SELF-CARE, COPING SELF-EFFICACY AND STRESS AMONG GRADUATE STUDENTS IN THE HELPING PROFESSIONS

BY

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Submitted to the graduate degree program in Psychology and Research in Education and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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SELF CARE, COPING SELF-EFFICACY AND STRESS AMONG GRADUATE STUDENTS
IN THE HELPING PROFESSION

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Date approved: 05/05/2017
Abstract
Self-care has grown in popularity over the decades and has been seen as a successful means in mitigating the effects of stress, particularly among trainees in the helping professions. However, a paucity of research exists examining the relationship among self-care and related variables. The aim of the present study was to further explore the impact of self-care and coping self-efficacy on stress among counseling psychology and clinical psychology graduate trainees. Specifically, this study examined the relationship between self-care utilization, coping self-efficacy, and perceived stress, as well as self-care utilization by years in training program, self-care utilization by participation in a mentoring program, and unique impact of self-care utilization and coping self-efficacy on perceived stress. The current study surveyed 168 students enrolled in graduate training programs in counseling and clinical psychology. The primary variables of interest (i.e., self-care utilization, coping self-efficacy, and perceived stress) demonstrated significant relationships confirming the first three hypotheses. Participants who reported higher levels of self-care utilization reported significantly lower levels of perceived stress $r = -.40$, participants who reported higher levels of coping self-efficacy reported significantly lower levels of perceived stress $r = -.49$, and a significant positive relationship was found between self-care utilization and coping self-efficacy $r = .63$. Individuals reporting high levels of self-care utilization also reported high levels of coping self-efficacy. No relationship was found between length in program and the primary variables of interest (i.e., self-care, coping self-efficacy and perceived stress). There was also no relationship found between participation in mentoring programs and the primary variables of interest (i.e., self-care, coping self-efficacy, and stress). Findings of the current study suggests
coping self-efficacy has a larger unique effect than self-care utilization on perceived stress.
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Chapter 1
Introduction

The Transactional Theory of stress was first discussed by Lazarus and Folkman (1984), where they describe the transactional nature of stress occurring between and individual and their environment. The deleterious impact of stress on physical health and mental health have been well documented in the literature (Melchior et al., 2007; Segerstrom & Miller, 2004). Studies have found prevalence of stress varies by multiple factors, one of which is work setting. One of the work place domains with disproportionately high levels of stress is the health care setting, where health care professionals have been found to experience high rates of job related stress (Acker, 2012; Hamaideh, 2012; Rossi et al., 2012). High rates of work related stress and burnout have also been found in psychologists across hospital and community based settings (Ackerly, Burnell, Holder, & Kurdek, 1988; Prosser, Johnson, Kuipers, Szmukler, Bebbington, & Thornicroft, 1997) and among graduate trainees in the helping professions (Cushway, 1992; El-Ghoroury et al., 2012; Holzman et al., 1996). While high rates of stress have been found to negatively impact physical and mental health, persistent stress among graduate trainees has been linked to early career burnout (Oliver et al., 2004).

In attempts at mitigating the effects of stress and potential burnout among health care professionals, researchers and organizations have encouraged the use of self-care strategies (El-Ghoroury et al., 2012). The concept of self-care is a multidimensional construct which involves engagement in various psychological and/or physical activities in order to enhance one’s overall wellbeing and sense of fulfillment (Cameron & Leventhal, 2003). In further highlighting the importance of self-care behaviors, previous literature has highlighted the APA Ethics code (APA, 2002), which states professionals and trainees must “be aware of the possible effect of their own physical and mental health on their ability to help those with whom they work” (p
However, one limitation of self-care is the paucity of research existing in the literature. Gnocher, Sherman, Barnett, and Haskins (2013) attempted to bridge this gap in the literature by developing the Self-Care Utilization Questionnaire (SCUQ).

Coping is a strategy similar to self-care aimed at mitigating the impact of stress. Coping is defined as a short-term response to threatening or harmful stimuli and emotional reactions (Lazarus & Folkman, 1987). While coping has been shown to be a useful strategy for mitigating stress, self-efficacy plays an important role in the utilization of a coping strategies. Bandura (1977), defines self-efficacy as an individual’s belief in their ability to successfully complete or perform a task within a specific domain. A measure of coping self-efficacy was created by Chesney, Neilands, Chambers, Taylor, and Folkman (The Coping Self-Efficacy Scale, 2006) to assess an individual’s belief in their ability to effectively cope with potential hardships.

Researchers have found social support to also be beneficial in mitigating stress and enhancing well-being (Berkman, Glass, Brissette, & Seeman, 2000; Uchino, 2009). These social supports can be comprised of structured programs or informal interpersonal relationships. As a result, intimate and romantic relationships are seen to play a significant role in stress. In addition to informal relationships, formal relationships such as mentoring have been seen to also have a significant impact on stress. Johnson (2002), defines mentoring as “a personal relationship in which a more experienced (usually older) faculty member or professional acts as a guide, role model, teacher, and sponsor of a less experienced (usually younger) graduate student or junior professional” (p. 88). Research has demonstrated that mentoring has a significant impact on overall satisfaction among graduate students and is a means for teaching pro-social behaviors (Clark, Harden, & Johnson, 2000; Johnson, Koch, Fallow, & Huwe, 2000). Goncher et al. (2013) also found that emphasis on self-care and coping by graduate training programs was related to
increased scores on quality of life measures among trainees. The authors go on to suggest these practices be taught and encouraged throughout a trainee’s graduate school experience, providing more opportunities to acquire self-care and coping skills.

**Statement of the Problem**

The present study investigates the relationship between perceived stress, self-care, and coping self-efficacy among graduate students in counseling psychology and clinical psychology doctoral programs. The main purpose will be to assess convergent validity of the Self-Care Utilization Questionnaire (SCUQ) developed by Gnocher et al. (2013) through comparisons with the Coping Self-Efficacy (CSE) scale developed by Chesney, Neilands, Chambers, Taylor, and Folkman (2006), and the 10-item Perceived Stress Scale (PSS10) developed by Cohen, Kamarck, and Mermelstein, (1983). The study will also explore the effects of mentoring programs and duration of graduate training on perceived stress, self-care, and coping self-efficacy.

**Research Questions:**

**Question 1:** Are there relationships among participants’ self-care utilization measured by the (SCUQ), perceived stress measured by the (PSS10), and coping self-efficacy measured by the (CSE)?

**Question 2:** How will length of time in a psychology training program affect self-care utilization, perceived stress, and coping self-efficacy?

**Question 3:** How will participation in a mentoring program affect self-care utilization, perceived stress, and coping self-efficacy?

**Question 4:** Is self-care utilization stronger than coping self-efficacy in predicting perceived stress?
Chapter 2
Literature Review

The current chapter begins with a description of stress and burnout among helping professions. Lazarus and Folkman’s (1984) theoretical model of stress is introduced, along with the construct of burnout. An overview of prevalence and implications of stress and burnout in the workplace are provided. Following discussion of stress and burnout, two popular strategies aimed at mitigating stress among health care professionals and trainees are introduced (i.e., coping and self-care). Assessment tools of coping and self-care are covered, along with relative effectiveness in enhancing well-being and impact on relevant outcomes. Following this section, programmatic efforts of graduate training programs in counseling and clinical psychology to encourage prosocial behaviors and development of well-adjusted trainees are discussed. The chapter concludes with a summary of stress, coping, and self-care, along with overview of mentoring programs in graduate programs.

Perceived Stress

The Transactional Theory of stress was first discussed by Lazarus and Folkman (1984). The authors describe the transactional nature of stress occurring between an individual and their environment. In this relationship, stress is the result of an individual’s appraisal on their environment and whether ample resources are available to assist with a potential stressor. Additionally, a situation is not deemed stressful if there is no potential threat to individual well-being, regardless of available resources. The appraisal involves two distinct processes labeled primary appraisal and secondary appraisal. During the primary appraisal process, an individual evaluates their environment for potential threats or harm to anything deemed valuable by the individual. This can include harm directed towards the individual, or harm directed towards others. The secondary appraisal process involves evaluation of available resources to cope with
the threatening stimuli. These resources can take a variety of forms such as tangible objects, social support, and/or cognitive strategies (Lazarus & Folkman, 1984). No temporal relationship is believed to occur between primary and secondary appraisal processes, which are viewed as functioning independently from each other (Lazarus & Folkman, 1987).

