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Dying for Change: the Impact of Awareness Prevention and Intervention on Graduate Assistant Stress

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DYING FOR CHANGE: THE IMPACT OF AWARENESS PREVENTION AND INTERVENTION ON GRADUATE ASSISTANT STRESS

by

MARLA BRUNER

(Under the Direction of Steven Tolman)

ABSTRACT

As challenges surrounding mental health and well-being in doctoral graduate students (GAs), continue to rise, it is imperative that higher education institutions evaluate the stressors that GAs experience, their awareness and use of campus resources for dealing with stressors, and the impact that additional resources and programming may have on stress. The research questions for this study sought to examine the stressors experienced by doctoral level graduate students working in GA positions and their corresponding awareness and use of campus resources, and to determine what impact, if any, providing additional services, resources, and programming in had after a three-year implementation period from 2016 to 2019. This quantitative study utilized Lewin's Change Model as a conceptual framework and Quick and Quick's Theory of Preventative Stress Management as a theoretical framework. The population included 1,751 doctoral GAs during the Spring 2016 data collection, and 689 doctoral GAs in the 2019 survey data collection. Parametric statistics were used to analyze the two data sets collected for this study. Descriptive statistics and zero-order, bivariate correlations, Pearson's *r*, were requested of the data to answer the first research question. To answer research questions two and three, a series of mixed-model ANOVAs (between-subjects and within-subjects) were conducted. Research question four used dependent paired samples to analyze measures of effect, proportion

of variance, and to determine the impact of a change in resources, services, and programming on graduate student stress. The information in this study will contribute to decreasing the gap in recent research and literature on the subject of GA stress and provide a resource to higher education and graduate education leaders on mitigating GA stress. The findings of this study provide clear evidence that awareness of campus resources, services, and programming is a statistically significant intervention for mitigating GA stress and that the implementation of new campus resources, services, and programming lowered GA stress overall. This study provides practical implications and recommendations on using awareness as a prevention and intervention for GAs in crisis and the utilization of a survey on stress to establish a baseline for continuous improvement. The implications of this study are supported by the literature and can be generalized for use by education leaders for other populations and the recommendations for awareness campaigns that align with the student life cycle and enrollment management best practices are accessible and utilize limited resources.

INDEX WORDS: Graduate assistants, Stress, Campus services, Resources, Programming, Organizational stress, Preventative stress management

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DOCTOR OF EDUCATION

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DYING FOR CHANGE: THE IMPACT OF AWARENESS PREVENTION AND INTERVENTION ON GRADUATE ASSISTANT STRESS

by

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DEDICATION

This dissertation is dedicated to my children, Thomas and Morgan. You are the reason I have worked so hard. Not just for my future, but for yours. I hope you will always chase your dreams and never be afraid to take on new challenges. I am so proud to be your mom and I hope this will be an example to you both. Never give up on yourself, no matter how hard the road may get. You were both so good, patient, and encouraging as I spent countless hours on coursework and writing. I have achieved my goal, and I cannot wait to see you achieve yours.

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CHAPTER 1

INTRODUCTION

Emphasis on how stress is linked to mental health, well-being, and graduate students continues to be an important area of inquiry. A report on graduate student happiness and well-being found that 47% of doctoral students and 37% of master's students surveyed met the clinical criteria for depression (University of California, Berkeley, 2014). This report mirrored findings from an American Psychological Association study that showed 87% of psychology graduate students reported symptoms of anxiety, 68% reported symptoms of depression, and 19% reported suicidal thoughts: all well above national averages reported in the general United States population (Breines, 2015). Over the last ten years, mounting evidence indicate that graduate students are face increasing levels of stress and anxiety, yet there is little known about the stressors across this population and even less is known about student pathways for care or the effectiveness of resources (CGS & JED, 2021). According to Grady et al., 2014 if higher education leaders can identify stressors and develop or realign campus resources and programs to alleviate stress, graduate students could experience overall higher levels of satisfaction with their graduate school experience. Higher levels of overall satisfaction can lead to higher quality learning, higher levels of academic student engagement, productivity, and creativity, and a lower prevalence of mental health issues (Moffitt et al., 2014).

Following the suicide of two graduate students in 2015 at one public institution in the southeastern United States, the administration determined there was a significant need to take stock of mental health and well-being among graduate students and determine the best preventions and interventions for managing the stress they experience. For the purposes of this study, the institution will remain anonymous and throughout this document be known as Grad

University. In 2015, administrators at Grad University sought to examine graduate student perceptions about their experience at the institution, to identify stressors that led to graduate student dissatisfaction, to gauge awareness and usage of current services, resources, and programming, to identify what, if any, impact awareness and usage of campus services, resources, and programming had on the graduate student experience and more importantly, identify gaps where new services resources and programming could be implemented as preventative and intervention measures to mitigate graduate student stress. To begin to answer these questions, Grad University needed to establish a baseline of the status quo, and thus developed the 2016 Graduate Experience Survey. The survey covered several areas of interest including overall experience, awareness and usage of campus services, resources, and programs, advisor/advisee relations, institutional, college, and program level support, workload for graduate assistants, financial status, and well-being.

Implementing the findings of the 2016 Graduate Experience Survey, Grad University administrators embarked on campus-wide initiatives focused on mental health and well-being by expanding services and programs offered by the Office of Graduate Studies, Career Development, Student Services, and the Counseling Center. The initiatives included: new models for funding graduate students serving as graduate teaching and research assistants; new policies, best practices, and guidelines on advisement, qualifying exams, and the dissertation process; expanded counseling and well-being services, resources, and programming; training for faculty, staff, and students on suicide prevention and identifying those at risk for suicide. Between 2016 and 2019, three more students (graduate and undergraduate) completed suicide on Grad University's campus before these initiatives could be fully implemented. This prompted a continued campus-wide focus on mental health and well-being, and in the spring of 2019, the

institution decided to relaunch the Graduate Experience Survey with the intent of gauging the impact the new services, resources, or programming had in changing graduate student perceptions about their experience, stressors experienced, and awareness and usage of campus services, resources, and programming.

The 2016 and 2019 Graduate Experience Surveys focused on the entire graduate student population at Grad University, yet the results indicated that the most significant number of graduate students experiencing low levels of satisfaction and high levels of stress came from a subpopulation of students hired as graduate research and teaching assistants (GAs). It became clear that not all graduate students had the same types of experiences. For this research study, GA is used as an all-encompassing term that includes doctoral level graduate research assistants (GRAs) and graduate teaching assistants (GTAs) who perform part-time research and teaching work for Grad University and receive a tuition waiver and stipend or/ other pay as compensation to support them as they pursue a degree. In their 2018 study on evidence for a mental health crisis in graduate education, Evans et al., found that graduate student trainees (GAs) were six times more likely to experience anxiety or depression when compared to the general population; and variables including gender, mentorship relationships, and work-life balance are contributing factors. Due to the high prevalence of graduate students experiencing anxiety and depression, this study sought to not only examine the experience of these doctoral students working in GA positions and their corresponding awareness and use of campus resources at Grad University, but also to determine what impact, if any, providing additional services, resources, and programming in support of GAs had after a three-year implementation period from 2016 to 2019 at a large public research institution in the southeastern United States.

Background

Graduate students in contemporary higher education serving in graduate assistantships (GAs) are tasked with a larger workload than ever before (Chadha, 2013, Evans et al, 2018). They are not only full-time students working on their academic pursuits, but they are also asked to spend their days on tasks such as running labs, teaching undergraduate students, and assisting faculty with research often while working another full- or part-time job; some do this while also raising a family or caring for elder parents (Chadha, 2013). Additionally, higher demands on faculty trickle down and contribute to the stress on GAs as they assist faculty by fulfilling multiple roles on campuses, such as teaching and research assistantships (Breines, 2015). Although external factors like health, family, or personal life can impact an individual's level of stress, Grady et al., (2014) found the academic culture and structure of graduate programs shape students' stress by determining the demands GAs are expected to meet, the mentorship available, and the resources allocated.

As Grady et al. (2014) pointed out, the social position of GAs is "rife with chronic role strains" (p. 5), including role conflict, acuity, and role overload as they perform duties of an apprentice, an employee, an instructor or faculty, and student. Their multiple duties and roles can contribute not only to stress but lead to legal issues and other types of dissent such as unionization (Hayden, 2001). Else (2015) suggested that the GA experience "can be a demoralizing existence; common complaints include low pay not reflecting hours worked, job insecurity, isolation, and a lack of institutional support and respect" (para 4). As the instances of depression and mental health issues continue to persist in graduate student populations, it is important to take a closer look at the stressors GAs experience (Leveque et al., 2017).

