implement emotional coping styles more effectively; however, their levels of depression, anxiety, and stress were not statistically different than the other group (Koller & Hicks, 2016). Although the sample size seems to be large enough for the conducted statistical analyses, the group of mental health professionals was inconsistently comprised of mental health counselors, psychologists, psychiatric nurses, case managers, social workers, and psychiatrists. Even though all of the participants were involved in the mental health field, they may have been significantly different in terms of their training, job stress, and the services they provide for their clients. This could be considered a threat to the generalizability of the results. Moreover, the other group, which was referred to as “general non-health industry workers” (p. 44), was not defined clearly. Although participants in that group did not have any mental health affiliations, some of them were involved in other helping professions such as teaching, and thus may have experienced symptoms similar to those in the first group; this could have affected the internal validity of the study. Also, the results are not consistent with those of previous studies in the U.S., which indicated that mental health (related) professionals are at higher risks of burnout. One of the reasons for this inconsistency might be the possible differences between the clinical working environments in the U.S. and Australia. Despite of the limitations, the findings of the study provide useful information with regard to the relationships among PsyCap, coping style, and psychological wellbeing for mental health professionals.

### **PsyCap in Academic Settings**

In addition to the role of PsyCap in preventing burnout among helping professionals, a review of literature suggests the potential applicability of PsyCap in academic settings. The results of a study by Brett Luthans and colleagues (2012) on 95 undergraduate business school students proved PsyCap as a predictive factor for students' academic performance represented by their grade point averages (Luthans et al., 2012). The sample size of the study seems to be large enough to support the requirements for conducting regression analyses; however, selecting the sample exclusively from business undergraduate students may create some limitations in generalizability of the result. Furthermore, the authors did not present the model specifications for the inclusion of variables in their regression model. In spite of the limitations, the outcome of the study provides valuable insight into the salience of academic PsyCap as a significant predictor for graduate students' academic achievement.

Riolfi and colleagues (2012) examined the relationship between PsyCap, academic stress, and the physical and psychological wellbeing of 141 undergraduate students and indicated that PsyCap had a mediating role between stress and students' levels of wellbeing. According to their study, PsyCap served as a buffer for the effect of stress, and it amplified students' life satisfaction (Riolfi et al., 2012). Selecting undergraduate students who are either in organizational behavior or business programs may warrant more caution for generalizability of the results to the students of other programs, especially graduate students who may be facing different or additional stressors. However, the study still provides useful information in that it illuminates the relationships among PsyCap, academic stress, and psychological wellbeing for undergraduate students.

A study by Khan and colleagues (2011) on 200 undergraduate students from different universities in Kuala Lumpur, Malaysia, proved students' level of PsyCap, their *Five-factor*

personality traits (i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism; McCrae & Costa, 1987; Norman, 1963) and their coping responses to be significantly correlated. Except for neuroticism, other dimensions of students' personalities had a positive relationship with their coping style. The result of regression analyses showed the predictive role of PsyCap and personality factors for students' coping mechanisms (Khan et al., 2011). A study conducted by Wen and Lin (2014) on 427 college freshmen in Taiwan identified PsyCap as a predictive factor for students' learning and their level of adjustment to stress (Wen & Lin, 2014).

The findings of a study by Selvaraj (2015) on 338 graduate and undergraduate students showed a positive correlation between participants' mental health and their level of scores on PsyCap. Also, the construct of psychological capital accounted for approximately 43.5 % of the variance in mental health scores. The author suggested improving students' mental health by developing their psychological capital proactively (Selvaraj, 2015). The sample size seems to be large enough for conducting multiple regression analysis and one-way ANOVAs; however, utilizing convenience sampling and selecting the participants only from one Midwestern institution may limit the generalizability of the results. Furthermore, including students at three different levels – undergraduate (70% of the total sample), masters, and doctorate – may affect the homogeneity of the sample and be considered a threat to the internal validity of the study. Finally, the author could have included other constructs, such as coping, to explore the role of PsyCap more thoroughly. However, the author clearly presented the psychometric properties and reliability of the instrument she used for measuring PsyCap and mental health. The findings of this study are nonetheless valuable in that they provide insight into the relationships between PsyCap and mental health for university students.

In a comprehensive review of PsyCap psychometric properties, Dawkins and colleagues (2013) found that the internal consistency for resilience and optimism was consistently lower than hope and efficacy (Dawkins, Martin, Scott, & Sanderson, 2013); however, according to Luthans, the reduction in scale reliability may have been the result of reverse-scoring method for optimism and resilience (Selvaraj, 2015).

### **Summary**

In summary, a review of literature lends convincing evidence that counseling students in CACREP-accredited counseling programs are facing a compound form of stress which is comprised of both academic and clinical stressors, and is negatively impacting their mental health. The current approaches for promoting their psychological wellbeing and mitigating the negative effects of stress (i.e., self-care strategies) seem to fail to consider the differences between students' psychological resources and how students are benefiting from them in coping with stressors. Unlike the current approaches, the construct of PsyCap does recognize the individual differences as to how they perceive and cope with stress. In addition, studies on both academic and helping-profession-related stress have underlined the role of PsyCap in relation to stress, individuals' (and particularly students') coping strategies, and their mental health. The unique stressors for this population, their vulnerability to those stressors, and the importance of their effectiveness in working with clients justified further explorations for understanding the relationship among PsyCap, academic and clinical stress, and mental health for counseling students in CACREP-accredited counseling programs. The present study sought to examine the relationships among the variables of interest employing a heuristic approach. The methodology and the instruments utilized in this study are presented in the next chapter.

## **CHAPTER THREE**

### **Research Methodology**

This chapter presents the research design and methodology implemented for the current study. Using positive psychology as the theoretical framework, a cross-sectional heuristic study was employed to explore the relationships among the variables of interest (i.e., psychological capital, academic and clinical stress, and mental health) and to verify the proposed hypothesis. In addition, the characteristics of the participants, the sampling plan and procedure, data-collection, measurements, and the process of data analysis are discussed in this chapter.

#### **Population and Sampling Procedure**

The sample of this study was selected from masters-level students enrolled in CACREP-accredited counseling programs. As mentioned in the previous chapter, a review of the literature related to counselor education and positive psychology shows that no study had examined the influence of psychological capital on counseling students; thus, the purpose of this study was exploratory in nature.

Students in all counseling specialties (e.g., clinical mental health, school, marriage and family) were included in the sampling procedure. Moreover, both first-year and second-year students participated in the study. The inclusion of all counseling specialties and both first- and second-year students provided the opportunity for the researcher to compare between the subgroups; it also generated a sample that is more likely to represent the target population of counseling students. On the other hand, all of the participants were selected from CACREP-accredited programs to ensure the homogeneity of the sample in terms of academic and clinical requirements across counseling programs.

Two hundred and sixteen participants were recruited through a convenience purposeful sampling procedure. Electronic invitations were sent to faculty members of CACREP-accredited counseling programs across the United States. They distributed the invitation emails to counseling students. For the purpose of reaching the target number of participants, a follow-up email was sent to the faculty members in the counseling programs that had been contacted initially. Throughout the process of sampling and data-collection, participants' and universities' identifying information were not collected for the purpose of confidentiality.

### **Data Collection**

Following the Institutional Review Board (IRB) approval, the process of data collection was conducted electronically using Qualtrics, an online-based survey platform. The survey included: (a) an *informed consent* which explained the purpose and the process of the study in addition to the contact information of the researcher in case participants had questions or face technical issues; (b) *demographic information* to capture the potential differences between subgroups of participants (e.g., first-years vs. second-years); (c) the Academic Psychological Capital Questionnaire (Brett Carl Luthans et al., 2012); (d) the Lakaev Academic Stress Reaction Scale (Lakaev, 2016); (e) a modified version of the Mental Health Professionals Stress Scale (MHPSS; Cushway, Tyler, & Nolan, 1996); (f) the Mental Health Continuum - Short Form (Keyes, 2009); and (g) open-ended question to identify and rank participants' major source of stress.

### **Instrumentation**

#### **Informed consent (Appendix A)**

The informed consent was the first part in the electronic survey to be read and completed by participants. In addition to explaining the purpose of the research, it addressed the time

needed for the completion of the surveys, as well as any risks or benefits related to participation in the study. Participants were informed about their rights of declining participation as well as confidentiality. As an incentive, individuals who completed the online-survey were included in the random selection of 20 winners to receive a \$25 Amazon gift card.

### **Demographic questionnaire (Appendix B)**

In order for the researcher to obtain some descriptive information regarding the sample and to be able to compare the results of the analyses among subgroups, participants were asked to provide information regarding their race/ethnicity, gender, program specialty (e.g., clinical mental health, marriage and family, school), program setting (i.e., face-to-face, online, hybrid), clinical engagement, extent of their knowledge about self-care, and self-care practices in which they are engaged, if applicable.

### **Academic Psychological Capital Questionnaire (B. C. Luthans et al., 2012; Appendix C)**

Using a 6-point Likert scale, A-PCQ measures the four components of psychological capital (i.e., self-efficacy, optimism, hope, and resilience) for school-work domain. This instrument consists of 24 items and is the modified version of the original PsyCap Questionnaire developed by Luthans et al (2007). Items are rated on a 6-point Likert scale. Minimum and maximum scores for each item range from one (*strongly disagree*) to six (*strongly agree*), and the total scores of participants may range from 24 to 144. In terms of psychometrics of A-PCQ, the Cronbach alpha for overall PsyCap is 0.89, and for each subscale of hope, efficacy, resilience, and optimism are 0.76, 0.84, 0.71, and 0.79, respectively (Luthans & Avolio, 2007).

### **Lakaev Academic Stress Reaction Scale (LASRS; Lakaev, 2016; Appendix D)**

This instrument is a measure of academic stress and consists of 26 items each scaled on a 5-point Likert scale ranging from one (*none of the time*) to five (*all of the time*). The LASRS

proposes a multi-factor conceptualization of academic stress in addition to measuring the overall academic stress. The instrument includes the following subscales: (a) *affective*, with an internal consistency of .82 and addressing the affective impacts of academic stressors. (b) *Behavioral*, with an internal consistency of .82 and indicating the behavioral effects of academic stress, (c) *Physiological*, with an internal consistency of .85 and indicating the physiological effects of academic stress; and (d) *cognitive* with an internal consistency of .89 and indicating the cognitive impact of stress on individuals. The overall internal consistency of the LASRS is .91.

### **Mental Health Professionals Stress Scale (Cushway, Tyler, & Nolan, 1996; Appendix E)**

This instrument consists of 42 items each rated on a 4-point Likert scale, and measures the level of stress for mental health professionals. The MHPSS includes seven subscales: (a) *workload*, with an internal consistency of .77; (b) *client-related difficulties*, with an internal consistency of .74; (c) *organizational structure and processes*, with an internal consistency of .81; (d) *relationships and conflicts with other professionals*, with an internal consistency of .77; (e) *lack of resources*, with an internal consistency of .60; (f) *professional self-doubt*, with an internal consistency of .87; and (g) *home-work conflict*, with an internal consistency of .61. The overall internal consistency of the MHPSS administered on 220 clinical psychologists was .87.

For the purpose of this study, the adapted instructions by Jenkins and Elliot (2004) were used for students who were working with clients at the time of measurement. Those who were not engaged in clinical work (i.e., internship or practicum) may have experienced stress as the result of thinking about their future clinical experiences, therefore a different instruction was utilized for them.

For the purpose of this study, only two subscales of *client-related difficulties* and *professional self-doubt* were administered. Moreover, a new subscale developed by this



researcher was also included in the MHPSS. The new subscale consists of seven items including: (a) *lack of positive support and/or conflicts in supervisory relationships*; (b) *lack of knowledge in any of CACREP's core areas (professional counseling theoretical orientation and ethical practice, multicultural counseling, human development, career, counseling and helping relationships, group counseling, research and program evaluation, and assessment)*; (c) *site placement process*; (d) *being evaluated by site and/ or university supervisor*; (e) *acquiring required clinical hours*; (f) *facing ambiguity and uncertainty in working with clients*; and (g) *feeling frustrated with unsatisfying training experience at your site*.

### **The Mental Health Continuum- Short Form (Keyes, 2009; Appendix F)**

This instrument includes 14 items, and measures the frequency of positive psychological experiences using a 6-point Likert scale ranging from zero (*never*) to five (*everyday*). Items 1-3 measure participants' positive affect and satisfaction with life. Item 4-8 measure social aspects of mental health. Items 9-14 measure autonomy, environmental mastery, intention for personal growth, positive relationships with others, purpose in life, and self-acceptance. The internal consistency for the subscales are 0.85, 0.81, and 0.83 (Keyes, 2005).

### **An Open-ended Question (Appendix G)**

In order to capture the main stressors for participants, an open-ended question and a 4-point Likert scale question ranging from one (not at all stressed) to four (very stressed) for rating their main source of stress were included in the questionnaire.

## **Research Questions and Hypotheses**

The purpose of this heuristic study was to investigate the following research questions: (a) What are the relationships among the level of psychological capital (PsyCap), perceived academic and clinical stress, and mental health for master's-level counseling students in

CACREP-accredited programs? and (b) How do the subgroups of participants differ in their mental health, perceived stress, and PsyCap?

Considering the results of previous related studies and the proposed research questions, the following hypotheses were posed for this study:

1. The variables of interest (PsyCap, stress, and mental health) are significantly correlated;
2. Counseling students at higher levels of PsyCap will report experiencing less clinical and academic stress (*directional hypothesis*);
3. Counseling students at higher levels of PsyCap will report higher levels of mental health (*directional hypothesis*);
4. Counseling students who were working with clients at the time of completing the survey will report higher levels of clinical stress (*directional hypothesis*);
5. The variables of interest are not significantly different for male and female participants (*null hypothesis*);
6. The variables of interest are not significantly different based on program specialty (*null hypothesis*);
7. The variables of interest are not significantly different based on race/ethnicity (*null hypothesis*);
8. The variables of interest are not significantly different based on delivery methods (online, hybrid, and face-to-face) (*null hypothesis*); and
9. The variables of interest for full-time and part-time participants are not significantly different (*null hypothesis*).

## **Data Analysis**

Data analysis was performed using SPSS software (version 22) for conducting statistical analyses. Descriptive statistics were conducted for all variables of interest in addition to demographic variables. Correlational analyses (i.e., Pearson product coefficient) were conducted to investigate whether the variables of interests were significantly correlated. Multiple regression analyses were conducted to determine the predictive role of academic stress, clinical stress, and PsyCap for participants' mental health. Moderation and mediation analyses were conducted to investigate the nature of relationships among the variables of interests. Structural Equation Modeling (SEM) was employed to examine whether a proposed mediation model fit statistically. Finally, analyses of variance (ANOVAs) were utilized to test the statistical differences between subgroups.