Stress has been found to have significant deleterious effects on individuals in a variety of domains. In a meta-analysis conducted by Segerstrom and Miller (2004), the authors examined the impact of stress on immune system functioning. At the conclusion of their review, the authors state “studies have convincingly established that stressful experiences alter features of the immune response as well as confer vulnerability to adverse medical outcomes that are either mediated by or resisted by the immune system” (p. 621). Results of their study also determined that chronic stressors are more detrimental to immunofunctioning than acute stressors. Work induced stress has also been found to have a deleterious impact on mental health and potentially precipitate depressive and anxiety disorders (Melchior, Caspi, Milne, Danese, Poulton, & Moffitt, 2007). In a longitudinal study conducted by Melchior and colleagues (2007), 972 individuals followed from birth (born 1972-1973) were evaluated in 2004 for the presence of work related stress and mental health status. Individuals working in positions with high psychological demands were twice as likely to received diagnoses of Major Depressive Disorder or Generalized Anxiety Disorder when compared to individuals with less demanding jobs. High rates of stress have also been found among graduate trainees in helping professions (Cushway, 1992; Holzman, Searight, & Hughes, 1996). In addition to negative effects on physical and mental health, persistent stress among graduate trainees has been linked to early career burnout (Oliver, Bernstein, Anderson, Blashfield, & Roberts, 2004).

**Burnout**
Individuals in the health care profession experience high rates of job related stress (Acker, 2012; Hamaideh, 2012; Rossi, Cetrano, Pertile, Rabbi, Donisi, Gigoletti, Curtolo, Tansella, Thornicroft, & Amaddeo, 2012). Related to work place stress is the psychological multidimensional construct of burnout. Burnout is comprised of three distinct areas described by Maslach, Schaufeli, and Leiter (2001); exhaustion, depersonalization, and inefficiency. Exhaustion describes the stress dimension of burnout which is the result of high workplace demands. In attempts to cope with exhaustion, individuals often distance themselves from work emotionally and cognitively which is termed depersonalization. Finally, inefficiency is defined as the reduced sense of personal accomplishment.

Mental health providers in particular experience psychological distress resulting from the nature of psychotherapy. In Sigmund Freud’s book, Dora: An Analysis of Case Hysteria (1905), he states “no one who, like me, conjures up the most evil of those half-tamed demons that inhabit the human beast, and seeks to wrestle with them, can expect to come through the struggle unscathed”. In a study by Acker (2012), her survey of four hundred and sixty mental health practitioners in the New York area found 56% of respondents reported moderate to high distress, while 73% of respondents reported moderate to high levels of distress as a result of their work role. A study focusing specifically on psychologists at the Veterans Health Administration (VHA) working in PTSD clinic teams found approximately half of the 138 psychologists sampled reported high rates of cynicism and exhaustion as determined by the Maslach Burnout Inventory-General Survey (Garcia, McGeary, McGeary, Finley, & Peterson, 2014). High rates of compassion fatigue have also been found among mental health providers working with trauma survivors (Killian, 2008). In their study, Garcia et al. (2014) found that most of the participants’ distress was attributed to organizational demands and perceived lack of control within the VHA.
system. High rates of work related stress and burnout have also been found in psychologists across hospital and community based settings (Ackerly, Burnell, Holder, & Kurdek, 1988; Prosser, Johnson, Kuipers, Szmukler, Bebbington, & Thornicroft, 1997). Overall rates of burnout and stress found by Ackerly and colleagues (1988) were echoed in a more recent study yielding similar findings (Rupert & Morgan, 2005) surveyed 571 doctoral level psychologists across various settings (i.e., solo individual practice, group practice, and agency settings). Agency settings consisted of general and psychiatric hospitals, community centers, counseling centers, and outpatient clinics. Respondents revealed higher levels of emotional exhaustion in agency settings compared to individual practice. Respondents in individual and group practices also reported higher levels of personal accomplishment. High rates of work related stress and burnout have also been found in international health settings (Yang, Meredith, & Khan, 2015). Yang et al. (2015) surveyed two hundred and twenty mental health providers in Singapore to measure levels of stress and burnout. Results revealed high rates of stress and burnout when compared to the general population, and higher rates of stress and burnout when compared to similar international cohorts of mental health practitioners in Western countries.

**Self-Care**

Self-care is an area of research which has gained popularity over the past few decades, particularly among health care professionals. One of the primary reasons self-care has gained attention is due to its capacity to prevent and mitigate burnout and deleterious effects among health care professionals and graduate students in related fields (El-Ghoroury et al., 2012). Defined by Cameron & Leventhal (2003) the concept of self-care is a multidimensional construct which involves engagement in various psychological and/or physical activities in order to enhance overall wellbeing and sense of fulfillment. Self-care activities are often used to restore
psychological and physical health which can be depleted due to inherent stressors of daily tasks such as work, family, and household obligations (Williams-Nickelson, 2006). Graduate students in health care fields are required to navigate multiple roles as they become competent in their areas of study. As students begin to develop these skills they are often confronted with new stressors which offer unique challenges. These stressors are seen as the primary barrier which affects both competence and maintenance in their academic programs (Myers et al., 2012).

Among medical and psychology graduate students, some of these stressors include issues with sleep, financial limitations, limited free time, patient care responsibilities, dissertation work, and the internship process (Levey, 2001; Nelson, Dell’Oliver, Koch, & Buckler, 2001). Barnett (2005) discusses self-care as an imperative in order to maintain competent and ethical standards as practicing health professionals. The author cites the APA Ethics code (APA, 2002) which states professionals and trainees must “be aware of the possible effect of their own physical and mental health on their ability to help those with whom they work” (p. 1062). Barnett (2005) proclaims there must be ongoing reflection, promotion of wellness, and resources in the form of self-care for psychologists to remain consistent with ethical standards and optimize care given to consumers. Not only can engagement in self-care among psychology trainees and professionals assist in the delivery of optimal health care and prevent burn out, but self-care can also prevent the development of psychiatric illnesses. Due to the inherent work of psychotherapy, practicing psychologists and trainees are at risk for vicarious traumatization and the development of other mental health ailments (Smith & Moss, 2009).

As previously mentioned, self-care is a multidimensional concept which can take many forms, including exercise, cooking, meditating, gardening, etc. Some areas of research have categorized self-care activities into broad domains. In her chapter titled *Balanced Living*
Through Self-Care, Williams-Nickelson (2006) discusses seven different domains of self-care; physical, emotional, spiritual, intellectual, social, relational, and safety/security. The physical domain, being one of the most widely researched modes of self-care, incorporates physical activity, nutrition, and medical care. The author describes physical activity as a planned and structured form of fitness that is intended for pleasure. The nutritional form of physical self-care entails either diet restriction or augmentation to limit nutrients that are deemed unhealthy by the individual while supplementing healthy nutrients often found in fruits and vegetables. The emotional domain of self-care is described as the identification and acceptance of the range of feelings. Researchers have found maladaptive long-term effects among individuals who actively suppress or avoid unpleasant feelings (Moore et al., 2007). The spiritual domain of self-care incorporates, but is not restricted to, organized religion. Broadly, the spiritual description offered by Williams-Nickelson (2006) includes a search for meaning and ways in which an individual can transcend life’s challenges. The author describes intellectual self-care as simply cultivating interests where an individual is required to explore ideas and learn in a creative manner. The next two domains both involve fostering social relationships. The social self-care domain involves investment of emotions outside of the immediate family network. This can be accomplished through community involvement along with the development of friendships. The relational domain however, focuses on the immediate family or family members an individual interacts with frequently. The author maintains the distinction between social and relational domains due to the regularity and increased potential to unknowingly neglecting family members with whom we commonly cohabitate. The final self-care domain discussed by the author is safety/security. This domain refers to measures taken by individuals to ensure their own sense of comfort.
Precautionary strategies in the form of insurance and environmental planning are commonly utilized in this domain (Williams-Nickelson, 2006).

