

A stress-management comparison between medical school students and clinical psychology  
doctoral students  
Iamee Renae Kling

A Dissertation Submitted to the Faculty of  
The Chicago School of Professional Psychology  
In Partial Fulfillment of the Requirements  
For the Degree of PsyD Clinical Psychology

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## Abstract

Higher learning institutions are different, demanding, and more challenging than traditional schooling. As a result, students that attend these institutions experience more stress as the demands to meet specific competency and performance metrics are much greater than undergraduate education. The purpose of this paper was to quantitatively investigate stress-management and self-care practices of medical school and graduate clinical psychology doctoral students. The students completed surveys to document various stresses and coping strategies. Surveys consisted of the following: Brief Cope, Perceived Stress Scale, Educational Stress Scale for Adolescents, Copenhagen Burnout Inventory, and Self-Care Assessment Worksheet. A total of 72 students were surveyed, 37 were clinical psychology students and 35 were medical students. When comparing differences between the different school types there was significant differences between various aspects of stress. Graduate psychology students were significantly more likely to abuse substances than medical students; graduate psychology students had a significantly higher level of perceived stress as compared to medical students; medical students placed a significantly higher expectation on themselves to do well in their coursework as compared to graduate psychology students; graduate psychology students were significantly more likely to experience personal burnout as well as educational burnout as compared to medical students; graduate psychology students participated significantly more in workplace/professional self-care as compared to medical students. The major clinical implication of this study is that by understanding the various differences between these student populations, programs can develop interventions that provide support, resources, and ultimately would lead to student's success in their respective programs.

## Chapter 1: Introduction

A consequence of the human condition is the experience of feeling stress. Seaward defines stress as, “the inability to cope with a perceived threat to one’s mental, physical, emotional, and spiritual well-being which results in a series of physiological responses and adaptations” (2002, p.4). Stress can come from a variety of demands that life puts upon a person. Consequently, stress can be viewed as negative (distress) or positive (eustress) (Oswalt & Riddock, 2007). Distress can result from problematic events like academic probation, loss of a job, divorce, etc. Whereas eustress could result from positive moments like graduating, starting a new career, or getting married. Stress can be broken down even further depending on the type of stressor. Oswalt and Riddock (2007) identified two major types of stressors and they are the following: life events and chronic strain. Life events refer to normative stress that occurs throughout the course of one’s life such as moving to a new place or a death in the family. Chronic strain refers to a situation that someone is perpetually a part of such as living in a toxic home environment or poverty. The two types of stressors can be considered either distress or eustress.

Higher learning institutions are very different, incredibly demanding, and more challenging than traditional or general schooling (Saeed, Bahnassy, Al-Hamdan, Almudhaibery & Alyahya, 2016; Cherkil, Gardens & Sonman, 2013; Oswalt & Riddock, 2007). It appears that stress and the perception of stress is associated with any type of graduate work, whether it be medical, law, psychology, or chemistry. As a result, students that attend higher learning institutions tend to experience more stress as the demands to meet specific competency and performance metrics are much greater than undergraduate education. The stress that graduate and medical school places on students is correlated with poor academic performance, coping



problems, disruptions in family relations, lower quality of life, and ultimately dropout rates (Saunders & Balinsky, 1993). Graduate school students as well as medical school students are at an increased risk for experiencing chronic distress (Saeed, et al, 2016; Cherkil, Gardens & Sonman, 2013; Oswald & Riddock, 2007; Pakenham & Stafford-Brown, 2012; Schwartz-Mette, 2009). Medical school along with professional clinical psychology doctoral programs are accompanied by many challenges such as rigorous academic curriculum, intensive training, competency exams, contributions to research, not to mention the emotionally draining aspect of directly working with human pain and suffering. Both medical school students as well as clinical psychology graduate students have chosen caregiving professions that require them to care for the psychological and physical needs of distressed patients. Caregiving professionals have to balance learning how to take care of/treat their patients and giving adequate attention and time to their patients, which can be physically and emotionally draining. On top of the academic challenges of higher education there are also financial concerns along with interpersonal demands. All of which can contribute to a person feeling stressed out or more specifically chronically distressed.

The impact of stress on the mental health and functioning of a person has been extensively researched and well documented. The chronic distress experienced by professional clinical psychology doctoral and medical school students can have detrimental effects on their mental and physical health, self-esteem, performance in their respective programs, memory, learning, problem solving capabilities, clinical/medical decisions, and patient care (Saeed et al., 2016; Cherkil & Sonman, 2013; Oswald & Riddock, 2007; Schwartz-Mette, 2009; Pakenham & Stafford-Brown, 2012). Not only does chronic distress impair the student's ability to function but it also impedes their ability to provide effective treatment to their patients. Considering the

gravity of the impairments it is essential to address the level of stress experienced and moderate its impact on students who attend higher learning institutions.

The effects of chronic distress on medical and professional clinical psychology doctoral students are extensive. Students who are training to become caregiving professionals experience higher rates of depression, anxiety, suicidal ideations and substance abuse than that of the general population (Givens & Tija, 2002; Tija, Givens & Shea, 2005; Mahoney, 1997; Pope & Tabachnick, 1994; Crosby, Cheltenham & Sacks, 1999; source). This population also experiences higher rates of fatigue and burnout than that of other fields of study (Weiss, 2004; Tanaka, Fukuda, Mizuno, Kuratsune & Watanabe, 2009; Tereszko, Drozdowicz, Szymura, Tauroginski, Tuleja, Koreniowski, Kozłowska & Dudek, 2015). Fatigue and burnout can lead to dropping out of school, an impaired ability to do their job effectively after receiving their degree, and a lower quality of life. High stress is an unavoidable consequence of attending higher learning institutions but the detrimental effects that chronic distress has on students should be thoroughly addressed and adequately reduced, considering caregiving professional's influence/impact on people.

Self-care as well as specific coping styles are known to be effective at reducing psychological and physical distress not only within the general population but also for mental health professionals (Norcross, 2000; Skovholt, Grier & Hansom, 2001; Pope & Vasquez, 2005). Psychologists who engage in self-care practices like professional support, professional development, life balance, cognitive awareness, and daily balance significantly reduce their stress levels (Rupert & Dorociak, 2019). Self-care is widely viewed as an essential part of the caregiving profession because it can help mitigate the effects of fatigue and burnout (Weiss, 2004; Tanaka, Fukuda, Mizuno, Kuratsune & Watanabe, 2009; Tereszko et al., 2015).

Caregiving practitioners who are on top of their physical and mental health needs are more engaged in their work, competent, effective at treating their patients, and are more aware of risks that may result in ethical violations. However, even though the positive benefits of self-care are known, little to no time is devoted to teaching students about it or implementing activities/programs that help students in higher learning institutions reduce their stress level. As a result, it is likely that students do not view self-care as important and essential to healthy functioning. Since these rigorous institutions do not adequately address it or allow the time for practicing it, self-care is often placed on the backburner.

### **Statement of the Problem**

Although chronic stress and its negative impact on individuals has been extensively researched and studied, little is known and/or implemented on how to understand and help professional clinical psychology doctoral and medical school students deal with the demands of higher learning institutions. Even though these programs have policies and resources in place to address students' needs, many students still feel overwhelmed and stressed (Oswalt & Riddock, 2007; Schwartz-Mette, 2009; Saeed et al., 2016). Since students are still feeling stressed despite measures and resources in place, it is likely that higher learning institutions are not accurately addressing and helping resolve the issue that many students are chronically distressed.

The purpose of this paper is to quantitatively investigate the self-care and stress management practices as well as resources of professional clinical psychology doctoral and medical school students. These two groups of students were being compared because they require similar amounts of training both academically and clinically, as well as training in extensive patient care. It was estimated that each group will contain 30 to 50 students per type of school group (medical school vs. graduate clinical psychology program). The variables of

interest in this study were coping styles, level of perceived stress, self-care practices, burnout, and academic pressure. The survey was administered using an online platform. The primary goal was to explore how professional clinical psychology doctoral and medical school students experience stress and discover what kinds of self-care they engage in to reduce stress. It was beneficial to understand how the level of academic pressure, perceived stress, coping styles, burnout, and self-care practices affect the student's psychological health and functioning (quality of life). In addition, the researcher was interested in looking at the difference in stress levels between medical school students and professional clinical psychology PsyD or PhD students.

The clinical implications of this study were an increased understanding of how professional clinical psychology doctoral and medical school students experience stress. Increased understanding can help accurately address the needs of students at higher learning institutions. It was also likely that professional clinical psychology PsyD or PhD students and medical school students have different coping styles towards dealing with chronic distress, academic pressure, perceptions of stress, and self-care or stress-management practices. Understanding how these students cope, perceive stress, and self-care can enhance how higher learning institutions implement measures and resources for promoting psychological health and wellbeing of their students. This in turn can increase their ability to provide effective treatment to their patients. After all, the main goal of higher learning institutions is to provide the world with competent and effective practitioners.

## Chapter 2: Literature Review

### Levels of Stress

The experience of stress results in a psychological and physical reaction when demands of life are constantly increasing, especially in caregiving professions. Stress is a normal part of advanced education and for some individuals it can be a motivational factor, which enables a more active, creative, and productive approach to dealing with challenges (Jahan, Siddiqui, Mitwally, Jasim Al Zubidi & Jasim Al Zubidi, 2016; Al Tabosh, Saadeddin, El Mouhayyar, Aridi & Fares, 2016; Oswalt & Riddock, 2007). However, for other individuals stress brings about intense feelings of fear, incompetence, unproductiveness, anger, cynicism, avoidance, and guilt (Al Tabosh, et al, 2016; Oswalt & Riddock, 2007; Pakenham & Stafford-Brown, 2012). Stress ultimately results when the pressures one faces exceed one's perceived ability to cope. Prolonged unmanageable stress is associated with depression, anxiety, alcohol and drug abuse, and suicide, all of which are known to impair the student's academic career, patient care, professionalism, relationships with faculty, other interpersonal relationships, life satisfaction, and cause harm to the character of the profession.

Medical school students as well as professional clinical psychology doctoral students are challenged by many stressors, including moving away or out of state from family and other social support systems, growing financial debts, changes in health habits such as less sleep, exercise, and eating more unhealthy foods, personal sacrifices which lead to emotional distress, adjusting to a rigorous academic curriculum along with intensive training clinicals/practicums, and dealing with human pain and suffering. The actual school/learning environment is a major source of pressure and ultimately stress for students in caregiving professions (Abdulghani, Alkanhal, Mahmoud, Ponnampereuma & Alfaris, 2011; Schwartz-Mette, 2009). The

school/learning environment creates an atmosphere where students not only have to do well in their coursework, but it also fosters feelings of having to outscore their peers. Higher learning institutions embrace education systems that are usually rigid and authoritarian which promotes competition rather than cooperation (Abdulghani, et al, 2011; Jahan, et al, 2016). The education system pits students against each other by creating environments that encourage intense competition and peer pressure not only to succeed but also to do better/score higher than their peers. This cutthroat competition likely adds to the stress that these students face. Many of the students in these intensive programs are categorized as “obsessive overachievers” who are struggling to cope with the fact that they do not know all the answers to the problems they are facing but are expected to be knowledgeable (Pakenham & Stafford-Brown, 2012; Tereszko et al., 2015). These type A personalities that higher learning institutions attract are so focused on getting the grade and making the cut that they may neglect their own wellbeing.