Several factors influence the experience a graduate student has while working in a GA position. A review of the literature on stress in graduate students demonstrates a need for further examination of this population and more up to date studies. The literature highlights five main areas of research on stress and well-being of GAs: role strain and social position (Bandura, 1997; Grady et al., 2013; Payne, et al., 2015); advisement and mentorship (Corbett & Paquette, 2011; Evans et al., 2018; Hoessler & Godden, 2015; Queens University, 2015; Rossouw & Niemczyk, 2013); stress and well-being (Mazzola et al., 2011); academic and workload burnout (Hopwood & Stocks 2008; Maslach et al., 2012; Muzaka 2009); and funding (e.g., Corbett & Paquette, 2011; Else, 2015; Gillon & Hoad, 2001; Hayden, 2001; Janson 2010; Lafer, 2003; Payne, et al., 2015). Overall, the literature on graduate student stress highlights several issues that can influence the graduate student experience and how an institution views GAs and the work that they do. What is not known, however, is what impact prevention or intervention measures, like services, resources, and programs offered at higher education institutions, can have on alleviating GA stress.

Statement of the Problem

Much of the literature on stress in GAs is out of date or focuses on one subsection of the GA population (e.g., research assistant or teaching assistant), or on a specific professional discipline (e.g., nursing or athletic trainers), but not on the impact of services, resources, and programming designed to alleviate stress in the overall doctoral level GA population across academic disciplines. The complexities surrounding role strain, work overload, stress, and mental health and well-being in GAs is an area of research that warrants further investigation. This study sought to fill a gap in the literature by identifying stressors doctoral GAs experience, their awareness and use of campus resources, and the impact of services, programming, and

resources focused on alleviating stress. Findings from this study may inform the development of intervention and prevention programs to help GAs more effectively manage stressors, which may affect instances of mental health issues, depression, and overall retention and enrollment in graduate education.

Purpose Statement

GAs are not only a valuable resource for instruction and research at colleges and universities, but they are also students and emerging faculty in training. Few studies on GAs have investigated the stressors associated with navigating the unique role they occupy within higher education. This study seeks to examine the stressors experienced by doctoral level graduate students working in GA positions and their corresponding awareness and use of campus resources at Grad University, and to determine what impact, if any, providing additional services, resources, and programming in support of GAs had after a three-year implementation period from 2016 to 2019. Findings from this study will benefit higher education leaders by informing decisions about allocating resources to prevention and intervention measures like services, resources, and programming focused on mitigating stress, mentoring/advising, and counseling. Additionally, the findings can provide a baseline of assessment for areas that need improvement, such as programming on managing stress, better guidelines for advisors and mentors on working with GAs, and intervention resources for dealing with mental health issues.

Research Questions

Following instances of graduate student suicide at Grad University, the administration determined there was a significant need to evaluate mental health and well-being among graduate students and how they manage the stress they experience. Over a three-year period from 2016 to 2019, the institution focused on mental health and well-being and expanded services and

programs offered by the Office of Graduate Studies, Career Development, Student Services, and the Counseling Center. The institution identified and implemented campus-wide preventative and intervention initiatives surrounding services, resources, and programs designed to mitigate stress within the graduate student population. To measure the impact of these changes, Grad University deployed the Graduate Experience Survey in 2016 (pre) and again in 2019 (post). To determine the level of impact, this study was guided by four research questions:

1. What stressors are GAs experiencing?
2. To what degree do GAs' awareness (high, low) of campus resources influence their perception of stress across a three-year time frame (Spring 2016 to Spring 2019)?
3. To what degree do GAs' utilization of campus resources (high, low) influence their self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?
4. What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

Theoretical and Conceptual Frameworks

To better define these interrelated concepts and the determinations made on what was statistically measured in this study, a theoretical and conceptual framework was needed (Creswell, 2014). As there is currently no preventative stress management model in existence for graduate students, or those serving in graduate assistantships, this study utilized theoretical and conceptual models from a closely related field to frame the interpretation of data analyzed. The theoretical framework utilized, Quick and Quick's (1979) organizational theory of preventative stress management (TPSM), serves as a model that overlays public health notions of prevention onto organizational stress process models.

Understanding the characteristics of organizational stress on GAs, the challenges they face, and the impact of intervention and/or prevention measures is valuable in assisting this student population. Additionally, as the primary data source utilized in this study comes from surveys on satisfaction and overall experience, Lewin's (1947) seminal work on organizational change was used as a conceptual model for evaluating the impact of intervention on GA stress. If one views GAs as employees in an organization (i.e., a college or university), understanding their stressors and stress responses before and after an intervention or prevention can be used to manage their stress and enhance their overall experience, leading to higher rates of retention and completion. An overview of both models follows below, with more detailed information provided in later chapters.

Organizational Theory of Preventative Stress Management Model

Quick and Quick's theoretical framework (1979, 2013) on preventative stress management is a philosophy and a set of principles grounded in public health prevention methods, primarily health promotion and disease prevention, that promote individual and organizational health, while preventing individual and organizational distress (Quick et al., 2013. The theory of preventative stress management model or TPSM is a proactive model of organizational change with the intent that individuals and organizations will anticipate and avert crises by altering structures, functions, or demands on organizations and individuals that either manage work demands or enhance the support that those in the organization receive (Quick et al., 2013). The model highlights the organizational stress process focusing on stress or demands of the individual, the stress response (eustress or distress), and the outcomes, while overlying primary, secondary, and tertiary public health prevention methods for managing the stress responses and outcomes.

As GAs makeup a large portion of the workforce in research focused universities, this model lends itself well to the implementation of primary and secondary preventions as well as tertiary interventions in managing the stressors, stress responses, and outcomes they experience. Following the TPSM model, the preventions and interventions that Grad University have put in place following the 2016 Graduate Experience Survey should yield a positive impact in the outcomes for GAs and should be reflected in the reported experiences of GAs in their 2019 Graduate Experience Survey.

Organizational Change Model

Lewin's model (1947) is a three-step process (unfreeze, change, freeze) that takes a high-level approach to organizational change. The model provides a framework for leaders to implement and evaluate a change effort within their organization (Hussain et al., 2018. This model serves as a conceptual framework to discuss the preventions and interventions change process that took place on Grad University's campus between the 2016 and 2019 Graduate Experience Surveys.

Following the tragic events on their campus, Grad University determined change was needed. Following Lewin's organizational change model, the institution prepared for change or the "unfreeze" process by implementing the first round of the survey to examine the status quo, increase awareness about the driving forces for change and thus decreased resistance to change. As the institution moved into and through the "change" process, leadership at the institution involved stakeholders in the training for faculty, staff, and students, and to develop preventions and interventions when and where possible. Now that the changes have been completed, the institution is entering the "refreezing" stage of the model. This includes gathering feedback to

measure and assess the impact of these changes via the 2019 Graduate Experience Survey and the potential need for further changes.

Procedures

To answer these research questions, I selected a quantitative archival dataset collected by Grad University through their 2016 and 2019 Graduate Experience Survey. The data sets were collected through the Qualtrics™ software system over the course of the Spring 2016 semester and Spring 2019 semester. Although there were 38 questions over 6 sections on the survey, I focus only on sections of the dataset related to stress, advisement, and mentorship, and use of campus resources and services. All archival data sets used were de-identified.

Research Design

The datasets from the surveys were entered to the Statistical Package for the Social Sciences (SPSS) for analysis. Parametric statistics were used to analyze the two data sets collected for this study. Descriptive statistics and zero-order, bivariate correlations, Pearson's *r*, were performed to answer the first research question on what stressors GAs are experiencing. To answer research questions two and three on awareness and utilization of campus resources, services, and programming GAs reported (high vs. low), a series of mixed-model ANOVAs (between-subjects and within-subjects) were conducted. To answer research question four on the impact of increased campus resources, services, and programming to alleviate stress, dependent paired samples of doctoral GAs were used for measures of effect and proportion of variance pre (2016) and post (2019) for standard deviation of size effect. These statistical designs are intended to first and foremost examine the statistical interaction between the groups across time; essentially asking: "Is the change across the three-year time frame pre and post change (Spring 2016, Spring 2019) moderated by the group membership?" Practical significance was evaluated

via the effect size, *partial* η^2(η^2_p). Cohen (1988) provided the following interpretive guidelines for η^2_p: .010-.059 as small; .060-.139 as medium; and ≥ .140.

Significance of the Study

Preparing GAs for professional and academic careers requires universities to continually improve, increase, and change their instruction, mentorship models, and resources for these students (Payne et al., 2015). Universities may also need to clearly define GA roles and to implement new policies for supervising their GA populations based on these definitions. The limited research on mental health and well-being of GAs clearly indicates the need for further study in this area. As concerns surrounding mental health and well-being of graduate students continue to rise, it is imperative that higher education institutions evaluate the stressors that GAs experience, their awareness of campus resources for dealing with stressors, and the perceptions GAs have about their use of these resources to alleviate stress.

I sought to fill a gap in the literature on the stressors that impact doctoral GAs, their awareness and use of campus resources, services, and programming, and the impact of additional resources, services, and programming (prevention and intervention measures). Moreover, findings will benefit GAs, the faculty that supervise and support GAs, and higher education administrators in helping to increase awareness of the stressors surrounding GA responsibilities, and shape potential program and resource development. Successful implementation of strategies to alleviate stress in GAs could result in overall higher levels of satisfaction, higher levels of productivity and creativity, higher levels of affinity, better student engagement, and a lower prevalence of mental health issues.