While William-Nickelson (2006) offers a good depiction of the broad and multidimensional concept of self-care, such an expansive construct can be difficult to measure. In an attempt to quantitatively study self-care, researchers have focused on activities which have demonstrated salutary effects in overall wellbeing among health care professionals and graduate students in related fields (El-Ghoroury et al., 2012; Myers et al., 2012). Sleep has been found to be a direct mediator for stress, in addition to a variety of biological functions which have latent effects on stress management. Individuals who attain less than 7 to 8 hours of sleep per night are more susceptible to developing ailments such as the common cold, and have higher mortality rates (Cohen et al., 2009). Studies suggest that sleep also has a significant impact across graduate student populations and can impact their patient care and overall training success (Myers et al., 2012). Baldwin and Daugherty (2007) found that medical students in their first and second years of training who reported 5 or less hours of sleep per night had higher incidences of serious accidents, conflict with other professionals, and serious medical errors. In addition to sleep, exercise is another mode of self-care which has demonstrated adaptive effects across almost all populations. The Center for Disease Control and Prevention (2010) listed numerous benefits from exercising such as reduced risk of cardiac disease, reduced risk of diabetes, along with facilitation in weight management. In addition to direct physical effects, exercise has demonstrated effective results in stress regulation through its capacity to decrease the impact of negative emotional responses (Gross, 1998).

A third area of self-care that has been found to play a significant role in stress management is social support. Past studies have found that graduate students who endorse higher
levels of perceived social support reported lower global stress (Clark, Murdock, & Koetting, 2009). In a study of the three aforementioned areas of self-care, Myers et al. (2012), found that all were significantly related to stress levels. The authors’ study was one of the first large-scale studies to focus specifically on students in psychology graduate training programs. Their findings were comparable to research among graduate students in other helping professions such as students in medical programs.

El-Ghoroury et al. (2012) also conducted a study focusing specifically on self-care and coping strategies among psychology graduate students. In their study the authors attempted to measure the construct of self-care by developing their own measure derived from previously validated measures. Their measure consisted of a variety of wellness promoting activities, strategies, and resources, without categorizing narrowly prescribed areas of self-care. The 20 activities and resources measured included seeking out support of friends and family, avoidance of school tasks, and talking to a physician. In their study, the authors found that 70.5% of psychology graduate students reported experiencing at least one significant event in their personal or professional lives that significantly impaired their performance. The top five strategies however, were seeking support from friends, seeking support from family, talking to classmates, exercising regularly, and engaging in hobbies. As previously mentioned, one of the unique aspects of graduate training for students is navigating new responsibilities and maintaining expectations of competency. This role balancing has been suggested as the primary source of stress for graduate students. In their study, El-Ghoroury et al. (2012) also assessed barriers which impede the use of self-care and coping strategies for psychology graduate students. The barriers measured ranged from lack of time, to lack of knowledge of available resources, to fear of loss of professional status. The authors found the top five barriers which
impeded the utilization of various self-care means were lack of time, financial constraints, worry about what could happen, lack of motivation, energy or interest, and shame, guilt or embarrassment. The barrier endorsed by more than two thirds of the population surveyed was lack of time.

While research has demonstrated an apparent need for the promotion of self-care among psychology graduate trainees, studies have also found programs often fall short in providing pragmatic remedies. Munsey (2006), surveyed graduate trainees and found a lack of formal training in the importance and use of self-care. It has been proposed that increasing the emphasis on self-care by training institutions would lead to higher levels in quality of life and overall satisfaction in graduate students. Goncher et al. (2013), found that graduate students who perceived an emphasis in self-care by their training program demonstrated higher scores on quality of life measures.

Coping

Similar to self-care, another strategy aimed at mitigating the impact of stress is coping. Coping is defined as a short-term response to threatening or harmful stimuli and emotional reactions (Lazarus & Folkman, 1987). Coping can occur as both a behavioral and cognitive response, and a variety of coping responses have been recognized in the literature over the decades. In an article published by Lazarus and Folkman (1987), the authors discuss problem-focused and emotion focused coping. Problem-focused coping is described as an attempt to change the relationship between the person and their environment, while emotion-focused coping is a direct attempt to mitigate emotional distress. Research has also connected coping to the appraisal processes of potentially distressing stimuli. The appraisal system of potential stressors is separated into primary and secondary processes. Primary appraisal is the cognitive process
where stimuli are evaluated for their relevance, while secondary appraisal involves the evaluative process of available resources to cope with threatening stimuli (Lazarus & Folkman, 1984). Coping has been found to occur in both primary and secondary appraisal, however, with different functions in each process. For the secondary appraisal process, research has found that problem focused coping is more frequently utilized when the environment is perceived to be malleable, where emotion focused coping is primarily utilized when the situation is evaluated to be unchangeable, and acceptance of inevitable outcomes is required. In respect to the primary appraisal process, various coping strategies are utilized affecting the potential stakes for the individual (Lazarus & Folkman, 1987). In addition to situation specific coping, individual factors such as predispositions affect coping strategies utilized (Carver & Scheier, 1989).

**Coping Self-Efficacy**

While utilization of different coping strategies is affected by situational and individual variables, another variable significantly impacting the probability of completing a coping behavior is individual self-efficacy. Self-efficacy is defined as an individual’s belief in their ability to successfully complete or perform a task within a specific domain (Bandura, 1977). Self-efficacy and belief in one’s agency to control or influence their environment has been linked to well-being (Thompson, 2002; Lent, 2004). In addition to perceived ability to control environmental situations, self-efficacy plays an integral role in regulation of affect (Bandura, 1997). Self-efficacy has been found to increase participation in activities commonly seen as coping strategies. Engagement in social activities and seeking of social support, along with modeling of pro-social behaviors, are all believed to be facilitated by self-efficacy (Lent, 2004). An attempt to measure coping self-efficacy, Chesney, Neilands, Chambers, Taylor, and Folkman (2006), created a measure to assess an individual’s belief in their ability to effectively cope with
potential hardships. The measure developed by Chesney et al. (2006), is based on Lazarus and Folkman’s (1984) stress and coping theory, as well as Bandura’s (1997) self-efficacy theory which suggests self-efficacy is a necessary prerequisite to changing a coping behavior. The coping self-efficacy scale was originally tested for validity and reliability with two randomly controlled clinical trials where coping self-efficacy training was provided to participants. The coping self-efficacy scale was used to measure the level of psychological distress following the training, along with other measures germane to psychological well-being.

The role of coping self-efficacy in stress management and well-being has been studied across many domains and populations including patients with chronic illness, ethnic minorities, students, and health care professionals. Among athletes, coping self-efficacy was found to have a positive association with coping effectiveness and suggested benefits for increased performance (Nicholls, Polman, & Levy, 2010). Coping self-efficacy also was found to impact negative health symptoms experienced by individuals diagnosed with HIV. Lower levels of coping self-efficacy predicted higher rates of symptom intrusiveness (e.g., fatigue, pain, diarrhea, nausea) in men positive for HIV. These findings suggest that coping self-efficacy can facilitate adjustment to chronic health conditions through development of coping strategies, which reduce psychological distress in addition to reducing of negative physical health symptoms (Mosack, Weinhardt, Kelly, Gore-Felton, McAuliffe, Johnson, Remien, Rotheram-Borus, Ehrhardt, Chesney, & Morin, 2009). Studying cross-cultural extensions of coping and self-efficacy, Miller, Yang, Farrell, and Lin (2011) examined the mental health status of a large community based sample of Asian American adults. In their study, the authors discuss bicultural self-efficacy which is one’s confidence in their ability to negotiate and cope with differences in language, social interaction, and value from their primary culture of origin. Higher levels of bicultural self-efficacy were
associated with positive outcomes in mental health (Miller et al., 2011). Similar results were also found among Asian American students and Latino students adjusting culturally in the United States (Li & Gasser, 2005; Torres & Solberg, 2001). Coping self-efficacy has also been found to mitigate the impact of stigma related stressors and negative physical health consequences experienced by lesbian, gay, and bisexual individuals (Denton, Rostosky, & Danner, 2014).

