THE EFFECTS OF SELF-CARE PRACTICES ON PERCIEVED STRESS OF SCHOOL PSYCHOLOGY GRADUATE STUDENTS

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

THE EFFECTS OF SELF-CARE PRACTICES ON PERCEIVED STRESS OF SCHOOL PSYCHOLOGY GRADUATE STUDENTS

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The perceived stress levels of psychology graduate students across the nation is greatly increasing. Stress can lead to many mental health disorders in students, along with a lack of enthusiasm and meaning in one's work, impairment in ethical decision making, lack of compassion for clients, burnout, and neglecting one's physical health. A majority of the research regarding perceived stress and psychology graduate students include clinical and counseling psychology, yet school psychology graduate students share the same responsibilities and roles. School psychology graduate students balance rigorous coursework, graduate assistantships, supervising meetings for their training, research, and additional service opportunities with life outside of graduate school. A stress reduction technique commonly researched with graduate students is self-care, the process of actively initiating a method to promote holistic well-being. According to the participant's responses, self-care practices do not have an effect on school psychology graduate students' levels of stress. However, the graduate students noted that program expectations, such as time limitations and an excessive workload, are their largest stressors and physical and emotional self-care practices are utilized the most amongst the participants.

Introduction

While many Americans of all ages deal with mental health issues at one point or another, the prevalence of young adults in America experiencing different types of mental health difficulties has been rising significantly over the past decade (Sliwa, 2019). Mental health includes emotional, psychological, and social well-being. It affects how people think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Symptoms of poor mental health include social withdrawal, loss of interest or engagement in activities once enjoyed, drastic mood changes, confused thoughts or lack of concentration, detachment form people or surroundings, excessive worry or anxiety, dramatic changes to sleep or eating patterns, peculiar or exaggerated behavior, difficulty coping with everyday problems, substance abuse, and suicidal ideation (Parekh, 2018).

Mental health is important at every stage of life, from childhood and adolescence through adulthood (Metnalhealth.gov, n.d.). Poor mental health among young people has been described as an epidemic and an escalating crisis (Sliwa, 2019). Poor mental health is the third most common cause of hospitalization in the United States for both youth and adults ages 18 to 24 (Glick, 2018). The statistics on mental health in young adults in America have prompted calls for the expansion in mental health training for professionals in all related fields.

It is of particular concern that the portion of people between the ages of 18 to 25 years old suffering from mental health difficulties has been steadily rising since 2011 (Glick, 2018). Research was conducted by the National Institute of Mental Health (2017) on the prevalence of mental illnesses in the United States. Mental illness was defined as mental, behavioral, or emotional symptoms that can vary in impact, ranging from no impairment to mild, moderate, and even severe impairment. These impairments can lead to affecting one or more life activities. The

research found that young adults aged 18 to 25 years old had the highest prevalence of any mental illness (25.8%) compared to adults aged 26 to 49 years old (22.2%) and adults aged 50 years and older (13.8%). In addition, young adults aged 18 to 25 years old had the highest prevalence of serious mental illness (7.5%) compared to adults aged 26 to 49 years old (5.6%) and adults aged 50 years and older (2.7%).

In other research conducted by Sliwa (2019), the rate of adolescents aged 12 to 17 reporting symptoms of depression and serious psychological distress in the past 12 months had increased by 52% from 2005 to 2017 and by 63% in young adults ages 18 to 25 years old from 2009 to 2017. Suicidal thoughts in young adults or other suicide-related outcomes, a symptom of serious psychological distress, also saw rates increase by 47% from 2008 to 2017. None of these increases in depression, serious psychological distress, or suicidal thoughts were found in older adults during these time periods. The research has actually found a decline in psychological distress in individuals over the age of 65 (Sliwa, 2019).

There are many possible factors that could explain the increase in mental health difficulties among young adults today that is not seen at other ages. These include an increased level of loneliness, family breakup, and childhood neglect and trauma; an unhealthy diet and lack of physical exercise; an increased use of electronic communication and digital media; a decrease in levels of sleep; genetic and environmental factors; negative relationships; and the pressure of competition in the workplace and schools (Innovation Unit, 2017; Parekh, 2018 & Sliwa, 2019). In addition to these factors, the added responsibilities of being a graduate student contributes to even greater mental health difficulties. This study will specifically look at mental health needs of school psychology graduate students.

Literature Review

Mental Health and Stress in Graduate Programs

Published research has been increasingly reporting on mental health and perceived stress in graduate students in programs across the United States. Stress can be defined as the perception that the demands of an external situation are beyond one's ability to cope (Lazaurs, 1996) and is a factor that can affect one's overall mental health and well-being. Academic fields, such as Law, Nursing, Medicine, Clinical Psychology, and Counseling Psychology are amongst the most researched fields when it comes to graduate student mental health. The current research is reporting that there are growing numbers of graduate school students who experience high stress, resulting in poorer emotional, academic, and health outcomes (Yusufov, Nicoloro-Santa Barbara, Gray, Moyer, & Lobel, 2018). Over 70% of graduate students report a level of stress that interferes with their functioning (El-Ghoroury, Gaper, Sawaqdeh, & Bufka, 2012). In the past 25 years, graduate students' perceptions of their own mental health have been declining and the current generation of students report that they struggle with stress management far more than previous generations (Yusufov et al., 2018).

Graduate students face a significant amount of stress, especially those in medical, helping, and clinically oriented graduate programs (Yusufov et al., 2018). There is evidence that younger and newer helping professionals are particularly susceptible to occupational stress (Shapiro, Brown, & Biegel, 2007). It has been shown in existing literature that graduate students in clinical and counseling psychology programs show rates of physical and mental health symptomology that are higher than those in the general population and medical students (Rummell, 2015). Graduate students in clinical and counseling psychology programs must balance multiple professional and personal roles, go through complex educational systems, and

respond well to constructive feedback (Rummell, 2015). These clinical and counseling graduate students also report chronic negative physical health symptoms, with these symptoms increasing with greater workload.

Graduate students in all programs not only engage in strenuous and in-depth theoretical learning but are also responsible for patients or clients and deal with a lack of knowledge and experience in a novel environment. Some graduate students report low confidence and an inability to complete tasks, which lead to increase anxiety, perceived stress, and depression (Yusufov et al., 2018). The evaluative and often highly competitive nature of graduate training can introduce students to greater vulnerability to stressors and lack of adequate coping skills (Rummell, 2015). Facing these challenges with insufficient coping skills can have a negative impact on students' psychological and physical well-being.

Stress can often lead to depression, anxiety, and other mental health disorders in students. It can also lead to a lack of sleep, psychiatric disorders, substance abuse, poor physical health, attrition from their graduate program, and poor academic performance (Yusufov et al., 2018). Increased levels of perceived stress can also lead to loss of enthusiasm and meaning in one's work, impairment in ethical decision making, lack of compassion for patients and clients, burnout, and neglecting one's physical health (Rummell, 2015).

Common stressors among graduate students. There are a wide range of stressors that can affect graduate students' perceived stress and mental health. These stressors include academic pressures, social challenges, family strains, financial concerns, career decisions, perceived competitive nature of graduate school, inadequate performance feedback, lack of adequate support from supervisors and faculty, limited use of mental health counseling, the type of instructional methods used in coursework, value conflicts or cognitive dissonance coming

from required new ways of thinking, and falling into the myths surrounding graduate school (El-Ghoroury et al., 2012, Rummell, 2015, Sheehy & Horan, 2004, & Yusufov et al., 2018). The myths that often coincide with graduate school are that students are only as good as their grades and class rank, they will have to study all the time, they must be at the top of their class to be successful, they cannot have social lives in graduate school, and they will have no time for leisure or fun during their time in graduate school (Sheehy & Horan, 2004). Additionally, the cost of higher education has risen 260% from 1980 to 2014 (Yusufov et al., 2018), increasing the financial concern for graduate students in all programs. Finally, there is constant evaluation of student performance and they are regularly expected to accept constructive feedback gracefully while appearing both appropriately self-confident and deferent to their instructors and supervisors (Rummell, 2015).

Graduate students are also balancing multiple professional roles every single day. They are a graduate student with rigorous coursework, they could be an instructor or teaching assistant to an undergraduate class, they could be a supervisee in their clinical training, a researcher, and could also have additional service opportunities, such as volunteering (Colman et al., 2016 & Rummel, 2015). These multiple responsibilities can increase the struggle in balancing their work and school obligations with their life obligations. Poor work and school-life balance has been found to be associated with depression, anxiety, emotional strain, general dissatisfaction with life, and poorer physical well-being (Rummell, 2015).