## **Ethical Considerations**

The proposal for present study was found to comply with appropriate ethical standards and was exempted from the need for formal review by the Institutional Review Board of the College of William & Mary's School of Education on 11/12/2016. All participants were asked to sign the informed consent form prior to completing the online-based survey. Through the informed consent form, participants were informed of their right to confidentiality and withdrawal from the study. For the purpose of ensuring confidentiality, all of the identifying information was eliminated throughout the study. There were no known risks for participating in the proposed study.

The current cross-sectional study sought to investigate the relationships among PsyCap, academic and clinical stress, and mental health in a national sample of 216 masters-level counseling students in CACREP-accredited counseling programs. The results of the statistical

analyses with regard to the research questions and hypotheses will be presented in the next chapter.

## **CHAPTER FOUR**

### **Results**

This chapter presents the results of the study, including the demographics, descriptive statistics, and the statistical analyses of the collected data regarding the research questions and hypotheses. Statistical analyses conducted in this study include one-way analysis of variance (ANOVA), Pearson product moment correlation, independent sample t-test, multiple linear regression, and structural equation modeling (SEM). The alpha level used in the study was .05, which is commonly used for psychological and educational research (Gall, Gall, & Borg, 2007).

### **Description of the Study**

#### **Sampling**

This study examined the relationships among Psychological Capital (Psycap), academic stress, clinical stress, and mental health in a sample of master's-level counseling students in CACREP-accredited counseling programs. Via email, the researcher contacted faculty members in CACREP-accredited counseling programs across the United States requesting them to share the electronic survey with their master's students. Forty faculty members representing 35 institutions in each of the five regions identified by the Association for Counselor Education and Supervision (ACES) were contacted. The data collection period began in November 2016 and lasted approximately a month. A total of 215 individuals completed the instruments, and were included in the data analysis. Of those who completed the instruments, one participant did not complete the demographic section.

#### **Instrumentation**

Participants completed an informed consent followed by four instruments that measured Psychological Capital, academic stress, clinical stress, and mental health. All data were collected

via Qualtrics, an online survey platform. The four instruments used in the study were: (a) the Academic Psychological Capital Questionnaire (Brett Carl Luthans et al., 2012), (b) the Lakaev Academic Stress Reaction Scale (Lakaev, 2016), (c) a modified version of the Mental Health Professionals Stress Scale (MHPSS; Cushway, Tyler, & Nolan, 1996), and (d) the Mental Health Continuum - Short Form (Keyes, 2009). Additionally, an open-ended question was included to identify participants' major source of stress. Participants also completed a demographic questionnaire and were asked supplemental questions regarding their life stressors and self-care strategies.

### **Demographic Information**

The demographic information participants provided for this study included: age, gender, ethnicity, program specialty, and knowledge of and engagement in self-care practices. Moreover, participants provided the number of semesters they had been enrolled in a counseling program and indicated their practicum and internship status (i.e., whether or not they enrolled in or completed practicum/internship). The demographic information was used to describe the sample and compare it to the population of master's-level counseling students in CACREP-accredited programs in the United States.

#### **Age and Gender**

The age of participants in this study ranged from 21 to 61. The mean age of the sample was 28.60 with a standard deviation of 8.39 years. Since the CACREP Vital Statistics Survey (CACREP, 2016b) did not include information regarding age, this researcher was not able to compare the sample with the population.

One hundred-and-eighty-one participants identified their gender as female (83.8%), 33 identified as male (15.3%), and one participant identified as "gender-fluid" (0.5%). According to

the CACREP Vital Statistics Survey (CACREP, 2016b) 82.54% of master's students enrolled in CACREP-accredited programs nationally identified as female and 17.40% identified as male. The results of a Chi-Square (goodness of fit) test indicated that the sample and the population are not significantly different in terms of gender proportion (Chi-Square (1, N = 215) = 0.64,  $p < .05$ ).

### **Race and Ethnicity**

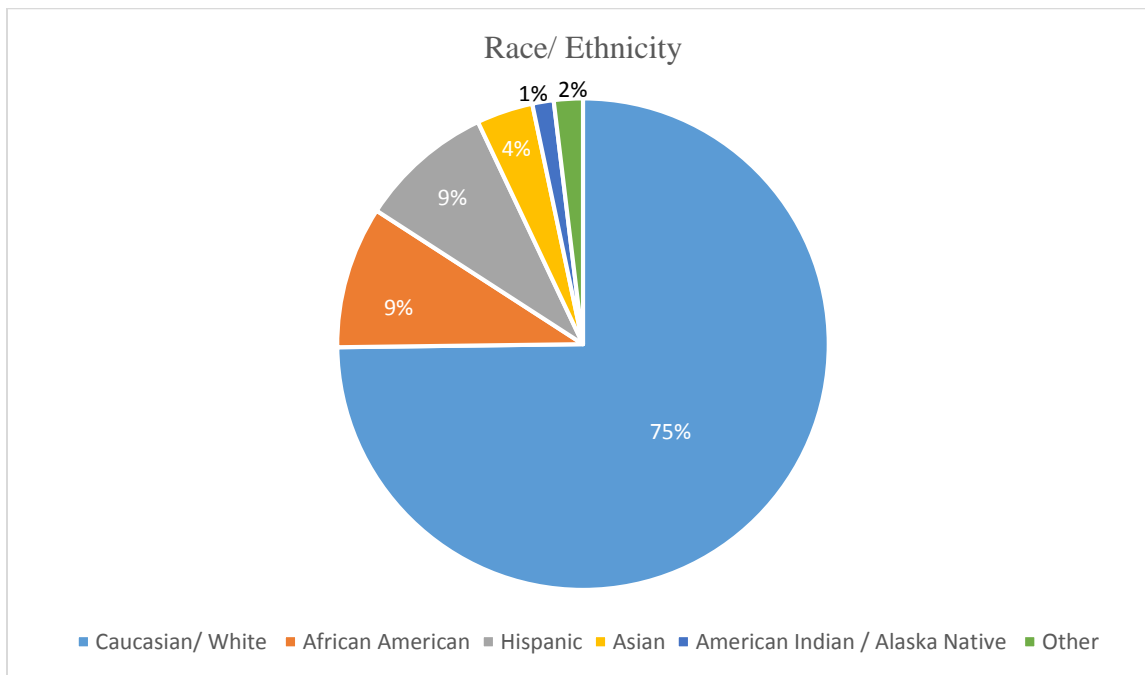
A majority of participants in the study identified as Caucasian/White (n = 161, 74.5%). Of the remainder, twenty participants identified as Black or African American (9.3%), nineteen participants identified as Hispanic (8.8%), eight participants identified as Asian (3.7%), three participants identified as American Indian or Alaska Native (1.4%), and four participants identified as "other" race/Ethnicity. According to the CACREP Vital Statistics Survey (CACREP, 2016b) 60.55% of master's students in CACREP-accredited counseling programs nationally identified as Caucasian/White, 18.34% identified as African American/Black, 8.53% identified as Hispanic/Latino, 2.04% identified as Asian American, 0.59% identified as American Indian or Native Alaskan, 0.14% identified as Native Hawaiian/Pacific Islander, 2.05% identified as multiracial, 0.73% identified as non-resident alien, and 7.03% identified as "other/ undisclosed" race/ ethnicity. The results of a Chi-Square (goodness of fit) test indicated that the sample and the population are significantly different in terms of race/ ethnicity (Chi-Square (1, N = 215) = 18.49,  $p < .05$ ). Therefore, the sample of this study represents larger group of Caucasian/ White participants and smaller group of racial/ethnic minorities than the target population. Hence, the results of inferential analyses should be interpreted with caution. The descriptive findings regarding participants' race/ethnicity are illustrated in Table 4.1 and Figure 4.1 below.

Table 4.1

*Race/ Ethnicity*

	<i>Frequency</i>	<i>Percent</i>
Caucasian/ White	161	74.5%
African American	20	9.3%
Hispanic	19	8.8%
Asian	8	3.7%
American Indian / Alaska Native	3	1.4%
Other	4	1.9%

*Figure 4.1 Race/ Ethnicity*



**Program Specialty and the Method of Delivery**

Clinical mental health and school counseling programs comprised the majority of participants in the sample of this study (n = 167, 77.3%). One hundred-and-fifteen participants



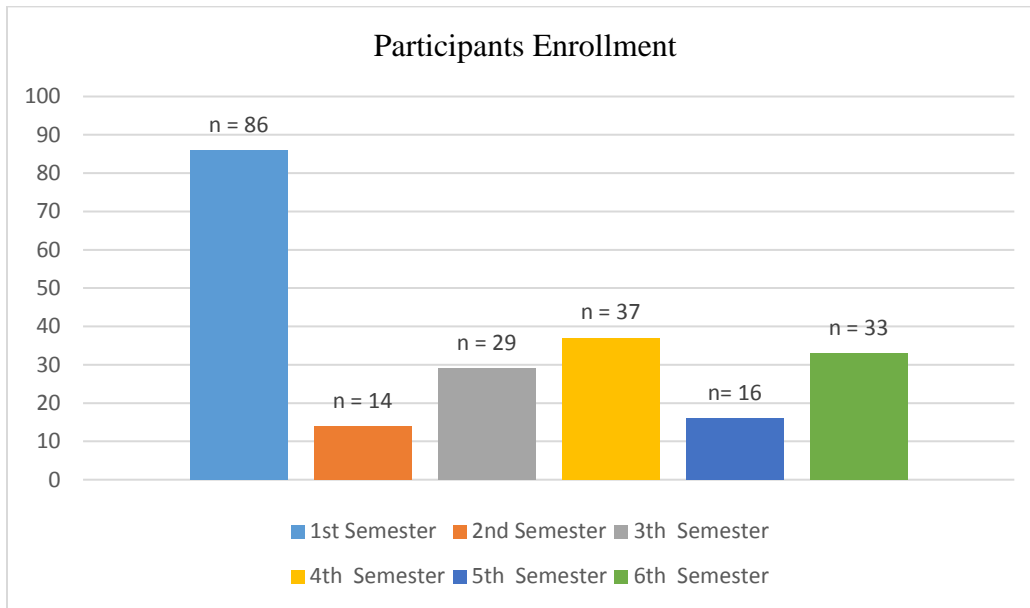
reported being enrolled in a clinical mental health counseling program (53.2%), and 52 participants reported being enrolled in a school counseling program (24.1%). The remaining participants in this sample reported being enrolled in the following program areas: addiction counseling (n = 13, 6.0%), marriage, couple, and family counseling (n = 21, 9.7%), student affairs and college counseling (n = 2, 0.9%), rehabilitation counseling (n = 9, 4.2%), and career counseling (n=1, 0.5%). According to the CACREP Vital Statistics Survey (CACREP, 2016b), 60.65% of counseling students in CACREP-accredited programs nationally are enrolled in clinical mental health programs, and 24.78% are enrolled in school counseling programs. The remaining counseling students in the population reported being enrolled in the following program areas: addiction counseling (0.06%), marriage, couple, and family counseling (7.13%), student affairs and college counseling (1.56%), rehabilitation counseling (0.21%), and career counseling (0.31%). Compared to the national population of master's-level counseling students in CACREP-accredited programs, the sample of the study included a similar percentage of students enrolled in school counseling programs (Chi-Square (1, N = 215) = 0.04,  $p < .05$ ), and a lower percentage of clinical mental health counseling students (Chi-Square (1, N = 215) = 4.62,  $p < .05$ ).

According to the results, 160 participants reported being enrolled in traditional (i.e. face-to-face) counseling programs (74.1%), and 52 participants reported being enrolled in hybrid (i.e., some courses were traditional and some were online) counseling programs (24.1%). Only three participants reported being enrolled in completely online counseling programs (1.45%).

### **Participants' Status**

Eighty-two percent of participants (n = 177) reported to be full-time, and the remaining participants reported to be part-time (n = 38, 18%). Participants' enrollment status is illustrated in Figure 4.2 below:

Figure 4.2 Participants Enrollment



Eighty-four participants reported that they had completed Practicum (39%). One hundred-and-nineteen participants reported that they had not started Practicum yet (55.1%), and 12 participants reported being enrolled in Practicum at the time of completing the electronic survey (5.6%). Sixty-seven participants reported being enrolled in Internship at the time of completing the electronic survey (31%), 137 participants reported that they had not started Internship yet (63.4%), and 10 participants reported that they had completed Internship (4.6%).

### Knowledge and Engagement in Self-Care

One hundred-and-forty participants reported having “*sufficient* knowledge about self-care practices” (64.8%), 73 participants reported having “*some* knowledge about self-care practices” (33.8%), and two participants reported having “*very limited* knowledge about self-care practices” (0.9%). The majority of participants reported being engaged in self-care practices at the time of

completing the electronic survey (n = 202, 93.5%), and the remaining of participants reported no engagement in self-care practices (n = 13, 6.0%). The self-care practices reported by participants are summarized in Figure 4.3 and Table 4.2 below:

Figure 4.3 Self-Care Practices

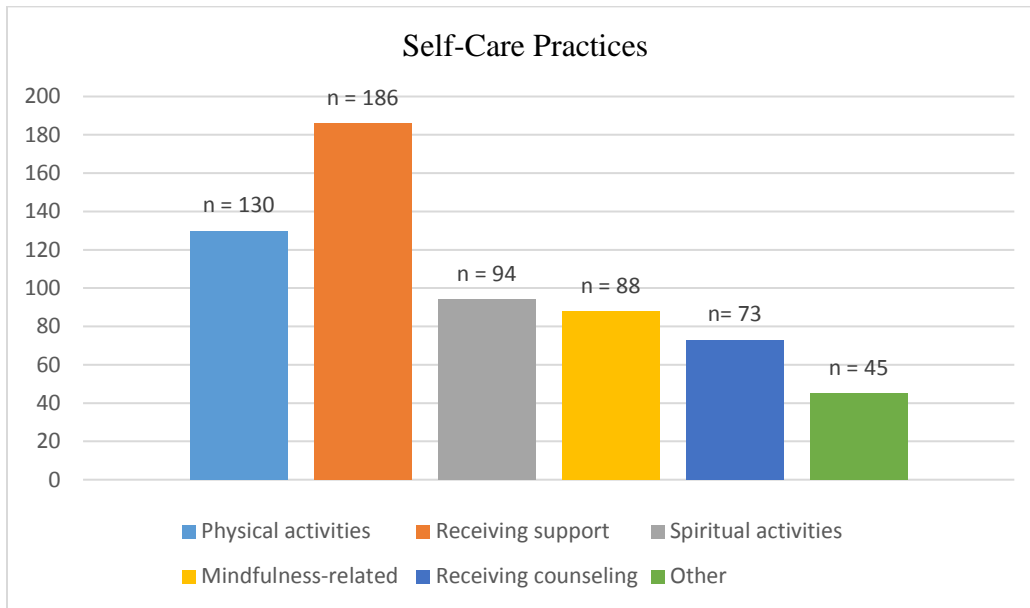


Table 4.2

*Self-Care Practices\**

	<i>Frequency</i>	<i>Percent</i>
Physical activities (e.g., going to the gym, running, swimming)	130	60.2%
Receiving support from family and friends	186	86.1%
Spiritual activities	94	43.5%
Mindfulness-related activities	88	40.7
Receiving counseling services	73	33.9

Other**	Engaging in hobbies (e.g. listening to music, watching TV, gardening, shopping, dance, traveling, and reading, crafting, cooking, art, and photography)	45	21%
	Spending time with family, friends, and pets	17	8%
	Self-reflection (i.e. journaling)	9	4%
	Physically-relaxing activity (e.g., massage, yoga)	9	4%
	Eating healthy	7	3%
	Sleep hygiene	3	1%
	Supervision	2	1%
	Setting boundaries with others	2	1%
	Using alcohol and drugs	2	1%
	Positive thinking, being thankful	1	0.4%
	Attending AA meetings	1	0.4%

*Note.* \* Participants could select more than one self-care practice

\*\* Participants who selected “other” were asked to input their self-care practices.