Definition of Key Terms

The following terms are defined for the purposes of this study:

Graduate Assistant (GA) - Throughout this document and this study, graduate assistant (GA) is used as an umbrella term for masters and doctoral level students who perform research and teaching work for a college or university and receive a tuition waiver and stipend or other pay as compensation to support them as they pursue a degree. GA will encompass the two types of GAs at Grad University, Graduate Research Assistants and Graduate Teaching Assistants.

Graduate Research Assistant (GRA) - Graduate Research Assistants are students hired 13-20 hours per week to conduct scholarly research in their discipline under a faculty supervisor.

G*raduate Teaching Assistants (GTA)* - Graduate Teaching Assistants are students hired 13-20 hours per week that perform teaching/classroom or lab work. They can serve as an assistant to faculty or instructor of record. Graduate research and teaching assistant receive a full tuition waiver.

Mental Health - Includes emotional, psychological, and social well-being associated with a positive state of mind, feeling of safety, ability to cope, a connection with people, the community, and wider environment.

Programming - Workshops, training, co-curricular activities, and experiences focused on self and professional development. (e.g., leadership training, suicide prevention training, mentorship training, difficult conversations, developing mutual expectations).

Resources- campus units and staff that provide support resources beyond the traditional cache of student services. (e.g., Health Center, Human Resources, Conflict Resolution and Ombudsmen, units that oversee policy and best practices development).

Services - Offices, centers, and campus units that provide academic and non-academic support to students by enriching the academic, personal, and professional growth of students. (e.g., Academic Advisement and Mentoring, Career Services, Counseling Services, and Scholarships and Financial Aid).

Stress - a state of mental or emotional strain or tension resulting from adverse or demanding circumstances.

Well-being - a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity.

Organization of the Study

Organized into five chapters, this dissertation includes an introduction, literature review, methodology, data analysis, and discussion of the data. Chapter 1 provides an introduction to the impact of campus services and resources on graduate assistant stress and well-being, background on the topic, and a conceptual and theoretical framework for the study. The first chapter also provides information on the purpose of the study and the research design. Chapter 2 provides a comprehensive review of the literature on the issues associated with graduate assistant stress and the use of campus resources. Chapter 3 outlines the details of the research design and the use of archival data, including population, data collection and data handling procedures. Chapter 4 covers analysis of the data, data tables, and statistics. Chapter 5 includes a discussion of the data, findings, connections to the literature, and implications for future research.

Chapter Summary

GAs experience unique stressors related to role strain and social position, advisement and mentorship, and workload. As challenges surrounding mental health and well-being in graduate students and GAs, continue to rise, it is imperative that higher education institutions evaluate the

stressors that GAs experience, their awareness and use of campus resources for dealing with stressors, and the impact that additional resources and programming may have on stress. As the research highlighted above demonstrates, there is a significant need to look more closely at mental health and well-being among graduate students and the unique contributing factors that lead to the stress they experience.

To fill a gap in the literature and better understand the relationship between the stress GAs experience and their use of campus services, resources, and programming, this study utilized archival data collected in a Graduate Experience Survey in 2016 and 2019 of graduate students at Grad University in the southeastern United States. The 2016 and 2019 Graduate Experience Survey data provide specific insight on the stressors GAs experience, their awareness and use of campus resources for alleviating stress, and the potential impact of new programming and resources. If higher education leaders can identify and mitigate some of these stressors and develop or realign campus resources to alleviate stress, GAs may experience higher levels of satisfaction with their graduate experience. Improvement of the GA experience can yield positive outcomes including: 1) higher quality learning; 2) higher levels of academic student engagement; 3) higher levels of productivity and creativity; and 4) lower prevalence of mental health issues (Moffitt et al., 2014).

CHAPTER 2

REVIEW OF THE LITERATURE

Over the last 20 years, considerable research has been devoted to the student experience at higher education institutions across the United States. Although this research has provided insight to the stressors that students experience, scholars are missing data analysis on a large portion of the overall student population by focusing on undergraduate students and omitting graduate students, more specifically those working in graduate assistantships (GAs). To analyze the GA experience, a review of the existing literature related to the unique stressors GAs encounter, and their use of campus resources to relieve these stressors is essential. Although this literature review is not comprehensive of all aspects of the graduate student or GA experience, the literature highlights critical areas of stress experienced by those in a graduate assistantship role.

To conduct this literature review, I used four primary search services: ProQuest dissertation database; Georgia Southern University's Discover database; Education Resources Information Center (ERIC) database; and Google Scholar. Keywords for the search included: graduate students, graduate assistants, research assistants, teachings assistants, student experience, stress and well-being, workload, role strain, graduate student retention, graduate student experience, advisement and mentorship, and graduate student dissent. I selected peer-reviewed articles published in scholarly journals that allowed for full Portable Document Format (PDF) access and were in English.

I originally searched for articles more recent than 2010; however, this did not yield sufficient depth into the subject and several older articles, seminal, and landmark studies of an earlier date were chosen for their added value to the literature review. Additional content is

comprised of educational statistics reports from regionally accredited institutions and reports from national organizations with expertise in graduate education and advocacy.

Organization of the Literature

This literature review is framed by a theoretical model, Quick and Quick's Theory of Preventative Stress Management (1979), and a conceptual model, Lewin's model for organizational change (1947). In a review of the literature on stress and well-being in graduate students and in particular, GAs, five main areas of research emerged: role strain and social position (Bandura, 1997; Duba-Biedermann, 1991; Grady et al., 2013; Payne, et al., 2015); advisement and mentorship (Corbett & Paquette, 2011; Hoessler & Godden, 2015; Queens University, 2015; Rossouw & Niemczyk, 2013); stress and well-being (Mazzola et al., 2011; academic and workload burnout (Hopwood & Stocks 2008; Maslach & Jackson, 1981; Muzaka 2009); and funding (e.g., Corbett & Paquette, 2011; Else, 2015; Gillion & Hoad, 2001; Hayden, 2001; Janson 2010; Lafer, 2003; Payne, et al., 2015). As this study is grounded in higher education leadership, an overview of intervention and prevention programming directly related to these research areas and their impact on student well-being in relation to the theoretical and conceptual framework will also be addressed.

Theoretical and Conceptual Frameworks

There is currently no seminal theory that addresses graduate student or graduate assistant stress and the impact of prevention or intervention programming to alleviate stress in these student populations. As such, Quick and Quick's (1979) model on preventative stress management in organizations was used as the theoretical framework for this study. The expectations surrounding the work that GAs perform in higher education institutions has similarities to work expectations that employees perform in other organizations. As stated in

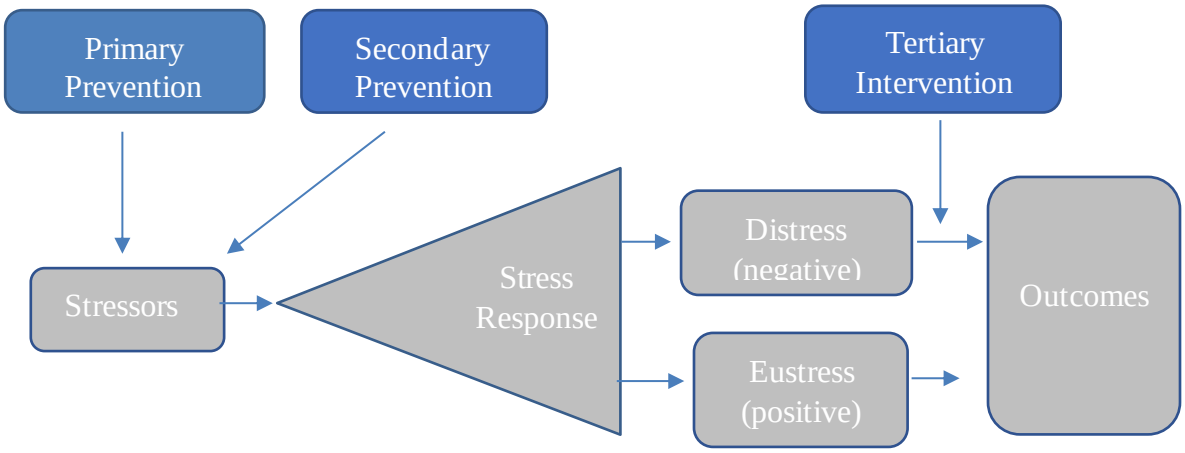
Chapter 1, the theory of preventative stress management lends itself well as a lens for viewing the stressors and interventions/preventions that impact GA stress. The areas of stress as defined by the literature were framed in the context of this theory and within the main areas outlined above: role strain and social position; advisement and mentorship; and stress and well-being. Funding was not addressed as part of this study as it is unique to individual institutions and subject to budgets cycles and economic impacts. The focus is on the impact and outcomes (positive or negative) of the intervention of new services and resources.