Medical education as well as professional clinical psychology doctoral programs also take many years to complete which adds in the factor of experiencing high levels of stress for a prolonged period of time (chronic distress) (Oswalt & Riddock, 2009; Jahan, et al, 2016). Unfortunately, the stress does not end after the program is completed. After obtaining the degree the individual has to meet licensing requirements and board certifications. Many of these programs are exceedingly demanding not only on a person’s time but also their commitment to successful completion, which reduces the likelihood of being able to work and financially support oneself during the program. While students are under chronic distress, they are accruing financial debt to pay for the program and at the same time are unlikely to be employed with a full-time position (Farer et al., 2016; Schwartz-Mette, 2009). This lack of autonomy as well as

feeling that they are not meaningfully contributing to society can also promote low self-esteem, depression, suicidal ideations, anxiety, guilt, and anger.

With advanced education comes stress, which can be viewed as motivational or overwhelming. The point at which the level of stress exceeds the student's ability to cope results in profound and detrimental effects not only to the perception of oneself but also to their wellbeing and functioning. Chronic distress is associated with depression, anxiety, alcohol and drug abuse, and suicide. These factors impair the student's academic career, patient care, professionalism, interpersonal relationships, life satisfaction, and ultimately harm to the profession. The challenges that medical school and professional clinical psychology doctoral students face are brought about by numerous stressors such as adjusting to a rigorous academic curriculum along with intensive training clinicals/practicums, growing financial debts, lack of time to self-care, and dealing with human pain and suffering. The school/learning environment is full of pressure to be a high achiever as well as competition to outdo peers. These programs take years to complete, are demanding of the student's time and commitment, reduce the capacity for autonomy, and are expensive. All of which can contribute to students neglecting their mental health and general wellbeing.

### **Effects of Stress**

As previously mentioned, medical school and professional clinical psychology doctoral students are faced with many challenges/stressors not only with academia but also with clinicals or practicums, as well as financial debt and at times social isolation. These challenges/stressors are known to negatively impact a person's mental health and wellbeing. Depression is one of the major concerns that can result from the numerous demands that higher learning institutions place on their students. In medical school students, depression is commonly seen and multiple studies

have shown that when it comes to medical interns and residents, the incidence of depressive symptoms ranged from 7% to 18% (Givens & Tija, 2002; Godenick, Musham, Palesch, Hainer & Michels, 1995; Hainer & Palesch, 1998; Kirsling, Kochar & Chan, 1989). It appears that even though medical students have higher rates of depression than that of the general public they are not seeking treatment and consequently not likely to be treated (Givens & Tija, 2002; Tija, Givens & Shea, 2005). Rosal, Ockene, Barrett, Ma, and Hebert (1997) found that in medical school depression increases over the course of education. Depression is detrimental to medical students because it not only affects their lifestyle and satisfaction, but it also affects their performance on their academics and patient care.

Depression is not only seen in medical school students, but it is also witnessed in clinical psychology doctoral students. The national health college survey found that depression has been diagnosed in 1 out of 10 college students (National Mental Health Association [NMHA], 2006). In a study conducted by Prochaska and Norcross (1983) about 82% of professional psychologists indicated that they experienced distress in one or more of the following forms: anxiousness, depression, body complaints, decreased self-esteem, confusion, and helplessness about solving their problems. Another study found that one third of psychotherapists disclosed experiencing anxiety or depression in the last year (Mahoney, 1997).

There appears to be an interesting relationship between the age of the therapists and the level of distress that can ultimately lead to symptom presentation and burnout (Hellman, Morrison & Abramowitz, 1986; Vredenburgh, Carlozzi & Stein, 1999; Rupert & Morgan, 2005). Research has revealed that over time a therapist will gain skills that reduce the symptoms that result from distress (Rosenberg & Pace, 2006). This suggests that clinical psychology doctoral students, therapists in training, and new therapists have an increased likelihood of



symptoms/problems related to stress. In other words, they are more likely to experience higher amounts of distress as many have not developed adequate coping mechanisms to deal with their caseload and the demands of clinical care. Thus, early career psychologists as well as trainees may be at risk for depression.

Depression and burnout are often highly correlated and as a result are frequently studied together. Depression is likely a response to burnout and therefore is considered the stage before depression. Burnout is an adverse consequence of occupational demands or caregiving activities that produce a state of mental, emotional, and physical exhaustion (Smith & Moss, 2009; Ishak, Nikraves, Lederer, Perry, Ogunyemi, & Bernstein, 2013). The following three features characterize burnout: emotional exhaustion, depersonalization, and reduced personal efficacy (Chin, Chua, Chu, Mahadi, Yusoff, Wong, & Lee, 2016; Chang, Eddins-Folensbee, & Coverdale, 2012). Emotional exhaustion is considered emotional drainage from being overworked. Depersonalization refers to apathetic feelings and often a negative demeanor towards patients/clients as well as peers. Reduced personal efficacy refers to decreased competence or a loss of personal achievement.

Burnout among medical school students has been extensively studied. Research has found that in general, burnout, which is considered a sign of distress, affects half of medical school students (Dyrbye, Thomas, Harper, Massie, Power, Eacker, Szydlo, Novotny, Sloan, & Shanafelt, 2009). In fact, the high level of burnout among this population is greater than that of age-matched college graduates not studying medicine, in other words the general population (Dyrbye, West, Satele, Boone, Tan, Sloan, & Shanafelt, 2014). National and multi-institutional studies have found that United States medical school students reported high emotional exhaustion (35-45%), and high depersonalization (26-38%) (Dyrbye & Shanafelt, 2016). Higher

levels of burnout appear to be more prevalent in later years of the program/training (Dyrbye & Shanafelt, 2016; Chin et al., 2016). Burnout is considered a sign of distress because it is associated with hindering the medical student's professional development, increasing dropout rates, decreasing effective patient care, and impairing the health of future physicians. More and more research is emerging which suggests that burnout stems mostly from the learning and working environment rather than from individual characteristics. The research reveals that burnout is a serious problem among students and should be a major concern for medical schools.

Even though research has not been conducted on clinical psychology doctoral students, studies on undergraduate students and psychologists have shown burnout is present among these populations. Burnout is not limited to particular majors or vocations and its detrimental effects cause impairments in general wellbeing and functioning. General college student populations have reported experiencing fairly high levels of burnout (Jacobs & Dodd, 2003; Meier & Schmeck, 1985). Unfortunately, little research is done on graduate students to show that burnout is present and is a substantial problem for this population. Most of the research conducted is on medical school students, which was previously discussed. Psychologists also reported high levels of burnout (Benedetto & Swadling, 2014). It appears that this profession has occupational hazards such as negative client behavior (suicidality or aggressiveness), varying therapeutic success with patients, and demanding administration duties (paper work), all of which increase the likelihood of burnout (Smith & Moss, 2009). A heavy workload has been positively correlated with burnout (Benedetto & Swadling, 2014). Among psychologists burnout has been associated with depression, suicide, and substance abuse/dependence (Smith & Moss, 2009). If burnout is present for undergraduate students and psychologists, it is also likely prevalent for clinical psychology doctoral students.

Another consequence of stress on medical and professional graduate students is suicide. For the age range of late teens to mid-twenties, suicide is the third leading cause of death in the United States (Barrios, Everett, Simon & Brener, 2000). Early to mid-twenties make up a large percentage of people who are enrolled in medical and professional graduate schools. Suicidal ideation is also the most prevalent in the 18 to 24 age range (Crosby, Cheltenham & Sacks, 1999). Students in this vulnerable age bracket are already at a higher risk of depression and suicidal ideations in addition to the pressure/stress that higher learning institutions place on them. Benton, Robertson, Wen-Chih, Newton, and Benton (2003) found that over the course of 13 years (1989-2001) depression as well as suicidal ideation among university students has significantly increased. This reveals that the demands placed on students in higher learning institutions are becoming more difficult and challenging to cope and deal with. Consequently, the added stress of academia is causing significant distress and impairment. According to the American College Health Association (2006) a national study and found that 10.7% of students considered suicide and 2.0% attempted suicide in the last year. Among medical students, the suicide death rate of 24-year olds between 1999 and 2003 was 12.4 per 100,000 in the United States (Center for Disease Control and Prevention [CDC], 2008). Among professional psychologists, Pope and Tabachnick (1994) conducted a study that revealed of the nearly 500 psychologists that were surveyed 61% experienced clinical depression. Of those who experienced clinical depression 29% had suicidal ideations and almost 4% attempted suicide (Pope & Tabachnick, 1994). All of the aforementioned data reveals that the risk of death by suicide is higher for physicians and psychologists in training than that of the general public.

Substance abuse is another consequence of chronic distress. According to the American Psychological Association [APA] (2006) substance abuse among psychologists is the most

thoroughly researched aspect for this population. This suggests that substance misuse is prevalent among mental health professionals. Thoreson, Miller, and Krauskopf (1989) conducted a study, which surveyed almost 400 psychologists and found that 9% of this sample indicated that alcohol was a problem in their lives. In another study that surveyed nearly 400 psychologists it was found that 20% indicated daily use of alcohol (Good, Thoreson & Shaughnessy, 1995). Not only are professional psychologists abusing substances but so are college undergraduates and graduate students (Oswalt & Riddock, 2007). Chronic stress likely contributes to students engaging in unhealthy behaviors like binge drinking. Binge drinking is a major problem on college campuses and the ultimate consequence of excessive and rapid alcohol consumption is death. Medical school students may also partake in substance abuse/self-medication to alleviate chronic distress (Saeed, Bahnassy, Al-Hamdan, Almudhaibery & Alyahya, 2016). They may also have easier access to substances than those in other fields of study (Sinthubua, Das, Ruengdit, Singsuwan & Mahakkanukrauh, 2016).

As previously mentioned, there are numerous effects of chronic distress on medical school and professional clinical psychology doctoral students. The intense workload and pressure that this population is put under subjects them to experience depression and anxiety to a greater degree than the general population. The age range of people who enter into higher learning institutions also places them at a heightened risk for experiencing mental health issues/disorders as they may not have fully developed coping strategies. Depression can be a result of intense academic pressure, burnout, stress, and poor coping strategies. Depression in its gravest form can bring about suicidal ideations, which can lead to devastating fatalities. Depression and anxiety can also bring about the negative coping means of substance abuse. If these issues remain

unchecked it can result in poor academic performance, impaired ability to treat patients properly, dropping out of school, and ultimately a lower quality of life.

### **Coping and Self-Care**

The term coping has a variety of different definitions and interpretations. In its most basic form coping refers to the resources, external or internal an individual uses when dealing with or handling a stressor (Hays & Brown, 2004; Lopez & Snyder, 2003). Stressors that are not only perceived as negative but are also viewed as unmanageable have devastating effects on an individual. Chronic distress has implications on a person's mental health and wellbeing. The effects that stress has on medical and professional clinical psychology graduate students were discussed earlier. The adverse side effects of prolonged distress can ultimately impact a student's motivation and performance. Folkman and Lazarus (1985) discovered three stages that student's experience when they are coping with negative events. The first stage is called primary appraisal. In this stage the person realizes and begins to understand the situation and/or threat. The second stage is secondary appraisal. In this stage the person come up with responses or actions that can be done in the face of the negative event. The third and final stage is referred to as coping or in other words how the coping process is executed (E.g. what is actually done to cope with the negative event).