## **Descriptive Statistics for the Research Instruments**

### **Academic PsyCap Questionnaire (A-PCQ)**

Adapted from the PsyCap Questionnaire (Fred Luthans et al., 2007) for educational settings, A-PCQ is a 24-item self-report instrument that measures academic psychological capital; a positive psychology construct that has been operationalized as individuals’ level of hope, optimism, self-efficacy, and resilience regarding their school related work (Brett Carl Luthans et al., 2012; Fred Luthans et al., 2007). Items are rated on a 6-point Likert scale. Minimum and maximum scores for each item range from one (*strongly disagree*) to six (*strongly*

*agree*), and the total scores of participants may range from 24 to 144. The range of scores for this sample ( $n = 216$ ) was 68 to 141 with a mean of 113.90 ( $SD = 13.29$ ). The skewness (-0.48) and kurtosis (0.73) values indicated an approximately normal distribution of PsyCap scores.

Participants' mean score in this study was not statistically different than the mean score of the sample that A-PCQ was initially normed on ( $t(309) = 1.79, p < .05$ ).

### **Lakaev Academic Stress Reaction Scale-2 (LASRS-2)**

The LASRS-2 (Lakaev, 2016) is a revision of the LASRS (Lakaev, 2009) and is a 26-item self-report instrument that measures academic stress. Items are rated on a 5-point Likert scale ranging from one (*none of the time*) to 5 (*all of the time*). The total scores of participants may range from 26 to 130. Scores in the sample of this study ( $n = 216$ ) ranged from 26 to 98 with a mean of 53.06 ( $SD = 16.58$ ). The skewness (0.55) and kurtosis (0.57) indicated an approximately normal distribution of academic stress scores.

### **Mental Health Professionals Stress Scale (MHPSS) – Modified**

A modified version of the MHPSS (Cushway et al., 1996) consisting of 19 items, was used in this study to assess participants' level of clinical stress. For the present study, a modified instruction by Jenkins and Elliot (2004) was used for participants enrolled in Practicum or Internship, and a modified instruction was used for those who were not working with clients at the time of completing the survey. In addition to the *client-related difficulties* (six items) and *professional self-doubt* (six items) subscales, a new subscale was developed by the researcher and used for the purpose of this study. The new subscale consists of seven items including: (a) *lack of positive support and/or conflicts in supervisory relationships*; (b) *lack of knowledge in any of CACREP's core areas (professional counseling theoretical orientation and ethical practice, multicultural counseling, human development, career, counseling and helping*

*relationships, group counseling, research and program evaluation, and assessment*); (c) Internship/Practicum site placement process; (d) *being evaluated by site and/or university supervisor*; (e) *acquiring required clinical hours*; (f) *facing ambiguity and uncertainty in working with clients*; and (g) *feeling frustrated with unsatisfying training experience at your site*. Items are rated on a 4-point Likert scale. Minimum and maximum scores for each item range from one (*never or rarely a problem*) to four (*very often a problem*), and the total scores of participants may range from 19 to 76. The range of scores for this sample ( $n = 216$ ) was 19 to 65 with a mean of 37.90 ( $SD = 9.35$ ). The skewness (-0.47) and kurtosis (-0.45) values indicated an approximately normal distribution of clinical stress scores.

**Mental Health Continuum- Short Form**

Created by Keyes (2005), the MHC-SF is a 14-item self-report instrument that assesses the frequency of positive psychological experiences. Items are rated on a 6-point Likert scale ranging from zero (*never*) to five (*everyday*). The total scores of participants may range from zero to 70. Scores in the sample of this study ( $n = 216$ ) ranged from 13 to 70 with a mean of 49.86 ( $SD = 11.25$ ) which was not statistically different than the mean score of a national sample of 338 undergraduate students (not in a specific program) in the U.S. (Selvaraj, 2015), ( $t(552) = 0.19, p < .05$ ). The skewness (-0.68) and kurtosis (0.43) indicated an approximately normal distribution of clinical stress scores.

Table 4.3 illustrates the descriptive statistics for the A-PCQ, LASRS-2, MHPSS –*Modified*, and MHC-SF.

Table 4.3

*Descriptive Statistic for the A-PCQ, LASRS-2, MHPSS –Modified, and MHC-SF*

	<i>M</i>	<i>SD</i>	<i>V</i>	$\alpha$
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Academic PsyCap Questionnaire	113.90	13.29	176.68	.92
Lakaev Academic Stress Reaction Scale-2	53.06	16.58	274.92	.94
Mental Health Professionals Stress Scale	37.90	9.35	87.51	.88
Mental Health Continuum- Short Form	49.86	11.25	126.64	.90

*Note.* M = mean; SD = standard deviation; V = variance; n = 217;  $\alpha$  = Cronbach's alphas

### Overall Stress

In order to capture the main stressors for participants, they were asked an open-ended question to identify the main stressors in their lives. Subsequently, participants rated the severity of their main stressors on a 4-point Likert scale. One hundred-and-two participants reported feeling “*moderately stressed*” (47%), 64 participants reported feeling “*very stressed*” (30%), 48 participants reported feeling “*a little bit stressed*” (22%), and two participants reported feeling “*not at all stressed*” (1%). The results of bivariate correlation tests indicated that participants’ scores on their overall stress were significantly correlated with their scores on academic stress ( $r = .57$ ), clinical stress ( $r = .24$ ), PsyCap ( $r = -.38$ ), and mental health ( $r = -.40$ ).

Table 4.4 below reports the main life stressors identified by participants:

Table 4.4

#### *Main Life Stressors Identified by Participants*

<i>Main Stressors</i>	<i>N</i>	<i>Percent</i>
School-related work	141	66%
Clinical stressors (Internship/Practicum-related)	65	30%
Financial difficulties	65	30%
Lack of time for too many responsibilities	63	29%
Relationship with significant other	35	16%

Finding a job in the future	29	13%
Family difficulties (other than relationship with spouse)	27	13%
Lack of family, friends, and/or community	20	9%
Lack of self-care	19	9%
Medical condition	13	6%
Poor time management	13	6%
Election	9	4%
Children	6	3%

### Statistical Analysis of Research Questions and Hypotheses

The purpose of this heuristic study was to investigate the following research questions:

(a) What are the relationships among the level of psychological capital (PsyCap), perceived academic and clinical stress, and mental health for master’s-level counseling students in CACREP-accredited programs? (b) How do the subgroups of participants differ in their mental health, perceived stress, and PsyCap?

Considering the results of previous related studies and the proposed research questions, the following hypotheses were posed for this study: (1) the variables of interest (PsyCap, stress, and mental health) are significantly correlated; (2) Counseling students at higher levels of PsyCap will report experiencing less clinical and academic stress (*directional hypothesis*); (3) Counseling students at higher levels of PsyCap will report higher levels of mental health (*directional hypothesis*); (4) Counseling students who were working with clients at the time of completing the survey will report higher levels of clinical stress (*directional hypothesis*); (5) The variables of interest will not be significantly different for male and female participants (*null*



*hypothesis*); (6) The variables of interest will not be significantly different based on program specialty (*null hypothesis*); (7) The variables of interest will not be significantly different based on race/ethnicity (*null hypothesis*); (8) The variables of interest will not be significantly different based on delivery methods (online, hybrid, and face-to-face) (*null hypothesis*); (9) The variables of interest for full-time and part-time participants will not be significantly different (*null hypothesis*).

### **Hypotheses One, Two, and Three**

The first hypothesis stated that participants' scores on PsyCap, academic stress, clinical stress, and mental health would be correlated. The second and third hypothesis assumed that the direction of correlation between stress and PsyCap would be negative, and the third hypothesis stated that the direction of correlation between PsyCap and mental health would be positive. Pearson product moment correlations were computed to test this hypothesis, and the Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/6 = .008$ ). The results indicated that all of the bivariate correlations were statistically significant. Academic stress was positively correlated with clinical stress ( $r^2 = .12$  indicating a moderate magnitude), negatively correlated with PsyCap ( $r^2 = .34$  indicating a large magnitude), and negatively correlated with mental health ( $r^2 = .32$  indicating a large magnitude). Clinical stress was negatively correlated with PsyCap ( $r^2 = .11$  indicating a moderate magnitude) and negatively correlated with mental health ( $r^2 = .06$  indicating a small magnitude). Lastly, PsyCap was positively correlated with mental health ( $r^2 = .36$  indicating a large magnitude). Therefore, the hypotheses were supported by the data. Table 4.5 below summarizes the results of bivariate correlation tests.

Table 4.5

*Pearson Correlations among AS, CS, PsyCap, and MH*

Measure	1	2	3	4
1. AS				
2. CS	.347*			
3. PsyCap	-.583*	-.329*		
4. MH	-.571*	-.235*	.599*	

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap); MH = mental health; n = 215

\*Significant at  $p = .008$ , 2-tailed.

### **Hypothesis Four**

Hypothesis four asserted that participants who were working with clients at the time of completing the survey would be experiencing higher levels of clinical stress ( $n_1 = 94$ ,  $M_1 = 35.73$ ,  $SD_1 = 7.73$ ) than those who were not working with clients ( $n_2 = 122$ ,  $M_2 = 39.57$ ,  $SD_2 = 10.16$ ). Since the result of Levene's test for equality of variance ( $F = 12.06$ ,  $p < .05$ ) was significant, a corrected degrees of freedom was used in calculation. The results of an independent sample  $t$ -test indicated that the level of clinical stress for the two groups (i.e. those who were working with clients vs. those who are not) was significantly different ( $t(213.97) = -3.15$ ,  $p < .05$ ); however, participants who were working with clients reported experiencing lower levels of clinical stress. Therefore, hypothesis four was rejected. Possible explanations for the results will be discussed in the next chapter.

### **Hypothesis Five**

This hypothesis stated that male participants' scores on PsyCap ( $M_{p1} = 113.36$ ), academic stress ( $M_{a1} = 51.48$ ), clinical stress ( $M_{c1} = 34.97$ ), and mental health ( $M_{m1} = 46.88$ ) would not be significantly different than their female counterparts ( $M_{p1} = 114.11$ ,  $M_{a1} = 53.31$ ,  $M_{c1} = 38.36$ ,

and  $M_{m1} = 50.50$ ). The results of independent sample  $t$ -tests indicated that the two groups of male and female participants were not statistically different:

- (a) For the academic stress variable: ( $t(212) = -0.59$ , not significant at  $p < .01$ ).
- (b) For the PsyCap variable: ( $t(212) = -0.30$ , not significant at  $p < .01$ ).
- (c) For the clinical stress variable: ( $t(212) = -1.94$ , not significant at  $p < .01$ ).
- (d) For the mental health variable: ( $t(212) = -1.71$ , not significant at  $p < .01$ ).

Since multiple  $t$ -tests were conducted, the Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/4 = .0125$ ).

### Hypothesis Six

The sixth hypothesis for this study was that the variables of interest would not be significantly different by program specialty. One-way analysis of variance (ANOVA) was computed for PsyCap, academic stress, clinical stress, and mental health measures to compare participants in different program specialties. The results of analysis supported the hypothesis. Table 4.6 and 4.7 below reports the results of these statistical tests.

Table 4.6

*Mean Scores by Program Specialties*

<i>Program Specialties</i>	<i>N</i>	<i>PC</i>	<i>AS</i>	<i>CS</i>	<i>MH</i>
Addiction	13	115.08	47.92	36.92	49.31
Clinical Mental health	115	115.08	52.41	38.71	49.35
Marriage, couples, and family	21	110.05	53.81	41.62	51.38
School	52	112.27	55.17	37.54	49.77
Student affairs and college	2	119.00	54.00	28.50	53.00

*Note.* AS = academic stress; CS = clinical stress; PC = Psychological Capital (PsyCap); MH = mental health

Table 4.7

*One-way ANOVA of PsyCap, Stress, and Mental Health by Program Specialties*

<i>Measure</i>	<i>N</i>	<i>F</i>	<i>P</i>
PsyCap	203	0.91	.462
Academic Stress	203	0.59	.674
Clinical Stress	203	1.44	.223
Mental Health	203	0.19	.945

*Note.* The Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/4 = .0125$ ).

### **Hypothesis Seven**

The seventh hypothesis for this study proposed that the variables of interest would not be significantly different by race/ethnicity. One-way analysis of variance (ANOVA) was computed for PsyCap, academic stress, clinical stress, and mental health measures to compare participants with different race/ethnicity. The results of analysis supported the hypothesis. Table 4.8 and 4.9 below reports the results of these statistical tests.

Table 4.8

*Mean Scores by Race/Ethnicity*

<i>Race/Ethnicity</i>	<i>N</i>	<i>PC</i>	<i>AS</i>	<i>CS</i>	<i>MH</i>
Caucasian/White	161	113.80	53.35	38.73	49.63
African American or Black	20	114.45	54.95	38.55	50.55
American Indian or Alaska Native	3	113.67	36.67	37.00	51.33
Asian	8	115.63	49.63	34.00	55.25
Hispanic	19	114.16	52.95	31.95	51.21

*Note.* AS = academic stress; CS = clinical stress; PC = Psychological Capital (PsyCap); MH = mental health

Table 4.9

*One-way ANOVA of PsyCap, Stress, and Mental Health by Race/Ethnicity*

<i>Measure</i>	<i>N</i>	<i>F</i>	<i>P</i>
PsyCap	211	0.40	.996
Academic Stress	211	0.89	.470
Clinical Stress	211	2.72	.031
Mental Health	211	0.55	.699

*Note.* The Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/4 = .0125$ ).

### **Hypothesis Eight**

The eighth hypothesis for this study assumed that the variables of interest for counseling students in different course settings (i.e., online, face-to-face, and hybrid) would not be significantly different. One-way analysis of variance (ANOVA) was computed for PsyCap, academic stress, clinical stress, and mental health measures to compare participants in different settings. The results of analysis supported the hypothesis. Table 4.10 and 4.11 below reports the results of these statistical tests.