Few studies have directly examined the relationship between coping self-efficacy and variables associated with positive well-being among health care professionals. In a study assessing the impact of medical school on mental health, Brennan, McGrady, Lynch, Schaefer, and Whearty (2016) examined variables related to mental health and coping among a large sample of first year medical students. The authors noted that 10% of first year medical students demonstrated clinically significant depression and anxiety which negatively impacted their academic performance and quality of life. In their study, Brennan et al. (2016) assessed the students’ levels of depression, anxiety, and coping self-efficacy following an 8-session training course on stress management/relaxation. The stress management intervention was led by a physician, a psychologist, and a counselor where relaxation strategies were taught. Students were also given relaxation scripts and encouraged to practice strategies outside of session. At the remainder of the 8-session training course, students demonstrated significantly higher scores in coping self-efficacy and significantly lower scores in anxiety, while scores in depression were lower but not statistically significant.

No studies could be found of peer-reviewed publications studying the effects of coping self-efficacy among psychology trainees. Among practicing psychotherapists, one study found that nearly 60% of psychologists reported providing therapy when they believed they were too distressed to be effective (Pope, Tabachnick, & Keith-Spiegel, 1987). In a survey of 208
practicing psychotherapists, Karmen-Kahn and Hansen (1998) assessed the percentage of *career sustaining behaviors* utilized. Their study revealed that psychotherapists who engage in coping behaviors such as utilization of peer support and engagement in leisure activities demonstrated higher scores related to job satisfaction. Implications of their study suggest that coping strategies are crucial for job satisfaction and performance. A more recent study also examined the prevalence and effects of career sustaining behaviors among psychologists (Stevanovic, 2004), which echoed the results of Karmen-Kahan and Hansen’s (1998) survey, demonstrating a positive correlation with job satisfaction and career sustaining behaviors. Both studies strongly suggest the use of social supports to assist with work related distress.

**Mentoring Programs**

Researchers have found social support to be beneficial in mitigating stress and enhancing well-being (Berkman, Glass, Brissette, & Seeman, 2000; Uchino, 2009). However, social support as a psychological construct has been proven to be complex and to comprise multiple forms. Halgeson (2003), separates social support into structural and functional measures. Functional measures of social support describe the nature of support in a qualitative manner, while structural measures are viewed in quantitative terms.

One form of social support which has received increasing attention in graduate academic institutions is mentoring. Providing a general guide for professional psychology in academia, Johnson (2002), defines mentoring as “a personal relationship in which a more experienced (usually older) faculty member or professional acts as a guide, role model, teacher, and sponsor of a less experienced (usually younger) graduate student or junior professional” (p. 88). Research has demonstrated that mentoring has a significant impact on overall satisfaction among graduate students (Clark, Harden, & Johnson, 2000; Johnson, Koch, Fallow, & Huwe, 2000).
Additionally, researchers have found that for many trainees, graduate school is often the final opportunity for mentoring relationships. As a result, organizations such as the American Psychological Association have encouraged the utilization of mentoring programs for graduate trainees (Swerdlik & Bardon, 1988; American Psychological Association [APA], 2000). Schwebel and Coster (1998), surveyed directors of professional psychology training programs accredited by the American Psychology Association, along with licensed practicing psychologists. Participants were asked which areas of training for the development of well-functioning psychologists were perceived most important in psychology graduate training. Areas of interpersonal involvement (e.g., mentoring, relationship with spouse/partner/family, and relationship with friends) were ranked highly among both groups with self-awareness/self-monitoring receiving the top ranking in both groups. Directors of training programs were also asked to identify programmatic changes they would like to introduce to further promote optimal functioning. The top areas identified were increased faculty involvement/mentoring programs, in addition to ongoing support groups. These findings are consistent with previous studies that suggested graduate students perceive mentoring as a critical component of their graduate training in professional psychology (Atkinson, Neville, & Casas, 1991; Lark & Croteau, 1998; Luna & Cullen, 1998). In a large sample of 3rd and 4th year doctoral students in counseling psychology, the research training environment of their program demonstrated a significant impact on their mentoring experiences and research self-efficacy. Furthermore, mentoring experiences and research self-efficacy was found to mediate research productivity (Hollingsworth & Fassinger, 2002). The impact of mentoring experiences has also been found to influence psychotherapeutic practice post-graduate training. Cook, Schnurr, Biyanova, and Coyne (2009), surveyed 2,607 licensed psychologists practicing in Canada, and assessed influences on their current clinical
practice. Significant mentors and graduate school training were reported to be two of the four primary influences in current clinical practice. As a result, the authors suggest emphasis on mentoring throughout graduate school in order to facilitate the incorporation of new practices. Psychosocial mentoring in graduate school has also been linked to emotional stability and post-graduate career resilience (Arora & Rangnekar, 2015). Specifically, Arora and Rangnekar (2015) found psychosocial mentoring partially mediated the relationship between emotional stability and career resilience among practicing psychologists.

Research has also shown a negative relationship between mentoring relationships and work strain (Laschober, Eby & Kinkade, 2012). Mentorship has been suggested as a catalyst for cultivating burgeoning areas of psychology. Zimmerman, Fiske, and Scogin (2011) discussed the important role of mentoring programs in expanding the field of geropsychology to address needs for an aging population. They state that through mentoring, trainees can achieve necessary competencies in clinical practice and research to further understand the understudied area of geropsychology. Mentor programs have also been found to have numerous salutary benefits in cross-cultural populations (Qian, 2014).

Despite the growing popularity of mentoring programs in academia, models for mentorship are less abundant (Johnson, 2003). In Johnson’s article, he attempts to remedy this issue by providing a model for mentorship. In his triangular model, he describes abilities, competencies, and virtues comprising the primary ingredients for mentor competence. He provides additional general guidelines for mentoring psychology students in graduate training. Organizational suggestions include incentivizing and training faculty for the mentor role, and preparing graduate students for the role of protégé. One barrier to successful mentorship identified by Johnson is lack of understanding and expectations by trainees on the nature of
mentorship. To facilitate a successful mentoring relationship, the author suggests preparation for graduate trainees on the mechanics of mentorship, and the intent of a collegial reciprocal relationship with their mentor.

**Conclusion**

The current study addresses the paucity of research in the area of self-care and coping among graduate trainees in counseling and clinical psychology. A review of the literature reveals graduate trainees experience increased levels of stress which put them at risk of early career burnout. Financial burdens, academic pressures, and strain unique to psychotherapy function as significant stressors for graduate trainees. Previous research has also pointed to the salutary impact of self-care and coping strategies on well-being. Mentoring programs along with structured systems of support are growing in popularity to enhance coping self-efficacy and promote self-care among trainees. The current study examines the relationship between self-care, coping self-efficacy, and stress to address this gap in the literature. This study also assesses the impact of length in stay in graduate school and social support programs on self-care, coping self-efficacy, and perceived stress.

**Research Question & Hypotheses:**

**Question 1:** Are there relationships among participants’ self-care utilization measured by the (SCUQ), perceived stress measured by the (PSS10), and coping self-efficacy measured by the (CSE)?

- **Hypothesis 1:** There is an inverse relationship between participants’ self-care utilization and perceived stress, such that participants who score higher on a measure of self-care utilization will score lower on a measure of perceived stress.
• Hypothesis 2: There is a relationship between participants’ self-care utilization and coping self-efficacy, such that participants who score higher on a measure of self-care utilization will score higher on a measure of coping self-efficacy.