Clinical and counseling psychology graduate students' mental health and workload. Research done by Rummell (2015) was conducted to explore psychology graduate students' workload, health, and program satisfaction. Self-reports from 119 students in APA-accredited programs in clinical and counseling psychology reported spending about 54.26 hours per week

engaging in activities related to school. These activities included being in class, doing homework, working on research, seeing clients, supervision, assistantship hours, and consulting. At least half of the sample reported experiencing each of the following at least twice a week: headache, backpain, feeling easily fatigued, and irritable bowels. This finding is more than double of the general population. More findings from this survey showed 49.11% of students reporting three or more symptoms of anxiety as occurring multiple times a week, 39.29% of students reporting five or more symptoms of depression as occurring multiple times a week, and 34.82% reporting clinically significant symptoms of both anxiety and depression based on criteria established by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). Of the graduate students surveyed in this study, 23.4% of graduate students surveyed reported that they experience some degree of thoughts of death at some point during their graduate work. However, data was not collected examining whether or not these students had suicidal intent, plans, or the means to harm themselves (Rummell, 2015). Ultimately, this study concluded that the total amount of hours spent engaging in school-related activities was correlated at a significantly positive level with total physical symptoms and total amount of anxiety.

Stress reduction techniques among graduate students. Sheehy and Horan (2004) and Yusufov et al. (2018) conducted studies examining the effects of certain stress reduction interventions among different graduate field programs. The Sheehy and Horan (2004) study compared 158 first-year law student participants receiving stress inoculation training (SIT) over a span of four weeks. The research was conducted because the legal profession is currently overwhelmed with increasing numbers of lawyers who are not satisfied with their careers and abandon the practice of law for seemingly less stressful career alternatives—also known as

attrition. The SIT intervention involved three phases: being educated about the sources of their stress, being taught coping skills directed toward specific stressors, and then exposure to real or simulated situations for practice in using these coping skills. After completing a variety of anxiety, irrationality, and stress scales, researchers found that all participants who received SIT displayed lower levels of anxiety, stress, and irrationality over time. Additionally, the academic ranks of participants predicted to finish in the bottom 20% of their class on the basis of the Law School Admission Test (LSAT) scores reflected noticeable and significant improvement (Sheehy and Horan, 2004).

The study done by Yusufov et al. (2018) used a meta-analytic technique to look at anxiety and perceived stress levels before and after interventions to get a comprehensive analysis of the effectiveness of interventions in reducing graduate students' anxiety and perceived stress. This study looked at six different interventions—cognitive-behavioral therapy (CBT), social support, coping skills training, mindfulness-based stress reduction (MBSR), psychoeducation, and relaxation. CBT aims to identify and change maladaptive thinking and behavior. Social support provides an environment where individuals are encouraged to communicate their experiences, thoughts, and feelings to one another. MBSR enhances one's abilities to attend to present moment experiences in a receptive way to reduce self-focused thoughts and emotions that could lead to poor mental health. Psychoeducation increases the knowledge of the causes of stress and its emotional, cognitive, behavioral, and physiological effects. Finally, relaxation training includes techniques, such as progressive muscle relaxation, guided imagery, meditation and biofeedback designed to reduce or alter the physiological stress response. Of the 43 studies researched in this study, 23 of them examined the effects of relaxation training interventions, 18 examined the effects of psychoeducation, 17 examined the effects coping skills training, 13

examined the effects of CBT, 11 examined the effects of MBSR, and four examined the effects of social support.

In the same study, multiple anxiety and perceived stress measures were used to compare anxiety and perceived stress levels before and after the six different interventions. Results showed that all intervention types showed a significant decrease in both anxiety and perceived stress levels. CBT, coping skills training, and social support interventions were more effective in reducing perceived stress. Relaxation training, MBSR, and psychoeducation were more effective in reducing anxiety (Yusufov et al., 2018).

A stress reduction technique less well studied with graduate students is self-care. Self-care has been defined as the process of actively initiating a method to promote holistic well-being (Colman et al., 2016). This definition implies a wide variety of potential activities that fall under the category of self-care, such as healthy eating, exercise, mindfulness, engaging in hobbies or leisurely activities, maintaining a sufficient sleep schedule, and using adaptive coping strategies (Colman et al., 2016). It also implies that one has to purposefully put forth effort to engage in these activities to maintain wellness across the multiple domains. There are five main areas of self-care: physical, emotional, psychological, spiritual, and professional (Franklin, 2017). Physical self-care is the most common form of self-care that people participate in. Intentionally eating well, developing a consistent workout routine, personal hygiene, and complimenting oneself are examples of physical self-care practices. Emotional self-care is about balance and healthy positive thinking. Taking time to reflect, treating yourself with kindness, talking to someone about personal struggles, crying when necessary, and listing things you love about yourself are examples of emotional self-care practices. Psychological self-care focuses on improving the mental and emotional state of a person. Saying “no” to extra responsibilities in

your life, engaging your intelligence in other topics, making time for self-reflection, and paying attention to your inner experience, such as thoughts, feelings, and attitudes, are examples of psychological self-care practices. Spiritual self-care is the act of getting in touch with your inner human spirit and soul. Examples of spiritual self-care practices are contributing to a cause you care about, meditating, spending time in nature, engaging in inspirational videos or literature, and religious practices. Lastly, professional self-care allows one to obtain a professional life balance. Examples of professional self-care include taking time to chat with peers, decorating your workspace, balancing your workload, developing a hobby outside of work, and creating a quiet and reserved area to get work done.

Self-care has been identified as one potential method for minimizing or getting rid of perceived stress associated with graduate training in professional psychology and has been found to positively affect life satisfaction, physical health, psychological well-being, academic success, and professional burnout domains (Colman et al., 2016). Some would also consider it to be an ethical imperative that psychology graduate students begin self-care practices in graduate school.

Stress and Self-Care in Psychology Graduate Programs

Despite the numerous challenging developmental tasks that all graduate students are encountering in their respected programs, their workload, stress levels, and overall well-being are deeply understudied. This current study looks at the effect of self-care practices specifically in school psychology graduate students across the United States. No research is currently available specific to school psychology graduate programs but there have been some research studies related to psychology graduate students in general.

Self-care and positive outcomes in clinical and counseling psychology graduate students. A meta-analysis to synthesize the findings from 17 studies examining the relationship

between self-care practices and positive outcomes for professional psychology graduate students was conducted by Colman and others, (2016). There were 52 effect sizes derived from the synthesis of these studies indicating that 24 of them showed a significant positive relationship between self-care and measured benefits, 27 indicated a nonsignificant relationship, and 1 indicated a significant negative relationship. The self-care practices were put into three main categories, including mindfulness, seeking social support, and mixed—several different types of self-care activities that were used jointly in a single study or activities that were only tested in one study. The types of outcomes were put into six categories, including psychological distress, gains in self-esteem or self-compassion, grade point average (GPA), satisfaction with some aspect of life, stress, and other.

The results of this meta-analysis indicated that engagement in self-care practices has a positive benefit for professional psychology graduate students, but contrary to their hypothesis, the type of self-care practice was not a significant moderator. More specifically, this effect indicates that about 80% of the psychology graduate students who engage in self-care practices show better outcomes than the average graduate student who does not engage in self-care practices. It was concluded that this meta-analysis supports the overall efficacy of self-care practices for professional psychology graduate students. However, it was also noted that not all studies led to significant benefits from participation in self-care practices and concluded that "there is not a one size fits all self-care plan," to explain those findings. While some students may benefit by engaging in mindfulness, others might notice more benefits while maintaining an exercise routine.

There have also been many surveys of psychology graduate students designed to measure the relationship between participation in self-care practices and the students' perceived stress. An

anonymous survey was completed by 488 clinical psychology graduate students from across the United States to examine their stress and self-care practices (Myers et al., 1996). This study used Lazarus' definition of stress, which is "the perception that the demands of an external situation are beyond one's ability to cope" (Lazarus, 1966). They defined self-care practices as behaviors that maintain and promote physical and emotional well-being and may include factors such as sleep, exercise, use of social support, emotional regulation, and mindfulness practices. They found that healthy sleep practices, higher social support, and emotional regulation strategies—such as cognitive reappraisal and suppression—were associated with lower levels of perceived stress. They also found that exercise and mindfulness were not significant even though they, empirically, have been linked to reduction in stress. They explained this phenomenon in their research by suggesting that individual differences, such as coping styles and personality dimensions, may impact one's ability to psychologically benefit from exercise as supported by Folkins and Sime (1981). The impact of exercise on stress may also depend on the type of stressor and the beliefs one holds about the efficacy of exercise as a coping strategy (Salmon, 2010). Some people view exercise strictly as a way to keep their physical body healthy and use other forms of self-care for their psychological and emotional well-being.

El-Ghoroury et al. (2012) also conducted a survey to examine self-care practices in psychology graduate students and their perceived stress. The researchers surveyed 387 psychology graduate students to examine stressors, coping strategies, and barriers to the use of self-care practices. These researchers partnered with the American Psychological Association of Graduate Students (APAGS) and the APA Advisory Committee on Colleague Assistance (ACCA) to gather more recent empirical data to guide their outreach activities for graduate students, psychology training programs, and faculty. The survey was developed to address how

many psychology graduate students report significant levels of stress, what the most frequent stressors that affect graduate students are, what the most common strategies used to cope with stress are, and what graduate students perceive as the greatest barriers to engaging in wellness and self-care practices.