Table 4.10

*Mean Scores by Program Settings*

<i>Program Settings</i>	<i>N</i>	<i>PC</i>	<i>AS</i>	<i>CS</i>	<i>MH</i>
Online	3	113.33	44.67	38.33	54.00
Face-to-face	160	113.91	53.47	38.48	49.56
Hybrid	52	113.98	52.67	36.25	50.65

*Note.* AS = academic stress; CS = clinical stress; PC = Psychological Capital (PsyCap); MH = mental health

Table 4.11

*One-way ANOVA of PsyCap, Stress, and Mental Health by Method of Delivery*

<i>Measure</i>	<i>N</i>	<i>F</i>	<i>P</i>
PsyCap	211	0.00	.997
Academic Stress	211	0.51	.602
Clinical Stress	211	1.22	.298
Mental Health	211	0.49	.615

*Note.* The Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/4 = .001125$ ).

### **Hypothesis Nine**

This hypothesis stated that full-time and part-time participants' scores on PsyCap, stress and mental health would not be significantly different. Table 4.12 below reports the results of these statistical tests.

Table 4.12

*Mean Scores of Full-time and Part-time Students*

	<i>N</i>	<i>PC</i>	<i>AS</i>	<i>CS</i>	<i>MH</i>
Full-time	177	114.02	52.16	38.33	49.97
Part-time	38	113.45	57.79	36.11	49.50

*Note.* AS = academic stress; CS = clinical stress; PC = Psychological Capital (PsyCap); MH = mental health

The results of an independent sample *t*-test indicated that the two groups of participants were not statistically different: For the academic stress variable: ( $t(48.54) = -1.71$ , not significant at  $p < .01$ ).

- (a) For the PsyCap variable: ( $t(209) = 0.26$ , not significant at  $p < .01$ ).
- (b) For the clinical stress variable: ( $t(209) = 1.31$ , not significant at  $p < .01$ ).
- (c) For the mental health variable: ( $t(209) = 0.36$ , not significant at  $p < .01$ ).

Since multiple *t*-tests were conducted, the Bonferroni correction method was used to adjust the alpha level ( $\alpha = .05/4 = .0125$ ).

### Mediation Analyses

In this section, the relationships among the measured variables (i.e., academic stress, clinical stress, PsyCap, and mental health) will be discussed. In order to establish a model indicating the relationships among the variables of interest, the correlations among them were first examined. Correlations among academic stress, clinical stress, PsyCap, mental health, academic stress\*PsyCap (i.e., interaction between academic stress and PsyCap), and clinical stress\*PsyCap are listed in Table 4.13 below.

Table 4.13

*Pearson Correlations among AS, CS, PsyCap, MH, PsyCap\*AS, and PsyCap\*CS*

Measure	1	2	3	4	5
1. AS					
2. CS	.347**				
3. PsyCap	-.583**	-.329**			
4. MH	-.571**	-.235**	.599**		
5. PsyCap*AS	.909**	.249**	-.213**	-.386**	
6. PsyCap*CS	.056	.866**	.175**	.070	.151*

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap); MH = mental health; n = 215

\*\* Significant at  $p = .01$ , 2-tailed. \*Significant at  $p = .05$ , 2-tailed.

An initial multiple linear regression was calculated to predict mental health level (i.e., DV) from academic stress (i.e., IV<sub>1</sub>) and clinical stress (i.e., IV<sub>2</sub>). A significant regression model was found ( $F(2, 213) = 51.792, p < .001$ , with an  $R^2$  of .327). An analysis of the coefficients of the predictor variables indicated that academic stress was a significant predictor for mental

health status ( $t(215) = -9.279, p < .05$ ), and the unstandardized and standardized coefficients for this variable were  $-.377$  and  $-.556$  respectively. At the same time, the results of the analyses indicated that clinical stress was not a significant predictor for mental health status at  $p < .05$ . Tests to check for collinearity and outliers were completed, and no issues were detected. Furthermore, similar but separate regression analyses were conducted for participants who were seeing clients and those who were not. The results indicated that clinical stress was not a significant predictor of participants' mental health status. Possible explanations for the non-significance of clinical stress will be addressed in the next chapter.

### Introducing PsyCap Elements

To examine the relationships among PsyCap and other variables, PsyCap and its interaction with academic and clinical stress were added to the previous regression model as three separate variables. Although the regression model itself was significant ( $(F(5, 210) = 32.327, p < .001$  with an  $R^2$  of  $.435$ ), none of the predictive variables were significant. Coefficients and diagnostics results are indicated in Table 4.14 and 4.15 below.

Table 4.14

#### *Coefficients for Mental Health*

Model	Unstandardized		Standardized			Collinearity Statistics	
	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>t</i>	<i>p</i>	<i>Tolerance</i>	<i>VIF</i>
AS	-.385	.320	-.567	-1.202	>.05	.012	82.684
CS	-.200	.615	-.166	-.325	>.05	.010	97.280
PsyCap	.189	.210	.224	.900	>.05	.044	22.924
Psy*AS	.001	.003	.192	.490	>.05	.018	56.958



Psy\*CS .002 .005 .177 .362 >.05 .011 89.137

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap); MH = mental health; Psy\*AS = interaction between PsyCap and academic stress; Psy\*CS = interaction between PsyCap and clinical stress; Coeff = Slope; SE = standard error; t = t-statistic; *P* = p-value.

Table 4.15

*Collinearity Diagnostics*

<i>Condition</i>	<i>Variance Proportions</i>					
	<i>(Constant)</i>	<i>AS</i>	<i>CS</i>	<i>PsyCap</i>	<i>Psy*AS</i>	<i>Psy*CS</i>
<i>index</i>						
1.000	.00	.00	.00	.00	.00	.00
7.202	.00	.00	.00	.00	.00	.00
9.768	.00	.00	.00	.00	.00	.00
20.943	.01	.01	.00	.00	.03	.01
127.926	.17	.98	.14	.17	.96	.14
182.707	.82	.01	.85	.83	.01	.85

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap); Psy\*AS = interaction between PsyCap and academic stress; Psy\*CS = interaction between PsyCap and clinical stress.

VIF values were all > 5, and thus indicated collinearity between variables. In the Table 4.5, the condition index of 127. 926 indicated the existence of a collinearity situation between academic stress and the interaction between PsyCap and academic stress. On the other hand, the results of moderation analyses indicated that both interactions (i.e., Psy\*AS and Psy\*CS) were not significant to establish a moderation model (Interaction coefficient = .0018, *p* > .05).

Therefore, based on the results of the presented analyses, three variables of clinical stress, Psy\*AS, and Psy\*CS were eliminated from the multiple regression model. The results of the new model indicated a significant regression equation ( $F(2, 213) = 81.317, p < .001$ ), with an  $R^2$  of

.433. The Table 4.10 indicates the coefficients for each predictive variable before and after the inclusion of PsyCap in the regression equation. The results indicated in Table 4.16 are indicative of a possible mediation role for PsyCap.

Table 4.16

*Coefficients for Mental Health as the Dependent Variable*

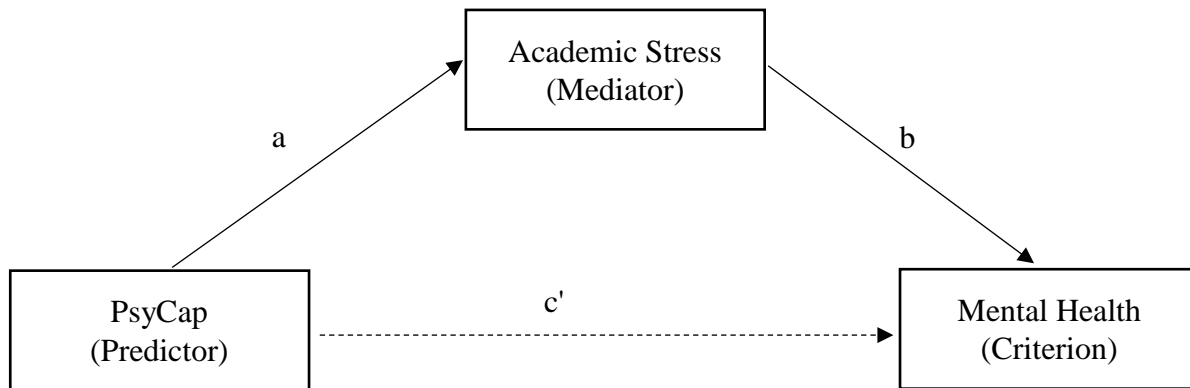
Model		Unstandardized Coeff		Standardized Coeff	<i>t</i>	<i>p</i>
		<i>B</i>	<i>SE</i>	<i>Beta</i>		
1	(constant)	70.405	2.117		33.252	<.01
	AS	-.387	.038	-.571	-10.166	<.01
2	(constant)	23.059	7.707		2.992	<.01
	AS	-.228	.043	-.336	-5.284	<.01
	PsyCap	.341	.054	.403	6.349	<.01

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap);; Coeff = Slope; SE = standard error; t = t-statistic; P = p-value.

**PsyCap as a Mediating Variable**

According to Baron and Kenny (1986), and James and Brett (1984) four steps would be required for establishing any mediational relationship regardless of which data analytic method is employed (e.g., logistic regression, multilevel modeling, and structural equal modeling). To establish a mediational relationship, there must be indication that: (a) the predictive variable is correlated with the outcome; (b) the predictive variable is correlated with the mediator; (c) the mediator affects the outcome; and (d) the effects of the predictive variable on the outcome decreases in the presence of the mediator. The results of testing the required conditions for establishing a mediation model are presented in Figure 4.4 below:

*Figure 4.4* Mediation Model Including the Indirect and Direct Effects



Step 1: A linear regression was calculated to predict the level of Mental Health (i.e., DV) based on PsyCap (i.e., IV). A significant regression equation was found ( $F(1, 214) = 119.66, p < .005$ ), with an  $R^2$  of .36. Unstandardized and standardized coefficients are indicated in Table 4.17 below.

Table 4.17

*Coefficients for Predicting Mental Health*

	<i>B</i>	<i>SE</i>	$\beta$
PsyCap	.51	.05	.60

*Note.* SE = standard error; B = unstandardized coefficients;  $\beta$  = standardized coefficients

Step 2: A linear regression was calculated to predict the level of academic stress (i.e., DV) based on PsyCap (i.e., IV). A significant regression equation was found ( $F(1, 214) = 110.20, p < .005$ ), with an  $R^2$  of .34. Unstandardized and standardized coefficients are indicated in Table 4.18 below.

Table 4.18

*Coefficients for Predicting Academic Stress*

	<i>B</i>	<i>SE</i>	$\beta$
PsyCap	-.73	.07	-.58

*Note.* SE = standard error; B = unstandardized coefficients;  $\beta$  = standardized coefficients

Step 3: A multiple linear regression was calculated to predict mental health (i.e., DV) based on PsyCap (i.e., IV<sub>1</sub>) and academic stress (i.e., IV<sub>2</sub>). A significant regression equation was found ( $F(2, 213) = 81.32, p < .005$ ), with an  $R^2$  of .43. Unstandardized and standardized coefficients are indicated in Table 4.19 below.

Table 4.19

*Coefficients for Predicting Mental Health*

	<i>B</i>	<i>SE</i>	$\beta$
PsyCap	.34	.05	.40
Academic stress	-.23	.04	-.34

*Note.* SE = standard error; B = unstandardized coefficients;  $\beta$  = standardized coefficients

Both academic stress ( $t = -5.28$ ) and PsyCap ( $t = 6.35$ ) were significant predictors of mental health status at  $p < .005$ . Since the effect of academic stress on controlling for PsyCap (i.e., path c') was not zero to establish a complete mediation, the results of the analyses indicates a *partial mediation*. The results of the final step of the mediation analysis is equivalent to Structural Equation Modeling, and are presented in Table 4.20 below:

Table 4.20

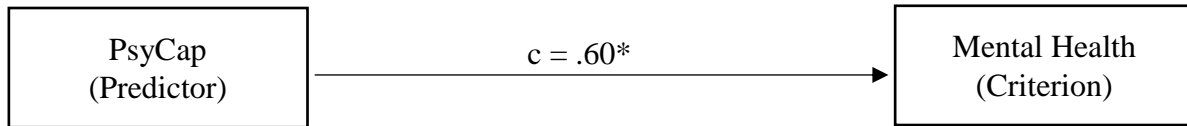
*Mediation Analyses: Academic Stress as the Partial Mediator*

	<i>Coeff</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI	
					<i>LLCI</i>	<i>ULCI</i>
Path a (PC. AS)	-.73	.07	-10.50	<.001	-.8638	-.5907
Path b (AS. MH)	-.23	.04	-5.28	<.001	-.3127	-.1428
Path c' (direct effect)	.34	.05	6.35	<.001	.2354	.4473
Path c (total effect)	.507	.05	10.94	<.001		

*Note.* AS = academic stress; PC = Psychological Capital (PsyCap); MH = mental health; *Coeff* = Slope; *SE* = standard error; *t* = *t*-statistic; *P* = *p*-value; CI = confidence interval, *LL* = lower level; *UL* = upper level

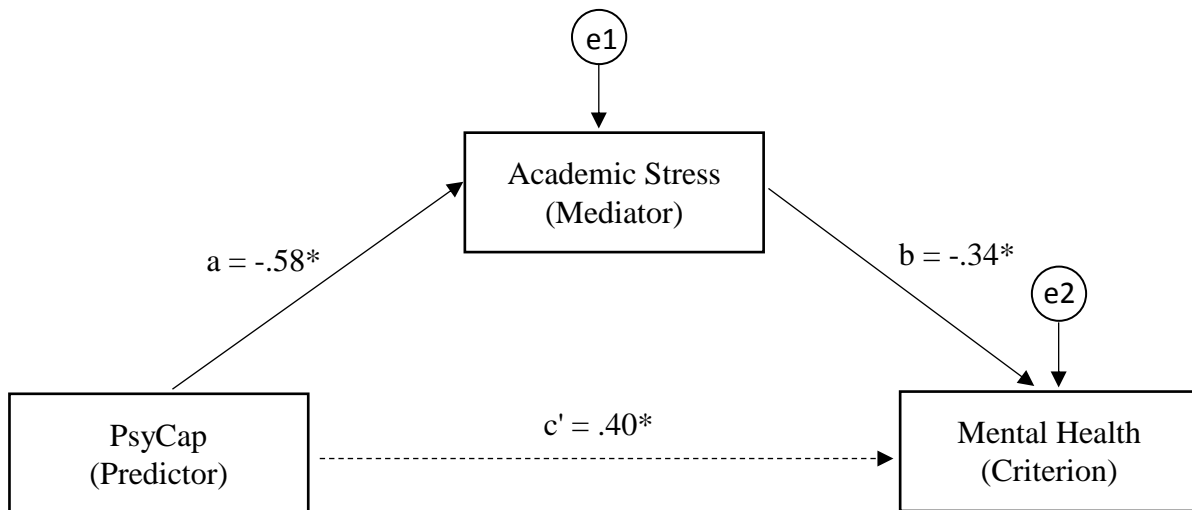
The amount of mediation (i.e., indirect effect) is equal to the reduction of the effect of the causal variable on the outcome or  $ab = c - c' = .20$

Figure 4.5 Total Effect of Academic Stress on Participants' Mental Health



\*Significant path

Figure 4.6 Mediation Model Including the Indirect and Direct Effects



Note.  $a*b$  = indirect effect;  $c'$  = direct effect

\*Significant path

### Significance of Indirect Effect and Effect Size

In order to examine the significance of the indirect effect in the presented model, *the joint test of significance* (R. M. Baron & Kenny, 1986) was conducted in conjunction with *bootstrapping* the indirect effects (Shrout & Bolger, 2002), a non-parametric method based on resampling procedure. The results indicated in Table 4.11 prove the joint significance of paths a and b. The results of the bootstrapping analyses showed that the bootstrap confidence interval

(level = 95%) for  $a*b$  does not include zero (LL = -.2312, UL = -.0980) which is an indication of significance of the indirect effects. Additionally, Percent mediation ( $P_M$ ) was calculated to test the effect size of the indirect effects (Preacher & Kelley, 2011), and it was equal to  $\frac{ab}{ab+c'}$  = .4119 indicating that PsyCap accounted for 41% of the total effect of stress on participants' mental health.