Organizational Theory of Preventative Stress Management Model

According to Quick and Quick's theoretical framework on preventative stress management (1979), individuals within organizations experiencing stress have two types of stress responses, distress (negative) and eustress (positive). Utilizing public health prevention methods, primarily grounded in health promotion and disease prevention, Quick and Quick theorize that organizations can employ primary or secondary prevention methods and tertiary intervention methods to promote individual and organizational health, or eustress, while preventing individual and organizational distress (Quick et al, 2013. The TPSM is a proactive model of organizational change designed to anticipate and avert crises by altering structures, functions, or demands on organizations and individuals that either manage work demands or enhance the support that those in the organization receive (Quick et al, 2013). The model maps out the organizational stress process focusing on stress responses or demands on the individual, the stress response (eustress or distress), and the outcomes, while overlying primary, secondary, and tertiary public health prevention and intervention methods for managing the stress responses and outcomes. Figure 1 outlines the components of Quick and Quick's framework.

Figure 1

Theory of Preventative Stress Management in Organizations Model



Note. Adapted from Quick et al, 2013. *Preventive stress management in organizations* (2nd ed.). American Psychological Association.

In a traditional organization or business setting, primary prevention methods focus on reducing negative stress or distress by offering individuals training, structured periods of rest or leave, and social support. Secondary prevention methods focus on moderating the stress response by complimenting the primary preventions with resources for managing stress or work demands (e.g., wellness or exercise programs). In addition to primary and secondary prevention methods, tertiary intervention can be deployed to moderate the outcomes of distress with services like counseling or medical care and encourage eustress with coaching and recognition (Quick et al., 2013).

Additionally, Quick and Quick identified four dimensions of stressors that impact individuals within an organization: role factors; job factors; physical factors; and interpersonal factors (Quick et al, 2013).

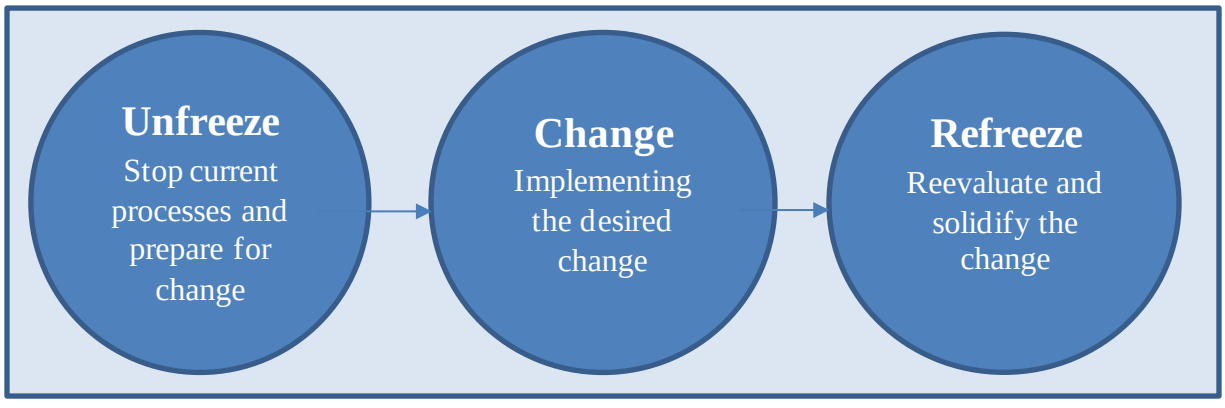
1. Role factors refer to power or social position within the organization, also referred to as role strain.
2. Job factors include quality of work, quantity of work, or work overload, feedback and appraisal.
3. Physical factors can be environmental or personal.
4. Interpersonal factors refer to relationships, conflict, and social isolation or well-being.

Organizational Change Model

Kurt Lewin's three-step (unfreeze, change, freeze) approach to understanding organizational change is a model (1947) that provides a framework for leaders to implement and evaluate a change effort within their organization. This model serves as a conceptual framework to discuss the process of developing preventions and interventions on Grad University's campus between the 2016 and 2019 Graduate Experience Surveys.

Figure 2

Lewin's Organizational Change Model



Note. Adapted from Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science; equilibrium and social change. *Human Relations, 1*(1), 5–41.

During the "unfreeze process," the status quo and current processes are open for change. In this phase of the process, the institution evaluated the need for change and prepared for change by implementing the first round of the survey, increased awareness about the driving forces for change, and thus decreased resistance to change. Part of their preparations included gathering feedback from various stakeholders in graduate education on their campus. Moving into and through the "change" process, leadership at the institution deployed a campus wide initiative to take action and make changes in services and resources, offering training to faculty, staff, and students, to revise and developing policy, and to develop preventions and interventions when and where possible *(*Hussain et al., 2016).

Once changes were implemented and the institution reached the final stage of the model, or "refreezing" stage, it was time to reevaluate and close the process. This stage included gathering feedback to measure the impact of these changes via the 2019 Graduate Experience Survey and the potential for further needs. In this study, I expand upon the goals of the "refreezing" stage and evaluate the impact of increased resources, services, and programming on doctoral GA stress over a three-year time frame.

Role Strain and Social Position

The structure and culture of graduate programs at academic institutions shape GA's stress by determining the demands graduate students are expected to meet, the mentorship available, and the resources allocated (Grady et al., 2014). Due to the nature of their role in teaching or research assistantships, GAs find themselves with one foot solidly in the realm of student scholar or apprentice and the other squarely in the realm of employee. Research universities increasingly employ GAs to teach their undergraduate students and conduct research; tasks previously performed exclusively by tenured or tenure track faculty (Chadha, 2013). Many GAs and

graduate student organizations have collectively sought the same rights and benefits offered to university employees. The first GA unions were established in the 1960s, and after years of stagnation, graduate student unions saw a sharp increase in participation by GAs and graduate student government associations/organizations in the 1990s (Janson, 2010). This growth period corresponds with changes within higher education, and with the transition from an industrial economy to a knowledge and information-based one economy in the United States (Kitchen, 2014).

The literature (e.g., Corbett & Paquette, 2011; Else, 2015; Hayden, 2001) on GAs as employees focuses not only on the core argument of student scholar versus employee, but also highlighted low-cost employees as one of the reasons the GA population has increased in number over the last few decades. The most recent recession in the United States has certainly made it more cost-effective for universities to hire GAs as opposed to part-time or full-time benefited employees. As Hayden (2001) pointed out, GAs are both students and employees, and should be granted the rights to collective bargaining. They meet all the classic criteria used by courts and administrative agencies to determine collective bargaining rights. Many institutions need to employ GAs to teach undergraduate courses and to fill temporary adjunct lines when possible, but these graduate students should not be the bulk of the total clinical faculty providing instruction and advisement (Kenner & Presser, 2014). It is important for GAs to have a clear understanding of their dual status, or social position on campus, being aware especially of the requirements, responsibilities, and privileges of their positions as both student and professional (Payne et al., 2015). As Bandura (1997) noted:

> ...if one does not know what demands must be fulfilled in a given endeavor, one cannot accurately judge whether one has the requisite abilities to perform the task.

> Discrepancies between efficacy belief and performance will arise when either the tasks or the circumstances under which they are performed are ambiguous (p. 234).

There is also evidence that hiring GAs was also a cost-effective way to hire workers with the most up to date knowledge. For example, Kenner and Pressler (2014) focused their study on graduate teaching assistants (GTAs) working in a clinical setting, noting the need for competent faculty with the most recent skills necessitated the expanding need for graduate students to fill the role of clinical teaching assistants.

In his work on the role and position of GAs (specifically graduate teaching assistants or GTAs), Muzaka (2009), highlighted that GAs "occupy an ambiguous niche; they are simultaneously teachers, researchers, students and employees, with considerable tensions emerging as a result of the often conflicting rights and responsibilities associated with such roles" (p. 2) In his findings, Mazuka (2009) cited time pressure, as perceived by GAs, as a predominant theme that emerged from his study noting that teaching took GAs a significant amount of time away from their own research and studies. In many cases, the loss of time affected the GAs time to degree completion and extended the burden of financing their graduate education.

Some staff and students in Mazuka's (2009) study also noted that the pay for the time-consuming effort is minimal and incongruent with the actual time it takes to do a proper job. Another significant source of stress that emerged from his study centered on the lack of authority and respect that GAs were experiencing both from faculty and undergraduate students. All problematic aspects were related back to the ambiguous role and power position the GAs straddle (Mazuka, 2009). The research findings called for a reframing of GA teaching training

and responsibilities that encompass both research and teaching opportunities as expanded doctoral training, as well as managerial skills training that will better prepare graduate students for today's job market.