An ANOVA was conducted to explore univariate differences between specific stress, barriers, and self-care practices of interest. The survey found that the most prevalent stressors of psychology graduate students were the following: academic responsibilities or pressures (68.1%), finances or debt (63.9%), anxiety (60.7%), and poor work/school-life balance (58.7%). Other common stressors of these psychology graduate students include family issues (44.9%), research responsibilities or pressures (43.1%), burnout or compassion fatigue (38.2%), professional isolation or lack of social support (36.3%), depression (35.1%), physical health issues (33.7%), relationship issues (33.0%), other interpersonal issues (32.6%), and death, loss or grief (27.7%).

The strategies used to cope with these stressors used in at least half of the psychology graduate students who took the survey were friend support (72.4%), family support (64.8%), talking to a classmate (62.8%), regular exercise (54.3%), and hobbies (52.0%). At least a quarter of the respondents used psychotherapy (48.3%), more time engaging in studies (47.2%), supervision or mentoring (37.2%), spiritual resources (33.3%), and talking to a physician (25.4%).

Lastly, this study compiled the most prevalent barriers to engaging in wellness and self-care practices. These barriers include a lack of time (70.6%); the financial cost and constrains (46.5%); worry about what could happen (32.6%); lack of motivation or energy (31.2%), shame, guilt, or embarrassment (29.6%); privacy or confidentiality concerns (29.3%); not knowing about

available resources (29.2%); inadequate social support (29.0%); and discouragement or hopelessness (25.5%).

Implementing Self-Care Practices in Graduate Programs. In the existing literature and research, there are many suggestions for implementation of self-care practices in psychology graduate programs. The first strategy is to encourage graduate programs to increase their efforts to help all of their students develop a culture of self-care (Colman et al., 2016). This could include language of self-care in program handbooks and other materials. Bamonti et al., (2014) conducted research on clinical and general psychology program handbooks to examine how many of these handbooks mentioned words related to self-care. Of the 136 graduate program handbooks sampled, 15 (11.0%) had an available general psychology department handbook that referred to self-care and 44 (32.4%) had an available clinical psychology training handbook with such a reference. These references were primarily only to mental health resources or other services in the event of distress or impairment and were not exclusively about the practice of self-care. Another strategy is to include early discussions of the value of self-care during students' orientation meetings when they first start their degree program. Advisors and professors can work closely with students to develop specific self-care plans and monitor their engagement in those plans throughout their time in graduate school and incorporating these discussions of wellness and self-care into academics (Colman et al., 2016 & El-Ghoroury et al., 2012). This shows students that their advisors and professors are invested in their well-being and want them to engage in activities to alleviate perceived stress.

Another suggestion found in the literature is institutionalizing a program for peer support (El-Ghoroury et al., 2012). Along with a peer support program, offering courses or trainings for how to approach a colleague you think may be in distress would also be beneficial (Barnett et al.,

2007). Students should be taught how to assess and handle the stressors of graduate school, as well as be encouraged to try out various wellness strategies, be educated to self-monitor their stress levels, and learn how to develop an individualized self-care plan (El-Ghoroury et al., 2012). These trainings could include modules that focus on both personal and professional aspects of self-care across the lifespan.

Problem Statement

School psychology graduate students experience the same level of stress and mental health distress as other graduate students studied in the research literature. They hold a variety of responsibilities throughout their graduate training, such as academic work, graduate assistantship work, conducting research, seeing clients, and internship work. For many of these graduate students, they struggle to balance their professional and personal life, producing a tremendous amount of stress. The topic of self-care has recently become an area of interest in the field of school psychology to ensure well-being in graduate students and faculty alike as chronic stress decreases well-being in the mental, physical, emotional, and relational domains (Colman et al., 2016).

As the field of psychology advances, the ability to engage in adequate self-care is being recognized as an essential topic in training (Myers et al., 2012). For psychologists, it is an ethical duty to maintain one's level of functioning to avoid impairment. If self-care is an important topic to teach in the field of psychology and is an ethical duty, it is necessary to do an efficient job modeling this in graduate school training (Barnett et al., 2007). Given the findings in the existing literature, it is suggested that graduate programs adopt clearly articulated and readily accessible self-care statements as well as institutionalized self-care practices that are encouraged and supported by faculty. Publicly providing a statement regarding self-care would foster an

environment that promotes well-being and success and would create a foundation for a career-long pursuit of professionalism (Bamonti et al., 2014 & Myers et al., 2012). Although sources of stress are well-studied in mental health professionals, implementation of stress management interventions, including participation in self-care practices, for this population, is lacking and studies suggest the need for further research on psychology graduate school programs in self-care (Shapiro et al., 2007).

Although there is an abundance of research regarding the perceived stress levels of counseling and clinical psychology graduate students and their self-care practices, there is no research regarding school psychology graduate students in this area. This research is especially important because the rates of burnout in school psychologists and the levels of stress in school psychology graduate students are becoming major concerns in the field. Observing perceived stress levels of school psychology graduate students across the United States and their engagement in physical, emotional, psychological, spiritual, and professional self-care practices will allow researchers to examine how the involvement in self-care practices effect stress levels in school psychology graduate students.

There are many research questions being examined for this project.

1. Is there a significant relationship between perceived stress and participation in self-care practices?
2. Is there a significant relationship between level of stress and participation in self-care practices?
3. Is there a significant relationship between perceived stress and type of program?
4. Is there a significant relationship between perceived stress and year in program?
5. Is there a significant relationship between perceived stress and cohort size?

6. Is there a significant relationship between level of stress and the type of program?
7. Is there a significant relationship between level of stress and the year in the program?
8. Is there a significant relationship between level of stress and cohort size?
9. Does level of perceived stress significantly differ in a Masters/Specialist program and Doctoral program?
10. Does the level of perceived stress significantly differ by year in program?
11. Can the five areas of self-care predict stress levels?
12. Is there a significant discrepancy between type of self-care used to prevent stress and the type of self-care used to reduce stress?

Method

Participants

The target population for this study was school psychology graduate students attending specialist and doctoral level training programs in the United States. The school psychology graduates were attending school psychology graduate programs listed on the National Association of School Psychologists' website.

The survey consisted of 292 participants that consented to answer the questions. Participants who did not complete 100% of the survey were removed from the dataset and were not included in the analyses. The final sample size was 201 participants.

The mean age of the participants was 27.47 years old (SD 6.54) and ranged from a minimum age of 21 to a maximum age of 57. The sample consisted of 85.6% females, 13.4% males, and 0.5% identifying as other. According to NASP census data collected in 2015, the percentage of female school psychologists were 83% and the percentage of male school psychologists were 16%, suggesting the data collected from the survey regarding gender is

consistent with the national school psychologist data (Walcott, Charvat, McNamara, Hyson 2016). Participants' ethnicities were also collected: 74.3% identified as Caucasian, 8.4% identified as African American, 11.9% identified as Hispanic/Latinx, and 1.0% identified as Asian. There was an option of an 'other' category where three participants identified as a mixed race and two participants were of Middle Eastern decent. According to NASP census data collected in 2015, the percentage of Caucasian school psychologists were 87%, the percentage of African American were 5%, the percentage of Hispanic/Latinx were 6%, and the percentage of Asian were 2.80% (Walcott et al., 2016). Lastly, 67.3% of the participants were from a masters or specialist program and 31.7% were in a doctorate school psychology program. Most specialist level school psychology graduate programs are completed in three to four years with doctoral programs extending into five or six years. For this study, 25.9% of respondents reported being in their first year, 36.3% in their second year, and 23.9% in their third year. Beyond that, 8.5% reported being in their fourth year, 1.5% in their fifth year, and 4.0% in their sixth year. Lastly, cohort size was put into groups of the following ranges: small cohort size (0 to 5), medium cohort size (6-12), and large cohort size (13+). The small cohort size consisted of 20.4% of the sample, the medium cohort size consisted of 57.2% of the sample, and the large cohort size consisted of 22.4% of the cohort size

Measures

The data for this research project was collected through a survey (See Appendix A) that was developed for school psychology graduate students using the software, Qualtrics (Qualtrics, 2019). The school psychology graduate student survey included items regarding self-care experiences related to graduate student perceived stress and another study regarding program support related to graduate student perceived stress. At the beginning of the survey, information

about the study was provided and consent to participate in the survey was required prior to starting the survey. There were four sections to the survey. The first section included questions regarding the graduate students' perceived levels of stress and the impact of stress. The second and third sections consisted of questions related to program self-care and program support. Half of the surveys presented the questions related to self-care first and the other half presented the questions about perceived program support first. Finally, the fourth section consisted of questions regarding demographics of the participants.