During the midst of their research Folkman and Lazarus (1984; 1985; 1986) found that there are two general types of coping. The first type of coping is known as problem-focused. Problem-focused coping involves active problem solving. This refers to thoughts, actions, and/or strategies that are to alter or mitigate the stress/stressor. Examples of problem-focused coping include coming up with alternative solutions to the problem, assessing pros and cons, and taking direct steps to solving the problem. This type of coping tends to be used by individuals who

believe that they can do something to fix their problem or alter their situation. The second type of coping is known as emotion-focused. Emotion-focused coping involves reducing or alleviating the emotional distress that results from the negative event/situation. There are a variety of strategies that can be done to help manage the emotions a person experiences when faced with stress/stressor. Some of the more common examples of this form of coping include the following: denial, focusing on emotions, venting emotions, positive reinterpretation of events and seeking out social support (Baker & Berenbaum, 2014). This type of coping tends to be used by individuals that believe that the stressor has to be endured. It should be noted that the coping process usually involves aspects of both problem-focused and emotion-focused. However, it is the predominate view that emotion-focused coping is maladaptive or ineffective especially in comparison to problem-focused (Baker & Berenbaum, 2014; Carver, Scheier, & Weintraub, 1989).

As previously stated, problem-focused coping is viewed as superior to emotion-focused coping. Problem-focused coping appears to be more effective because the individual is actively engaging in solving the issue at hand that is contributing to the stress (Baker & Berenbaum, 2014; Carver, Scheier, & Weintraub, 1989; Struthers, Perry, & Menec, 2000). The person is directly doing something to reduce the impact of the stressor. For example, a student is anxious about an upcoming assignment therefore they contact the professor in order to get clearer guidelines. Attending to the emotion (anxiety) and attempting to reduce it does not necessarily eliminate the stress. The assignment is the stressor. Getting a clearer understanding about the requirements for the assignment would allow for the student to complete it. Problem-focused could also be viewed as more superior because it is easier to measure actions that are a result of solving the problem rather than reducing the emotional turmoil a person is experiencing.

Emotions are harder to measure than direct problem solving because they are more subjective. It is also likely that problem-focused coping is viewed as more effective because the strategies employed are considered positive (e.g. planning ahead, breaking things down into steps, efficacy) whereas emotion-focused coping strategies encompass more negative components (e.g. denial, venting, disengagement). How the coping styles are defined may be contributing to the misunderstanding because problem-solving coping strategies can include negative behaviors and emotion-focused coping strategies can include positive behaviors. Maybe these coping styles are not separate from one another as coping usually involves both problem-focused and emotion-focused strategies.

According to the research, clinical psychologists utilized both behavioral and cognitive strategies when dealing with stress (Cushway & Tyler, 1994). These strategies incorporated both problem-focused and emotion focused coping styles. Clinical psychologists tend to use active behavioral strategies more so than mental health nurses (Cushway, Tyler, & Nolan, 1996). Cushway and Tyler (1994) conducted research on stress and coping of clinical psychologists and found that avoidance coping strategies whether they be problem-focused or emotion-focused had the poorest outcome, meaning that the clinical psychologists who avoided their problems and/or emotions had poorer mental health. In addition, younger clinical psychologists appear to have more maladaptive coping strategies (Cushway & Tyler, 1994). Age appears to be a moderator with coping styles and their effectiveness for clinical psychologists, as older clinical psychologists are less stressed and utilize more effective coping strategies. Unfortunately, there is little to no research on clinical psychology doctoral students in regard to their coping styles and their effectiveness.

In addressing medical school students, research has shown that positive coping strategies are more effective than negative coping strategies (Cherkil, Gardens, & Sonman, 2013). Positive coping strategies refer to appropriate appraisals of either the problem or the emotion and adequate planning. In addressing gender, men tend to use negative coping strategies and substances when dealing with stressors while women use religion, social support, and positive coping strategies (Cherkil, Gardens, & Sonman, 2013). However, both male and female medical school students use avoidance and it is associated with the poorest mental health and academic outcome (Cherkil, Gardens, & Sonman, 2013). Tanaka, Fukuda, Mizuno, Kuratsune, and Watanabe (2009) conducted research on stress and coping styles of medical school students and found that high amounts of stress and an avoidance coping style was associated with severe fatigue and a greater likelihood of acquiring chronic fatigue syndrome (CFS). Their research also found that emotion-focused coping styles more so than problem-focused coping styles were better at reducing fatigue and decreasing the chance of acquiring CFS (Tanaka, Fukuda, Mizuno, Kuratsune, & Watanabe, 2009). Sometimes focusing on the emotion reduces stress more than a problem-focused approach. There are mixed results for which coping style is better in regard to medical students, which illuminates the complex nature of stress and coping styles. However, it is apparent that it is important to incorporate both problem-focused and emotion-focused coping strategies since stress involves both problems and emotions.

Self-care is a term that is used often but is not always clearly defined. It is likely that the lack of an operational definition of this term results from it appearing intuitive; taking care of oneself. In addition, the methods of self-care are as diverse as the people who use them. Self-care can range from properly grooming/bathing oneself to engaging in activities that reduce stress and bring about happiness or tranquility such as yoga. Self-care is especially important for



individuals who are in highly demanding, time-consuming, and challenging fields. Self-care prevents fatigue, burnout, and reduction of mental disorders. When self-care is done properly it can result in successfully managing emotionally charged and physically stressful situations. Self-care strategies can also be dysfunctional such as excessive alcohol consumption, substance abuse, and binge eating high caloric foods.

According to O'Halloran and O'Halloran (2001) self-care can be broken down into four general categories. The four general categories are as follows: biobehavioral, affective and cognitive, relational, and spiritual. Biobehavioral self-care refers to engaging in activities/behaviors that enhance one's physical care. These include getting adequate amount of sleep, eating properly, and exercising regularly. Affective and cognitive self-care generally refers to anticipating and planning for stressful situations. These include time management to allow for ample time to complete assignments, activity monitoring, and planned study/homework breaks. Relational self-care refers to developing and maintaining support systems. Feelings of isolation and depression can result when a person does not make time to have an adequate social life. Spiritual self-care refers to enhancing the feeling of being connected to a higher power/the universe. This could include activities like going to church, attending a bible study, or taking a Buddhism course. The main component of this type of self-care is exploring and nurturing one's spiritual side.

Self-care practices such as sleep, eating habits, exercise, using social support, emotional regulation strategies, and mindfulness practices are known to reduce stress and promote well-functioning for graduate students and medical students. However, there is limited research that examines self-care practice and stress among clinical psychology doctoral students and medical students. The majority of the research asked if this population engages in specific behaviors that

they deem as important aspects of self-care. They are not specifically asking what these students do to self-care. They may have a checklist that asks them to check all that apply in terms of self-care. These checklists rarely ask how frequently they engage in these self-care practices. The self-care practices checklists are comprised of items the researcher believes are important self-care practices not necessarily what the students think or what they actually do to self-care. The main self-care practices that are studied in the research for these students are the following: sleep, exercise, and social support/engagement.

In regard to self-care, sleep and stress was researched in college students and medical school students and it was found that poorer quality of sleep and lack of sleep has detrimental effects on physical and psychological health (Lund, Reider, Whiting, & Prichard, 2010; Huen, Chan, Yu, & Win, 2007). In a study conducted on medical residents, which researched sleep deprivation and fatigue found that this sample was more prone accidents/injuries, conflict with staff, and, medical errors (Baldwin, & Daughtry, 2004). In another study on medical school students it was revealed that good sleep was important because it not only relaxes them but it also helps control the stress (Jahan, et al., 2016, Siddiqui, Mitwally, Al Zubidi, & Al Zubidi, 2016). Shaikh, Kahloon, Kazmi, Khalid, Nawaz, Khan, and Khan (2004) found that female medical school students were more likely to sleep in terms of self-care practices than males. There were no studies found that looked at the relationship between stress and sleep in clinical psychology doctoral students. The aforementioned research reveals that sleep can impact health and although students deem sleep as important, sleep is often neglected by students even though the research denotes sleep as an essential component of self-care.

Exercise and its positive effects on physical and mental health have been extensively researched. Some of the physical benefits are reduced risk of cardiovascular disease, lowered

likelihood of Type 2 diabetes, increase of strength in the bones and muscles, and weight management (Center for Disease Control & Prevention, 2010). Exercise can also enhance emotional well-being because it reduces stress and can prevent suppression of the immune system (Fleshner, 2005). Unfortunately exercise and stress has not been studied among clinical psychology doctoral students. However, it has been researched among medical school students. The research within this population has shown that students who exercised regularly reported less stress in general and less academic stress than those did not regularly exercise (Sheetsa, Gorenfloa, & Forneyb, 1993; Frank, Tong, Lovelo, Carrera, & Duperly, 2008). In another study conducted on medical school students it was found that males were more likely than females to exercises via playing a sport for self-care (Shaikh et al., 2004). Exercise is viewed as a positive form of self-care due to the numerous health benefits but it is not does not appear to be a main priority for those attending higher learning institutions. This may be due to the time constraints this population faces. They likely want to get their academic requirements completed, and then make time to exercise.

Social support and social engagement are considered a component of self-care. Positive social support/engagement has been studied in graduate student populations. Research has shown that program support as well as family support has been shown to reduce the graduate student's stress level (Mallinckrodt, & Leong, 1992). Munir and Jackson (1997) found an inverse relationship between social support and anxiety levels among female graduate students. In other words, the more social support a female graduate student has the less anxiety she experiences. There is scarce research between social support and stress among medical school students. However, research that assessed coping strategies of medical school students found that the self-care practice of talking to family members/friends helps control stress levels (Jahan, et al., 2016,

Siddiqui, Mitwally, Al Zubidi, & Al Zubidi, 2016). For counseling psychology doctoral students, research has indicated that students who perceived higher level of support from advisors, students, family, and friends reported decreased levels of stress (Clark, Murdock, & Koetting, 2009). It appears that social support is a mitigating factor on stress level of students in higher learning institutions. Social support seems to be a self-care practice that students engage in as well as studied by researchers.

### **Present Study**

The previous literature has shown that chronic distress has detrimental effects on student's mental health and wellbeing. Medical school and professional graduate school students are confronted by many challenges. Over prolonged periods of time these challenges/pressures result in high levels of stress, which can lead to an impaired ability to cope. The stress and lack of effective coping can become so overwhelming that it can bring about depression, suicidal ideations, lowered self-esteem, incompetence and many other negative consequences. Much of the literature has examined how stresses affect medical students as well as their coping styles and what they do to self-care. However, research has largely ignored the stress level and its effects on professional clinical psychology graduate students. Undergraduate psychology students and professional psychologists have been studied extensively with the aforementioned variables in mind. Little is known about professional clinical psychology doctoral student's coping styles, but research has addressed self-care practices of this particular population. It is likely that this population also experiences chronic stress, which can have detrimental effects on their mental health and general wellbeing. Consequently, this can impair client care. Thus, this study quantitatively examined the level of academic pressure, perceived stress, coping styles, burnout, and self-care practices of medical school students and professional clinical psychology doctoral

students. The researcher's sample size was approximately 30 to 50 students per type of school group. The researcher acquired participants via a Facebook link after first reaching out to contacts. The inclusion criteria for this study were adults who are currently enrolled in either medical school or professional clinical psychology doctoral programs. If the subject was willing to participate the Facebook link would provide 5 questionnaires (coping styles, perceived stress, academic pressure, burnout, and self-care practices). It was believed that by conducting a quantitative design, it would enhance the understanding of the stress level and its effects on professional clinical psychology doctoral students. It would also hopefully give insight to their coping styles and self-care practices which can assist higher learning institutions in developing and implementing programs to help students appropriately deal/cope with chronic distress.