• Hypothesis 3: There is an inverse relationship between participants’ coping self-efficacy and perceived stress, such that participants who score higher on a measure of coping self-efficacy will score lower on a measure of perceived stress.

**Question 2:** How will length of time in a psychology training program affect self-care utilization, perceived stress, and coping self-efficacy?

• Hypothesis 4: Students who have been in their graduate training program longer are significantly more likely to engage in self-care practices, demonstrate higher levels of coping self-efficacy and lower levels of perceived stress.

**Question 3:** How will participation in a mentoring program affect self-care utilization, perceived stress, and coping self-efficacy?

• Hypothesis 5: Students who participate in mentoring provided by their graduate training program are significantly more likely to engage in self-care practices, demonstrate higher levels of coping self-efficacy and lower levels of perceived stress.

**Question 4:** Is self-care utilization stronger than coping self-efficacy in predicting perceived stress?

• Hypothesis 6: Self-care utilization is stronger than coping self-efficacy in predicting perceived stress. That is, self-care utilization will account for the majority of the variance in perceived stress.
Chapter 3

Method

This study was designed to evaluate the relationship between perceived stress, coping self-efficacy, and self-care among graduate trainees in counseling psychology and clinical psychology. An additional goal was to determine the impact of variables such as length of time in training program and participation in mentoring programs on primary variables (i.e. perceived stress, coping self-efficacy, and self-care). This chapter describes the participants in the study, variables, data analysis, research questions, and hypotheses.

Participants

The current study included 168 students currently enrolled in psychology graduate training programs. The sample was split fairly evenly between individuals enrolled in Ph.D. and Psy.D. programs, 54.1% and 45.9% respectively. The sample was also split about evenly between Counseling (47.5%) and Clinical (52.5%) programs. Demographic compositions across gender, ethnicity, and sexual orientation were largely homogenous as seen in Table 1. Comparing demographics of the current study to a survey a completed by the American Psychological Association demonstrated comparable distributions across ethnicity. However, the current study was comprised of a higher rate of female respondents compared to the national sample, 85% versus 72% respectively (Cope, Michalski, & Fowler, 2016). For length in program, participants selected between options ranging from 1 to 6 + years. The mean year in program was 2.83 (SD = 1.54) with adequate representation across years.

Respondents were also asked about their participation in mentoring provided by their graduate training program. 77.4% of respondents reported their program provided mentoring, while 11.9% reported their program did not provide mentoring and 10.7% were unsure. Of those
### Demographic Characteristics of Participants

<table>
<thead>
<tr>
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<td>42</td>
<td>25</td>
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</table>

*Note. N=168*
reporting their training programs provided mentoring, 29.8% stated they participate as a mentee, 4.2% as a mentor, 32.1% as both a mentee and mentor, with 33.9% not reporting. The majority of participants also reported they were currently seeing clients/patients 78.6% as a part of their practicum, externship, or internship experience with the remaining 21.4% reporting they were not.

Measures

Demographic Measure: Participants responded to various demographic questions (e.g. marital status, ethnicity, degree type, program of training, years in program), in addition to detailing their participation in mentoring programs. Participants were also asked to select their top three stressors such as academic/course work pressures, marital/relationship issues, burnout or compassion fatigue, etc.

Perceived Stress: The 10-item Perceived Stress Scale (PSS10) is designed to assess the amount of perceived stress experienced (Cohen, Kamarck, & Mermelstein, 1983), and asks respondents to think about stressful situations from the past month (Cohen et al., 1983). The PSS10 asks participants to respond based on a 5-point Likert scale (0=Never, 4=Very Often). The PSS10 is an abbreviated version of the PSS14 which also used a 5-point Likert scale and asked respondents to consider stressful situations over the previous month. 4 items from the PSS14 were dropped following an analysis which revealed an alpha coefficient of .75. This was lower than previous studies conducted by Cohen et al (1983) which reported alpha coefficients of .84-.86 across three samples, suggesting adequate internal consistency. As a result, four items with the lowest factor loadings were removed, providing the PSS10 with a final alpha coefficient of .78 in Cohen and Williamson’s study (1988).
**Self-Care Utilization:** Given the paucity of empirical research on self-care among psychology graduate trainees, few instruments have been developed and consistently used when measuring self-care. For the current study, the Self-Care Utilization Questionnaire (SCUQ) developed by Gnocher et al (2013), was used to measure levels of participation in self-care activities among doctoral trainees in clinical psychology. The SCUQ consists of 30 items pertaining to various self-care strategies or activities. Participants are asked to respond on a 5-point Likert scale ($1=Never$, $5=Almost Always$). The 2013 study by Gnocher and colleagues revealed a satisfactory alpha coefficient of .89. Correlations between SCUQ and a Quality of Live index revealed a strong positive correlation of .68 ($p<.001$), providing evidence of convergent validity.

**Coping Self-Efficacy:** The 26-item Coping Self-Efficacy (CSE) measure was designed to assess the perceived ability and confidence to cope with difficult life situations (Chesney et al. 2006). Participants are asked to respond on a 10-point Likert scale ($1=Cannot Do at All$, $10=Certain Can Do$). In a study to assess reliability and validity of the measure, the CSE was tested in two randomized clinical trials among individuals who received coping effectiveness training. Exploratory and confirmatory factor analysis revealed three coping domains; problem focused coping, stopping unpleasant emotions or thoughts, and getting support from friends and family. All three domains provided alpha coefficients of .91, .91, .80, respectively.

**Procedures**

Participants were recruited for this study by randomly selecting American Psychology Association (APA) accredited counseling and clinical psychology programs provided by Division 17 (Counseling Psychology) and 12 (Clinical Psychology) of APA. Once selected, training directors from each program were identified and contacted via email (see appendix E)
with a request to distribute the study to current students. In the message for participants, the aim of the study was discussed along with potential implications which included the enhancement of self-care practices for graduate students. Within the message for participants was a link to the online survey. Upon selecting the link, participants were directed to the online survey where they were first provided with informed consent, followed by demographic questions, PSS10, SCUQ, and CSE. Administration of the survey took approximately 5-10 minutes to complete, and allowed participants to return to the survey for completion at a later time. Due to the anonymous method of survey distribution, response rates could not be determined.

**Plan of analysis**

**Descriptives:** Reliability analyses were conducted to determine the consistency of measures. Cronbach’s reliability $\alpha > .70$ is considered acceptable fit (George & Mallery, 2003), with a higher $\alpha$ indicating greater internal reliability. PSS10, SCQU, and CSE demonstrated adequate reliability based on Cronbach alpha coefficients of .85, .85, and .93 respectively.

**Correlations:** In order to address the first three hypotheses of the study, analyses were performed in SPSS Version 22.0. In assessing the relationships among perceived stress, self-care utilization, and coping self-efficacy (Hypothesis 1-3), bivariate intercorrelations were computed.

**Analysis of Variance:** To address whether number of years in program effected perceived stress, self-care utilization, and coping self-efficacy (Hypothesis 4), a MANOVA was conducted. Years in training program was recoded and compressed into a categorical variable. The three groups were created for years in program: 1) students in their first and second year “beginning program” (n=65), 2) students in their third and fourth year “middle of program” (n=45), and 3) students in their 5 year and higher “end of program” (n=23). Tukey’s post hoc analysis was selected to determine between-group differences. To address whether involvement
in mentoring affected self-care utilization and perceived stress (*Hypothesis 5*), a MANOVA was also conducted. Two groups were created for mentor involvement: 1) students who were not participating in mentoring program “no participation” (n=30), and 2) students who were participating in mentoring as a mentee and/or mentor “mentee participation” (n=90). Again, Tukey’s post hoc analysis was selected to determine between-group differences.