Measures of Stress. The section on perceived stress included two different measures of stress. The first measure examined stress levels experienced by the graduate student throughout their graduate school experiences and the second measure was the Perceived Stress Scale (PSS-14) (Cohen, Kamarck, & Mermelstein, 1983), which measured the overall level of stress experienced within the last month. These two measures provided different perspectives on stress including overall levels of stress throughout graduate school and different stress experiences within just the past month.

The first stress measure categorized and defined stress for participants according to the intensity of their stress. Stress was defined as the perception that the demands of an external situation are beyond one's ability to cope (Lazarus, 1996). For this measure, four different levels from Typical (*some stress but it does not impact personal life and/or graduate school work*) to Extreme (*stress that is debilitating to both personal life and/or graduate school work)* were defined and participants were asked to rank the percent of time they have spent experiencing each level of stress during their time in graduate school. This measure has a total score ranging from 100 to 400 with higher scores indicating greater levels of stress. To get the total score, the rating for each level of stress from 1 (Typical) to 4 (Extreme) were multiplied by the percentage

of time the participant reported experiencing that level of stress and then a total was calculated for all levels combined.

The second stress measure consisted of questions from the Perceived Stress Scale (PSS-14) (Cohen, Kamarak, & Mermelstein, 1983). Cohen et al. allow permission to use the scale for academic research or educational purposes. The PSS-14 is a widely used stress measure and has been validated in many articles (Lee, 2012). Lee reported that the PSS-14 stress measure has a Cronbach's Alpha of greater than .70 has been reported in all 11 studies examining the PSS-14 stress measure, suggesting there is a high level of internal consistency among the items (2012). The PSS-14 stress measure contained 14 items examining feelings and thoughts within the last month. The items were answered on a four-point Likert scale: 0 (*Never*) to 4 (*Very Often*). For this measure, a Total Perceived Stress Score was obtained by reversing the scores on the seven positive items and then adding the scores of all 14 items. The scores for the PSS-14 ranged range zero to 56, with higher scores indicating greater perceived stress.

Lastly, the section on stress included five multiple choice questions and one open-ended question. These questions provided information regarding the impact of stress on school psychology graduate students both in their personal lives and in their graduate work.

The first question asked, "How much has graduate school stress impacted your performance in the program?" The second question asked, "How much has graduate school stress impacted your personal life?" Participants answered these two questions with a Likert scale ranging from 0 (*Not At All*) to 4 (*A Great Deal*). Another question asked, "Have you ever considered dropping out of the program due to high levels of stress?" This question was answered with "Yes" or "No". The fourth multiple-choice question asked, "When considering other students in your program, do you feel like you are experiencing more stress, less stress, or

about the same amount of stress?" The fifth multiple-choice question asked, "How would you compare your stress level as an undergraduate to your stress level as a graduate?" with scores ranging from 1 (less stress), 2 (some amount of stress), and 3 (more stress). The last question in this section was an open-ended question that asked what the largest source of stress within graduate school was for them.

Measures of Self-Care and Program Support. The second and third sections of this survey consisted of questions on program support developed by another researcher and questions on self-care relevant to this research study. The section on self-care included seven questions. The first five questions asked how frequently the school psychology graduate student responding to this survey had participated in physical, emotional, psychological, spiritual, or professional practices of self-care since entering graduate school. These questions were included in the survey because the five areas examined were the most prevalent self-care topic areas in literature and websites relating to self-care (Franklin, 2017; Reisch, 2017; Schoeppler, 2019 & Scott, 2019). These five questions showed which self-care practices were being utilized the most by school psychology graduate students across the nation. A total self-care practices score was obtained. Each of the five questions have a range of 1 to 7 (1=never, 2=less than once a month, 3=once a month, 4=2 to 3 times a month, 5=1 to 3 times a week, 6=4 to 6 times a week, and 7=daily) and a total score was calculated by adding up the ratings for each of the five questions together.

The last two questions in the self-care section asked which of the five areas of self-care has been the most beneficial in preventing stress and which practice has been the most beneficial in reducing stress. These questions help understand which self-care practices help in managing the stress they feel from their school psychology graduate program.

Demographic Questions. The last set of questions in this survey were about demographics. This included questions asking about gender, race, age, cohort size, year in the program, and type of program (e.g., masters, specialist, Ph.D.).

Procedure

Approval was obtained by the research committee and the application process for the Institutional Review Board (IRB) was completed through Western Carolina University. A database was created with the names and emails of all program directors from all of the school psychology graduate programs listed on the National Association of School Psychologists (NASP) website. Once this information was collected, an email was sent to all program directors about the study along with how informed consent would be obtained. It stated that if informed consent was not indicated by the participant at the beginning of the survey, the participant wouldn't be able to continue with the survey. In addition, each program director was randomly sent one of the two school psychology graduate student survey links, the difference being whether the self-care questions or the program support questions were listed first in the survey. The program directors were asked to forward the school psychology graduate student survey to their students. The survey was available for one month before it was closed. Once the survey was closed, data was collected through Qualtrics, the data was downloaded into an excel file, and then transferred to the Statistical Package for Social Sciences (SPSS) program for analyses.

Results

Pearson Correlations were conducted in order to answer the following research questions: Is there a significant relationship between perceived stress and participation in self-care practices, is there a significant relationship between level of stress and participation in self-care practices, is there a significant relationship between perceived stress and type of program, is

there a significant relationship between perceived stress and year in program, is there as significant relationship between perceived stress and cohorts size, is there a significant relationship between level of stress and type of program, is there a significant relationship between level of stress and the year in the program, and is there a significant relationship between level of stress and cohort size? ANOVAs were conducted in order to answer the following research questions: Is there a significant difference between type of program and level of perceived stress and is there a significant difference between year in program and level of perceived stress? A linear regression was conducted in order to answer the research question asking if the five areas of self-care can predict stress levels. Chi-square analyses were conducted to answer the following research question: Is there a significant discrepancy between type of self-care used to prevent stress and the type of self-care used to reduce stress? Lastly, Descriptive Statistics and Qualitative Analyses of open-ended questions provided more information about the stress and self-care experience of school psychology graduate students. For Qualitative Analyses, thematic analysis was utilized. Thematic analysis, as proposed by Braun and Clarke (2006), is a method of analyzing qualitative research employing a six-step process. In regard to this process, first participants' responses were individually examined, and emerging themes were identified. After all responses were categorized, the researcher individually identified themes in terms of content. The last step involved identifying main and sub-themes present throughout participants' perceptions.

Research questions that had asked about the level of stress were not included in the results. The analyses that were conducted yielded results that varied significantly and were not statistically significant.

Descriptive Statistics

Descriptive statistics for the demographic characteristics were obtained, including the participant's year in the program, type of program (Masters and Specialist or Doctoral), cohort size, gender, race, and age. These percentages and frequencies can be obtained in the participant's section.

Descriptive statistics were also utilized to examine the average perceived stress levels during school psychology graduate school in both their personal experiences and academic experiences (1=A great deal, 2=A lot, 3=A moderate amount, 4=A little, 5=None at all). The mean level of perceived stress in relation to the impact on their academic performance was 3.42 (SD =.97). The mean level of perceived stress in relation to the impact on their personal life had a mean of 2.47 (SD=1.07).

Another descriptive statistical analysis measured the average amount of thought given to dropping out of their school psychology graduate program due to stress (1=I have never considered it (N=84), 2=I have thought about it once or twice (N=94), 3=I have seriously considered it (N=23)). The participant's responses to this question resulted in a mean of 1.71 (SD=.67).

A third descriptive statistical analysis was utilized to examine how school psychology graduate student's compare their average level of stress to other's in their program (1-*Much less stress*, 2-*Less stress*, 3-*About the same stress*, 4-*More stress*, 5-*Much more stress*). A mean score of 3.42 (SD=1.52) was obtained.

Pearson Correlations

Pearson correlations were conducted between the five self-care areas and the two stress measures, as well as between the demographics (cohort size, type of program, and year in

program) and the two stress measures. However, the correlations were all insignificant. Correlations between level of stress and self-care practices and demographics were not included due to the large variability and inability to compute a total stress score because of the structure of the measure.

Table 1. Correlations between Perceived Stress and Self-Care Practices

Self-Care Practice	Perceived Stress	
	Correlation (*r*)	P-Value (*p*)
Emotional	.028	.693
Psychological	.002	.973
Physical	-.081	.258
Spiritual	.005	.943
Professional	-.035	.627

Table 2. Correlations between Perceived Stress and Demographic Characteristics

Demographics	Perceived Stress	
	Correlation (*r*)	P-Value (*p*)
Type of Program	-.005	.949
Year in Program	.050	.482
Cohort Size	-.062	.391

ANOVA

Further analyses were conducted to determine whether there were any statistically significant differences between demographic characteristics (type of program and year in program) and perceived level of stress.