In their qualitative analysis of policy surrounding GAs in teaching roles at a Canadian institution, Hoessler and Godden (2015) researched the conflicting messages GAs receive about their various responsibilities, level of support, practical training, and how policy shapes the work done by graduate students performing duties in a GA role. Communications about responsibilities, teaching training, expectations and rights were expected to occur through institution-level policies and agreement forms completed for each teaching assistantship and teaching fellowship. Hoessler and Godden (2015) found this was not the case and that a myriad of departmental level policies were causing a gap in support of these graduate students. Further research at other institutions would be beneficial before any sort of broad sweeping proposed solutions could be called for. Although this analysis of policy may be difficult to replicate in the United States, the research provides information about graduate teaching assistant rights and policy that can be gleaned. As stated by Maslach and Jackson (1981), lack of clarity surrounding work duties can lead to emotional exhaustion and depersonalization, and lack of support can lead to a negative view of one's personal accomplishments. These factors, as identified in the research by Hoessler and Godden (2015), are directly linked to burnout syndrome.

While they do not cite burnout syndrome specifically, Payne et al. (2015) identified lack of autonomy, lack of feedback, lack of clarity surrounding organizational role and university procedures as dissent triggers for GAs. Their qualitative analysis of masters-level GAs explored GA dissent and identified the triggers and influences on decisions to communicate or to avoid conflict or dissent. Graduate assistants made decisions to approach or avoid dissent based on

personal characteristics, supervisor relationships, and department openness to feedback from students. How students identified, as student or employee, framed their dissent (Payne et al., 2015).

Lack of clarity and confusion around the role that GAs fill at their institution and the power struggle for social position and employee rights prompted The American Federation of Teachers (AFT) Higher Education Program and Policy Council to draft a report and handbook in 2004 that outlined standards of good practice in hiring graduate students as employees (AFT, 2004). The report and handbook call for recognition of the role strain that GAs experience and demands respect and rights for students serving in GA and fellowship positions. The guidelines and best practices are broken down into standards for fair compensation, fair employment practices, standards of professional responsibility and support, and ensuring full rights of graduate employees in their union.

The council, a national organization comprised of AFT members, includes both graduate student employees and faculty advisors from research institutions of higher education from around the United States. They argued that graduate employees deserve dignity and respect for the work they perform at institutions nationwide and the main point of their report and guidelines was to highlight the lack of policy and guidance that would identify GAs as employees and to offer them the same benefits and protections that faculty and staff are afforded.

In 2004, the U.S. Department of Education reported that of the 1.3 million employees that make up the instructional workforce at colleges and universities nationwide, 20% of those are graduate employees:

> Establishing that graduate employees are, in fact employees is only one fight in the larger struggle, since graduate employees make up a significant portion of the new instructional

> labor force in higher education that is largely contingent, underpaid, and professionally marginalized. (p. 5)

AFT (2004) offered some solutions and recommendations in their report on standards of good practice in the employment of GAs stating that institutions should offer GAs fair working conditions, fair employee practices, professional responsibility, support, and should ensure GAs full rights and a full voice on campus and in their union.

AFT cited data on the increase in the number of graduate student employees, subpar pay and working conditions, and lack of professional support. Most of the data points provided are based on funding and employment numbers reported by the department of education, but the report would be significantly stronger if it provided more data points and more evidence that support the policies and guidelines they propose. Given the rise in concerns about graduate student mental health and well-being, it would also seem to be timely to update the data and findings in the report for comparison.

The stress experiences surrounding social position of GAs was further explored in qualitative research by Grady et al. (2014) that focused on the stressors and experiences of 40 MS and PhD students. The researchers focused on sources of institutional stress surrounding the dual role (student and employee) that graduate students play on campus. They looked at mentor relationships, isolation, funding, and the need for social support, role strain, and role overload. Students in the study indicated that they felt marginalized, had no real power, and that resources were geared toward undergraduate students or faculty (Grady et al.) Three areas emerged as relevant for addressing graduate student well-being: strong mentoring relationships; development of social support to combat isolation; and development of more funding opportunities.

Here again, many of the issues highlighted in the report by AFT (2004) and the research of Grady et al. (2014) can be directly tied back to factors that lead to the emotional exhaustion and cynicism (depersonalization and personal accomplishment) that indicate burnout syndrome including, ambiguity surrounding the GA role, lack of support, lack of autonomy, isolation, and work overload (Maslach & Jackson, 1981; Mazerolle et al., 2012).

While the ambiguity around role strain and social position of GAs can lead to dissent and unionization, as indicated by the AFT (2004) report and Payne et al., (2015), defining the role of GAs on university campuses is not without its challenges. In his law review, *The University Works Because We Do: Collective Bargaining Rights for Graduate Assistants,* Hayden (2001) argued that courts and administrative boards have repeatedly reviewed the status of graduate assistants as employees within deficient frameworks that lead them to ineffective solutions. Hayden provided an overview of the challenges to employee rights faced by GAs, a history of the court cases surrounding the graduate student apprentice vs. employee argument, interpretations of the law from the National Labor Relations Board on unionization of student employees, and a recommendation for establishing national laws to protect this population of employees. Hayden (2001) included information on the challenges surrounding pay, conflict in the workplace, leave, and the merits and challenges of the apprentice model.

Despite evidence that highlights the multiples roles GAs occupy as both student and employee, some university administrators and trustees argue that GAs should not be considered employees. A GA position has historically been viewed as part of the education and training process or apprenticeship pathway in higher education (Hayden, 2001). According to the American Federation of Teachers (AFT), a trade union of educational, healthcare, and public service workers, administrators contend that the teaching and research conducted by graduate

students should be considered training in their academic discipline in an apprenticeship type model and a part of their development as students (AFT, 2004). However, other university employees are offered mentoring, on the job training, and professional development without being considered students (Pollon et al., 2013).

Advisement and Mentorship

Many educators exhibit the necessary mentoring characteristics and are ready, willing, and able to pursue the role of mentor (Corbett & Paquette, 2011). Likewise, graduate students in assistantship roles are enthusiastic and appreciative of the opportunities and benefits provided by a positive mentor/mentee relationship (Corbett & Paquette, 2011). In the apprenticeship model, an experienced faculty member commits time and energy to advising and mentoring a graduate assistant either by responsibility or by choice. Educational administrators typically view mentorship as a voluntary relationship, or as service to the university, but with the increased numbers of graduate students in assistantship roles nationwide, combined with faculty shortages, many faculty feel forced to mentor more students than they can take on (Corbett & Paquette, 2011).

Another facet of the mentorship relationship is whether a faculty supervisor perceives the working relationship with a GA to be employee-based. This perception can change the mentoring relationship from one focused on learning to one focused on previous experience and knowledge. For example, the practice at Queen's University (2015) has been to treat research assistantships as employment rather than research training toward fulfillment of degree requirements or as an apprenticeship. At other institutions, graduate students are treated as students in training and the work they do is part of their degree program and any hours 'worked' are in the pursuit of their degree (Queen's University, 2015).

Research by Naufel and Beike (2013), focused on the undue or perceived harm that can come to these students. They suggested that graduate students engaged in a research role may continue to work in unsafe or unhealthy environments out of fear of losing rapport with or a recommendation from their research advisor. Feedback from GAs about their overall experience and the stressors that impact them is necessary for improving programs, campus resources, and instruction. As Payne et al. (2015) pointed out, the role of a GA position, as both employee and student, can hinder the ability of a student on assistantship to give feedback if they disagree with institutional policies, procedures, resources offered, or the treatment they receive.

The work done by GAs in research and teaching can often blur the line in these mentor/student mentee relationships. Rossouw and Niemczyk (2013) noted that while graduate student and supervisor relationships have some similarities to regular employment, graduate research positions represent employment based on the acquisition and sharing of skills, as well as the desire to promote student and researcher learning, and the student's career development. This becomes an issue of conflicting outcomes on whether higher education institutions are developing students to become academic faculty or whether they are hiring employees to complete tasks. This is not necessarily an either/or question. The optimal outcome would be that institutions could simultaneously employ GAs to complete tasks in the areas of research, teaching, and administrative work while fostering student learning, expanding academic experience, and furthering professional development (Hayden, 2001).

One of the merits of the apprentice model identified by Hayden (2001), the AFT (2004) report, and Payne et al.'s work (2015) that could be developed to alleviate stress on GAs was the support they receive from faculty performing in an advisement or mentorship role. To further investigate the role of mentorship, Corbett and Paquette (2011) developed a quantitative study

that examined the beliefs of faculty mentors and their research and teaching GAs about their professional relationships, mentoring, and the factors that influence their mentoring experience. Their study focused on four main factors: work environment; faculty beliefs about the mentoring they provide; GAs work assignments; and positive professional growth.

The results indicated there is a discrepancy in the beliefs of faculty and their GAs and TAs about the type of work assignments given, the opportunity for giving feedback, and in areas of mutual trust and respect (Corbett & Paquette, 2011). They highlighted the reciprocal role mentoring plays for both faculty and graduate students and more importantly, place emphasis on providing an environment where both can open professional communication. A graduate research assistant position has historically been viewed as part of the education and training process or apprenticeship pathway to a professional faculty or research position in higher education (Pollon et al., 2013). In their self-study on the importance of mentorship and support in their development as researchers, Pollon et al. (2013), discussed the importance of their research learning experience as graduate student employees while completing their Master's thesis and PhD programs.