### Summary

This study examined the relationships among psychological capital (PsyCap), academic stress, clinical stress, and mental health for master's-level counseling students in CACREP-accredited counseling programs and how PsyCap may influence the relationship between stress and mental health for participants. The sample consisted of 216 master's-level counseling students currently enrolled in CACREP-accredited counseling programs in the United States. The mean score on PsyCap for participants of this study was 113.90 ( $SD = 13.29$ ). The mean score on LASRS-2 was 53.06 ( $SD = 16.58$ ); the mean score on MHPSS–*Modified* was 37.90 ( $SD = 9.35$ ), and the mean score on MHC-SF was 49.86 ( $SD = 11.25$ ). Forty-seven percent of participants reported feeling “moderately stressed”, 30% reported feeling “very stressed”, 22% reported feeling “a little bit stressed”, and 1% reported “not at all stressed.”

Nine hypotheses were assumed based on the results of previous studies. The results of the statistical analyses supported eight hypotheses, and rejected one of them. Hypothesis one proposed that the variables of interest (i.e., PsyCap, academic stress, clinical stress, and mental health) would be significantly correlated. Hypothesis two assumed that PsyCap would have negative correlation with academic and clinical stress, and hypothesis three stated that PsyCap and mental health would be positively correlated for participants of the study. Statistical analyses of the data supported all three hypotheses, indicating that counseling students at higher levels of

PsyCap were experiencing higher levels of mental health and lower levels of academic and clinical stress. Hypothesis four assumed that participants who were working with clients would be experiencing higher levels of clinical stress. The results of an independent sample *t*-test indicated that counseling students who are working with clients experienced lower levels of clinical stress, and thus rejected the hypothesis. Hypothesis five proposed that the variables of interest (i.e., PsyCap, academic stress, clinical stress, and mental health) for male and female participants would not be statistically different. The result of an independent sample *t*-test supported the hypothesis. Hypothesis six stated that variables of interest for participants in different program specialties would not be significantly different. The results of a one-way ANOVA test supported the hypothesis. Hypothesis seven proposed that the variables of interest would not be statistically different for participants identified with different race/ethnicity. The results of a one-way ANOVA test supported the hypothesis. Hypothesis eight assumed that the variables of interest for participants in different settings (i.e., online vs. face-to-face vs. hybrid) would not be significantly different. The results of a one-way ANOVA test supported the hypothesis. Lastly, hypothesis nine proposed that the variables of interest would not be different for full-time and part-time participants. The results of an independent sample *t*-test supported this hypothesis.

The results of multiple regression analyses indicated that academic stress and PsyCap are predictors of the dependent variable of mental health status, and that clinical stress was not a significant predictor for mental health status. Additionally, the results of the mediation analyses indicated that, academic stress partially *mediated* the effect of PsyCap on participants' mental health. In other words, PsyCap influences participants' mental health partially and indirectly by influencing their perceptions about academic stress.

In the following chapter, the results of the present study will be discussed within the context of previous research. The implications of the findings for counselor educators, practitioners, and future research will also be addressed.



## **CHAPTER FIVE**

### **Discussion and Conclusion**

This chapter discusses the results of the study within the context of the current body of literature. An overview of the research purpose is presented followed by a discussion of the research questions, hypotheses, and findings. Additionally, the chapter addresses implications for counseling practice, counselor education, and future research, as well as the limitations and final conclusions of the study.

#### **Overview of the Study**

Research has established a negative relationship between academic stress and students' mental health. More specifically, academic stress was found to contribute to a variety of mental health conditions such as anxiety, depression, and even suicidality (Ang & Huan, 2006; McKinzie, Altamura, Burgoon, & Bishop, 2006; Misra & McKean, 2000). Counseling students in CACREP-accredited counseling programs in particular are facing stressors related to their required clinical training in addition to academic stress. The literature suggests that clinical stressors such as the anxiety of working with clients, being evaluated on clinical performance, lack of counseling self-efficacy, and boundary difficulties with clients may negatively affect counseling students' mental health, and consequently can negatively impact their clients (Byars, 2005; Parker, 2014; Skovholt & Rønnestad, 2003; Yager & Tovar-Blank, 2007).

The literature also suggests that the current approaches for addressing the issue of academic and clinical stressors in counseling programs are mainly centered on introducing counseling students to needs and strategies for self-care (Chrisman et al., 2008; Christopher & Maris, 2010; Leppma, 2011; Myers et al., 2012; Napoli & Bonifas, 2011; Richards et al., 2010; Schure et al., 2008), which has been defined as “self-initiated behaviors that promote good health

and wellbeing” Christopher, 2006, p. 496). According to the literature, self-care practices include but are not limited to mindfulness-based stress reduction strategies, physical exercise, utilizing time management and anxiety reduction techniques in conjunction with leisure activities, receiving counseling services, engaging in spiritual activities, and seeking emotional and social support (Calicchia & Graham, 2006; Christopher & Maris, 2010; Enochs & Etzbach, 2004; Ickes et al., 2015; Misra & McKean, 2000; Myers et al., 2003; Napoli & Bonifas, 2011; Shapiro et al., 2007).

A major limitation to the current approaches, however, is that the nature of introduction to the needs and strategies for self-care is rather unilateral and, thus, fails to take into consideration the differences among individuals in their psychological resources for coping with stress. According to the transactional model of stress (Lazarus, 1966), the role of individuals’ psychological structure would be even more significant than that of the environment in determining how they perceive and cope with stress (Lee, Lim, Yang, & Lee, 2011), and yet, that role is not given enough attention when counseling students are being introduced to the needs and strategies for self-care.

There seems to be another approach to understand and potentially address this issue without overlooking the individual differences. Psychological Capital (PsyCap) is a positive psychological construct that has been operationalized as one’s level of hope, optimism, self-efficacy, and resilience (F. Luthans, Avolio, Avey, & Norman, 2007). The literature has found that PsyCap, as an individualized psychological resource, is a predictor for academic achievements and mental health of university students and the psychological wellbeing of professional employees (Cheung, Tang, & Tang, 2011; Ding et al., 2015; Khan, Siraj, & Li, 2011; Knudson, 2015; Luthans, Luthans, & Jensen, 2012; Riolli, Savicki, & Richards, 2012;

Selvaraj, 2015). This construct, however, had not yet been investigated within the context of Counselor Education, in which counseling students are facing both clinical and academic stressors. This study investigated the relationships between academic and clinical stress, PsyCap, and mental health for a sample of 216 masters-level counseling students in CACREP-accredited counseling programs in the United States.

## **Discussion**

In this section, the descriptive results related to participants' knowledge and engagement in self-care, their overall stress, and their main life stressors will be discussed. Additionally, the results associated with each hypothesis and the role of PsyCap as a partial mediator for the relationship between academic stress and mental health will be addressed within the context of the aforementioned literature.

### **Descriptive Results**

**Knowledge and engagement in self-care.** The descriptive results indicated that 65% of participants reported having sufficient knowledge about self-care practice; 34% reported having some knowledge about self-care practices, and only one percent reported having very limited knowledge about self-care practices. Moreover, more than 93% of participants reported being engaged in some self-care practices. The results suggest that the majority of participants believed that they did have the knowledge (i.e. information) regarding self-care, which concurs with previous research suggesting that counseling students are being provided psychoeducational information regarding the needs and strategies for self-care, and the results of this study are largely supported by that research.

**Self-care strategies.** Participants were given a list of self-care practices from which they identified strategies they had utilized for their self-care. The list included common self-care

practices identified by reviewing the current literature (Calicchia & Graham, 2006; Christopher & Maris, 2010; Enochs & Etzbach, 2004; Ickes et al., 2015; Misra & McKean, 2000; Myers et al., 2003; Napoli & Bonifas, 2011; Shapiro et al., 2007). Participants were also given the option to identify practices that were not included in the list. The results were supported by previous research, in that the items identified on the list were the most frequently identified self-care practices: receiving support from family and friends (86%), physical activities (60%), spiritual activities (44%), mindfulness-related activities (41%), and receiving counseling services (34%). Twenty-one percent of participants identified self-care practices that were not initially included in the survey. It's note-worthy to mention that the selection bias may have also contributed to the aforementioned pattern of higher response rate for items included in the survey list than that of items were not included in the list by default.

One commonality among all of the activities identified by participants seemed to be their inclusion of strategies that could ultimately enable them to *cope* with stress more effectively. Although only one percent of participants reported using alcohol and drugs as a coping strategies, social desirability bias may have contributed to the low rate of including coping strategies that are not perceived as socially desirable, such as smoking or using alcohol and illegal drugs (Embree & Whitehead, 1993; Furnham, 1986). Additionally, participants' variable definitions of self-care practices may have also been a contributing factor in the specific lists of practices that they identified.

Although spiritual activities, receiving support from family and friends, mindfulness-related activities, and receiving counseling and supervision might contribute to an improvement in the elements of PsyCap (i.e., engaging in such activities might help participants to feel more optimistic, hopeful, resilient, and self-efficacious), only one participant directly identified

“positive thinking” as a self-care practice. This finding was supported by what previously was identified as the shortcoming of the current approaches to address the issue of stress, and indicated that psychological capital, as an individualized and internal resource for coping with stress, is not typically included in the self-care practices introduced to counseling students.

**Overall stress.** The results of participants’ rating on their overall stress indicated that 77% of participants reported feeling “moderately” (47%) or “very stressed” (30%). This is consistent with the results of aforementioned research on counseling students’ level of perceived stress (Byars, 2005; Parker, 2014; Skovholt & Rønnestad, 2003; Yager & Tovar-Blank, 2007), highlighting the significance of academic and clinical stress for counseling students. What is noteworthy is that although more than 93% of participants reported being engaged in some self-care practices, and 99% of them reported having at least some knowledge about self-care, their reported stress-level remained relatively high. One explanation for this may be the previously discussed shortcoming of the current self-care practices being introduced to counseling students. It is also worthy of attention that the results of a Chi-Square (goodness of fit) test indicated that the percentage of participants who reported feeling “very stressed” significantly decreased towards the winter break time when the academic and clinical stress for counseling students subside. A reasonable speculation for this could be that academic and clinical stress may have constituted a considerable portion of participants’ overall stress; thus, when academic and clinical stress decline, students’ overall stress levels decrease accordingly. What participants identified as their main life stressors supports this speculation, in that they ranked school-related work and clinical stressors (Internship/Practicum-related) as their most recognized life stressors.

**Main life stressors.** The first four life stressors identified by participants were: school-related work (66%), clinical stressors related to practicum or internship (30%), financial

difficulties (30%), and “lack of time for too many responsibilities” (29%). The results of participants’ answers to the open-ended question about their main life stressors indicated that academic stress followed by clinical stressors (as well as financial difficulties) were the most recognized life stressors for counseling students. Although academic stress, financial difficulties, and lack of time for too many responsibilities seem to be common among the majority of graduate students, the stress associated with Practicum and Internship are particular to counseling students. Furthermore, since counseling students have to take the Practicum and Internship courses, and fulfill the course requirements (e.g., assignments, case presentations, group supervision, etc.) in addition to engagement in clinical work, some participants may have viewed and reported these requirements as “school-related work” even though the requirements are related to the clinical aspects of the program. Moreover, completing Practicum and Internship would require considerable time commitments, which may have also contributed to what participants identified as “lack of time for too many responsibilities”.

### **Research Questions and Hypotheses**

The current study addressed the following research questions: (a) what are the relationships among the level of psychological capital (PsyCap), perceived academic and clinical stress, and mental health for master’s-level counseling students in CACREP-accredited programs? (b) If at all, how do the subgroups with the sample differ in their mental health, perceived stress, and PsyCap?

Based on previous research on the topic, the following hypotheses guided this study: (1) the variables of interest (PsyCap, academic stress, clinical stress, and mental health) are significantly correlated (directional hypothesis); (2) counseling students at higher levels of PsyCap would report experiencing less clinical and academic stress (directional hypothesis); (3)

counseling students at higher levels of PsyCap would report higher levels of mental health (directional hypothesis); (4) counseling students who were working with clients at the time of completing the survey would be experiencing higher levels of clinical stress (directional hypothesis); (5) the variables of interest for male and female participants would not be significantly different (null hypothesis); (6) the variables of interest for participants in different program specialties would not be significantly different (null hypothesis); (7) the variables of interest for participants identified with different race/ethnicity would not be significantly different (null hypothesis); (8) the variables of interest for participants in counseling programs with different delivery methods (online, hybrid, and face-to-face) would not be significantly different (null hypothesis); and (9) the variables of interest for full-time and part-time participants would not be significantly different (null hypothesis). Results relevant to each research question and hypothesis are presented below.

### **Hypotheses One, Two, and Three**

The results of analyses supported the first three hypotheses, indicating that the four variables of PsyCap, academic stress, clinical stress, and mental health were significantly correlated. In terms of the direction of correlations, the results suggested that PsyCap was negatively correlated with stress (both academic and clinical) and positively correlated with mental health, suggesting that participants with higher levels of PsyCap reported lower levels of academic and clinical stress and higher levels of mental health. These results also lend support to the notion that PsyCap may have mitigated the effects of stress on participants' mental health by helping them cope with academic and clinical stress more effectively. This finding is consistent with the results of previous research on PsyCap, academic stress, and mental health (Riulli et al., 2012; Selvaraj, 2015) for college students. Furthermore, the results of the current study

established a negative correlational relationship between PsyCap and clinical stressors for counselors-in-training, and thus extended what previous research as established to this particular population. Although significant correlations among the variables of interest are not an indication of causal relationships, they could be the initial steps to establish stress and PsyCap as predictive variables for mental health.