Type of program and PSS-14. A one-way ANOVA was conducted to compare the different types of programs on Total Perceived Stress. The independent variable for the ANOVA was type of program, with two levels (Masters/Specialist and Doctoral). The difference between the Program Types was not significant $F(1,195) = .004$, $p = .95$. The mean score for Masters/Specialist degree students was 32.78 ($SD = 5.43$). The mean score for Doctoral degree students was 32.73 ($SD = 5.56$).

Table 3. Means and Standard Deviations for Total Stress based on Program Type

ANOVA		
Program Type	**N**	**Mean (SD)**
Masters/Specialist	134	32.78 (5.43)
Doctoral	63	32.73 (5.56)
Total	197	32.77 (5.46)

Year of program and PSS-14. A one-way ANOVA was conducted to compare the Year of Program on Total Perceived Stress (See Table 4). The difference between the student's Year of Program was not significant $F(5,192) = 1.03$, $p = .40$. The number of students enrolled in the programs for more than three years was considerably lower than participants enrolled in years 1 through 3.

Table 4. Means and Numbers of Year in Program.

ANOVA		
Year	**Mean (SD)**	**N**
1	32.18 (5.25)	51
2	34.00 (5.10)	73
3	33.07 (5.31)	46
4	31.65 (7.54)	17
5	29.33 (3.05)	3
6	35.63 (5.80)	8

Regression

Self-Care practices and total stress. A linear regression was used to see if the participant's responses to their participation in the five different areas of self-care would predict their total level of perceived stress. Emotional, psychological, physical, spiritual, and professional self-care total scores were regressed onto the total perceived stress level score (see Table 5). Below, partial Pearson's *r* is reported as a measure of effect size for coefficients. The five areas of self-care accounted for 1.2% of the variance, $R^2 = .012$, $F(5, 195) = .457$, $p = .808$. None of the five areas of self-care were associated with participant's total level of perceived stress.

Table 5. Regression Analysis Predicting Total Perceived Stress from Five Areas of Self-Care.

						95% CI for *b*		Effect Size
	b	*SE*	β	*t*	*p*	Lower	Upper	*pr*
Emotional	.257	.339	0.063	.757	.450	-.0412	0.926	.055
Psychological	.081	.308	0.023	.264	.792	-.0527	0.689	.019
Physical	-.420	.320	-.101	-1.312	.191	-1.051	0.211	-.095
Spiritual	.023	.223	0.008	.103	.918	-0.416	0.462	.007
Professional	-.173	.266	-0.051	-.652	.515	-.0698	0.351	-.047

Notes: CI = confidence interval. Effect size *pr* is the partial Pearson correlation.

Chi-Square

There was no statistically significant discrepancy between the usage of self-care practices in preventing stress and in reducing stress, $\chi 2 = 21.221$, $p = .170$. Since there is no statistical significance between the discrepancy of the use of what self-care practices were used in preventing stress or of reducing stress, this means that participants don't use any certain self-care practice (emotional, psychological, physical, emotional, or professional) more than the other to prevent stress from coming on or reducing stress once they are experiencing it.

Qualitative Analyses.

Qualitative Analysis were conducted using a thematic analysis process. First, participants' responses were individually examined, and emerging themes were identified. After all responses were categorized, the researcher discussed individually identified themes in terms of content and agreement. The last step involved identifying main and sub-themes present throughout participants' perceptions of what training programs can do to address burnout.

Thematic analyses of self-care practice. Thematic analysis of the 184 total participants' responses was conducted to examine what self-care practice they use the most. Responses were recoded into categories 1 through 5: (1) Emotional, (2) Psychological, (3) Physical, (4) Spiritual, and (5) Professional. Several responses consisted of more than one self-care practices but was coded into the self-care area that was listed first.

Theme one: physical self-care. "Physical self-care, such as working out or eating healthier." –Participant 156

This theme consisted of participants that indicated the self-care practice that they participate in the most is physical in nature. This was the most addressed theme with 101 participants including a variety of responses. Responses included exercising (kickboxing, running, walks), eating healthier, relaxing, taking baths, getting enough sleep, and watching Netflix. There were also more general answers that consisted of simply stating "Physical" as their most used self-care practice.

Theme two: emotional self-care. "Emotional, I make sure to take time to be with my significant other, friends and family." –Participant 66

Within this theme, participants indicated that the self-care practice that they participate in the most during their school psychology graduate program training fit into the Emotional Self-Care category. This theme was addressed by 33 participants and included responses regarding the specific self-care practice they use the most. Some answers included spending time with their friends and family and allowing themselves to cry and be emotional. Several responses were broader in nature and simply stated "Emotional" in the response box.

Theme three: spiritual self-care. "Lighting a candle and saying a prayer." –Participant 57

Within this theme, participants indicated that the self-care practice that they utilize the most fits in the Spiritual self-care category. This theme was addressed by 22 participants with answers including going to church services, lighting a candle, praying, and mediating. The term "Spiritual" was also used as a more general response to the question regarding what self-care practice they engage in the most.

Theme four: psychological self-care. "Attending therapy with a neuropsychologist, meditation & reflection on thoughts, behaviors and attitudes." –Participant 118

Within this theme, participants indicated that the self-care practice that they participate in the most during their time in graduate school fit into the Psychological Self-Care category. This theme was addressed by 14 participants and included responses regarding the specific self-care practice they use the most. Some answers included journaling, going to therapy, and paying attention to their inner experience. Several responses were broader in nature and simply stated "Psychological" in the response box.

Theme five: professional self-care. "Chatting with co-workers makes me feel the best. I have a wonderful work atmosphere." –Participant 42

Lastly, this theme consisted of responses that indicated that the self-care practice they engage in the most during graduate school was related to Professional Self-Care. This theme was addressed by 14 participants. Some answers included talking with professors, saying "no" to a lot of responsibilities, and confiding in their cohort members. Other answers consisted of simply stating "Professional" as their most used self-care practice while in graduate school.

Thematic analysis of largest stressor. Thematic analysis of the 174 total participant's responses to what their largest stressor is in school psychology graduate school indicated a total of five themes and 10 subthemes. Themes were identified after individually examining each

response, noting emerging themes that were identified, and forming main and subthemes present throughout participants'' responses to what their largest stressor was in graduate school. The five main themes included: (1) Program Expectations, (2) Work-Life Balance, (3) Personal Reasons, (4) Finances, and (5) Research. Several participants responded with more than one significant stressor they were experiencing in graduate school that fell into two or more themes, but the stressor went with the more dominating answer to fit into one theme.

Theme one: program expectations. "Lack of communication with the program expectations." –Participant 39

Within this theme, participants indicated the various stressors they navigate relating to given expectations of their school psychology graduate program that affect their functioning in and out of the program. This was the largest source of stressor that the participant's reported with a total of 99 responses.

Subtheme one: overall expectations. "Overwhelming amount of assignments and the time it takes to complete each assignment to meet expectations. Also, unclear expectations make things more stressful." –Participant 152

This subtheme was addressed by 16 participants and included responses regarding expectations that the professors have for their students in terms of assignments and professionalism and expectations to balance all responsibilities at once. Other specific responses included uncertainty of whether they are fulfilling specific requirements, expectations to fit everything into their schedule, upholding appropriate grades, and the needs to feel perfect.

Subtheme two: workload. "In graduate school, the biggest source of stress has definitely been the coursework. Having to ready 5+ chapters for each class and having to prepare for discussions has been difficult." –Participant 58

This subtheme was addressed by 45 participants. Participants explained that the workload in graduate school is very large. Their responses included the number of assignments, the length of assignments, the "unrealistic" course load, and writing papers, and having multiple assignments due on one day are their largest source of stress in school.

Subtheme three: assessments. "Extremely time-sensitive course requirements in an IQ testing class. These required me to find a child within a certain age range to test, score the test, and have everything turned in within a 7-day spans. Messing up one protocol effectively invalidated all progress made with that specific test's competency requirements, meaning you had to give at least 2 more on top of moving on to another test within the week." –Participant 29

Learning, administering, and interpreting psychological assessments are large responsibilities of a school psychologist with a majority of school psychologists utilizing assessments every day. This subtheme was addressed by 10 participants as being their largest stressor in graduate school. Responses included a variety of answers ranging from finding examines (specifically after moving to a city where they don't know anyone), learning a high quantity of assessments at once, the rigor of assessment courses, and administering assessments without feeling sufficiently trained in them.

Subtheme four: time limitations. "Time…there is never enough. You can never get ahead in grad school because there is always something that you could be working on. Plus, there is not a lot of time for social life outside of studies." –Participant 145

This subtheme consisted of responses relating to the lack of time they have while in graduate school as their largest stressor and was addressed by 22 participants. Answers that related to time limitations explained how sometimes they didn't have time to cook dinner because they were trying to balance all of their responsibilities, meeting deadlines, having to sit

through classes and having to spend more time after that for homework, and having too much to do in too little time.