## Chapter 3: Methodology

### **Participants**

The present study aimed to seek completed surveys from approximately 60 students who were currently enrolled in medical school (30) and professional clinical psychology doctoral programs (30). The researcher hoped to get an equal number of students per school type. The respondents had to be adults who were currently enrolled in either medical school or professional clinical psychology doctoral programs. There were no restrictions to age, gender, or ethnicity. Due to the limited access to medical schools and professional clinical psychology doctoral programs, this sample was recruited using a snowball sampling technique. An initial Facebook message with a link to the survey was sent to a small list of known medical school and professional clinical psychology doctoral students, through personal contacts. A separate Facebook page was constructed that was not linked to the researcher's personal account. The Facebook message then asked the original sample to recruit other individuals to be part of the study by having them forward the link to other potential subjects. This sample was also a purposive sample, in that all respondents had to be currently attending either medical school or a professional clinical psychology doctoral program.

### **Measures**

#### **Demographic Questionnaire**

The respondents were asked to complete a demographic questionnaire that helped to identify any limitations to the generalization of the findings from this study. The demographic questionnaire was included in the Facebook message and as part of the survey. The demographic questionnaire was anonymous and did not collect any personally identifiable information. The demographic questionnaire asked for school type (medical school or professional clinical

psychology doctoral program), year in program, age, gender, ethnicity, marital status, number of dependents, a quality of life question, a self-care question, and whether or not their school provides adequate resources for students to deal with stress appropriately.

### **Brief COPE-28-**

Brief COPE-28 (Carver, 1997) was used in this study to assess coping styles of students in this sample. This inventory incorporated coping style responses that are functional as well as dysfunctional. Respondents answered a series of 28 questions based on a 4-point Likert scale (1: I haven't been doing this at all to 4: I've been doing this a lot). There are 14 scales and 2 questions for each scale. The 14 scales were as follows: self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. There was no reverse coding. Scores within the scales were summed. The higher the score on the scale the more they used that coping strategy.

### **Perceived Stress Scale-10**

PSS-10 (Cohen, Kamarck, & Mermelstein, 1983) was used in this study to measure the perception of stress in this sample. It looked at the degree to which an event in the respondent's life is appraised as stressful. The items were designed to address if respondents find their life unpredictable, uncontrollable, and overloaded. Respondents answered a series of 10 questions based on 5-point Likert scale (0:Never to 4: Very often). Reverse coding was used on 4 items (4, 5, 7, & 8). Items were summed. The higher the score the more stress the person perceived.

### **Educational Stress Scale for Adolescents-16**

ESSA-16 (Son, Dunne, Hou, & Xu, 2015) was used in this study to measure academic stress in this sample. The items were designed to tap into five latent variables of academic stress, and they are the following: pressure from study, workload, worry about grades, self-expectancy, and despondency. Respondents answered a series of 16 questions based on a 5-point Likert scale (1: Strongly disagree to 5: Strongly Agree). With the exception of pressure from study, which had four questions, the other variables had three questions that tap into that variable. There was no reverse coding. Items were summed. The higher the score the more academic pressure the person experienced.

### **Copenhagen Burnout Inventory-19-**

CBI-19 (Kristensen, Borritz, Villadsen, & Christensen, 2005) was used in this study to measure burnout in this sample. The items were designed to look at three aspects of burnout and they are the following: personal burnout, work-related burnout, and client-related burnout. Since this inventory was designed for working caregiving professionals and the population of this study is students, the work-related burnout questions were changed/alterd to address education and training. Respondents answered a series of 19 questions all of which had five response categories (Always, Often, Sometimes, Seldom, Never/almost never). Responses were rescaled to a 0-100 metric (0-25-50-75-100). Scale scores were calculated by taking the mean of the items in that scale. The higher the score on the scale the more of that type of burnout the person experienced.

### **Self-Care Assessment Worksheet**

Self-Care Assessment Worksheet- (Saakvitne, & Pearlman, 1996) was used in this study to assess for self-care strategies in this sample. There were 6 categories of self-care that this



assessment measured, and they are as follows: physical, psychological, emotional, spiritual, workplace or professional, and balance. There are a number of items in each category and respondents checked all that applied. The frequency of each category was then rated on a 5-point Likert scale (5: Frequently to 1: It never occurred to me). There was no reverse scoring. Items were summed within each category. The higher the score in the category the more of that type of self-care the respondent engaged in. The psychometric properties of this assessment were not found.

### **Procedures**

The proposed higher education sample was asked to complete a demographic questionnaire and four digital surveys identified above that were available on Survey Monkey. The initial respondents were contacted via Facebook message through personal contacts that the researcher has identified. The Facebook message provided information about informed consent, how to access the digital survey, and the debriefing statement. A separate Facebook page was constructed that was not linked to the researcher's personal account. The email also asked the respondents to recruit other students in the program to participate in the study by asking them to forward the Facebook link to other students in the program. The demographic questionnaire and the five questionnaires took approximately 45 to 50 minutes to complete. Respondents were asked for their voluntary participation in the study in the Facebook message that they received. It was written in the Facebook message that participation was voluntary, and that completion of the survey indicated their consent to participate in the study.

Each respondent was given a digital informed consent explaining the purpose and procedures of the study, which was attached to the Facebook message and in the introductory paragraph to the survey. In addition, all the information that was gathered was anonymous; no

identifying information was obtained. In order to ensure that confidentiality is maintained the demographic questionnaire was separated from the general survey information. All information that was collected was kept on a password protected computer that only the researcher and the research Chairperson had access to. In addition, the data will only be kept for three years and then subsequently destroyed. Upon completion of the survey, each respondent received a digital debriefing statement with the researcher's contact information. This debriefing statement was included as the final portion of the online survey with additional information and the researcher's contact information provided in the initial email. Also, respondents were notified that their voluntary participation in this research study resulted in a chance to be included in a raffle for a target gift card as a token of appreciation for their participation.

## Chapter 4: Results

### Demographics

A total of 72 students were surveyed to determine how students from different areas of study, specifically medical school and professional psychology doctoral programs handled various aspects of stress. Fifty-one percent (n=37) of the respondents were enrolled in a clinical psychology doctoral program while 49% (n=35) were enrolled medical school.

Additional student demographic data are summarized in figures 1-8. Approximately 50% of the students were aged 26-30 and Caucasian. About two thirds of the sample were female and were enrolled in their third / fourth year of the program. Approximately three quarters of students were single and most did not have any dependents. Seventy-one percent of the sample felt they had adequate quality of life in school while 60% of students felt that they had adequate resources.