**Regression:** Finally, in determining effects of self-care utilization and coping self-efficacy on perceived stress (*Hypothesis 6*), a multiple linear regression was conducted. Continuous variables of SCQU and SCE were the independent variables in the model with PSS10 as the continuous dependent variable.
Chapter 4: Results

The first research question guiding this study examined the relationships among perceived stress, coping self-efficacy, and self-care among psychology graduate trainees. The second and third research questions involve the effects of length of time in a psychology training program and participation in mentoring programs. And finally, the strength of self-care and coping self-efficacy were tested as predictors of perceived stress. Based on the prior literature, six hypotheses were developed to answer these questions. This chapter reviews bivariate relationships among the primary variables of interest, group comparisons, and hierarchical linear regression analyses to address the research hypotheses of this study.

Descriptive Analyses

Descriptive analyses identified the reported levels of self-care, coping self-efficacy, and stress. Scores on the 10-item PSS ranged from 0-40 (\(\bar{X}=28.58, SD=5.65\)), while scores on the SCUQ ranging from 0-150 (\(\bar{X}=100.49, SD=12.04\)), and scores on the CSE ranging from 0-250 (\(\bar{X}=165.23, SD=31.36\)).

Correlation among Variables

**Hypothesis 1.** When examining hypothesis 1 (*There is an inverse relationship between participants’ self-care utilization and perceived stress, such that participants who score higher on a measure of self-care utilization will score lower on a measure of perceived stress.*), a bivariate intercorrelation between self-care utilization (SCUQ) and perceived stress (PSS) was examined. A strong inverse relationship was found between self-care utilization and perceived stress (\(r = -.40; p < .01\)).

**Hypothesis 2.** When examining hypothesis 2 (*There is a relationship between participants’ self-care utilization and coping self-efficacy, such that participants who score*
higher on a measure of self-care utilization will score higher on a measure of coping self-efficacy.), a bivariate intercorrelation was used to examine the relationship between self-care utilization (SCUQ) and coping self-efficacy (CSE). A strong positive relationship was found between self-care utilization and coping self-efficacy ($r = .63; p < .01$).

**Hypothesis 3.** When examining hypothesis 3 (*There is an inverse relationship between participants’ coping self-efficacy and perceived stress, such that participants who score higher on a measure of coping self-efficacy will score lower on a measure of perceived stress.*), a bivariate intercorrelation was also used to examine the relationship between coping self-efficacy (CSE) and perceived stress (PSS). A strong inverse relationship was found between coping self-efficacy and perceived stress ($r = -.49; p < .01$).

| Table 2. Correlations between Perceived Stress, Self-Care, and Coping Self-Efficacy |
|----------------------------------|------------------|------------------|------------------|
| Variables of Interest | Perceived Stress | Self-Care | Coping Self-Efficacy |
| Perceived Stress | -    | -    | -    |
| Self-Care | -.40** | -    | -    |
| Coping Self-Efficacy | -.487** | .634** | -    |

** Denotes significance level of $p < .01$.

**Group Comparisons**

In order to analyze variables of perceived stress, self-care, and coping self-efficacy based on sexual orientation, marital status, gender, degree, program, year in program, and participation in mentoring, a one-way between-groups MANOVA was conducted. A statistically significant difference was found on scores of coping self-efficacy by marital status (Table 3). Married participants revealed significantly higher scores when compared to single and unmarried individuals. However, scores on perceived stress and self-care were not significantly different
based on marital status. No significant differences were found on perceived stress based on gender, degree, or program (Tables 4-7). Analyses of the dependent variables were not performed on ethnicity and sexual orientation due to insufficient variability within each independent variable.

Table 3. Means and Standard Deviations for Self-Care and Coping Self-Efficacy by Marital Status

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Single (n = 80)</th>
<th>Married (n = 52)</th>
<th>Unmarried (n = 36)</th>
<th>Total (n = 168)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Care</td>
<td>101.31 (11.92)</td>
<td>102.60 (12.93)</td>
<td>100.56 (12.24)</td>
<td>101.56 (12.06)</td>
<td>.78</td>
</tr>
<tr>
<td>Coping Self-Efficacy</td>
<td>163.69 (29.02)</td>
<td>176.25 (34.87)</td>
<td>153.44 (29.98)</td>
<td>165.54 (31.83)</td>
<td>&lt; .05</td>
</tr>
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</table>

Table 4: MANOVA of Self-Care and Coping Self-Efficacy by Demographic Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
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<th>df</th>
<th>p</th>
<th>Partial Eta Squared</th>
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<td>3</td>
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<td>Program</td>
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<td>&lt;.05</td>
<td>.047</td>
</tr>
<tr>
<td>Gender</td>
<td>.977</td>
<td>1.493</td>
<td>3</td>
<td>.229</td>
<td>.030</td>
</tr>
</tbody>
</table>

**Hypothesis 4.** When examining hypothesis 4 (*Students who have been in their graduate training program longer are significantly more likely to demonstrate lower scores in perceived stress and higher scores in self-care practices and coping self-efficacy.*), a one-way between-groups MANOVA was conducted. Prior to collapsing the variable into three groups (i.e., beginning program, middle program, and end of program), bivariate correlations were performed between length in program (years 1-6) and perceived stress, self-care, and coping self-efficacy. No statistically significant relationships were found. A one-way between-groups MANOVA was conducted comparing mean scores of perceived stress, self-care, and coping self-efficacy of the
collapsed groups (beginning program, middle program, and end of program). While participants near the end of their program revealed higher scores on self-care, overall differences were not statistically significant (Tables 8 & 9).

Table 8: MANOVA of Differences in Self-Care and Coping Self-Efficacy by Stage in Program and by Mentoring Participation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>Partial Eta Squared</th>
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</thead>
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<tr>
<td>Stage in Program</td>
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<td>.282</td>
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<td>Mentoring Participation</td>
<td>.984</td>
<td>.932</td>
<td>3</td>
<td>.397</td>
<td>.016</td>
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</tbody>
</table>

**Hypothesis 5.** When examining hypothesis 5 (*Students who participate in mentoring provided by their graduate training program are more likely to demonstrate lower scores in perceived stress and higher scores in self-care practices and coping self-efficacy.*). A one-way between-groups MANOVA was conducted to examine general effects of mentoring participation. Different groups of respondents participating in mentoring programs were collapsed into one group and compared with respondents who reported participation. While mean scores revealed differences in directions consistent with the hypotheses, no statistically significant differences in perceived stress, self-care practices, and coping self-efficacy were found between respondents who participated in mentoring and participants who did not (Tables 8 & 10).

**Regression Analysis**

**Hypothesis 6:** When examining hypothesis 6 (*Self-care utilization is stronger than coping self-efficacy in predicting perceived stress. That is, self-care utilization will account for the majority of the variance in perceived stress.*.) a hierarchical regression was performed. Preliminary analyses were conducted to ensure no violation of the assumptions of normality,
linearity, multicollinearity and homoscedasticity. Variance Inflation Factor was 1.673, falling within an acceptable range. Coping self-efficacy was entered at step 1, explaining 24% of the variance in perceived stress, $F(1, 131) = 40.64, p < .001$. After adding self-care utilization at step 2, the model change was not statistically significant ($p = .146$) (Table 11).

To further examine the relationship between coping self-efficacy, self-care utilization, and stress, the two primary independent variables were entered into the model with self-care utilization at step 1, and coping self-efficacy at step 2. Preliminary analyses were conducted again to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Variance Inflation Factor was 1.673, falling within an acceptable range. After entering self-care utilization at step 1, 16% of the variance in perceived stress was explained. Once entry of coping self-efficacy was performed at step 2, the total variance explained by the model as a whole was 25%, $F(2, 130) = 21.57, p < .001$. The measure of coping self-efficacy explained an additional 9.3% of the variance in stress, after controlling for self-care utilization, $R^2$ squared change = .093, $F$ change (1, 131) = 16.19, $p < .001$ (Table 12).