Subtheme five: practicum/internship experience. "Balancing all activities requires for internship hours and classes (i.e., assessment, intervention, consultation, and supervision hours)" –Participant 56

The last subtheme under Program Expectations is relating to participant's experiences in field and clinic practicum and internship. A total of six participants said stressors relating to practicum and internship were their largest. Some answers included meeting internship requirements, going over hours to finish everything, and balancing classwork along with internship and practicum demands. A few participants simply reported "Internship" or "Practicum" as their biggest stressors.

Theme two: work-life balance. "Trying to balance my time between homework, my baby, taking care of our house, and my relationship with my husband. Trying to prioritize what's most important." – Participant 162

This second main theme incorporated two subthemes relating different aspects of the work-life balance, including balancing their friends, family, partners, and kids with school and balancing other jobs with school.

Subtheme one: with friends, partners, kids, and families. "Balancing schoolwork with responsibilities as a parent and a spouse." –Participant 91

Fourteen participants noted their largest stressor in graduate school relates to trying to balance their personal life with their schoolwork. Responses included balancing their family and kids with the program, trying to spend meaningful time with their significant other, and being a single mother and trying to balance all of her responsibilities.

Subtheme two: with other jobs. "Trying to work 20 hours a week while going to graduate school full time and living 35 minutes from campus." –Participant 173

In addition to going to graduate school, 11 participants stated balancing having fulltime and part time jobs as their largest stressor. One participant stated they have three jobs and it's difficult to maintain personal relationships, family, and academics. Other responses included working 25 hours a week and not having enough time to balance graduate school requirements and another being a special education teacher while going to graduate school.

***Theme three: personal reasons*.** "Being far away from family and having unprofessional professors." –Participant 61

Within this theme, participants stated that their largest source of stress while in graduate school related to personal stressors, such as mental health difficulties, medical diagnoses, and strained relationships with cohort members and professors. A total of 26 participants answered into this theme.

Subtheme one: unexpected stressors. "Personal family issues." –Participant 62

The first subtheme consisted of stressors that were unexpected to the participant. This includes a diagnosis of Lupus, personal family issues, and medical issues. These stressors affected their personal lives, how they spent their time while at school, and their academic functioning.

Subtheme two: mental health/emotional challenges. "Feeling pulled in many different directions." –Participant 77

This subtheme consisted of responses about mental health difficulties and emotional challenges participants were facing. Seven participants' responses fell into this subtheme. Responses consisted of personal issues outside of school, such as sexual orientation, balancing

family trauma with their own diagnosis of PTSD, feeling uncertain that a career in school psychology is right for them, and preparing for post-graduation.

Subtheme three: environment of program. "My largest source of stress has come from my professors. I felt like I had no support and that they did not care about my success as a professional. For the last year of my schoolwork my professors tried to drop me from the program for standing up for my professional goals. Honestly, the professors are the downfall of my program." –Participant 194

The last subtheme of Personal Reasons consists of responses relating to the environment and relationships within the program and was the largest Personal Reasons subtheme of stress with 16 participants. Participants answered the question with poor peer relations, lack of quality feedback on assignments, being students of color in a program where they are a minority and feeling as they are not being supported as much as they should have.

Theme four: finances. "Personal finances and amount of debt that is accrued/accruing" –Participant 114

This theme is associated with the cost of graduate school, having enough money for daily living, and the debt that is accumulating each year they are in graduate school. Of the 174 responses, 14 of the participants stated that financial stressors are their biggest source of stress while in graduate school. Responses ranged from general answers, such as "Finances" and "Financial related-stress" to specific answers, such as the lack of finances and resources to cover costs of school and daily living, paying for school out of pocket, and not having enough money.

Theme five: research. "Research productivity being added on top of clinical and teaching responsibilities." –Participant 120

Within this theme, participants indicated that research related duties were their largest

stressor while in graduate school. This theme was addressed by 11 respondents and included responses such as their dissertation, thesis, research, data collection, and meeting milestones on time.

Discussion

Interpretation and Explanation of Results

The current study intended to research the relationship between perceived stress experienced by school psychology graduate students across the United States and their participation in self-care practices. According to the responses from the 201 participants in the current study, there is no significant relationship between perceived stress or level of stress in self-care practices. Results also showed that there is no significant relationship between perceived stress or level of stress with type of program, year in program, or cohort size. According to the participants who took the survey, there is also not a significant difference between the type of program (Masters/Specialist or Doctorate) or the year they are in the program and the level of perceived stress they were experiencing at the time. Each of the five areas of self-care practices (emotional, psychological, physical, spiritual, and professional) were examined to determine if the participation in each of the five areas of self-care could predict the participants' stress levels, but it did not.

However, it is noteworthy that the two most utilized self-care areas included physical self-care practices, such as hiking, eating healthier, and getting enough sleep, and emotional self-care, such as spending time with loved ones and allowing themselves to cry. Lastly, an examination was conducted to determine if there is a significant difference as to what people use to prevent stress from occurring and what people use to reduce stress once it is present, but no significant difference was found. Overall, the results showed that, within the current sample, the more school psychology graduate students participate in any of the five areas of self-care, it does not have an impact on their stress level. The type of program they are in, the year they are in the program, and the number of people in their cohort does not have an impact on their stress levels

at the time the survey was taken or in their entire time in graduate school. Also, there is not a specific type of self-care practice that the participants used to prevent or reduce stress.

Relevant findings from the participant's responses relate to how stress affect's their functioning in school, their largest stressors during their time in graduate school, and the specific types of self-care they use during their time in graduate school. Results showed that perceived stress levels impacted the graduate students' functioning in and out of school at least a little bit to a moderate amount. Program expectations was the most mentioned stressor from the respondent's, especially the large workload involving classes, assistantships, research, and practicum in combination with significant the time limitations. Respondents reported that they do not have enough time with having classes all day and then having to go home and complete all of the outside work that comes along with graduate school. The amount of stress the respondents were feeling at the time of taking the survey has made them think about dropping out of their program ranging from once or twice to seriously considering it. They also rated their stress level similarly to or a little more stress than their cohort members. Some participants explained that they have mental health issues and have experienced Imposter Syndrome—feelings of severe inadequacy and self-doubt that leave people doubting themselves and their ideas at work—which could have an impact on the number of times they have thought about dropping out of their program or comparing their stress levels higher to their cohort members.

Further analyses were conducted to examine the most significantly stressed participants. Out of the 201 respondents, nine of them spent at least 90% of their time in significant to extreme stress during their time in graduate school. Their answers were looked at individually to examine their largest stressor, how often they use self-care practices, and their year in the program. Eight of the nine participants were in a Masters or Specialist program with one was in

their first year, two were in their second year, and six were in their third year of the program. With the exception of one of these respondents, they all used all five areas of self-care at least once a month and sometimes daily. The biggest stressors for all nine of the most significantly stressed within the sample ranged from strained relationships with cohort members and faculty, unrealistic assignment loads, lack of time, unclear expectations of the program, being far away from their family, and financial difficulties. These students' responses showed many similarities to the group as a whole regarding their largest stressors and time spent utilizing self-care practices, indicating that when compared to the other students, these students seemed to have higher stress reactions to similar experiences.

Relating Findings to Current Literature

Current literature is reporting that there are increasing numbers of graduate school students who experience high stress, resulting in poorer outcomes in emotional, academic, and physical health (Yusufov, Nicoloro-Santa Barbara, Gray, Moyer, & Lobel, 2018). In the past 25 years, graduate students' perceptions of their own mental health have been declining and the current generation of students report that they struggle with stress management far more than previous generations (Yusufov et al., 2018). Graduate students have multiple responsibilities and roles and go through complex educational systems with high demands and expectations (Rummell, 2015). There are a wide range of stressors that can affect graduate students' perceived stress and mental health. These stressors include academic pressures, social challenges, family strains, financial concerns, career decisions, perceived competitive nature of graduate school, inadequate performance feedback, lack of adequate support from supervisors and faculty, limited use of mental health counseling, the type of instructional methods used in coursework, value conflicts or cognitive dissonance coming from required new ways of thinking, and falling into

the myths surrounding graduate school (El-Ghoroury et al., 2012, Rummell, 2015, Sheehy & Horan, 2004, & Yusufov et al., 2018). These stressors were also all mentioned in the current study by school psychology graduate students reporting on the greater sources of stress that they experience.