Figure 1

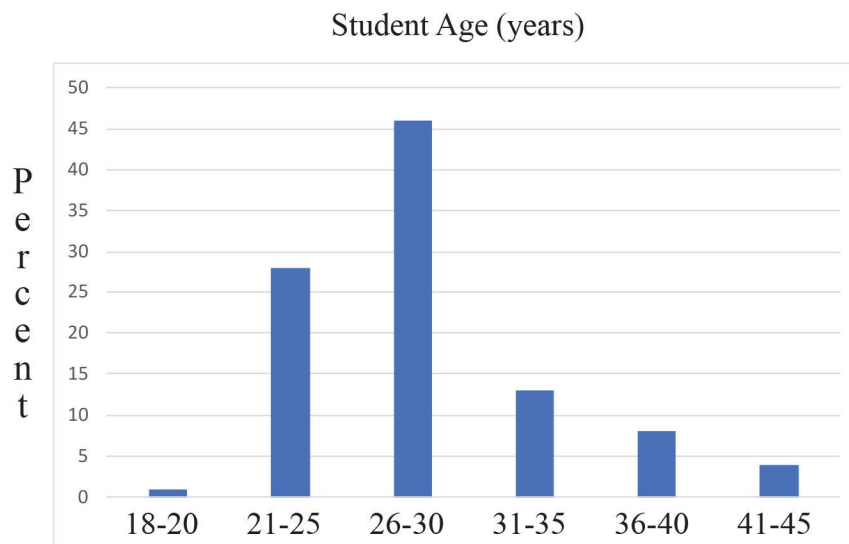


Figure 2

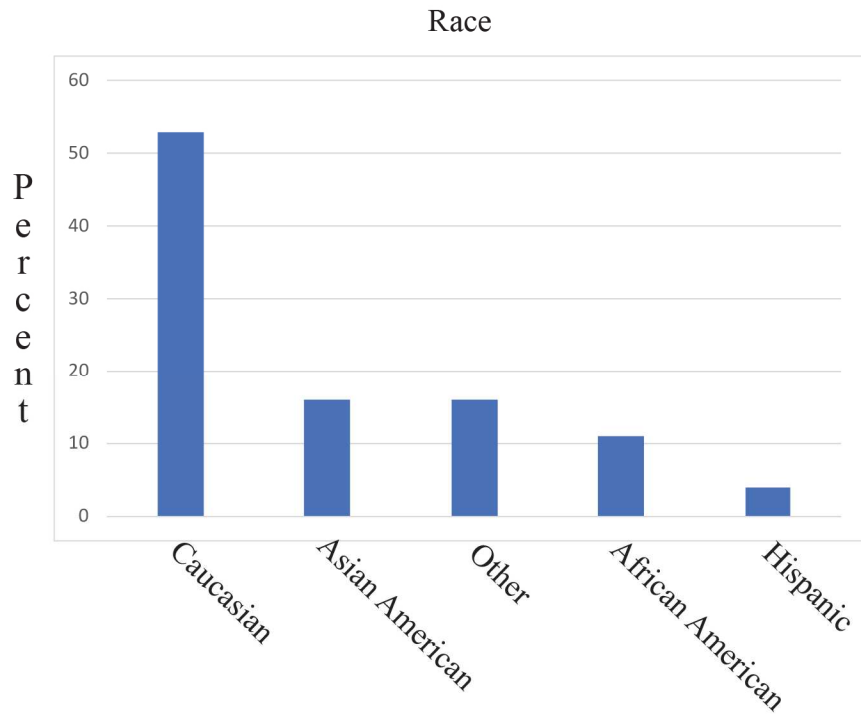


Figure 3

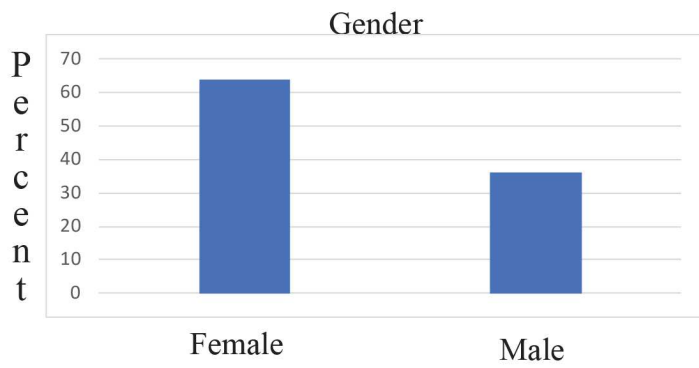


Figure 4

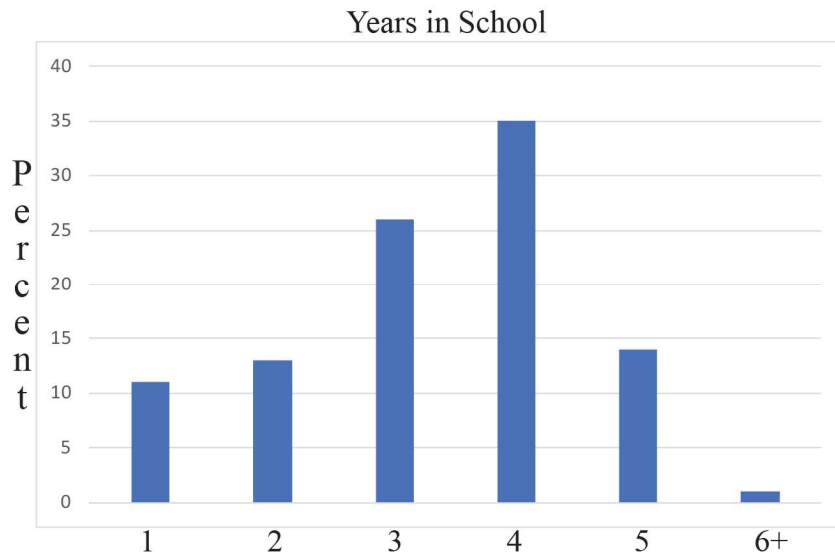


Figure 5

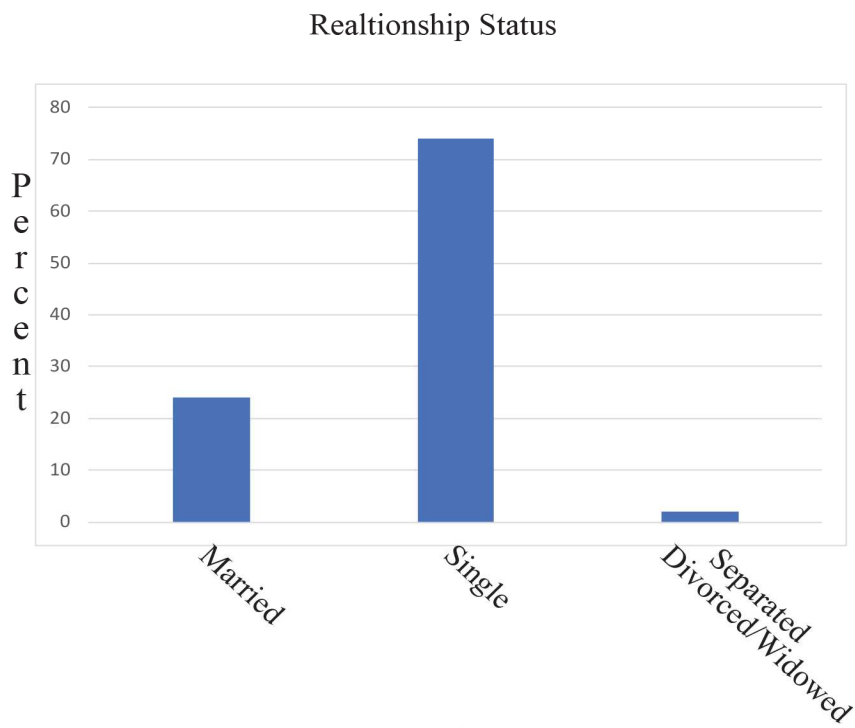


Figure 6

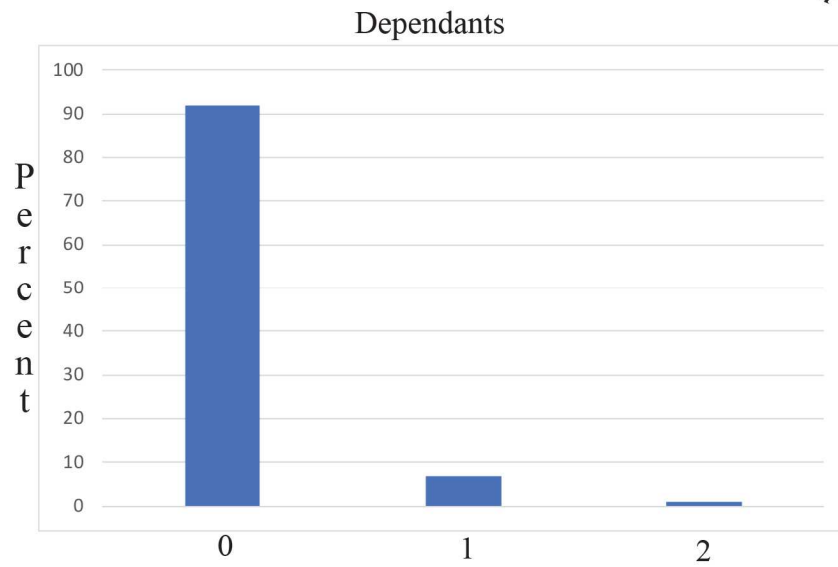


Figure 7

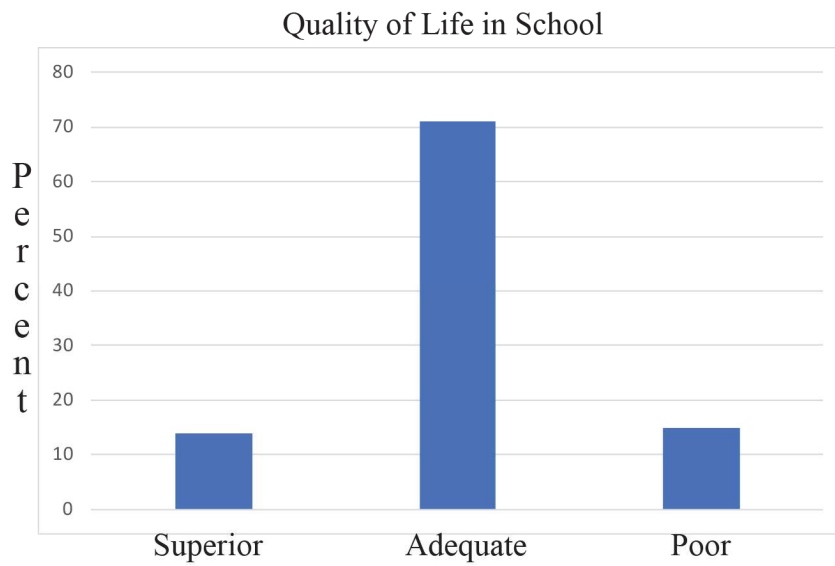
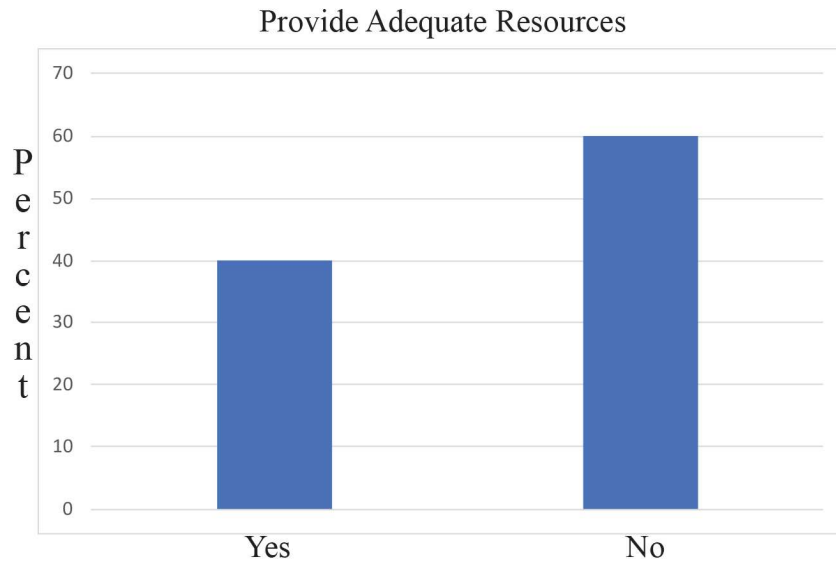


Figure 8



### Statistical Analysis

Data was analyzed using IBM's Statistical Package for Social Sciences SPSS.

Comparisons between graduate clinical psychology students and medical students' scores on coping styles, levels of perceived stress, academic pressure, burnout, and self-care practices.

Differences in scoring patterns were examined using independent T Tests used to compare the significance of coping styles in students from the different school types. Relationships between sampled variables were analyzed using the Pearson r correlation statistical test.

### Independent T-test Analysis

When comparing differences between students from different school types there were multiple significant differences between various aspects of stress, table 1. In terms of coping styles, graduate clinical psychology students were significantly more likely to abuse substances than medical school students ( $t_{(70)} = -1.97, p \leq .05$ ). In terms of perceived stress levels, graduate clinical psychology students had a significantly higher level of perceived stress as compared to medical school students ( $t_{(70)} = -2.41, p \leq 0.05$ ). In terms of academic pressure, medical school students placed a significantly higher expectation on themselves to do well in their coursework as compared to graduate clinical psychology students ( $t_{(70)} = -2.75, p \leq 0.05$ ). In terms of burnout, graduate clinical psychology students were significantly more likely to experience personal burnout as compared to medical school students ( $t_{(70)} = -3.03, p \leq 0.05$ ). Also, graduate clinical psychology students had significantly higher rates of education and training related burnout as compared to medical school students ( $t_{(70)} = -2.52, p \leq 0.05$ ). In terms of self-care practices, graduate clinical psychology students participated significantly more in workplace/professional self-care as compared to medical school students ( $t_{(70)} = -2.08, p \leq 0.05$ ).