They explored the relationship between holding a research GA position and becoming a professional research consultant with the goal of serving incoming graduate students considering an assistantship, current research assistants, faculty and staff supervisors, and department chairs. In their findings, they identified distinctive characteristics of research GA experiences during MS and PhD studies, distinctive characteristics of research GAs and supervisors, and the experiences and skills they gained that had an impact on their professional development as researchers. In short, Pollon et al. (2013) agreed that the experience had provided valuable and transformative learning in their development as researchers and that the relationship with their

supervisor had a significant impact on shaping their research experience, both good and bad. Autonomy in their work and trust from their supervisor was fundamental to their success in the role as a research GA. The researchers also noted that persistence and resilience on the part of the research GA also emerged as a fundamental characteristic that led to a successful graduate experience. The study was limited by the small sample size and may lack the depth and range needed to speak to research GA positions in general. However, the methodology lends itself to a much larger study across multiple research institutions. Both Corbett and Paquette (2011) and Pollon et al. (2013) focused on the impact that a positive mentorship relationship can have for both the GA and the faculty they work with, unfortunately much of the following research focuses on the impacts and risks to the GA when the mentor or advisor is not supportive or in some cases acts as a bully in the workplace. Myers (1997) stated, "These bullying behaviors have the potential to disrupt graduate student's focus on their education since most graduate students have concerns about being properly socialized and to turn to faculty for help." (p. 273)

In their research on workplace bullying in graduate psychology programs, Yamada et al. (2014) stated that given the competitive and individualistic nature of the tenure process and the power dynamic of the student-supervisor relationship, "Graduate students may be particularly vulnerable to workplace bullying by their supervisors" (p. 58).Their study explored the prevalence and nature of workplace bullying in the context of the student-supervisor relationship for graduate students in Canadian psychology programs. Of the 336 students (55 men and 281 women) who responded to their survey, 68 (21.3%) reported that they had been subjected to workplace bullying from their supervisors during graduate school. Exploratory factor analysis indicated three types of bullying behaviors: threatening-dismissive, passive-aggressive interpersonal, and work-management (Yamada et al., 2014).

Although the researchers found no significant effect of student gender on bullying status, students with female supervisors were more likely to report being bullied than students with male supervisors, particularly female students with female supervisors. In addition, students whose supervisors were at the associate professor level were more likely to report experiencing bullying than students whose supervisors had full professor status (Yamada et al., 2014). The results point to the importance of exploring and creating dialogue around the issue of workplace bullying in graduate programs. This theory of workplace bullying and the connection to burnout in graduate students in GA positions is furthered by a 2015 research study by Goodboy et al. (2015). In their study on the relationships between workplace bullying by graduate faculty and graduate student burnout and organizational behaviors, they surveyed 272 graduate students, across 80 disciplines, to measure the relationships between workplace bullying by graduate faculty and the correlation to burnout experienced by graduate students employed in GA positions. They defined workplace bullying behaviors as *belittement (*e.g., intimidating, shouting, teasing, gossiping, insulting), *punishment* (e.g., persistent criticism, accusations, reminders of errors, threats, suggesting termination), *managerial misconduct* (e.g., unmanageable workload, impossible projects, excessive monitoring, demeaning tasks), and *exclusion* (e.g., withholding information, being ignored, excluding opinions) (Goodboy et al., 2015).

These researchers claimed GAs who are bullied suffer from burnout syndrome as researched and identified by Maslach and Jackson (1981) as a prolonged response to chronic emotional and interpersonal stressors on the job as defined by the dimensions of exhaustion, cynicism, and inefficacy. They found workplace bullying had a positive correlation to burnout for GAs and that GAs were unwilling to engage in organizational citizenship behaviors for their department (Goodboy et al., 2015).

Similar to the risks burnout poses to patients of graduate athletic trainers (Mazerolle et al., 2012), Kenner and Pressler (2014) point out the potential risks to GAs working in nursing that perform clinical instruction. They highlighted best practices on the hiring of graduate students as teaching GAs for clinical instruction to undergraduate nursing students. Kenner and Pressler (2014) noted that diminished state support for public institutions has necessitated the hiring of more graduate students (read cheaper labor) to support instruction, but there are limitations. They recommended that teaching GAs should not make up a significantly large portion of the total clinical faculty, GAs should be supported and professionally developed through performance evaluations, and to hire new faculty that have previous GA experience to ensure a succession of clinical experts.

The authors also discussed the ethics around "do no harm," including no harm to the GAs, undergrad student nurses, and potential patients by keeping the expectations and workload manageable and by providing faculty support to GTAs. This article would have a more significant impact if there were more data provided that supported the guidelines proposed. The authors are careful to outline both the advantages and disadvantages of hiring graduate students for clinical instruction and highlight the professional development advantages to graduate students who perform instructional duties.

Naufel and Beike (2013) also considered the risks that GAs are exposed to in their study on the ethical treatment of research assistants. They wrote, "extensive anecdotal evidence suggests that research assistants can experience unique physical, psychological, and social risks when implementing their typical responsibilities" (p. 1) Additionally, from their findings they suggested that research assistants may feel pressured or coerced to work in unsafe environments out of fear of losing rapport with or recommendation from their advisor or supervisor. The

researchers call for policy development in the form of a "Research Assistants Bill of Rights" that could serve as guidance and a handbook of mutual expectations for the research GA and their supervisor (Naufel & Beike, 2013, p. 10).

Stress and Well-Being

Holding a GA position at a research institution is an important part of a doctoral graduate student's academic training, professional development, and at times financial stability. An assistantship can offer these opportunities; however, they can also be a source of stress for GAs (Mazzola et al., 2011). The stressors most frequently reported by GAs were work overload, interpersonal conflict, and organizational constraints, and they reported that these stressors most frequently lead to feelings of frustration, anger, and anxiety (Mazzola et al., 2011). The literature above has provided clear indications that GAs experience multiple stressors related to their role and social position, and the type of relationship they have with their mentor or advisor. However, these are not the only sources of stress they experience. Research policy observers and academics have begun to voice concerns about the relationship between research, workload, low job prospects for PhD students, and a rise in mental health problems. However, reports of depression, anxiety, burnout, and exhaustion officially reported remains low (Levecque et al., 2017).

In their study, Levecque et al. (2017) sought to gather empirical data to address three issues: inform research policy by assessing mental health in a large sample of PhD students in Belgium; assess the scope of the problem; and better understand how organizational and research policies relate to the issue of mental health. They were careful to point out differences between European and North American PhD programs, including an important note: students in Belgium as compared to other European and North American students, have a full-time employment

agreement with a university, receive larger stipends on par with those in the private job market, and are not expected to balance other working requirements alongside their research.

Levecque et al. (2017) used a web survey and had a response rate of 33% (4069 participants). The researchers then compared their data set to responses from a similar survey of the general population. The results showed that 51% of PhD students experienced prevalence of at least two symptoms of mental health problems; 40% experienced at least three symptoms; and 32% experienced at least four symptoms. Prevalence was 34% higher for females and those with a partner or family. This study could have more conclusive outcomes if the researchers continue to compare the data to other mental health evaluations of the general population and to other institutions in Europe and North America.

Mazzola et al. (2011) also examined stress in graduate students using qualitative and quantitative methods to assess stressors and strains experienced by graduate students. Their study included the stressors of work overload, interpersonal conflict, and organizational constraints and the psychological strains of frustration, anger, and anxiety. There were 207 participants, all graduate assistants; the sample was 69.6% female. Doctoral students reported higher levels of workload than master's students but did not report higher levels of the other stressors or physical strains. The two most common reported stressors were work overload and interpersonal conflict. The most common psychological strains reported were frustration, anger, and anxiety (Mazzola et al., 2011). Interestingly, there is some speculation by Mazzola et al., (2011) that graduate assistants may be primed to expect the demands of graduate schools and their position as a graduate assist to be stressful and there is a level of acceptance that results in lower reporting in the study.

Use of Campus Resources

In their 2007 study, Oswalt and Riddock performed a quantitative study on graduate student stress and the use of university services. The researchers examined factors contributing to stress, coping strategies, and the use of university services in 223 graduate students at a southeastern university in the United States. A majority of the students indicated they felt stressed, but males and females reported differing coping strategies. Most of the participants also indicated that they wanted to know more about coping strategies and university services. The findings in this study will allow campus leaders in student affairs, student services, counseling, and other university centers the data they need to address stress factors and reduce graduate student stress and potentially mental health incidents (Oswalt & Riddock, 2007). Most studies on student stress focus on undergraduates. This study provides needed data on graduate students, an understudied population.