Table 11: Summary of Regression Analysis for self-care and coping self-efficacy predicting perceived stress

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<td>$\beta$</td>
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<td>-.067</td>
<td>.046</td>
<td>-.144</td>
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</table>

$R^2$  

.237  

.249

Note. *Denotes significance level of $p < .05$
Table 12: Summary of Regression Analysis for self-care and coping self-efficacy predicting perceived stress

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Note. *Denotes significance level of $p < .05$
Chapter 5: Discussion

Summary of Results

The aim of this study was to further explore the impact of self-care and coping self-efficacy on stress among counseling psychology and clinical psychology graduate trainees. Specifically, this study examined the relationship between self-care utilization, coping self-efficacy, and perceived stress (Hypotheses 1-3), as well as self-care utilization by years in training program (Hypothesis 4), self-care utilization by participation in mentoring program (Hypothesis 5), and unique impact of self-care utilization and coping self-efficacy on perceived stress (Hypothesis 6).

The primary variables of interest (i.e., self-care utilization, coping self-efficacy, and perceived stress) demonstrated significant relationships confirming the first three hypotheses. A strong relationship between self-care utilization and perceived stress was found among participants. Individuals who reported higher levels of self-care utilization reported significantly lower levels of perceived stress $r = -0.40$ (Hypothesis 1). A stronger relationship was found between coping self-efficacy and perceived stress, where participants who reported higher levels of coping self-efficacy reported significantly lower levels of perceived stress $r = -0.49$ (Hypothesis 2). Finally, a significant positive relationship was found between self-care utilization and coping self-efficacy $r = 0.63$ (Hypothesis 3). Individuals reporting high levels of self-care utilization also reported high levels of coping self-efficacy. These findings suggest that participants with higher levels of confidence in their ability to successfully engage in coping strategies were more likely to engage in self-care behaviors. As reported levels of self-care and coping self-efficacy increased, participants reported lower levels of perceived stress. These findings also provide convergent validity for the measure of self-care utilization. Both constructs of self-care and
coping aim to reduce distress through cognitive and behavioral strategies (Barnett, 2006; Lazarus & Folkman, 1984). Since this study used a correllational analysis, a temporal relationship cannot be determined. Previous literature suggests a reciprocal relationship between self-efficacy and task completion (Bandura 1977).

Upon further investigation of self-care, coping self-efficacy, and perceived stress, potential effects of duration in program were also examined. No relationship was found between length in program and the primary variables of interest (i.e., self-care, coping self-efficacy and perceived stress) (Hypothesis 4). Based on a review of literature, these finding were somewhat surprising. In their survey of psychology graduate students, El-Ghoroury and colleagues (2012) found academic/course work pressures and finances/debt to be the top two sources of distress. Hence, it was hypothesized that as one progressed through their program, debt and course work would accumulate and result in higher levels of distress. One of the potential moderating variables affecting the course of perceived stress throughout graduate training was participation in mentoring programs. However, no relationship was found between participation in mentoring programs and the primary variables of interest (i.e., self-care, coping self-efficacy, and stress) (Hypothesis 5). This was also somewhat surprising based on previous literature suggesting that graduate students in programs emphasizing self-care practices demonstrated higher levels of life satisfaction (Goncher, 2013). However, significant differences in coping self-efficacy were found by marital status. Participants who indicated they were married endorsed higher levels of coping self-efficacy. These findings are consistent with research that suggests social support can inform and enhance coping strategies and beliefs of self-efficacy in that domain (Lent, 2004). The present study also found self-care, coping self-efficacy, and perceived stress were not significantly different as a function of program type, degree type, sexual orientation, or gender.
Examining the individual effects of self-care and coping self-efficacy on perceived stress, the variables were used in a hierarchical regression model. When self-care utilization and coping self-efficacy were entered into two different models first, coping self-efficacy accounted for a larger portion of unique variance than self-care utilization on perceived stress. Additionally, when self-care utilization was entered second in the hierarchical regression, the model change was statistically insignificant. This suggests coping self-efficacy has a larger unique effect than self-care utilization on perceived stress. These findings run counter to the prediction that self-care utilization would account for more unique variance than coping self-efficacy in perceived stress (Hypothesis 6).

Limitations

One limitation of the present study is the cross-sectional analysis utilized to examine the relationships among self-care utilization, coping self-efficacy, and perceived stress. While constructs of coping and self-care have many similarities in their strategies to reduce and prevent distress, the primary distinction is their temporal relationship to a stressor or stressful event. Self-care is seen as a proactive measure aimed at reducing daily stress and lessening the impact of unforeseen or impending stressors, while coping is employed in response to a stressful event in attempts to mitigate associated distress (Barnett et al., 2006). Therefore, the cross-sectional method used in the present study is unable to assess the effects of self-care and coping self-efficacy on perceived stress in relationship to time of an ongoing stressor or stressful event. Longitudinal studies, or studies with multiple observations, would be better fit to examine this relationship.

Another limitation was the measure used for self-care. Due to the paucity of research on self-care among health care professionals, available instruments to measure this construct are
limited. The measure used by Gnocher and colleagues (2013) was created to assess self-care among graduate trainees in clinical psychology. While the measure was derived from foundational literature on self-care, theirs is the only published study utilizing the SCUQ to measure self-care to our knowledge. One of the aims of the current study was to further assess the utility of the SCUQ by providing convergent validity with a commonly used measure of coping.

Another limitation in the present study were assumptions made regarding participation in mentoring programs. Based on previous literature, psychology training programs that emphasized self-care also had students who demonstrated higher levels of self-care (Gnocher et al. 2013). Provision of mentoring programs and student participation in mentoring programs was seen as an easily identifiable extension of program emphasis on self-care. While participation and provision of mentoring programs were determined, frequency and nature of mentoring programs were not assessed in the present study. For example, it is possible that the type of mentoring programs assessed in the present study were merely research focused and did not emphasize self-care.

**Conclusion**

Significant relationships were found among the three primary variable of interest (i.e., self-care utilization, coping self-efficacy, and perceived stress). Participants who reported higher levels of self-care utilization reported significantly lower levels of perceived stress. A stronger relationship was found between coping self-efficacy and perceived stress, where participants who reported higher levels of coping self-efficacy reported significantly lower levels of perceived stress. A significant positive relationship was also found between self-care utilization
and coping self-efficacy. Also, coping self-efficacy was found to have a larger unique effect when compared to self-care utilization on perceived stress.

Self-care utilization, coping self-efficacy, and perceived stress were not different as a function of length in program. Also, no relationship was found between participation in mentoring programs and the primary variables of interest (i.e., self-care, coping self-efficacy, and stress). The present study also found self-care, coping self-efficacy, and perceived stress were not significantly different as a function of program type, degree type, sexual orientation, marital status, or gender.

Limitations of the study include inability to assess the relationship of self-care and coping self-efficacy on perceived stress in a temporal manner, limited available measures of self-care due to a paucity of research in this area, and unclear nature of mentoring participation. Future studies should address these areas of limitation through use of methods allowing for multiple observations across time and more precise measures of mentoring programs.