#### **Hypothesis Four**

The results of an independent sample *t*-test rejected the hypothesis four, and revealed that participants who were clinically engaged (i.e. working with clients) reported feeling significantly lower levels of clinical stress, a finding that would not logically have been predicted for participants who were exposed to significant clinical stressors. When answering the clinical stress questionnaire, participants who were not working with clients were asked to *project* their thoughts and feelings based on what stressors they anticipated during their clinical experiences in Practicum or Internship, and they reported higher levels of anticipated clinical stress than those who were actually experiencing clinical stress. A possible explanation for this finding may be that those who were not working with clients and had to predict their clinical stress were feeling less self-efficacious about the clinical practice and, thus, *overestimated* their future clinical stress by reporting higher levels of clinical stress than those who were working with clients.

Performance accomplishment is considered the first learning resource for improving one's self-efficacy (Bandura, 1977), and therefore, counseling students who had not started working with clients would be less likely to feel self-efficacious for clinical work. A lower inter-correlation between reported academic and clinical stress for participants who were working with clients also supported this explanation.



The results of the present study also revealed that the overall stress was significantly higher for participants who were working with clients. This is consistent with the fact that participants who were working with clients rated clinical stressors as their second main life stressor. This result corroborates previous research on the stressors experienced by counseling students (Byars, 2005; Parker, 2014; Skovholt & Rønnestad, 2003; Yager & Tovar-Blank, 2007), indicating that counseling students who are engaged in clinical work are exposed to clinical stressors in conjunction with academic stressors, and consequently may experience higher levels of stress. Additionally, the results of an independent *t*-test in the current study indicated that participants who were working with clients reported significantly higher levels of academic stress, even though they reported lower levels of clinical stress. One explanation for this result may be a lack of clarity and the existence of an overlap between academic and clinical stress for participants. Although Practicum and Internship stressors are defined as clinical stressors in this study, they were also part of participants' academic stress, in that they are a part of the academic program. Participants who were in Practicum or Internship had to complete the required clinical hours and present their counseling sessions for individual and group supervisions in order to pass Practicum or Internship. Therefore, even though stressors related to Internship or Practicum experiences were initially conceptualized as clinical stressors in this study, they may have been subsumed under participants' academic stress since they also constituted a part of participants' academic stress.

### **Hypothesis Five**

The results of statistical analyses revealed that the level of PsyCap, clinical stress, academic stress, and mental health were not different for male and female participants, thus supporting the null hypothesis. The results challenge the findings of some of the previous studies

suggesting that gender might be a factor in predicting the level of stress (Bayram & Bilgel, 2008; Gupchup et al., 2004; Kardatzke, 2009; Misra & McKean, 2000; Pierceall & Keim, 2007), and yet they corroborate the results of studies indicating no significant difference between male and female students in terms of their levels of PsyCap (Khan et al., 2011; Riolli et al., 2012; Selvaraj, 2015). The results indicate that gender does not seem to be a contributing factor in individuals' level of PsyCap and perceived stress. The findings are particularly noteworthy as they suggest that the implications of this study can apply to both men and women. In other words, the same framework could possibly apply to both genders to understand and potentially improve their PsyCap, or to decrease their perceived stress.

### **Hypothesis Six, Seven, Eight, Nine**

The findings of statistical analyses supported hypothesis six, indicating that academic stress, clinical stress, PsyCap, and mental health for participants in different program specialties (i.e., clinical mental health counseling, school counseling, marriage, couple, and family counseling, addiction counseling, student affairs and college counseling, rehabilitation counseling, and career counseling) did not differ. This finding may be an indication that although the counseling courses offered in different program specialties vary, the clinical and academic stressors are not significantly different across those program specialties. The finding may also mean that, the implications of the present study apply to all CACREP-accredited counseling programs regardless of the counseling specialties being offered in those programs.

The results of analyses supported hypothesis seven, eight, and nine suggesting that academic stress, clinical stress, PsyCap, and mental health were not significantly different for participants who identified with different races/ethnicities (i.e., Caucasian/White, African American, Hispanic, Asian, and American Indian/Alaska Native); however, the sample of this

study was not large enough to accurately represent participants from minority populations. Despite the sampling limitations, the findings indicate that race/ethnicity does not appear to contribute to individuals' levels of perceived stress and PsyCap, suggesting that the implications of this study would be applicable to any individual regardless of their race and/or ethnicity. Additionally, participants in counseling programs with different delivery methods (i.e., online, hybrid, and face-to-face) did not differ on their scores of stress, PsyCap, and mental health, indicating that the method of delivery was not a contributing factor in the level of perceived stress. CACREP-accredited counseling programs are being offered through face-to-face, online, and hybrid (i.e. a combination of online and face-to-face) platforms. Although the majority of CACREP-accredited programs are offered in face-to-face settings, the findings of this study indicate that the academic and clinical training stressors in counseling programs are independent of the methods through which they are being delivered, suggesting that the issue of stress for counseling students is not limited to face-to-face platforms, and moreover, the implications of the present study can apply to all program settings. Finally, the findings revealed that full-time and part-time students experience the same level of academic and clinical stress, indicating that despite the differences between the academic and clinical requirements for full-time and part-time students, both full-time and part-time counseling students experience the same levels of academic and clinical stress. Therefore, the findings and implications of the present study are applicable to all graduate counseling students, regardless of their course load.

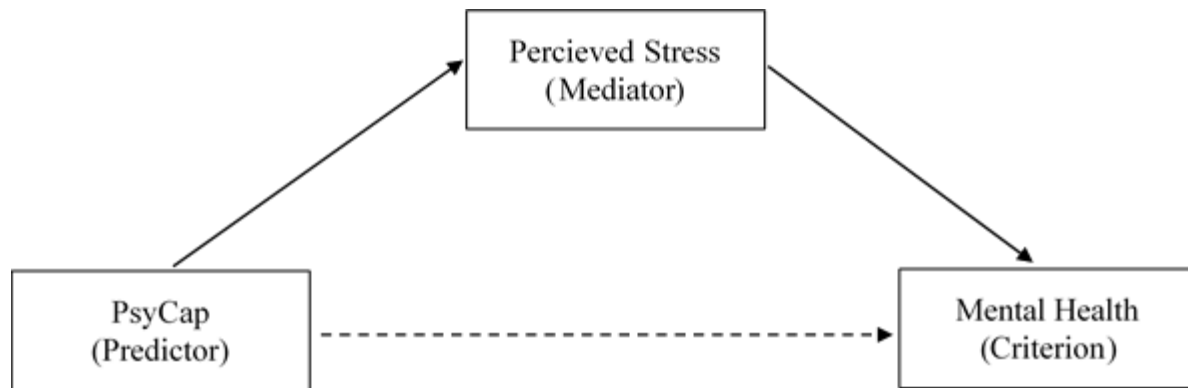
### **PsyCap: An Internal Resource for Coping with Stress**

Previous research has established different roles for PsyCap in its relationships with other variables. The results of some studies yielded a moderating role for PsyCap. For example, in a study by Cheung et al. (2011), PsyCap was found to moderate the relationship between

emotional labor and burnout. On the other hand, another group of studies indicated a mediating role for PsyCap, as in a study by Shen et al (2014) in which PsyCap appeared to mediate the relationship between occupational stress and participants' depressive symptoms. In a study by Wang et al. (2012), PsyCap mediated the relationship between work-family conflicts and burnout and was introduced as a resource for nurses to utilize when facing stress. Finally, Riolli et al. (2012) investigated the relationship between PsyCap, academic stress, and physical and psychological wellbeing of 141 undergrad students and concluded that PsyCap had mediated the relationship between stress and participants' wellbeing.

Despite the aforementioned roles for PsyCap, this researcher hypothesized an alternative model to what has been established in previous studies by incorporating the definition of PsyCap, the transactional conceptualization of stress (Lazarus, 1966), and the nature of measurement. PsyCap is defined as “an individual’s positive psychological state of development that is characterized by” having self-efficacy, hope, optimism, and resiliency (Luthans et al., 2015, p.2). On the other hand, according to the transactional model of stress, individuals’ psychological characteristics would be significant factors influencing how they perceive and cope with a threat (Lazarus, 1966). Considering the elements of Psychological Capital (i.e., hope, self-efficacy, optimism, and resiliency) as psychological characteristics that could serve as internal resources in how one perceives and copes with a threat, the researcher hypothesized the following relationships among the variables of interest which are depicted in Figure 5.1 below:

*Figure 5.1. Initial Hypothesized Mediation Model*



The initial mediation model (Figure 5.1) assumed that PsyCap has a predictive role on individuals' mental health, and the effect of PsyCap on mental health would be partially mediated by perceived academic and clinical stress. In other words, it was hypothesized that not only would PsyCap directly affect participants' mental health, but it would also have an indirect effect on participants' mental health by influencing their perception about academic and clinical stressors that they are exposed to (i.e., perceived stress). Accordingly, individuals with higher levels of PsyCap, would be likely to experience feeling less stressed than those with lower levels of PsyCap when facing the same stressors.

According to Baron and Kenny (1986), and James and Brett (1984) four steps would be required for establishing any mediational relationship regardless of which data analytic method is employed (e.g., logistic regression, multilevel modeling, and structural equal modeling). To establish a mediational relationship, there must be indication that: (a) the predictive variable is correlated with the outcome; (b) the predictive variable is correlated with the mediator; (c) the mediator affects the outcome; and (d) the effects of the predictive variable on the outcome decreases in the presence of the mediator. Therefore, to examine the mediation model proposed by this researcher, a multiple linear regression was calculated to predict mental health (i.e., DV) based on academic stress (i.e., IV<sub>1</sub>) and clinical stress (i.e., IV<sub>2</sub>). The results indicated that clinical stress did not have a significant predictive role in the regression model, while academic

stress significantly predicted mental health. A similar but separate regression analysis on participants who were working with clients yielded the same results, suggesting that even for students who were clinically engaged, the variable of clinical stress was not a significant predictor of mental health. One possible explanation may be the issue of a lack of clarity in measuring clinical and academic stress which was mentioned earlier in this chapter: the fact that the clinical experiences for counselors-in-training are also part of their academic requirements creates a considerable overlap between these two variables. Therefore, participants may have also included some aspects of their clinical stress when reporting their academic stress. Although clinical and academic stress are two distinct variables, it seems that for counseling students in particular, this did not appear to be the case, since their clinical experience is part of their education. This may have led to a situation where participants' scores on academic stress represented not only their coursework but also a considerable portion of stress related to their clinical experiences. Consequently, due to the overlap (i.e., correlation) between clinical and academic stress and the higher predictive power of academic stress in the multiple regression model for predicting mental health, the regression weight associated with clinical stress may have been subsumed by that of academic stress; therefore, clinical stress appeared to have no significant role for predicting mental health in the regression model. Another potential explanation for the non-significance of clinical stress could have been a lack of reliability in the instrument measuring clinical stress, although, that did not seem to be the case in this study, since the reliability of the MHPSS-modified for the sample of this study was .84, .90, and .88 for those who were working with clients, those who were not, and the total sample, respectively. Due to the non-significance of clinical stress, this variable was removed from the regression equation for predicting mental health. Finding a predictive role for academic stress in the

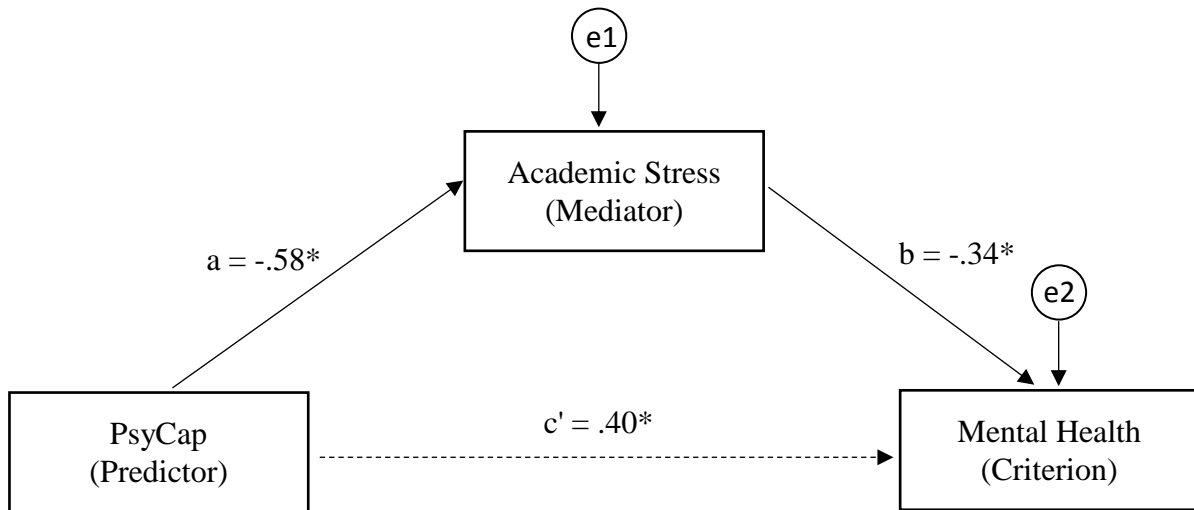
relationship between academic stress and mental health corroborates the findings of previous research on this topic (Ang & Huan, 2006; Neely et al., 2009; Nelson et al., 2001).

### **Examination of Findings within the Proposed Model**

The results of analyses indicated that the *interaction* between PsyCap and Academic stress was not statistically significant, suggesting that PsyCap did not appear to have an influence on the relationship between academic stress and mental health. In other words, PsyCap did not seem to moderate the relationship between academic stress and mental health. However, the variable of PsyCap itself was found to be a significant predictive variable, along with academic stress, for predicting mental health.

The results of examining the conditions for establishing a mediation relationship (R. M. Baron & Kenny, 1986; James & Brett, 1984) indicated that academic stress partially *mediated* the effects of PsyCap on participants' mental health. This finding suggests that in addition to the direct effect of PsyCap on mental health ( $c' = -.34$ ), PsyCap indirectly affected participants' mental health by influencing their perception about the stressors to which they were exposed. For example, participants with higher levels of PsyCap reported experiencing lower levels of stress, which subsequently decreased the negative impact of academic stress on their mental health. The mitigating effects of PsyCap on perceived stress may be theoretically explained considering PsyCap as an internal resource that empowers individuals to cope with stress more effectively through fostering confidence, positive appraisal, positive reframing, and positive self-talk (Hatzigeorgiadis, Zourbanos, Mpoumpaki, & Theodorakis, 2009). PsyCap may assist individuals in reframing their perception of stressors "as motivational challenges rather than debilitating threats" (Rioli et al., 2012, p. 1206). The final mediation model is illustrated below in Figure 5.2:

Figure 5.2. Final Mediation Model



Note.  $a*b$  = indirect effect;  $c'$  = direct effect  
\*Significant path

Previous research has established a predictive role for PsyCap with regard to mental health. The results of a study by Ding et al. (2015) introduced PsyCap as one of the predictive factors for burnout. PsyCap was also found to be one of the predictive factors for workplace wellbeing and burnout among new graduates of nursing programs (Laschinger & Fida, 2014). Moreover, the findings of a study by Selvaraj (2015) on 338 graduate and undergraduate students indicated that the construct of PsyCap accounted for approximately 43.5 % of the variance in mental health scores. In addition to corroborating the results of previous research on predictive role of PsyCap and academic stress on mental health, the findings of the current study extend the current knowledge on the topic by establishing a mediating role for academic stress in relationship between PsyCap (as the predictive variable) and mental health (as the dependent variable) for the masters-level counseling student population in CACREP-accredited counseling programs in the United States.