Researchers also emphasize GA's impressions that they are underpaid under current labor laws, they have no voice, and many institutions did not offer any benefits (Janson, 2010; Lafer, 2003; Payne et al., 2015). Although there is literature available about graduate student stress in specific disciplines, such as law or medicine, or in specific graduate student populations like international students, there is limited research that covers overall GAs in relation to employee issues or the relationship these stressors have to burnout. According to Maslach et al. (2012), close, prolonged interaction in work focused on people, including jobs in healthcare, customer service, and education, can result in symptoms of burnout, which can negatively affect the working relationships of a GA and their supervisor and or their advisor. This can make it difficult for advisors and supervisors (educational workers) to feel empathetic towards GAs (clients) and their stress and may cause them to demonstrate cynical behavior toward GAs and in

turn, similar behavior can be exhibited by GAs toward the students they teach, and the research work they perform. GAs who work in a clinical setting may also be at a higher risk for burnout because of the time constraints to complete their assistantship, their academic responsibilities, and their additional administrative responsibilities (Mazerolle et al., 2012).

Research policy observers and academics have begun to voice concerns about the relationship between research, workload, and low job prospects for doctoral students, and a rise in mental health problems. However, reports of depression, anxiety, burnout, and exhaustion officially reported remain low (Levecque et al., 2017). Bridging the gap between instances of stress and mental health issues and students reporting them is another challenge. It is important for higher education institutions to examine what stressors GAs are experiencing, their use of campus resources, and overall mental health so that campus resources may be developed or realigned to alleviate some of these factors, and so that GAs would experience less stress and burnout (Grady et al., 2014).

Work Overload

Maslach's Burnout Inventory (MBI) is a scale designed to assess the various factors that lead to burnout syndrome. The MBI scales focus on three subscales: emotional exhaustion, depersonalization, and personal accomplishment. The researchers defined burnout syndrome as "emotional exhaustion and cynicism that occurs frequently among individuals that do 'people-work' or those working in human services professions" (Maslach & Jackson, 1981, p. 99). This includes educators and graduate research and teaching assistants. According to Maslach and Jackson, (1981), various stressors found within an institutional work environment, including workload and ambiguity, can lead to burnout syndrome. Maslach and Jackson (1981) also found that there is a high correlation between burnout and self-reported indices of personal distress

including exhaustion, an increased use of drugs and alcohol, insomnia, and problems with interpersonal relationships.

Over the last four decades, Maslach has expanded her research on burnout using the MBI scales. Of particular interest for this research study is Maslach's and others' work(s) on burnout in educational institutions. Leiter and Maslach (2004) identified six sources of burnout including: lack of control, values conflict, insufficient reward, work overload, unfairness, and breakdown of community, all of which align with the stressors GAs experience.

To gain a clearer picture of how university students are influenced by perceived stress and loneliness in relation to learning burnout, Stoliker and Lafreniere (2015) studied 150 undergraduate participants at a university in Ontario Canada. Until the mid-2000s, researchers looked at burnout in relation to occupation and workplace only. Stoliker and Lafreniere (2015) were able to fill a gap in the literature by looking at burnout in students in an educational setting and took a novel approach by looking at both loneliness and burnout as an influencer on overall experience in a single study. They were looking for correlations between stress, loneliness, and learning burnout on a student's overall academic experience while working toward a degree using Maslach's Burnout Inventory-Student Survey (MBI-SS) to measure learning burnout and the Perceived Stress Scale (PSS) by Cohen et al. (1983). The results showed that loneliness and educational burnout do negatively influence learning and overall academic experience and performance in undergraduate students. Overall, Stoliker and Lafreniere (2015) were able to build upon seminal research done on burnout by Maslach and Jackson (1981) but did not measure the same factors for graduate students or GAs.

Chapter Summary

The purpose of this literature review was to explore and evaluate peer-reviewed research on the historical context of GA stressors in relation to theoretical and conceptual frameworks that identify a preventative stress management model and change model within a university setting. The stressors GAs encounter are unique, but align well with the dimensions of stress as identified by Quick and Quick's Theory of Preventative Stress Management. Most higher education leaders acknowledge that GAs experience high levels of stress, that the factors that lead to negative stress responses can be multifaceted, and that changes to policy and practice are needed to improve the graduate student experience. The goal of this study was to identify these stressors and determine what preventions and interventions can be put in place to manage GA stress and create higher levels of student satisfaction.

CHAPTER 3

METHODOLOGY

GAs experience unique stressors related to their role as students and employees at research institutions. As challenges surrounding mental health and well-being in graduate students and GAs continue to rise, it is imperative that higher education institutions evaluate the stressors that GAs experience. The purpose of this study was to identify stressors GAs experience, their awareness and use of campus resources, and the impact of services, programming, and resources focused on alleviating stress in 2016 vs. the increase in services, programming, and resources offered in 2019 at Grad University. To fill a gap in the literature and better understand the relationship between the stress GAs experience and their use of campus services, resources, and programming, I used archival data collected in the Graduate Experience Survey in 2016 and 2019 of graduate students at Grad University in the southeastern United States. The 2016 and 2019 Graduate Experience Survey data provide specific insight on the stressors GAs experience, their awareness and use of campus resources for alleviating stress, and the potential impact of new programming and resources.

Research Questions

This research study benefits graduate students and higher education leaders in graduate education by increasing awareness of the stressors that impact GAs' overall student experience, GAs' awareness and use of campus resources, and the impact of increased intervention and prevention measures via new resources, services, and programming. As Creswell (2014) explained, while the research topic is a broad area with central ideas, key concepts, or phenomena, research questions "narrow the purpose statement to specific questions that researchers seek to answer" (p.117). The following four research questions guided this study:

1. What stressors are GAs experiencing?
2. To what degree does GAs' awareness (high, low) of campus resources influence their perception of stress across a three-year time frame (Spring 2016 to Spring 2019)?
3. To what degree does GAs' utilization of campus resources (high, low) influence their self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?
4. What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

Research Design

To answer these research questions, I selected a quantitative archival dataset collected by Grad University through their 2016 and 2019 Graduate Experience Survey. All identifiers have been redacted and the data has been reported in aggregate. This study focused on sections of the dataset that relate to stressors experienced, advisement and mentorship, and use of campus resources and services. Institutional Review Board (IRB) approval was granted by Grad University and the researcher procured a letter of cooperation for IRB approval from Georgia Southern University. All archival data sets used were de-identified.

An ex-post facto research design was used to examine the factors that lead to stress in GAs. Ex-post facto, or *after the fact,* is the approach utilized to answer the research questions in this quantitative study due to the longitudinal data collected for this specific population (Gay et al., 2012). Consideration was given to other approaches, but an ex-post facto approach allowed for the use of dependent paired samples to better understand the impact of additional primary, secondary preventions, and tertiary intervention measures via new resources, services, and programming on GAs (Charles, 1998).

While ex-post facto research design does not establish cause-effect relationships between variables, it does provide important educational research and is the most appropriate design due to the inability to manipulate independent variables (Charles, 1998). Utilizing this approach allows for a longitudinal look at the data without the constraints of time. In a true experiment, groups would be classified based on an independent variable, in this case PhD students and GAs or graduate students not serving in a GA position, and the dependent variables of stress, mentoring and advisement, or use of campus resources would be observed over time.

Study Site

Grad University is a public research-intensive university with nearly 40,000 total students across three campuses. There are over 90 doctoral and master's degree programs offered across six colleges. The main campus, where the 2016 and 2019 survey were conducted, is in the southeastern United States. At Grad University there were 9,798 graduate students enrolled in the Spring of 2016 and 17,760 enrolled in the Spring of 2019. Of those enrolled graduate students, just over 3,300 doctoral students served in a GA (GTA or GRA) role in 2016 and 2019 respectively.

Population and Sample

During the Spring 2016 data collection, 6,499 graduate students, 48% of the on-campus graduate student population completed the survey, of those, 1751 were doctoral level GAs. The survey was limited to those graduate students studying in on-campus programs. During the Spring 2019 data collection, 2407 graduate students, 35% of the on campus and on-line student population completed the survey, of those 689 we doctoral level GAs. Online programs at Grad University are Master's level only and do not offer GA positions. Archived data from the 2016 and 2019 Graduate Experience Survey were collected from Institutional Research (IR) after

Institutional Review Board (IRB) approval was granted and permission to use the data sets was given by the data steward at Grad University. IR defined an enrolled graduate student as any student enrolled in one or more hours in a graduate degree seeking program.

To answer the research questions, a population was sought that included PhD graduate students serving in two types of roles, teaching assistants (TAs) and research assistants (RAs), employed by their institution, and receiving compensation via a tuition waiver and monthly stipend. Collectively, this population is referred to as GAs as defined above. This population of doctoral students serving in GA roles was selected because it allowed dependent paired samples to be analyzed pre- and post-change. Master's students serving in GA roles were eliminated due to the short time length of their program, for example, master's students who were surveyed in 2016 would have graduated before the 2019 survey was administered.

Instrumentation

The original survey instrument utilized at Grad University in 2016 (Appendix A) was developed by an internal committee and the questions were contextually bounded by the needs of the institution. The committee included staff, administrators, graduate student leaders, and resident faculty experts in statistics, sociology, and market analysis. Equivalent measures were used for the 2019 survey (Appendix B) to ensure that direct comparisons could be drawn. Prior to the release of each instrument, pilot testing comprised of small focus groups of 15 graduate students were conducted in 2016 and 2019 at Grad University to check for clarity and understanding of the questions within the survey with participants before the survey(s) was released to the entire population. This study analyzed archived data sets that were collected as the graduate student experience survey administered in 2016 and again in 2019 following the implementation of new resources, services, and programming at Grad University.