In the research, relaxation training, mindfulness exercises, and psychoeducation were effective strategies in reducing anxiety and stress in graduate students (Yusufov et al., 2018). Self-care has been identified as another potential method for minimizing or getting rid of perceived stress associated with graduate training in professional psychology and has been found to positively affect life satisfaction, physical health, psychological well-being, academic success, and professional burnout domains (Colman et al., 2016). The results of a meta-analysis indicated that engagement in self-care practices has a positive benefit for professional psychology graduate students, but contrary to their hypothesis, the type of self-care practice was not a significant moderator. This could be a reason as to why none of the five areas of self-care examined in the current study had a significant relationship with the level of perceived stress the graduate students were experiencing. The mentioned study indicated that about 80% of the psychology graduate students who engage in self-care practices show better outcomes than the average graduate student who does not engage in self-care practices in the long run and supported the overall efficacy of self-care practices for professional psychology graduate students. However, it was also noted that not all studies in the meta-analysis led to significant benefits from participation in self-care practices and concluded that "there is not a one size fits all self-care plan," to explain those findings. They found that healthy sleep practices, higher social support, and emotional regulation strategies—such as cognitive reappraisal and suppression—were associated with lower levels of perceived stress but found that exercise and mindfulness were not

significant even though they, empirically, have been linked to reduction in stress. They explained this phenomenon in their research by suggesting that individual differences, such as coping styles and personality dimensions, may impact one's ability to psychologically benefit from exercise as supported by Folkins and Sime (1981) which would also explain the insignificant results from the current study. Since school psychology graduate students share similar experiences and all seem to engage in some type of self-care, this could also be related to the large variety found in the level of stress (typical, moderate, significant, extreme) reported by the participants.

Limitations to the Study

There were a few limitations with the current study. The first being a sample size: there are 240 school psychology graduate programs in the United States, but a total of 292 graduate students ended up completing the survey. Since some of the surveys were not fully completed, resulting in an additional 91 of the responses had to be taken out of the dataset leaving 201 responses. If there was a larger sample size, there may have been statistical significance in some of the findings. Another limitation of the current study was the stress measure that was used for most of the analyses only got a snapshot of the graduate students' stress. The Perceived Stress Scale asked questions regarding their stress during the past month and not during their entire time in graduate school. This is why the Total Stress Scale was formed, to get a global look into the graduate student's stress levels of all of their time in graduate school. However, the Total Stress Scale was found to have large standard deviations among the responses resulting in restricted use for analyses. Furthermore, the survey had initially been planned to be sent out at the end of the first semester when stress would have been higher for the school psychology graduate students with end of the semester deadlines, but because of a delay in IRB, it was not sent out until the middle of the spring semester.

Future Directions

For future research, it may be necessary to look elsewhere to find what significantly reduces stress in school psychology graduate students since self-care was not found to be a significant factor. Additionally, looking at self-care practices, it might be beneficial to look at early career school psychologists to see if the use of self-care practices continued after graduation and whether this led to stress in the first years of practice as school psychologists. The information gathered from the results of the current study show that school psychology graduate students regularly practice self-care during their time in graduate school and utilize self-care in order to reduce their stress levels. Therefore, continuing to monitor stress levels and self-care practices into the beginning of their professional career would give insight to how they cope with stress levels. Lastly, research on other professional psychology graduate students, such as clinical and counseling psychology graduate students, is prevalent in the literature. Continuing to research school psychology graduate students would be beneficial to continue to understand common stressors experienced by school psychology graduate students and how they deal with stress so as to reduce the level of attrition in graduate programs and burnout in practicing school psychologists.

REFERENCES

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: Author.

Bamonti, P. M., Keelan, C. M., Larson, N., Mentrikowski, J. M., Randall, C. L., Sly, S. K., Travers, R. M., & McNeil, D. W. (2014). Promoting Ethical Behavior by Cultivating a Culture of Self-Care During Graduate Training: A Call to Action. *Training and Education in Professional Psychology, 8*(4), 253-260.

Barnett, J. E., Baker, E. K., Elman, N. S., & Schoener, G. R. (2007). In Pursuit of Wellness: The Self-Care Imperative. *Professional Psychology: Research and Practice, 38*(6), 603-612.

Cohen, S., Kamarck, T., & Mermelstein, R (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396.

Colman, D. E., Echon, R., Lemay, M. S., McDonald, J., Smith, K. R., Spencer, J., & Swift, J. K. (2016). The Efficacy of Self-Care for Graduate Students in Professional Psychology: A Meta-Analysis. *Training and Education in Professional Psychology, 10*(4), 188-197.

El-Ghoroury, N. H., Gaper, D. I., Sawaqdeh, A., & Bufka, L. F. Stress, (2012). Coping, and Barriers to Wellness Among Psychology Graduate Students. *Training and Education in Professional Psychology, 6*(2), 122-134.

Folkins, C. H. & Sime, W. E. (1981). Physical fitness training and mental health. *American Psychologist, 36, 373–389*.

Franklin, S. (2017). 5 Types of Self-Care for Your Mental Health. *The Mighty.*

Glick, S. (2018, October 9). America's Growing Mental Health Crisis. *Oliver Wyman.*

Innovation Unit. (2017, January 11). Our Collective Mental Health is Getting Worse—But Why? *Medium Cooperation.*

Lazarus, R S. (1966). Psychological Stress and the Coping Process. New York: McGraw-Hill.

Lee, E. H. (2012). Review of the Psychometric Evidence of the Perceived Stress Scale. *Asian Nursing Research*, *6*(4), 121-127.

Myers, S. B., Sweeney, A. C., Popick, V., Wesley, K., Bordfeld, A., & Fingerhut, R. (2012). Self-Care Practices and Perceived Stress Levels Among Psychology Graduate Students. *Training and Education in Professional Psychology, 6*(1), 55-66.

National Institute of Mental Health. (2017). Mental Health Information Illness. *National Institute of Mental Health.*

Parekh, R. (2018, July). Warning Signs of Mental Illness. *American Psychiatric Association.*

Reisch, Robyn (2017, May 15). Six Areas of Self-Care You Need to Address. *Heart Intelligence.*

Rummell, C. M. (2015, November 2). An Exploratory Study of Psychology Graduate Student Workload, Health, and Program Satisfaction. *Professional Psychology: Research and Practice. 46*(6), 391-399.

Salmon, P. (2001). Effects of Physical Exercise on Anxiety, Depression, and Sensitivity, to Stress: A Unifying Theory. Clinical Psychology Review, 21, 33-61.

Schoeppler, Summer (2019, February 4). The 5 Areas of Self-Care. *Love A Lil.*

Scott, Elizabeth (2019, July 25). 5 Self-Care Practices for Every Area of Your Life. *Very Well Mind.*

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching Self-Care to Caregivers: Effects of Mindfulness-Based Stress Reduction on the Mental Health of Therapists in Training. *Training and Education in Professional Psychology, 1*(2), 105-115.

Sheehy, R., & Horan, J. J. (2004). Effects of Stress Inoculation Training for 1st-Year Law Students. *International Journal of Stress Management*, *11*(1), 41-55.

Sliwa, J. (2019, March 14). Mental Health Issues Increased Significantly in Young Adults Over Last Decade. *American Psychological Association*.

Qualtrics (2005). *Qualtrics.* Provo, Utah, USA.

Walcott, C. M., Chavarat, J., McNamara, K. M., & Hyson, D. M. (2016). School Psychology at a Glance: 2015 Member Survey Results. *National Association of School Psychologists*.

What is Mental Health? (n.d.). Retrieved from https://www.mentalhealth.gov/basics/what-is-mental-health

Yusufov, M., Nicoloro-SantaBarbara, J., Gray, N. E., Moyer, A., & Lobel, M. (2018, May 3). Meta-Analystic Evaluation of Stress Reduction Interventions for Undergraduate and Graduate Students. *International Journal of Stress Management.*

APPENDICES

Appendix A.

Survey

Western Carolina University
Consent Form to Participate in a Research Study

Project Title: Examining the Stress Levels of School Psychology Graduate Students

This study is being conducted by: Nicole Zelhofer, B.S., Hannah Anderson, B.A., Dr. Lori Unruh, PhD.
Description and Purpose of the Research: You are invited to participate in a research study examining the stress levels of school psychology graduate students as well as the support provided by programs and the self-care practices that school psychology students utilize. By doing this study we hope to learn more about what school psychology programs can do to reduce the stress of graduate students.

What you will be asked to do: You will be asked to complete a survey regarding your experience with stress in graduate school, supports that your program has provided, and sources of self-care. Additionally, demographics (age, gender, race) will be collected in order to report on the generalization of our population. The data collected will not include your name, program name, or other identifying information. The survey is estimated to take approximately 10 minutes.

Risks and Discomforts: We anticipate that your participation in this survey presents no greater risk than everyday use of the Internet. This survey will inquire about stress levels and the ways in which they may have impacted you. Identifying this may be stressful.

Benefits: There are no direct benefits to you for participating in this research study. The study may help us better understand the stress levels of school psychology students and ways in which stress can be reduced for this population.