**Implications**

There are a number of implications from the present study for future research. Subsequent studies would benefit from a precise definition of mentoring and assessment. Mentoring relationships vary in a number of ways which can make assessment difficult. A clearer understanding of factors such as frequency and goals of mentoring would cultivate better understanding by determining which relationship fit the general definition of a mentoring relationship. Additionally, further research on mentoring relationships should examine the perceived quality of such relationships. Students who participate in programs while also reporting benefit along established goals may demonstrate associated benefits differently than students who only report participation with fewer reported benefits.
In addition to the quality of relationships assessed, formal and informal forms of mentorship should also be examined. As mentioned earlier, previous research has demonstrated that social relationships impact mental health and pro-social behaviors. As a result, it is possible individuals may receive benefits from informal mentoring relationships that are similar to formal mentoring relationships. These studies would help determine the necessity of formal mentoring programs compared to programmatic facilitation and emphasis on informal social support between students. Longitudinal studies would also add to the literature which suggests mentoring relationships have a positive impact on early career psychologists. These types of studies could also distinguish the type of benefits experienced by early career psychologists involved in mentoring programs during graduate school.
References


Freud, Sigmund. (1905) *Dora: An Analysis of Case Hysteria*


Smith, P. L., & Moss, S. B. (2009). Psychologists impairment: what is it, how can it be prevented, and what can be done to address it? Clinical Psychology: Science and Practice, 16(1), 1-15


Appendix A

Demographic Measure

1. Which of the following degrees are you currently obtaining?
   a. Ph.D.
   b. Psy.D.
   c. Other

1. Which of the following programs are you currently enrolled in?
   a. Counseling Psychology
   b. Clinical Psychology
   c. Other __________

2. What year are you in your psychology training program?
   a. 1
   b. 2
   c. 3
   d. 4
   e. 5
   f. 6+

3. Are you currently seeing clients/patients as a part of your practica or internship experience?
   a. Yes
   b. No

4. Marital status:
   a. Single
   b. Married
c. Unmarried, living with partner
d. Separated
e. Divorced
f. Widowed

5. Sexual orientation:
   a. Heterosexual
   b. Gay/Lesbian
c. Bisexual
d. Other: __________

6. Race/ethnicity: (Choose all that apply)
   a. Asian American/Pacific Islander
   b. Black/African American
c. Caucasian/White American
d. Hispanic/Latino American
e. Native American
f. Other ________________

7. Does your psychology training program provide mentoring by either graduate peers or faculty?
   a. Yes
   b. No
   c. Not Sure

8. If mentoring is provided by your program, do you participate?
   a. Yes, I participate as a mentee
b. Yes, I participate as a mentor

c. Yes, I participate as a mentee and mentor

d. I do not participate

e. Not applicable
Appendix B

Self-Care Utilization Questionnaire

Please indicate your level of agreement with each of the following statements.

Circle the appropriate number as follows:

1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Almost Always

1. I talk to someone during stressful periods.
2. I make time to engage in leisure activities regardless of my workload.
3. When feeling stressed about school or clinical work, I seek supervision.
4. I attend personal psychotherapy sessions to address feelings of distress during my graduate training.
5. I take inventory of possible warning signs of distress and seek out self care strategies to manage them.
6. I make time to engage in physical activity.
7. I attend workshops that provide instruction on positive stress management techniques (i.e., relaxation methods, meditation, etc….)
8. I discuss personal, emotional, physical, and spiritual development with significant others.
9. I take vacations during the year.
10. I take part in peer supervision when clinical work becomes difficult.
11. I engage in personal hobbies outside the realm of psychology.
12. I attend to my personal religious and spiritual needs.
13. When feeling distressed, I feel it’s OK to take a break from what I am doing.
14. I take time to be aware of my diet and use healthy eating habits.
15. When overwhelmed, I take time to think about and use positive ways to cope with stress.
16. When stressed, I use positive self-talk to put aside negative thoughts.
17. I take part in many personally fulfilling activities.
18. I maintain a strong support groups including family, friends, and faculty.
19. I choose clinical activities that interest me.
20. I work to create a comfortable work environment for myself.
21. I take time to volunteer in the community.
22. I maintain a balance between work, family, and play.
23. I avoid self-blame and self-denigration.
24. I think back to positive, life transforming, or breakthrough moments with a client as a way to appreciate the rewards of clinical work.
25. I use my sense of humor when feeling overwhelmed or stressed.
26. I set realistic goals for myself regarding academic and clinical work.
27. I seek positive solutions to difficulties I encounter.
28. I actively try to be in touch with my feelings in the moment.
29. I attend to feedback from others regarding my stress level and
professional functioning.

30. I maintain self-awareness of the impact that my personal and professional experiences have on me and my work.
Appendix C

Coping Self-Efficacy Scale

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<tr>
<th>Cannot do at all</th>
<th>Moderately certain can do</th>
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<tr>
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When things aren’t going well for you, or when you’re having problems, how confident or certain are you that you can do the following:

For each of the following items, write a number from 0 – 10, using the scale above.

\[
0 = \text{cannot do at all}, \quad 5 = \text{moderately certain can do}, \quad \text{and} \quad 10 = \text{certain can do.}
\]

1. Keep from getting down in the dumps.
2. Talk positively to yourself.
3. Sort out what can be changed, and what cannot be changed.
4. Get emotional support from friends and family.
5. Find solutions to your most difficult problems.
7. Leave options open when things get stressful.
8. Make a plan of action and follow it when confronted with a problem.
9. Develop new hobbies or recreations.
10. Take your mind off unpleasant thoughts.
11. Look for something good in a negative situation.
12. See things from the other person’s point of view during a heated argument.
13. Try other solutions to your problems if your first solutions don’t work.

14. Stop yourself from being upset by unpleasant thoughts.

15. Make new friends.

16. Get friends to help you with the things you need.

17. Do something positive for yourself when you are feeling discouraged.

18. Make unpleasant thoughts go away.

19. Think about one part of the problem at a time.

20. Visualize a pleasant activity or place.


22. Pray or meditate.

23. Get emotional support from community organizations or resources.

24. Stand your ground and fight for what you want.

25. Resist the impulse to act hastily when under pressure.
Appendix D

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 how often you felt or thought a certain way.

Never            Almost Never            Sometimes            Fairly Often            Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and “stressed”?

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

5. In the last month, how often have you felt that things were going your way?

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

7. In the last month, how often have you been able to control irritations in your life?

8. In the last month, how often have you felt that you were on top of things?

9. In the last month, how often have you been angered because of things that were outside of your control?

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
Appendix E
Recruitment Letter

Dear Dr. ___,

My name is Erik Clarke and I am a doctoral student in the Counseling Psychology program at the University of Kansas. Under the guidance of Dr. Tom Krieshok, I am currently recruiting participants for my dissertation study. This study will examine the role of self-care behaviors among counseling psychology doctoral students. Through this study, we hope to gain a deeper understanding of the negative and beneficial impact self-care plays during the graduate training experience. As mental health practitioners, self-care plays a large role in our professional and non-professional lives.

I would like to ask for your help in forwarding the participation request below to graduate students in your program. This research has been approved by the Human Subjects Committee Lawrence, of the University of Kansas (IRB # STUDY 00004322). If you have any further questions, please feel free to contact me at ewclarke@ku.edu or Dr. Tom Krieshok at tkrieshok@ku.edu. I greatly appreciate your time and consideration of this request.

Sincerely,

Erik Clarke, M.S.
Doctoral Candidate in Counseling Psychology
University of Kansas
Dear participant,

My name is Erik Clarke and I am doctoral student in the counseling psychology program at the University of Kansas. I am currently conducting a study for my dissertation focused on the role self-care plays in the experience of graduate students in counseling and clinical psychology training programs. Given the scant amount of research in this area, your participation will have a significant role in helping our field and training programs better understand and subsequently augment self-care practices.

Participation includes a brief survey that takes approximately 7 minutes to complete. The survey includes demographic questions along with questions about your daily activities and experiences. To participate in the study, you must be currently enrolled in a counseling or clinical psychology training program and 18 years-old. For your convenience, a solid bar will appear at the top of your survey to track your progress towards completion. If you would like to participate in this study, please click on the link below and you will be directed to the survey:

https://lehigh.co1.qualtrics.com/SE/?SID=SV_9GNyMbKEDMABFRj

To ensure your confidentiality, all data will be assigned unique codes and de-identified. Care will also be taken to ensure that the identity of participants cannot be inferred from any of the details provided in the final report. This research has been approved by the Human Subjects Committee Lawrence, of the University of Kansas (IRB # STUDY00004322). If you have any question about this study, please feel free to contact me at ewclarke@ku.edu or my advisor, Dr. Tom Krieshok at tkrieshok@ku.edu. Thank you very much for your time and consideration!

Sincerely,
Erik Clarke, M.S.

Doctoral Candidate in Counseling Psychology

University of Kansas