All other comparisons between clinical psychology doctoral and medical school students were not significantly different (T-test,  $p \geq 0.05$ ). See table 1

Table 1

		School Type		T Value	Significance
		Medical <i>df=34</i>	Psychology <i>df=36</i>		
Standard Deviations appear in parentheses below means		Mean (SD)	Mean (SD)		2-tailed
<b>COPE Questionnaire</b> Higher=More use of coping strategy	Self-Distract	5.29 (1.62)	5.95 (1.47)	-1.81	$p \geq 0.05$
	Active Cope	5.34 (1.81)	5.59 (1.64)	-0.62	$p \geq 0.05$
	Denial	2.62 (1.06)	3.24 (1.66)	-1.89	$p \geq 0.05$
	Substance Abuse	2.63 (1.06)	3.24 (1.65)	<b>-1.97</b>	<b><math>p \leq 0.05</math> *</b>
	Emotional Support	2.94 (1.55)	3.78 (2.04)	-1.18	$p \geq 0.05$
	Institutional Support	5.91 (1.82)	6.38 (1.52)	0.8	$p \geq 0.05$
	Behavior Disengage	3.03 (1.47)	3.05 (1.58)	-0.07	$p \geq 0.05$
	Venting	4.34 (1.61)	4.86 (1.29)	-1.52	$p \geq 0.05$
	Positive Reframing	5.17 (1.54)	5.16 (1.36)	0.03	$p \geq 0.05$
	Planning	5.31 (1.73)	5.49 (1.76)	-0.42	$p \geq 0.05$
	Humor	5.2 (1.84)	5.08 (1.99)	0.26	$p \geq 0.05$
	Acceptance	5.63 (1.65)	5.81 (1.43)	-0.5	$p \geq 0.05$
	Religion	4.74 (2.13)	4.00 (2.11)	1.54	$p \geq 0.05$
	Self-Blaming	4.4 (1.83)	4.81 (1.94)	-0.92	$p \geq 0.05$
	<b>PSST Questionnaire</b> Higher=more stress perceived		17.83 (6.99)	21.81 (7.02)	<b>-2.41</b>

<b>ESSA Questionnaire</b> <b>Higher=more academic pressure experience</b>	Pressure from Study	11.74 (4.23)	12.65 (3.07)	-1.04	$p \geq 0.05$
	Work Load	9.03 (3.19)	9.89 (2.64)	-1.25	$p \geq 0.05$
	Worry about Grades	9.17 (3.19)	7.97 (2.50)	1.78	$p \geq 0.05$
	Self-Expectancy	10.23 (3.23)	7.97 (2.06)	<b>-2.75</b>	<b><math>p \leq 0.05</math> *</b>
	Despondence	7.83 (3.02)	7.24 (2.95)	0.83	$p \geq 0.05$
	ESSA Total	48.00 (14.27)	49.73 (9.53)	-0.61	$p \geq 0.05$
	<b>CBI Questionnaire</b> <b>Higher= more burnout experiences</b>	Personal Burnout	53.21 (23.24)	67.45 (15.62)	<b>-3.07</b>
Educational Burnout		51.53 (23.02)	63.8 (18.18)	<b>-2.52</b>	<b><math>p \leq 0.05</math> *</b>
Client Burnout		27.98 (20.77)	25.00 (19.22)	0.63	$p \geq 0.05$
<b>SCAW Questionnaire</b> <b>Higher=Use this self-care</b>	Physical	4.06 (1.00)	4.14 (0.75)	-0.38	$p \geq 0.05$
	Psychological	3.74 (1.04)	3.95 (0.74)	-0.96	$p \geq 0.05$
	Emotional	3.86 (1.14)	4.03 (0.73)	-0.76	$p \geq 0.05$
	Spiritual	3.49 (1.17)	3.62 (0.89)	-0.56	$p \geq 0.05$
	Workplace	3.40 (1.06)	3.86 (0.82)	<b>-2.08</b>	<b><math>p \leq 0.05</math> *</b>
	Balance	3.63 (1.09)	3.70 (0.94)	-0.31	$p \geq 0.05$

### Pearson r Correlations

For medical school students, it was found that there was a significant positive correlation between substance abuse and personal burnout ( $r(df)=X, p<0.01$ ), educational burnout ( $r(df)=X, p<0.05$ ), perceived stress scale ( $r(df)=X, p<0.05$ ) and self-expectations ( $r(df)=X, p<0.05$ ). For graduate clinical psychology students, it was found that there was a significant positive correlation between self-expectation and personal burnout ( $r(df)=X, p<0.01$ ) as well as educational burnout ( $r(df)=X, p<0.05$ ). Both school types had a significant positive correlation between perceived stress scale and self-expectations (Medical students:  $r(df)=X, p<0.01$ ; Psychology students;  $r(df)=X, p<0.01$ ). Graduate clinical psychology students also had a significant positive correlation between perceived stress scale and educational burnout ( $r(df)=X, p<0.01$ ). It was also found that both groups had a significant positive correlation between personal burnout and educational burnout (Medical students:  $r(df)=X, p<0.01$ ; Psychology students;  $r(df)=X, p<0.05$ ). See table 2

Table 2

<b>Pearson Correlation Significance</b>
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<b>Medical Students</b>						
	Abuse	PSS	Self Exp	Per Burn	Ed Burn	WK Place
Abuse	1	*	*	**	*	
PSS	0.38	1	**			
Self Exp	0.40	0.52	1			
Per Burn	0.52	0.74	0.72	1	**	
Ed Burn	0.42	0.73	0.67	0.88	1	
WK Place	-0.05	0.04	0.32	0.30	0.18	1

<b>Psychological Students</b>						
	Abuse	PSS	Self Exp	Per Burn	Ed Burn	WK Place
Abuse	1	*				
PSS	0.30	1	**		**	
Self Exp	0.12	0.47	1	**	*	
Per Burn	0.28	0.68	0.46	1	*	
Ed Burn	0.18	0.52	0.39	0.74	1	
WK Place	0.07	0.04	-0.06	0.03	-0.08	1

\*\*p<.01      \*p<.05

## Chapter 5: Discussion

### Findings

This study aimed to quantitatively investigate the self-care and stress management practices of those attending higher learning institutions, specifically professional clinical psychology doctoral and medical school students. It was believed that no differences would be found between the two groups of students. It was thought that since both groups of students required similar amounts of training both academically and clinically, as well as training in extensive patient care, that they would have comparable coping styles, level of perceived stress, academic pressure, burnout, and self-care practices. The results of this study showed otherwise.

A major finding was demonstrated in the coping styles of the studied groups, that graduate clinical psychology students were significantly more likely to abuse substances than medical school students. It is important to note that this study did not distinguish between the types of substance abuse. Since medical school students have greater access to prescription drugs than other fields of study, it could be assumed that substance abuse in medical students would be higher than other graduate student populations (Sinthubus, Das, Ruengdit, Singsuwan & Mahkkanukrauh, 2016). Arora, Kannan, Gowri, Choudhary, Sudarasanan, and Khosla, (2016) documented that medical students have a 5% dependence rates of alcohol, tranquilizers and psychedelics. Another study looked at substance use prevalence rates of senior medical school students and compared them with national, age-related comparison groups and found that their sample reported less substance use with the exception of alcohol, tranquilizers, and psychedelics (Baldwin, Hughes, Conard, Storr, & Sheehan, 1991). This study looked at the following substances: alcohol, marijuana, cigarettes, cocaine, tranquilizers, opiates, psychedelics,

amphetamines, barbiturates, LSD, and heroin. However, the key finding was that after entry into medical school, substantial new drug use was reported only for tranquilizers (Baldwin, et al., 1991).

Data seems to be lacking for substance usage and/or abuse in graduate clinical psychology doctoral students, however, there is research regarding substance usage for mental health professionals (APA, 2006). Substance abuse, specifically alcohol abuse, is the most thoroughly researched area for professional psychologists (APA, 2006). Thoreson, Miller and Krauskopf (1989) conducted a study, which surveyed almost 400 psychologists and found that 9% of this sample indicated that alcohol was a problem in their lives. In a national study that surveyed nearly 400 psychologists it was found that 20% indicated daily use of alcohol (Good, Thoreson & Shaughnessy, 1995). In terms of reported drug use of psychologists, this aforementioned study found the following results: 2.2% cocaine, 2.9% opiates, 6.4% marijuana, and 6.2% tranquilizers (Good, Thoreson, & Shaughnessy, 1995). In another study that looked at substance abuse among psychologists, it was found that nicotine use, caffeine use, and prescription medicine were a problem (Thoreson, Budd, & Krauskopf, 1986). Not only are professional psychologists abusing substances but so are college undergraduates and graduate students (Oswalt & Riddock, 2007). Stress likely contributes to students engaging in unhealthy behaviors like binge drinking. Binge drinking is a major problem on college campuses (American College Health Association, 2006). Since substance abuse is a problem for college students and for mental health professionals, it is likely that engaging in the aforementioned behavior may start as a student.

Another finding in this study indicated that graduate clinical psychology students had a significantly higher level of perceived stress as compared to medical school students. It was anticipated that since all or both advanced degree programs create an atmosphere where students

not only have to excel in their course work, but also promote competition to outscore their peers, both groups would have similar perceived stress levels. Higher learning institutions embrace education systems that are usually rigid and authoritarian, which pits students against each other by encouraging intense competition and peer pressure not only to succeed but also to do better than their peers (Abdulghani, et al, 2011; Jahan, et al, 2016). There have been multiple studies that have looked at perceived stress levels of medical school students and have found that one third to one half of this population believes that they are stressed (Rizvi, et al., 2015; Gazzaz, et al., 2018; Heinen, Bullinger, & Kocalevent, 2017). There is no published data on graduate clinical psychology doctoral students and perceived stress levels. However, in a study conducted by El-Ghoroury, Galper, Sawaqdeh, and Bufka (2012), which surveyed 387 psychology graduate students, found that 70.5% of respondents reported that the stress since starting their training program interfered with their wellbeing. More than half of the study's sample reported the following four stressors as impacting their personal or professional wellbeing: academic responsibilities/pressures, finances/debt, anxiety, and poor work/school-life balance (El-Ghoroury, et al., 2012).

One interesting finding in which medical school students scored significantly higher than graduate clinical psychology doctoral students was on the self-expectancy scale of the education stress measure. It appears that medical school students place a significantly higher expectation on themselves to do well in their coursework as compared to graduate clinical psychology doctoral students. Many of the studies that investigated stress for medical school students have found that academic pressure from educational demands plays a major role on their stress levels (Saipanish, 2003; Shaikh et al., 2004; Hill, Goicochea, & Merlo, 2018). Academic stress appears to be the most researched aspect for medical school students. Also, academics seems to be their biggest



source of stress, even more than working with patients and other factors such as financial burdens, relationships (romantic and peers), and family problem (Saipanish, 2003; Shaikh et al., 2004; Hill, Goicochea, & Merlo, 2018). In fact, when it come to school stress, the most recurrent stressors were doing well on the exams and overwhelming academic workload for the first two years of medical school (Lee & Graham, 2001; Shaikh et al., 2004; Hill, Goicochea, & Merlo, 2018).

Even though in this study medical school students scored higher on measures indicating that their expectation to do well in their coursework and exams than psychological graduate students, students in medical schools did not have higher rates of education and training related burnout as compared to graduated clinical psychology students. Unfortunately, research surrounding burnout and graduate clinical psychology students is absent. However, research on burnout has been conducted on undergraduate students and psychologists and it has showed that high levels of burnout are present among these populations (Jacobs & Dodd, 2003; Meier & Schmeck, 1985; Benedetto & Swadling, 2014). Jacobs and Dodd (2003) found that negative temperament, lack of perceived social support, and subjective workload were predictive of psychological burnout of undergraduate students. Mental Health professionals have occupational hazards such as negative client behavior (suicidality or aggressiveness), varying therapeutic success with patients, demanding administration duties (paper work), professional self-doubt, and management of time and boundaries, all of which increase the likelihood of burnout (Smith & Moss, 2009; Hannigan, Edwards, & Burnard, 2004). A heavy workload has been positively correlated with burnout (Benedetto & Swadling, 2014). Within psychologists, burnout has been associated with depression, suicide, and substance abuse/dependence (Smith & Moss, 2009). If

burnout is present for undergraduate students and psychologists, it is also likely prevalent for graduate clinical psychology doctoral students.