Privacy/Confidentiality/Data Security: The data collected in this study are anonymous. This means that not even the research team can match you to your data. Research will be collected with the Qualtrics survey anonymous link. The data collected will be stored in an encrypted cloud-based system. The research team will work to protect your data to the extent permitted by technology. It is possible, although unlikely, that an unauthorized individual could gain access to your responses because you are responding online. This risk is similar to your everyday use of the internet.

Voluntary Participation: Participation is voluntary, and you have the right to withdraw your consent or discontinue participation at any time without penalty. If you choose not to participate

or decide to withdraw, there will be no impact on your grades/academic standing.

Compensation for Participation: No compensation will be given for participation.

Contact Information: For questions about this study, please contact Nicole Zelhofer or Hannah Anderson at nzelhofer1@catamount.wcu.edu or handerson@wcu.edu. You may also contact Dr. Lori Unruh, the principal investigator and faculty advisor for this project, at lunruh@wcu.edu.

If you have questions or concerns about your treatment as a participant in this study, you may contact the Western Carolina University Institutional Review Board through the Office of Research Administration by calling 828-227-7212 or emailing irb@wcu.edu. All reports or correspondence will be kept confidential to the extent possible.

I understand what is expected of me if I participate in this research study and understand that participation is voluntary. My consent choice below indicates that I agree to participate and am at least 18 years old.

- ○ I consent
- ○ I do not consent

Considering your time in graduate school, please approximate the percentage of time you have spent experiencing each level of stress defined below. You will not be allowed to have a total over 100%.

Typical: some stress but it does not impact personal life and/or graduate school work (0-100)

Moderate: stress that has some negative impact on personal life and/or graduate school work (0-100)

Significant: stress that has a large negative impact on personal life and/or graduate school work (0-100)

Extreme: stress that is debilitating to both personal life and/or graduate school work (0-100)

The questions provided below 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.

Although some of the questions are similar, there are differences between them and you should treat each one as a separate question.

The best approach is to **answer each question fairly quickly**. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

	Never (1)	Almost Never (2)	Sometimes (3)	Fairly Often (4)	Very Often (5)
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 dealt successfully with irritating life hassles?	○	○	○	○	○

5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?	○	○	○	○	○
6. In the last month, how often have you felt confident about your ability to handle your personal problems?	○	○	○	○	○
7. In the last month, how often have you felt that things were going your way?	○	○	○	○	○
8. In the last month, how often have you found that you could not cope with all the things that you had to do?	○	○	○	○	○

9. In the last month, how often have you been able to control irritations in your life?	○	○	○	○	○
10. In the last month, how often have you felt that you were on top of things?	○	○	○	○	○
11. In the last month, how often have you been angered because of things that happened that were outside of your control?	○	○	○	○	○
12. In the last month, how often have you found yourself thinking about things that you have to accomplish?	○	○	○	○	○
13. In the last month, how often have you been able to control the way you spend your time?	○	○	○	○	○

14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	○	○	○	○	○

How much has graduate school stress impacted your performance in the program?

- ○ A great deal
- ○ A lot
- ○ A moderate amount
- ○ A little
- ○ None at all

How much has graduate school stress impacted your personal life?

- ○ A great deal
- ○ A lot
- ○ A moderate amount
- ○ A little
- ○ None at all

Have you ever considered dropping out of the program due to high levels of stress?

- ○ Yes
- ○ No

When considering other students in your program, do you feel like you are experiencing more stress, less stress, or about the same amount of stress?

- ○ Less stress
- ○ About the same
- ○ More stress

How would you compare your stress level as an undergraduate to your stress level as a graduate?

- ○ Much less stress
- ○ Less stress
- ○ About the same stress
- ○ More stress
- ○ Much more stress

What has been your largest source of stress within graduate school?

_____

The items below describe different things that graduate programs may do to help relieve the stress of graduate school for students. For each item, please indicate whether the statement is **true or false** within your particular school psychology program. **If true** please describe how often you take advantage of this resource/support. If false, move on to the next true/false

statement.

For example, if your program offered free cheesecake, how often do you take advantage of that cheesecake? If you took the cheesecake every time it was offered, you would indicate Very Often. If you only took the cheesecake once you would indicate Almost Never.

	Utilization					Availability	
	Never (1)	Almost Never (2)	Sometimes (3)	Fairly Often (4)	Very Often (5)	True (1)	False (2)

1. My program hosts social events that provide time to speak with and engage in activities with faculty, students, or career psychologists.	○	○	○	○	○	○	○
2. Within my graduate school or program I have been educated about options for financing my education. For example, information about loans or loan forgiveness opportunities.	○	○	○	○	○	○	○
3. My program faculty have encouraged me to take advantage of NASP's Graduate Student Support Network (GSSN) or another established NASP mentoring program such as the NASP Convention Mentoring Program or the Diversity and Leadership Mentoring Program.	○	○	○	○	○	○	○
4. My program educates us about emotional and mental health resources such as an on-campus counseling center.	○	○	○	○	○	○	○

5. Within your program you have been encouraged to participate in planned social events intended for socializing/bonding rather than discussing program topics/news.	○	○	○	○	○	○	○
6. Within my graduate program I have received advice regarding scholarships, summer assistantships, or other ways of reducing financial burdens.	○	○	○	○	○	○	○
7. My program has a mentorship program in which academic and career advice and support is offered. This can include a built-in relationship between a student and faculty, a further along student and a newer student.	○	○	○	○	○	○	○
8. My program's mentors allow students to speak openly about stress or other emotional needs and receive support.	○	○	○	○	○	○	○

9. My program creates a collaborative climate in which students can build friendships with peers, faculty, or career psychologists.	○	○	○	○	○	○	○
10. Within my graduate program I have the opportunity to earn money, reduce tuition, or be supported financially through some form of assistantship, internship, or other work-resource.	○	○	○	○	○	○	○
11. My program encourages and helps build mentorship relationships with career psychologists who can help guide you as you begin working in the field.	○	○	○	○	○	○	○
12. My program hosts workshops or provides other dedicated resources regarding ways of improving mental health or managing stress.	○	○	○	○	○	○	○

For supports offered above but not utilized, please explain why you did not use them.

_____

Within your school psychology program do you feel that you are provided supports that go unmentioned above? Please describe these briefly.

_____

_____

_____

_____

_____

In what other ways do you feel that a program can work to reduce the stress of its students?

_____

The items below describe different self-care practices that graduate students may engage in to help relieve or respond to the stress of graduate school. For each of the following self-care practices, please indicate how often you participate using the scale provided.

	How often have you participated since entering graduate school?						
	Never (1)	Less than once a month (2)	Once a month (3)	2 to 3 times a month (4)	1 to 3 times a week (5)	4 to 6 times a week (6)	Daily (7)

1. Have you participated in Emotional Self-Care practices since entering graduate school? (Ex. finding things that make you laugh, complimenting yourself, allowing yourself to cry, spending time with loved ones, etc.)	○	○	○	○	○	○	○
2. Have you participated in Psychological Self-Care practices since entering graduate school? (Ex. saying "no" to extra responsibilities, allowing time for self-reflection, engaging your intelligence in other topics, paying attention to your inner experience (thoughts, feelings, attitudes), etc.)	○	○	○	○	○	○	○
3. Have you participated in Physical Self-Care practices since entering graduate school? (Ex. eating healthier, watching Netflix, exercising, taking a bath, etc.)	○	○	○	○	○	○	○

4. Have you participated in Spiritual Self-Care practices since entering graduate school? (Ex. contributing to causes you care about, praying, connecting to a higher power, meditating, spending time in nature, engaging in inspirational videos or literature, etc.)	○	○	○	○	○	○	○
5. Have you participated in Professional Self-Care practices since entering graduate school? (Ex. chatting with coworkers, decorating your workspace, balancing your workload, creating a quiet place to get your work done, etc.)	○	○	○	○	○	○	○

What self-care practice do you participate the most in?

_____

Of the following practices of self-care, which practice has been the most beneficial in **preventing** stress?

- ○ Emotional
- ○ Psychological
- ○ Physical
- ○ Spiritual
- ○ Professional

Of the following practices of self-care, which practice has been the most beneficial in **reducing** stress?

- ○ Emotional
- ○ Psychological
- ○ Physical
- ○ Spiritual
- ○ Professional

What type of program are you in?

- ○ Masters-Specialist
- ○ Doctorate

Please indicate which year of your program you are in.

- ○ Year 1
- ○ Year 2
- ○ Year 3
- ○ Year 4
- ○ Year 5
- ○ Other _____

How many people are in your cohort (i.e. students who entered your school psychology graduate program the same year as you)?

_____

I identify my gender as:

- ○ Male
- ○ Female
- ○ Other _____

I identify my ethnicity as:

- ○ Asian
- ○ Black or African American
- ○ Caucasian
- ○ Hispanic/Latinx
- ○ Native American
- ○ Pacific Islander
- ○ Other _____

Current age:

_____