The proposed mediation model was found to be statistically significant and to have a meaningful effect size; however, according the results of Structural Equation Modeling analysis (e.g., the value of RMSEA) , the model did not fit well. One possible explanation for this may be a lack of model specification. In order for a model to fit well, all of the contributing variables need to be included in the model. Theoretically, in addition to directly influencing mental health, PsyCap serves as an internal resource that gets activated when individuals face adversities by empowering them to cope more effectively. Even though adversities could be manifested in different forms (e.g., experiencing failure, stress, grief/loss, etc.), this study initially investigated the relationships among PsyCap, academic and clinical stress, and mental health. Following the removal of clinical stress due to a lack of significant regression weight, the only variable included in the proposed model that represented a form of adversity was academic stress even though other forms of adversity that were not included in the proposed mediation model might have a different relationship with PsyCap and mental health. For example, the resilience component of PsyCap might have more influence on individuals who are experiencing a failure, while the self-efficacy component of PsyCap might get activated in the face of the anxiety associated with accomplishing a task. Although the relationships among the variables within the proposed mediation model were significant and meaningful, other predictive variables relating to other forms of adversity could have been included in the model that would have better satisfied the model's specifications and consequently led to a statistical model that would have fit.

### **Implications**

Heuristic in nature, this study aimed to establish a relationship among counseling students' perceived stress due to the academic and clinical training stressors in CACREP -

accredited counseling programs, their psychological capital, and their mental health. The results of this study have implications for counselor education, counseling practice, and future research.

### **Implications for Counselor Education**

The results of the present study indicated that only one participant from a sample of 216 counseling students identified “positive thinking” and gratitude as strategies for self-care; this could be due to the participants’ lack of *knowledge* and *awareness* regarding the role of positive emotions and positive psychological resources such as gratitude in fostering mental health and psychological wellbeing (Rashid, 2009; Seligman et al., 2006; Sin & Lyubomirsky, 2009). The results support what was previously noted regarding the potential shortcomings of the unilateral introduction of common self-care strategies to counseling students without recognizing the positive psychological resources they can benefit from to cope with the training stressors more effectively.

The findings of this study revealed that in addition to its direct effects on participants’ mental health, PsyCap also had an indirect impact on mental health by influencing participants’ perceptions of stress. PsyCap was found to serve as an internal resource that also accommodates individual differences in terms of the degree and quality of coping effectiveness (e.g., a student might have a relatively higher level of optimism and lower level of resilience). Having the knowledge and awareness about their PsyCap will, first, help counseling students conceptualize and make better sense of their strengths and vulnerabilities in coping with academic and clinical stress, and secondly, will serve as a guide for counselor educators to use in order to recognize and capitalize on each student’s strengths (Rashid, 2009; Sin & Lyubomirsky, 2009) and to identify areas of growth in coping skills so as to better assist them in improving in those areas. One implication is for counselor educators to *introduce* the concept of psychological resources,

and particularly PsyCap, to their students and make them aware of the utility of this construct in addition to the unilateral introduction of common self-care strategies.

Since PsyCap is conceptualized as a construct that is state-like (i.e., it is open to development), another implication of this study for counselor educators is the systematic integration of activities into academic curricula for the purpose of PsyCap improvement (B. C. Luthans et al., 2014; F. Luthans, Avey, Avolio, Norman, & Combs, 2006). Luthans et al. (2014) suggest a series of brief micro-training interventions that focus on improving individuals' PsyCap by "implementing obstacle planning and goal-setting techniques," "developing positive expectancy," "building efficacy," "experiencing success and modeling others," "persuasion and arousal," "building assets," and building the ability to reflect on the impact of a setback, evaluate one's control on the setback, and consider the options to make up for the setback (B. C. Luthans et al., 2014, p. 196).

Although such interventions have shown to provide a specific framework for enhancing the Academic PsyCap of business students (B. C. Luthans et al., 2014), they would need to be modified based on counseling students' clinical and academic needs, and the challenges they are exposed to.

As mentioned in chapter two, some counseling programs incorporate *mindfulness and mindfulness-based stress reduction (MBSR)* activities as strategies for self-care (Christopher & Maris, 2010; McKinzie et al., 2006; Myers et al., 2012; Napoli & Bonifas, 2011; Shapiro et al., 2007). Although this practice is limited only to some counseling programs and is not consistent across all the programs in the U.S. it can, according to Jain and Singh (2016c), potentially provide a context for improving counseling students' PsyCap. According to Sin and Lyubomirsky (2009), consistent practice of strategies for cultivating positivity (including

positive psychological capital), even after the intervention is over, leads to greater and more sustainable improvements. This finding suggests that the positive effects of PsyCap improvement activities might best be realized by engaging students in the activities at least for the length of a semester.

The positive effects of having the knowledge and awareness regarding PsyCap and strategies for its improvement would empower counseling students to cope with stress more effectively and, consequently, would not only positively affect their mental health, but could also benefit their clients in Practicum and Internship. PsyCap improvement activities once ingrained would become habits (B. C. Luthans et al., 2014) that could also prepare counseling students to cope more effectively with the clinical stressors of their future job as professional counselors and prevent potential burnout (Goldberg & Maslach, 1998; Lee et al., 2011).

### **Implications for Counseling Practice**

Although the participants of this study were all selected from counseling students population, previous research has shown that the effectiveness of interventions for improving individuals' PsyCap was not limited to counseling students, and thus, may apply to clients who are struggling with anxiety, poor self-efficacy, or a lack of motivation, willpower, and/or confidence for therapeutic change may benefit from (a) *being introduced (i.e., psychoeducation) to the construct of psychological capital*, which may help them gain a deeper understanding of their strengths and vulnerabilities by considering PsyCap in conceptualizing their presenting problems, and (b) *PsyCap improvement interventions*, which may empower them cope with stress, anxiety, and lack of motivation, willpower, and/or confidence more effectively. Through positive interventions (Rashid, 2009; Sin & Lyubomirsky, 2009) that focus on clients' character strengths (Park et al., 2004), clients would feel greater positivity (Seligman et al., 2006) and

progress toward achieving a richer mental health. Hence, their mental illness would decrease as the result of an improvement in their mental health. Moreover, highlighting the state-like nature of PsyCap for clients as something open to develop may empower them to progress through the stages of change more effectively.

College and school counselors may also utilize PsyCap in their therapeutic interventions. As discussed earlier in this chapter, academic PsyCap plays a particular role in students' academic success and could help them cope with stressful events such as tests, exams, and life transitions more effectively. Integrating training programs in classrooms for students to learn about PsyCap and strategies for PsyCap development would also positively affect their psychological wellbeing in addition to their academic achievement (Riulli et al., 2012).

The literature has identified psychological characteristics (i.e. self), and not the external environment, as the main predictor of burnout among clinicians, (Goldberg & Maslach, 1998; Lee et al., 2011). In this study, PsyCap was introduced as a reflection of individuals' psychological recourses that can mitigate the negative effects of stress, and thus, can positively influence their mental health. Counselors and clients alike may benefit from becoming more aware of this internal resource and engaging in burnout prevention strategies that center on enhancing their positive psychological capital.

### **Future Research**

This present study was an exploratory investigation of the relationship among the variables of interest (academic and clinical stress, PsyCap, and mental health) among masters-level counseling student in CACREP-accredited counseling programs. The purpose of the study was to address the gap in the literature related the issue of clinical and academic stress for counseling students, the unilateral approach of addressing the needs and strategies for self-care,

and the potential applicability of recognizing students' psychological capital as an internal resource to be capitalized on in coping with academic and clinical stress. Although this study has not completely filled this gap, it provides the basis for further investigation on the topic.

There are several ways that the findings of the present study may lead to additional research on the applicability of PsyCap in addressing counseling students' self-care. This study established a mediation model addressing the relationship among the variables; however, the heuristic nature of this study (i.e., employing cross-sectional analyses), was not enough to establish causal relationships. Hodges (2010) conducted an experimental study to examine the impact of a PsyCap micro-intervention (F. Luthans et al., 2006) and the relationship between PsyCap development and participants' engagement and performance; however, further research should investigate the sustainability of the results and the potential utility of long-term and more comprehensive interventions for PsyCap improvement. The literature also lacks experimental studies investigating the impact of PsyCap on participants' mental health. Particularly for counseling students, a longitudinal study could be conducted to provide better understanding of the impact of infusing PsyCap development interventions into counseling programs as another resource for students' self-care.

As discussed earlier in this chapter, academic and clinical stress for the sample of this study are so interrelated that the instruments utilized in this study may have failed to capture each separately. This limitation could be a potential line of inquiry for developing a new survey for counseling students in particular, to contextualize and measure their perceived academic and clinical stress more accurately. The fact that clinical stress was identified as the second main life stressor for participants who were working with clients suggests that the impact of clinical stress

on mental health may be more significant than what the results of this study yielded, and, thus, may be worthy of further exploration.

The present study established a mediating role for academic stress in the relationship between PsyCap and mental health. Examining the impact of PsyCap on participants' perceptions of other forms of adversities such as failure or grief and loss may provide more insight into the mediation model proposed by this researcher. On the other hand, investigating the relationship between mental health and other constructs rooted in the premise of positive psychology such as gratitude and forgiveness may benefit future research (Selvaraj, 2015). As mentioned earlier, the sample of this study was not large enough to accurately represent participants from minority populations, therefore, exploring the level of PsyCap across different race and ethnicities with enough participants from those populations could add insights into multicultural aspects of the construct of PsyCap. This study focused on CACREP-accredited counseling programs; however, additional studies might include participants from accredited and non-accredited programs to explore potential differences between the two groups. Another possible study might include faculty in counseling programs to examine their perceptions regarding the utility of PsyCap in addressing the issue of stress and self-care in counselor education programs. Finally, a qualitative exploration of the relationship between the variables of interest in this study may enrich the findings of the present study by providing contextual information about counseling students in CACREP-accredited counseling programs.

### **Informed Critiques and Limitations**

In this section, the informed critiques and limitations of the present study are addressed. The presented limitations are related to research design, sampling, and instrumentations. Suggestions for improving the limitations are also discussed.

## **Research Design**

Utilizing a cross-sectional approach, the current study yielded significant correlations among all variables of interests (i.e., academic stress, clinical stress, PsyCap, and mental health). The results also indicated predictive roles for PsyCap and academic stress with regard to participants' mental health. However, to determine causal relationships, an experimental design must be employed. Another limitation that was mentioned throughout the description of the findings is related to model specification. The present study only investigated the mediating role of academic stress in the relationship between PsyCap and mental health; however, as noted earlier in this chapter, there might be other forms of adversities, such as failure or grief/loss, that could also have mediated the effects of PsyCap on mental health, and since they were not included in the model, the proposed mediation model did not fit well.

## **Sampling**

A convenience sample of masters-level counseling students in CACREP-accredited counseling programs was used in this study to examine the research questions and hypotheses. Participants were contacted through faculty members in counseling programs across the United States; therefore, the electronic survey was not made available to every counseling student in the target population. It is also possible that individuals who participated in the study possessed a particular interest in the topic, which would result in their responses differing from those who did not participate. This limitation reflects an inherent weakness in studies that rely on voluntary recruitment. Although in terms of gender, the sample of this study and the target population did not differ significantly, the sample represented a larger group of Caucasian/White participants and smaller group of racial/ethnic minorities. Consequently, the results of inferential analyses should be interpreted with caution. Since the electronic survey was only distributed in counseling



programs in the United States, the sample may not be generalizable to counseling students from other countries or cultures.

The sample of this study was intentionally limited to counseling students in CACREP-accredited counseling programs. Not only do the training requirements (e.g. number of courses, or required clinical hours for the completion of Practicum or Internship) of those students in accredited counseling programs follow a different set of standards, but research has also indicated that significant differences exist in both professional behavior and knowledge between graduates of accredited and non-accredited counseling programs. For example, it was found that graduates of accredited counseling programs scored significantly higher on the National Counselor Examination (Adams, 2006). Moreover, another study indicated that only 18.3% of licensed counselors who had committed an ethical violation were from CACREP-accredited programs, compared with 81.7% from non-accredited programs (Even & Robinson, 2013). For the above reasons, the findings of the present study may not be generalizable to counseling students in programs not accredited by CACREP. However, according to the most recent CACREP annual report (CACREP, 2016a), by the end of 2014, CACREP had accredited 66% of counseling programs in the United States; thus, although the results of this study are limited to students in accredited counseling programs, they include the majority of counseling students in the U.S.

### **Measurement**

The primary measurement limitation of this study is related to measuring the variable of clinical stress. As mentioned earlier in this chapter, though two distinct instruments were utilized to capture participants' academic and clinical stress, and clinical stress was identified as the second main life stressor for participants who were working with clients, the nature of clinical

stress, particularly for counselors-in-training, is not fully separated from their academic stress as working with clients is a part of their education. This may have led participants to include some aspects of their clinical stress in their reports of academic stress, and consequently, participants' scores on academic stress may have partially reflected the variance related to clinical stress. This may explain the non-significant regression weight for clinical stress in predicting mental health. This limitation could be a potential line of inquiry for developing a new survey for counseling students in order to capture their perceived academic and clinical stress.

Another limitation related to measurement is the issue of response bias (e.g., social desirability bias, selection bias, etc.) due to the use of a self-report method of data collection. Moreover, the instructions of the instruments administered in the study were not consistent in terms of the time frame they referred to, and this may have affected the reliability of the responses. Despite the above limitations, the results of the current study offer useful insight into understanding and potentially addressing the issue of stress and self-care for counseling students in CACREP-accredited counseling programs.