Burnout among medical school students has been extensively studied. Research has found that half of medical school students will experience burnout and that their level of burnout is greater than that of the other college graduates who are not studying medicine (Dyrbye et al., 2009; Dyrbye et al., 2014). Factors that were found to be significantly related to burnout for medical school students were lack of support, higher levels of stress, and a lack of autonomy (Santen, Holt, Kemp, & Hemphill, 2010). Santen et al. (2010) examined burnout of medical school students and found that burnout progressively develops over the course of their education. Burnout was seen in the following: 21% of first years, 41% of second years, 43% of third years, and 31% of fourth years (Santen et al., 2010). In fact, other studies have found that medical school students report that they experience higher levels of burnout in the later years of their program/training (Dyrbye & Shanafelt, 2016; Chin et al., 2016). However, this study demonstrated the opposite, graduate clinical psychology doctoral students experience more educational and training related burnout than medical school students.

In terms of self-care practices, graduate clinical psychology doctoral students engaged in more workplace or professional self-care as compared to medical school students. Workplace or professional self-care activities includes the following: setting and maintaining appropriate professional boundaries, balancing one's work schedule, taking breaks throughout the work day, creating a healthy work space for oneself, acquiring regular supervision or consultation, and having a peer support group (Gionta, 2008; Saakvitne, & Pearlman, 1996). When researchers investigate self-care, they are usually interested in physical self-care such as sleep and exercise habits or emotional or relational self-care e.g. social support/engagement. As a result, little is

known about medical and graduate clinical psychology student's workplace or professional self-care practices. However, Dorociak, Rupert, and Zahniser (2017) looked at workplace or professional self-care practices of psychologists across their life span and found that late career psychologists partake more in this form of self-care as compared to early and midcareer psychologists. Since students are already impacted with multiple demands it is likely that the ability to engage in self-care is diminished because there is not enough time. However, the APA Ethical Principles of Psychologists and Code of Conduct as well as the Guidelines and Principles of the Committee on Accreditation are in place to ensure that education and training programs are appropriately addressing graduate school pressures and interventions for troubled/impaired trainees (APA, 2006). It is likely that this is why graduate clinical psychology doctoral students may engage in self-care practices more so than medical school students.

### **Clinical Implications**

The major clinical implication of this study is that by understanding the various differences between these student populations, programs can develop interventions that provide support, resources, and ultimately would lead to success for these students in their respective programs. Substance abuse, perceived stress, educational and personal burnout were all significantly higher in clinical psychology doctoral students than medical school students. However, self-expectancy was significantly higher in medical school students than clinical psychology doctoral students.

During their advanced degree pursuit, medical school students are afforded more support and resources via programs that are designed to enhance student's optimal functioning and wellbeing than clinical psychology doctoral students (Wolf, Randal, & Faucett, 1988; Abdulghani, 2008; Dun, Iglewicz, & Moutier, 2008). Medical schools are also designed to

provide emotional support e.g. counseling, psychiatry, and mentorship to their students in order to enhance student success (Barnes, Hattan, Black, & Schuman-Olivier, 2017). Wolf et al. (1988) found that the United States and Canada have implemented wellness and mental health programs for their medical school students and have seen positive results. The most prominent aspect of mental health promotion programs is physical well-being. Research has shown that the most studied self-care practices are sleep and exercise, which are components of physical well-being (Jahan et al., 2016; Frank et al., 2008). Other features of wellness and mental health promotion programs include study skills, support groups, time management, aerobics, intramural sports, and financial planning. In terms of targeting medical school student's emotional well-being, programs incorporate mindfulness related activities, such as Mindfulness-Based Stress Reduction (MSBR), Mindful Movement, and Mindfulness-Based Cognitive Therapy (MBCT) (Barnes et al., 2017). By incorporating these various types of activities medical schools have reduced the negative effects of stress on their student's health and academic performance (Abdulghani, 2008).

One program that has been focusing on and making targeted efforts to provide support to their students is the University of California, San Diego, School of Medicine (UCSD SoM). Specifically, this medical school has implemented the Healthy Student Program, which offers student's opportunities to exercise and relax with yoga classes and soccer, as well as provides healthy snack options on exam days (Dunn et al., 2008). This school also offers seminars on coping with stress to students and social events. Additionally, they have created an elective course on mindfulness-based stress reduction (MBSR) for students. This course has demonstrated positive results of student's well-being and empathy (Shapiro, Schwartz, & Bonner, 1998). Another key component to UCSD SoM program is mentorship, not only between

students and faculty but also between students and senior peers. This aids students' personal and professional development. Mentorship has been found to decrease feelings of dysphoria, anxiety, and disappointment with their training program (Hauer, Teherani, Dechet, & Aagaard, 2005). It appears as though UCSD SoM is targeting multiple areas of self-care which include physical, cognitive, and social. By creating a culture that promotes a sense of community and support they are witnessing positive results from their efforts.

Clinical psychology doctoral programs are more like traditional graduate programs where students are self-reliant for their success. Attrition rates for medical school students are much lower than for professional psychology doctoral students. Depending on the program of study, graduate schools have an attrition rate somewhere between 40 to 60 % whereas medical schools are around 3.3% (Bair & Haworth, 2005; Association of American Medical Colleges (AAMC), 2018). This implies that once a student is accepted into medical school the chances of becoming a doctor are exceptionally high. Sadly, this is not the case for doctoral students in other fields of study. Sowell, Zhang, Redd, and King (2008) found that on average the completion rate of doctoral students in both private and public institutions was 56.5%. Further analysis of completion rates by field of study was done and there was considerable variability. The breakdown is as follows: humanities 49.3%, mathematics/physical science 54.7%, social science 55.9%, life science 62.9%, and engineering 63.6% (Sowell et al., 2008).

Lunneborg and Lunneborg (1973) looked at the academic careers of 123 students who were admitted to a psychology doctoral program and found that the attrition rate was 35%, while the completion rate was 29%. The attrition rate for women was significantly higher than for men. Their study also discovered that the best predictors of students obtaining their Ph.D. were having a master's degree prior to starting the doctoral program, age, marital status and faculty evaluation

of the student's first year (Lunneborg & Lunneborg, 1973). In another study, conducted by Knox (1970), which looked at completion and withdrawal rates among 593 psychology graduate students, found that 27.7% completed their Ph.D. program and 45% withdrew. The significant predictors of acquiring a Ph.D. in this study were marital status and sex. The low completion rate for psychology graduate students is cause for concern because the unique challenges that higher learning institutions present can have detrimental effects not only on the wellbeing and lives of students but also the society at large.

Rummell (2015) investigated graduate students in both clinical and counseling psychology programs and found higher rates of physical and mental health symptomology than not only that of the general population but also of medical students. The study's results indicated that this sample (n=119) experienced clinically significant symptoms of the following: 49% anxiety, 39% depression, and 34.82% both anxiety and depression (Rummell, 2015). Over half of the sample indicated experiencing chronic physical health symptoms that became exacerbated with greater workloads. In a study conducted by Hudson and O'Regan (1994) that looked at 171 professional psychology student's stress levels found that the group with the highest stress levels were women who in addition to being a full-time student worked full-time and were not in a committed relationship. In another study that examined stress and success of 53 clinical psychology graduate students found that the sources that caused the greatest amount of stress were scholastic coursework, dissertation work, and financial situation (Nelson, Dell'Oliver, Koch, & Buckler, 2001). Other significant stressors were internship expectations, application process, practicum placement, daily hassles, time management, and working with patients. A key point is that despite their physical and mental health deterioration and high workloads and stress

levels many students reported that their programs were lacking not only in support from faculty members and supervisors but also in resources such as psychotherapy.

The results of this study can form clinical implications for future psychology graduate programs to ensure increased student success. Clinical psychology doctoral students are more at risk of educational and personal burnout as well as substance abuse than medical school students. Medical schools who have implemented support groups, stress-management workshops, peer and faculty mentorship programs, and a MBSR course have seen positive effects on their student's immune system functioning, a decrease in anxiety and depression symptoms, increased use of positive coping skills, greater social support, and enhanced ability to resolve conflicts (Rummell, 2015). These types of interventions could be tailored for clinical psychology doctoral students. Ironically, clinical psychology doctoral students are better at workplace or professional self-care than medical school students. This implies that clinical psychology doctoral programs may be restructured to include increased training in other areas of self-care to decrease the feeling of perceived stress and burnout. Faculty and clinical supervisors could provide psychoeducational seminars as well as classes or materials on stress-management and self-care practices/techniques. Also, it would be beneficial to have appropriate self-care engaged in and modeled by faculty and supervisors. This may show students that they are allowed to take care of their mental health and wellbeing. It is also important to continue to destigmatize mental health counseling as students may fear that they will be seen as incompetent or impaired for seeking psychological services. Lastly, programs need to find mental health counselors and psychiatrists who are not affiliated with the institution that are willing to offer discounted or pro bono services to graduate students. By reducing feelings of stress and burnout it may decrease student substance abuse. Ultimately,

by increasing student success it will impact the industry by developing stronger mental health professionals.

### **Limitations**

One of the major limitations of this study is due to sampling bias. A main criterion for participation in this research was that students are currently enrolled in either medical school or a professional clinic psychology doctoral program. The researcher did not look at students who withdrew or dropped out of school. A reason why the student dropped out or withdrew from school may be difficulty managing stress. Consequently, this study's sample may consist of students with lower stress levels or used self-care practices to manage stress effectively. The participants in this survey were also a self-selecting sample. It is possible that stress levels and self-care practices differ between students who chose to complete the survey versus those who did not.

Another limitation of this study is the confounding variables of marital status and dependent status. Married life as well as having dependents may contribute to an additional layer of stress on the students attending higher learning institutions. It is likely that the more roles a person has (e.g. spouse, parent, caretaker, etc.) the more stressed out they feel when the demands of proceeding through the education system increase. They may also have less time to devote to self-care than someone who does not have multiple roles. Since attending higher learning institutions happens to be around the time where people get or are married, as well as start a family, or take care of their parents, it would be hard to get a large enough sample without including these people in the study.

Lastly, the next limitations are in regard to the scales used in this study. The Educational Stress Scale was designed to gauge the academic stress of adolescents not adults. Adults are the



population of interest in this research. This scale was normed on adolescents and therefore could not be generalized to adults. The psychometric properties such as validity and reliability are unknown within the adult population. The academic pressure for adolescents may be very different than for adults, who have had more time to master studying techniques and figured out what self-care practices work best for them. Also, the Self-Care Assessment worksheet has not gone through psychometric testing to determine validity and reliability.

### **Future Research**

This study only measured a snap shot of current advanced degree medical school and clinical psychology doctoral students and their feelings of stress and self-care. Additional samples across other graduate programs may document stress levels and self-care in other disciplines of study. Once a bigger sample of different students is established, perhaps trends may become apparent.

Another critical study may include taking subsets of students, provide additional support, and measure the changes of those student's outlook as compared to students that did not receive additional care. Another study could compare graduate clinical psychology students to other graduate students. Perhaps graduate clinical psychology students are similar to other graduate students and medical school students are the anomalies.

It is also important to have studies that compare gender differences and ages within programs. It is possible that mature or older students face greater concerns. It is also imperative to examine if diversity factors influence any levels of stress and burnout.

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## Appendix A

### Informed Consent

American School of Professional Psychology at Argosy University, Southern California

Please read this consent agreement carefully before agreeing to participate in this experiment.

**Title of Study:** A stress-management comparison between medical school students and clinical psychology doctoral students

**Purpose of the Study:** This research study is being conducted by Jamee Kling at Argosy University, Southern California and seeks to explore medical school and professional clinical psychology doctoral students coping styles, perceived stress level, academic pressure and self-care practices.

**What you will do in this study:** You will be asked to complete four questionnaires. This involves answering a series of questions. Questions will include details about your coping styles, self-care practices, stress level and academic pressure you receive while attending a higher learning institution.

**Time required:** The semi-structured interview will vary in time depending on responses, but it is estimated to take approximately 15 minutes.

**Risks:** There are minimal risks for participation in this study. This research study is designed to explore coping styles and self-care practices of medical school and professional clinical psychology doctoral students. However, you may feel some emotional discomfort when answering questions about how you approach your stress level, academic pressure, coping style, and self-care practices.

**Benefits:** There are no direct benefits to participants. However, it is hoped that your participation will help researchers learn more about how medical school and professional clinical psychology doctoral students experience their institutions and the coping means they use to deal with the stress.

**Confidentiality:** All information provided will remain confidential and with no identifying information. All the information gathered from the study will be kept in a secure location and only those directly involved with the research will have access to it. After the research is completed, the information will be destroyed after a period of a year.

**Participation and withdrawal:** Your participation in this study is completely voluntary. You may withdraw from the study at any time without penalty and this will not affect your current or future relations with Argosy University, Southern California. You may withdraw by telling the experimenter that you no longer wish to participate and the study will be stopped.

**Researcher Contact:** If you have any further questions about participating in this study, please contact me at (714) 620-3700 or [lameeKling@stu.argosy.edu](mailto:lameeKling@stu.argosy.edu).

**Whom to contact about your rights in this experiment:** This study is conducted under the supervision of Dr. Bina Parekh from American School of Professional Psychology at Argosy University, Southern California, Department of Psychology. She can be contacted at (714) 620-3628 or [bparekh@argosy.edu](mailto:bparekh@argosy.edu), or you can contact Dr. Diana Sigano of Argosy University, Southern California Institutional Review Board at 601 South Lewis Street, Orange, CA 92868 at (714) 620-3662 or [dsiganoff@argosy.edu](mailto:dsiganoff@argosy.edu).

**Before signing this consent form, please talk to the researcher to clarify anything on this consent form or any concerns you have about participating in this research study**

**Agreement:** The purpose and nature of this research study has been explained to me by the researcher and I agree to participate in this study. I understand that I am free to withdraw at any time without any penalty.

#### COMPUTER ADMINISTRATION

By pressing "I agree" I am consenting to my voluntary participation in the study.



## Appendix B

## DEBRIEFING STATEMENT

**Title:** A stress-management comparison between medical school students and clinical psychology doctoral students

**Researcher:** Jamee Kling

Dear Participant:

Thank you for participating in this study's questionnaires. The intention of the study in which you have participated is to gather information from medical school and professional clinical psychology doctoral students about their experience in a higher learning institution. It is the researcher's hope to help advance the scarce body of literature to help people understand how this group experiences stress and the ways in which they manage their stress.

Once again, your participation in this study is greatly appreciated. All collected information and data will remain confidential. If you have any further questions or comments concerning your participation, please feel free to contact the researcher: Jamee Kling, at [JameeKling@stu.argosy.edu](mailto:JameeKling@stu.argosy.edu) or at (714) 620-3700. This clinical research project's chair, Dr. Bina Parekh, Ph.D, may also be contacted for additional information at [bparekh@argosy.edu](mailto:bparekh@argosy.edu), or you can contact the Dr. Diana Siganooff of American School of Professional Psychology at Argosy University, Southern California, Institutional Review Board at 601 South Lewis Street, Orange, CA 92868 at (714) 620-3662 or [dsiganooff@argosy.edu](mailto:dsiganooff@argosy.edu).

If you are interested in the final report of this research, which will be available by the end of, please contact either Jamee Kling or Bina Parekh, Ph.D., expressing your interest in this study's findings. Thank you again for your participation.

Regards,

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**Jamee Kling**

Psy. D. Doctoral Candidate at  
American School of Professional Psychology  
Argosy University, Southern California

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**Bina Parekh, Ph.D.**

Clinical Research Project Chair  
Associate Professor of Clinical Psychology  
American School of Professional Psychology  
Argosy University, Southern California

## Appendix C

## Demographic Questionnaire

1. Age:
2. Gender:
3. Race/Ethnicity:
4. Marital Status:
5. Number of dependents:
6. School type: A) medical School      B) professional psychology doctoral program
7. Year in school/program:
8. How would you rate your quality of life within your school/program?  
1= poor      2=sufficient/adequate      3= superior
9. Do you feel like your school provides adequate resources for students to deal with stress appropriately?
10. What resources does your school provide in terms of helping students cope with stress?
11. What do you do to self-care?

## Appendix D

### Brief COPE

These items deal with ways you've been coping with the stress in your life since you found out you were going to have to have this operation. There are many ways to try to deal with problems. These items ask what you've been doing to cope with this one. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

- 1 = I haven't been doing this at all
- 2 = I've been doing this a little bit
- 3 = I've been doing this a medium amount
- 4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.

27. I've been praying or meditating.
28. I've been making fun of the situation.

## Appendix E

## Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name \_\_\_\_\_ Date \_\_\_\_\_

Age \_\_\_\_\_ Gender (Circle): M F Other \_\_\_\_\_

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?..... 0 1 2 3 4
2. In the last month, how often have you felt that you were unable to control the important things in your life? ..... 0 1 2 3 4
3. In the last month, how often have you felt nervous and “stressed”? ..... 0 1 2 3 4
4. In the last month, how often have you felt confident about your ability to handle your personal problems? ..... 0 1 2 3 4
5. In the last month, how often have you felt that things were going your way?..... 0 1 2 3 4
6. In the last month, how often have you found that you could not cope with all the things that you had to do? ..... 0 1 2 3 4
7. In the last month, how often have you been able to control irritations in your life?..... 0 1 2 3 4
8. In the last month, how often have you felt that you were on top of things?.. 0 1 2 3 4
9. In the last month, how often have you been angered because of things that were outside of your control?..... 0 1 2 3 4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? ..... 0 1 2 3 4

## Appendix F

### Education Stress Scale for Adolescents

Answer the following questions regarding educational stress using the following scale:  
1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

1. I am very dissatisfied with my academic grades.
2. I feel that there is too much schoolwork.
3. I feel there is too much homework.
4. Future education and employment bring me a lot of academic pressure.
5. My parent's care about my academic grades too much that brings me a lot of pressure.
6. I feel a lot of pressure in my daily studying.
7. I feel that there are too many tests/exams in the school.
8. Academic grade is very important to my future and even can determine my whole life.
9. I feel that I have disappointed my teacher when my test/exam results are poor.
11. There is too much competition among classmates that brings me a lot of academic pressure.
12. I always lack confidence with my academic scores.
13. It is very difficult for me to concentrate during class.
14. I feel stressed when I do not live up to my own standards.
15. When I fail to live up to my own expectations, I feel I am not good enough.
16. I usually cannot sleep because of worry when I cannot meet the goals I set for myself.

## Appendix G

### Copenhagen Burnout Inventory

Answer the following questions regarding burnout using the following response categories: Always, Often, Sometimes, Seldom, Never/Almost Never

1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: “I can’t take it anymore”?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?
7. Is your education and training emotionally exhausting?
8. Do you feel burnt out because of your education and training?
9. Does your education and training frustrate you?
10. Do you feel worn out at the end of school/training day?
11. Are you exhausted in the morning at the thought of another day at school/training?
12. Do you feel that every school/training hour is tiring for you?
13. Do you have enough energy for family and friends during leisure time?
14. Do you find it hard to work with clients?
15. Do you find it frustrating to work with clients?
16. Does it drain your energy to work with clients?
17. Do you feel that you give more than you get back when you work with clients?
18. Are you tired of working with clients?
19. Do you sometimes wonder how long you will be able to continue working with clients?

## Appendix H

## Self-Care Assessment Worksheet

This assessment tool provides an overview of effective strategies to maintain self-care. Check all that apply. After completing the full assessment, choose one item from each area that you will actively work to improve.

Using the scale below, rate the following categories in terms of frequency:

5 = Frequently

4 = Occasionally

3 = Rarely

2 = Never

1 = It never occurred to me

## Physical Self-Care

Eat regularly (e.g. breakfast, lunch and dinner)

Eat healthy

Exercise

Get regular medical care for prevention

Get medical care when needed

Take time off when needed

Get massages

Dance, swim, walk, run, play sports, sing, or do some other physical activity that is fun

Take time to be sexual—with yourself, with a partner

Get enough sleep

Wear clothes you like

Take vacations

Take day trips or mini-vacations

Make time away from telephones

Other:

How often do you engage in physical self-care?

## Psychological Self-Care

Make time for self-reflection

Have your own personal psychotherapy

Write in a journal

Read literature that is unrelated to work

Do something at which you are not expert or in charge

Decrease stress in your life

Let others know different aspects of you

Notice your inner experience—listen to your thoughts, judgments, beliefs, attitudes, and feelings

Engage your intelligence in a new area, e.g. go to an art museum, history exhibit, sports event, auction, theater performance

Practice receiving from others

Be curious

Say “no” to extra responsibilities sometimes

Other:



How often do you engage in psychological self-care?

Emotional Self-Care

- Spend time with others whose company you enjoy
- Stay in contact with important people in your life
- Give yourself affirmations, praise yourself
- Love yourself
- Re-read favorite books, re-view favorite movies
- Identify comforting activities, objects, people, relationships, places and seek them out
- Allow yourself to cry
- Find things that make you laugh
- Express your outrage in social action, letters and donations, marches, protests
- Play with children
- Other:

How often do you engage in emotional self-care?

Spiritual Self-Care

- Make time for reflection
- Spend time with nature
- Find a spiritual connection or community
- Be open to inspiration
- Cherish your optimism and hope
- Be aware of nonmaterial aspects of life
- Try at times not to be in charge or the expert
- Be open to not knowing \_\_\_ Identify what is meaningful to you and notice its place in your life
- Meditate
- Pray
- Sing
- Spend time with children
- Have experiences of awe
- Contribute to causes in which you believe
- Read inspirational literature (talks, music, etc.)
- Other:

How often do you engage in spiritual self-care?

Workplace or Professional Self-Care

- Take a break during the workday (e.g. lunch)
- Take time to chat with co-workers
- Make quiet time to complete tasks
- Identify projects or tasks that are exciting and rewarding
- Set limits with your clients and colleagues
- Balance your caseload so that no one day or part of a day is “too much”
- Arrange your work space so it is comfortable and comforting
- Get regular supervision or consultation
- Negotiate for your needs (benefits, pay raise)
- Have a peer support group
- Develop a non-trauma area of professional interest
- Other:

How often do you engage in workplace or professional self-care?

Balance

\_\_\_ Strive for balance within your work-life and workday

\_\_\_ Strive for balance among work, family, relationships, play and rest

How often do you engage in balance?