### **Conclusion**

Counseling students in CACREP-accredited counseling programs are facing academic and clinical stressors that negatively impact their mental health and that consequently affect their clients (Byars, 2005; Parker, 2014; Skovholt & Rønnestad, 2003). The current approaches for addressing the issues of academic and clinical stressors in counseling programs are centered on introducing counseling students to the needs and strategies for self-care including mindfulness-based stress reduction strategies, physical exercise, utilizing time management and anxiety reduction techniques on conjunction with leisure activities, receiving counseling services, engaging in spiritual activities, and seeking emotional and social support. A major limitation to

the current approaches, however, is that introduction of students to the needs and strategies for self-care is unilateral, and it does not seem to take into consideration the differences among individuals in their psychological resources for coping with stress. The present study sought to fill this shortcoming by introducing the positive psychological construct of Psychological Capital (PsyCap) (operationalized as one's level of hope, optimism, self-efficacy, and resilience) by investigating the relationships between academic and clinical stress, PsyCap, and mental health for a sample of 216 masters-level counseling students in CACREP-accredited counseling programs in the United States. The findings indicated that all the variables were significantly correlated, and that PsyCap was found to be a significant predictive variable for participants' mental health. Additionally, the results of the study revealed that the effects of PsyCap were partially mediated by academic stress. The findings of this study provide support for the use of PsyCap as an internal psychological resource for counseling students' coping with academic and clinical stress. Future research building upon the results of the present study could evaluate interventions for improving PsyCap among counseling students and practitioners.

## Appendix A: Informed Consent

**Study Title:** Psychological Capital: A Resource for Counseling Students Coping with Academic Stress

**3. Investigators:** Abbas Javaheri, a doctoral candidate in Counselor Education and Supervision under the direction of Dr. Charles McAdams at the College of William & Mary.

**4. Purpose of the study:** Psychological capital (PsyCap) is a positive psychology construct that has been operationalized as individuals' level of hope, optimism, self-efficacy, and resilience (Luthans, Youssef-Morgan, & Avolio, 2015). It has also proven to influence stress-perception, coping, and ultimately the level of mental health for college students and employees (Cheung, Tang, & Tang, 2011; Ding et al., 2015; Khan, Siraj, & Li, 2011; Knudson, 2015; Riolli, Savicki, & Richards, 2012; Selvaraj, 2015). Despite the importance of counseling students' mental health and the uniqueness of the stress they experience in CACREP-accredited counseling programs, no study has been done to investigate the influence of PsyCap on masters-level counseling students' perceived stress and mental health. The proposed study will investigate the relationship among psychological capital, perceived stress (academic and clinical), and mental health for masters-level counseling students in CACREP-accredited counseling programs to explore how psychological capital will influence students' perceived stress and ultimately, their mental health.

**5. Subject inclusion:** The sample of this study will be selected from master's level students enrolled in CACREP-accredited counseling programs.

**6. Subject exclusions:** Individuals who opt not to participate in this study will be excluded from this study.

**7. Description of study:** Participants will complete an electronic survey including: (a) an informed consent which will explain the purpose and the process of the study in addition to the contact information of the researcher in case participants have questions or face technical issues; (b) demographic information to capture the potential differences between subgroups of participants (e.g., different specialties); (c) Academic Psychological Capital Questionnaire (B. C. Luthans et al., 2012); (d) the Lakaev Academic Stress Response Scale (Lakaev, 2009); (e) the adjusted version of the Mental Health Professionals Stress Scale (MHPSS; Cushway, Tyler, & Nolan, 1996); (f) the Mental Health Continuum - Short Form (Keyes, 2009); and open-ended question to identify participants' major source of stress. The survey is expected to take approximately 30 minutes. Following the data collection phase, statistical analyses will be utilized to examine the relationship among academic stress, clinical stress, mental health, and psychological capital for participants.

**9. Risks:** No anticipated risks are associated with participation in this study.

**10. Removal:** Participants who elect not to participate will be removed from the study.

**11. Right to refuse:** Participants may choose NOT to participate or to withdraw from the study at any time with no penalty and without explanation.

**12. Privacy and Confidentiality:** All responses to the assessments and the demographic questionnaire will be completely anonymous, and participants name will not be associated with any reports of the study's results.

Questions about this research can be directed to Abbas Javaheri at (315) 744-7090 or [ajavaherimoham@email.wm.edu](mailto:ajavaherimoham@email.wm.edu), or the principal investigator, Dr. Charles McAdams at [crmcad@wm.edu](mailto:crmcad@wm.edu).

For reporting concerns to the Committee on the Protection of Human Subjects, you may contact Dr. Thomas Ward at ([tjward@wm.edu](mailto:tjward@wm.edu)) or (757) 221-2358.

Please indicate that you have read and understand the consent form and that you want to proceed with the online survey.

I am above the age of 18 and currently enrolled in a CACREP-accredited master's level counseling program. I understand the above statements, and do hereby consent to participate in this study.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date:

\_\_\_\_\_ I would like to be included in a raffle to be considered as one of the twenty recipients of a \$25 Amazon gift card. (If you check this box, you will be directed to a new page to enter your contact information. **YOUR RESPONSES TO THIS SURVEY WILL REMAIN ANONYMOUS**).

\_\_\_\_\_ I would like to receive information regarding the results of this study as it relates to publication. (If you check this box, you will be directed to a new page to enter your contact information. **YOUR RESPONSES TO THIS SURVEY WILL REMAIN ANONYMOUS**).

At the end of this survey you will be asked if you would like to be included in a raffle to be considered as one of the twenty recipients of a \$25 Amazon gift card (If your answer is Yes, you will be directed to a new page to enter your contact information, and **YOUR RESPONSES TO THIS SURVEY WILL REMAIN ANONYMOUS**).

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone [757-221-3966](tel:757-221-3966)) ON 2016-11-12 AND EXPIRES ON 2017-11-12.

## Appendix B: Demographics Questionnaire

### Program Specialty:

- Addictions Counseling
- Career Counseling
- Clinical Mental Health Counseling
- Marriage, Couple, and Family Counseling
- School Counseling
- Student Affairs and College Counseling
- Other (please specify \_\_\_\_\_)

### Program Setting:

- Online
- Traditional face-to-face
- Hybrid (some courses are traditional face-to-face and some are online)

**Please indicate the number of semesters you have been enrolled in the counseling program:**

\_\_\_\_\_

**Please indicate your age (optional):** \_\_\_\_\_

### Gender:

- Female
- Male
- Transgender
- Other (please specify \_\_\_\_\_)

### How would you estimate your knowledge of self-care practices?

- I have sufficient knowledge about self-care practices
- I have some knowledge about self-care practices
- I have very limited knowledge about self-care practices

**Are you engaged in self-care practices?**  Yes  No

### If yes, please specify (You can choose more than one):

- Physical activities (e.g., going to the gym)
- Receiving support from family and friends
- Spiritual activities
- Mindfulness-related activities
- Receiving counseling services
- Other (please specify \_\_\_\_\_)

**Appendix C: Academic Psychological Capital Inventory ( A-PCQ; Luthans, Luthans, & Jensen, 2012)**

Below are a series of statements that describe how you may think about yourself RIGHT NOW. We are asking you to consider each question relative to your school-related work. Use the scale below to indicate your level of agreement or disagreement with each statement.

Strongly Disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
1	2	3	4	5	6

1. I feel confident analyzing a long-term problem to find a solution concerning my school-related work.
2. I feel confident in representing my ideas concerning my school-related work.
3. I feel confident contributing to discussions about strategies on my school-related work.
4. I feel confident setting targets/goals on my school-related work.
5. I feel confident contacting people to discuss problems concerning my school-related work.
6. I feel confident sharing information with a group of students about my school-related work.
7. If I should find myself in a jam about my school-related work, I could think of many ways to get out of the jam.
8. At the present time, I am energetically pursuing my school-related work goals.
9. There are lots of ways around any problem concerning my school-related work.
10. Right now, I see myself as being pretty successful concerning my school-related work.
11. I can think of many ways to reach my current goals regarding my school-related work.
12. At this time, I am meeting the goals that I have set for myself concerning school-related work.
13. When I have a setback with school-related work, I have trouble recovering from it, moving on.
14. I usually manage difficulties one way or another concerning my school-related work.
15. I can be “on my own” so to speak, if I have to regarding my school-related work.
16. I usually take stressful things in stride with regard to my school-related work.
17. I can get through difficult times at school because I’ve experienced difficulty before concerning my school-related work.
18. I feel I can handle many things at a time with my school-related work.

19. When things are uncertain for me with regards to school-related work, I usually expect the best.
20. If something can go wrong for me with my school-related work, it will.
21. I always look on the bright side of things regarding my school-related work.
22. I'm optimistic about what will happen to me in the future as it pertains to my school-related work.
23. With regards to my school-related work, things never work out the way I want them to.
24. I approach my school-related work as if "every cloud has a silver lining."

Sources:

Luthans, F., Avolio, B., Avey, J.B., & Norman, S.M. (2007). Psychological capital: Measurement and relationship with performance and job satisfaction. *Personnel Psychology, 60*, 541-572.

Luthans, F., Youssef, C.M., & Avolio, B.J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.

Adapted for Education by: Luthans, B.C., Luthans, K.W., Jensen, S. (2012). The impact of business school students' psychological capital on academic performance. *Journal of Education for Business, 87*: 253-259.

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### **Appendix D: Lakaev Academic Stress Reaction Scale (LASRS; Lakaev, 2016)**

The following questions ask about how you have been coping in the last seven days. For each question, mark the option that best describes the extent to which you felt that way about your academic studies.

Instructions:

- None of the time       A little of the time       Some of the time       Most of the time  
 All of the time

1. I had trouble concentrating in class.
2. I used alcohol, drugs or socializing to avoid anxiety/stress
3. I wanted to sleep all the time or I slept all day
4. I felt I was lazy when it came to university work.
5. I felt overwhelmed by the demands of study.
6. There is so much going on that I can't think straight.
7. My emotions stop me from studying.
8. I felt uncomfortable in the stomach.
9. I have trouble remembering my notes.
10. I avoided class.
11. I couldn't breathe.
12. I had headaches.
13. I procrastinated on assignments.
14. I yelled at family or friends.
15. I felt worried about coping with my studies.
16. I stayed away from friends and/or family.
17. My hands were sweaty and/or trembling
18. I have had a lot of trouble sleeping.
19. I was unable to study.
20. I felt angry about unreasonable demands being asked of me
21. I was distracted in class.
22. I felt emotionally drained by university.
23. felt anxious/stressed by university
24. My work built up so much that I felt like crying.
25. I had difficulty eating.
26. My heart pounded.

## Appendix E: Mental Health Professionals Stress Scale (Cushway et al., 1996)

**Instructions for students enrolled in practicum or internship** (adjusted instruction by Jenkins & Elliott, 2004):

The following have been found to be sources of pressure at clinical sites. Please respond by choosing the items which represent the extent to which each item applies to you (i.e., represents a source of pressure at your practicum or internship site for you).

0: Never or rarely a problem    1: Sometimes a problem    2: Often a problem    3: Very often a problem

### **Instructions for students not enrolled in practicum or internship:**

Please choose the items best describe your thoughts and feelings, thinking about your future clinical experiences:

0: I *never or rarely* feel worried/concerned about facing it in my practicum or internship.

1: I *sometimes* feel worried/concerned about facing it in my practicum or internship.

2: I *often* feel worried/concerned about facing it in my practicum or internship.

3: I *very often* feel worried/concerned about facing it in my practicum or internship.

### **MHPSS, Subscale II: Client-Related Difficulties**

1	Terminating with clients
2	Dealing with death or suffering
3	No change or slowness of change in clients
4	Difficult and /or demanding clients
5	Physically threatening clients
6	Managing therapeutic relationships

### **MHPSS, Subscale VI: Professional Self-Doubt**

1	Feeling inadequately skilled for dealing with emotional needs of clients
2	Uncertainty about own capabilities
3	Feeling inadequately skilled for dealing with difficult clients
4	Doubt about the efficacy of therapeutic endeavors

5	Keeping professional/clinical skills up to date
6	Fear of making a mistake over a client's treatment

**Subscale for Counseling Students**

1	Lack of positive support and/or conflicts in supervisory relationships
2	<i>Lack of knowledge</i> in any of CACREP's core areas (professional counseling theoretical orientation and ethical practice, multicultural counseling, human development, career, counseling and helping relationships, group counseling, research and program evaluation, and assessment)
3	Site placement process
4	Being <i>evaluated</i> by site and/or university supervisors
5	Acquiring required clinical hours
6	Facing ambiguity and uncertainty in working with clients
7	Feeling frustrated with unsatisfying training experience at your site

**Appendix F: The Mental Health Continuum Short Form (MHC-SF; Keyes, 2009)**

Please answer the following questions about how you have been feeling during the past month. Choose the item that best represents how often you have experienced or felt the following:

During the past month, how often did you feel...	NEVER	ONCE OR TWICE	ABOUT ONCE A WEEK	ABOUT 2 OR 3 TIMES A WEEK	ALMOST EVERY DAY	EVERY DAY
1. happy						
2. interested in life						
3. satisfied with life						
4. that you had something important to contribute to society						
5. that you belonged to a community (like a social group, or your neighborhood)						
6. that our society is becoming a better place for people like you.						
7. that people are basically good						
8. that the way our society works makes sense to you						
9. that you liked most parts of your personality						
10. good at managing the responsibilities of your daily life						
11. that you had warm and trusting relationships with others						
12. that you had experiences that challenged you to grow and become a better person						
13. confident to think or express your own ideas and opinions						
14. that your life has a sense of direction or meaning to it						

## **Appendix G: Stressors Question**

What are the main stressors you experience? \_\_\_\_\_

Overall, how stressed are you feeling about the main stressors you experience?

1 = Not at all stressed

2 = A little bit stressed

3 = Moderately stressed

4 = Very stressed

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### Education

- 2017 **The College of William & Mary, Williamsburg, Virginia, United States**  
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Master of Science in Clinical Mental Health Counseling
- 2008 **Iran University of Science & Technology, Tehran, Iran**  
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### Presentations

**Javaheri, A.** & Kooyman, B. (October, 2016). Infusion of Spirituality Competencies within Didactic and Group Work in Multicultural Coursework, Southern Association for Counselor Education and Supervision (SACES). New Orleans, LA.

**Javaheri, A.** & Branch, K. (October, 2016). Integrating Principles of Positive Psychology in Offender Counseling: A Proposed Model, Southern Association for Counselor Education and Supervision (SACES). New Orleans, LA.

**Javaheri, A.** & Kooyman, B. (March 2016). Positive Family Counseling: Integrating Positive Psychology Interventions in Family Counseling, The International Association of Marriage and Family Counselors (IAMFC), New Orleans, LA.

**Javaheri, A.**, Sheffield, B. R. (Feb 2016). Meeting Your Child's Emotional Needs, Focusing on the Future Symposium, The College of William & Mary, Williamsburg, VA.

### Publications

McAdams, C.R., Avadhanam, R., Foster, V.A., Harris, P.N., **Javaheri, A.**, Kim, S., Kooyman, B., Richelle, J.J., Sheffield, R.L., & Williams, A.E. (2016). The viability of structural family therapy in the twenty-first century: An analysis of key indicators. *Contemporary Family Therapy: An International Journal*, 38. doi: 10.1007/s10591-016-9383-9.