Data Collection

To answer the research questions, I selected a quantitative archival dataset collected by Grad University through their 2016 and 2019 Graduate Experience Survey. Details about the survey, the data collected, analysis, and limitations are expressed through the remainder of this chapter.

Graduate Student Experience Survey

The 2016 Graduate Experience Survey was administered through a secure link on the institution's website. Once a student logged in using their institutional credentials, they were taken to an informed consent page. Once they met the consent requirements, they were taken to a web-based form that included the survey questions. Once the student completed the survey, they were not be able to take the survey again using the same credentials. In 2019, the same procedures were in place, except the survey instrument was put into Qualtrics for secure data collection and analysis instead of a webform. All opportunities to take the surveys were advertised to the graduate student population via email using the account on file in their student record. The outcomes of the survey and potential data that could be used for a positive change were of particular importance to the Graduate Student Government Association (Graduate SGA) at Grad University.

To show their support of the students they represent and raise awareness about graduate student challenges, the graduate SGA enlisted assistance from faculty and staff to incentivize graduate students to take the survey. They advertised and held sessions within each college to answer questions about the survey, how the data would be used, gave out free food, and held gift card drawings for the college with the largest percentage of completion. The data collected were stored securely by the institutional research office and were deidentified once aggregate

demographic data was collected. Once analyzed, aggregate data were shared with university administrators, deans, campus resource staff, the counseling center, and graduate student leaders to be used to improve resources, services, and programming on the campus.

Archival Data for Research Study

To be granted access to the data sets collected in 2016 and 2019, contact was first established with the Office of Enterprise Data Management and the Vice Provost of Graduate Education at Grad University. Once permission from these administrative units was granted, I obtained a letter of agreement from the IRB office at Grad University and submitted it with a request for IRB approval from my home institution, Georgia Southern University. Once all required approvals were met, Institutional Research (IR) released the data sets for use in this study.

The data sets provided by IR included all survey instrument responses and other demographic data, such as gender, sexual orientation, disability, residency, number of family members living with student, degree level and type, citizenship, proximity to campus, and mode of transportation. Throughout this study, I did not have any contact with the participants, as only de-identified student data were analyzed to ensure that Family Educational Rights and Privacy Act of 1974 (FERPA) and Health Insurance Portability and Accountability Act of 1996 (HIPPA) laws were met. The institution created new identification numbers to keep students unidentifiable for security purposes.

Data Analysis

The datasets from the surveys were entered to the Statistical Package for the Social Sciences (SPSS) for analysis. Parametric statistics were used to analyze the two data sets collected for this study. Descriptive statistics and zero-order, bivariate correlations, Pearson's *r*,

were requested of the data to answer the first research question. To answer research questions two and three, a series of mixed-model ANOVAs (between-subjects and within-subjects) were conducted. To answer research question four, dependent paired samples of doctoral GAs were used for measures of effect and proportion of variance pre (2016) and post (2019) for standard deviation of size effect. These statistical designs were intended to first and foremost examine the statistical interaction between the groups across time, essentially asking if the change across the two semesters (Spring 2016, Spring 2019) was moderated by group membership. Practical significance was evaluated via the effect size, *partial* η^2(η^2_p). Cohen (1988) provided the following interpretive guidelines for η^2_p: .010-.059 as small; .060-.139 as medium; and ≥ .140. The method of data analysis for each research question is mapped out in Table 1.

Table 1

Table of Data Analysis

Research Question	Survey Questions	Change Made after 2016	Statistical Analysis
RQ1 What stressors are GAs experiencing?	Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q31, Q32, Q33, Q33b,		Descriptive statistics analysis to provide a barometer on stressors and how many GAs are experiencing
RQ2 To what degree does GAs' awareness (high, low) of campus resources influence their perception of stress across two semesters (Spring 2016, Spring 2019)?	Q34	Advertising Campaigns to raise awareness of campus resources. Awareness campaigns to faculty & students about student employment policies	Mixed model analysis of variance/bearing, within subjects, medium split procedure high/low

RQ3 To what degree does GAs' utilization of campus resources (high, low) influence their self-reported stress level across two semesters (Spring 2016, Spring 2019)?	Q35, Q36, Q37		Mixed model analysis of variance/bearing, within subjects, medium split procedure high/low
RQ4 What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across two semesters (Spring 2016, Spring 2019)?	Q30, Q35, Q36, Q37, Q14	New onboarding & orientation programming for incoming grad students More counselor's and appointments made available in counseling center. Launch of the Health & Wellbeing unit – new services & resources. CARE Center opened to triage students. Suicide Prevention Training for faculty staff & students Feedback mechanisms implemented and advertised. New funding models for support Workshops on Conflict resolution offered. Expanded Career development offerings. Workshops on classroom management for GTAs Graduate Welcome & Convocation Graduate Appreciation Week Thank a TA program New position, Vice Provost for Advocacy & Conflict Resolution and New grievance pathways Regular Meetings with Graduate student organizations for feedback	Dependent paired samples (pre vs post comparison over time), measures of effect, AIDA square proportion of variance (0-1), check for standard deviation of size effect

I report the findings based on each research question in the following chapter. A narrative summary with supporting tabular evidence was used to discuss the findings for each group from 2016 and 2019.

Limitations, Delimitations, and Assumptions

Although this study provides valuable information on the doctoral GA experience, there are a few limitations. First, the surveys were conducted on only one campus. The second limitation is that the data is self-reported; therefore, the results rely on the accuracy of the participants. The third limitation is that the institution created their own survey. The population surveyed also presented a fourth limitation in that some doctoral GAs that took the Graduate Experience Survey in 2016 graduated and some new doctoral GAs beginning their studies took the 2019 Graduate Experience Survey. A beta test and a test of hypothesis questions should have been conducted prior to the administration of the survey to determine the participant's perspective on the questions as well as the context intended. A sampling procedure should have also been put in place for both iteration so the survey to ensure that the sample represented the full population.

To note, the sample size of the population at Grad University was unusually large in 2016; with 48% of the on-campus graduate students completing the survey, 80% of which were in a GA position. The institution conducted the survey again in 2019 in order to evaluate progress on improving campus resources and the overall graduate experience. In 2019, the sample size was lower with 27% of the on-campus graduate student population completing the survey and 80% of those students holding a GA position.

Chapter Summary

The goal of this study was to determine the stressors that impact the graduate student experience in GAs, including role strain, mentoring/advising, and workload, the corresponding awareness and use of campus resources, and the impact of increased resources, services, and programs at one research intensive institution, Grad University, in the southeast. Using an ex-post facto approach, data were collected on doctoral graduate students serving in GA roles enrolled in Spring of 2016 and again in Spring of 2019. The archival data collected from these two surveys was requested from Institutional Research and IRB approval was granted in the Spring of 2019.

Parametric statistics were used to analyze the two data sets collected for this study. Descriptive statistics and zero-order, bivariate correlations, Pearson's *r*, were requested of the data to answer the first research question. To answer research questions two and three, a series of mixed-model ANOVAs (between-subjects and within-subjects) were conducted. Research question four used dependent paired samples to analyze measures of effect, proportion of variance, and to determine the impact of a change in resources, services, and programming on graduate student stress.

CHAPTER 4

RESULTS

The purpose of this study was to examine the stressors experienced by doctoral level graduate students working in GA positions and their corresponding awareness and use of campus resources at Grad University, and to determine what impact, if any, providing additional services, resources, and programming in support of GAs had after a three-year implementation period from 2016 to 2019. Findings from this study will benefit higher education leaders by informing decisions about allocating resources to prevention and intervention measures on mitigating stress, mentoring/advising, and counseling. Additionally, the findings can provide a baseline of assessment for areas that need improvement, and intervention resources for dealing with mental health issues.

The participants of this study included doctoral graduate students at Grad University serving in two types of roles: teaching assistants (TAs) and research assistants (RAs) employed by the institution and receiving compensation via a tuition waiver and monthly stipend in the Spring semester of 2016 and the Spring semester of 2019. This population was selected because it allowed dependent paired samples to be analyzed pre- and post-change. In this chapter, a brief overview of the research design and a description of the respondents are presented along with key findings of the study.

Research Questions

The administration of Grad University determined there was a significant need to take a deeper look at mental health and well-being among graduate students and managing the stress they experience. Over a three-year period from 2016 to 2019, the institution focused on mental health and well-being and expanded services and programs offered by the Office of Graduate

Studies, Career Development, Student Services, and the Counseling Center. The institution identified and implemented campus-wide preventative and intervention initiatives surrounding services, resources, and programs designed to mitigate stress within the graduate student population. To measure the impact of these changes, Grad University deployed the Graduate Experience Survey in 2016 (pre) and again in 2019 (post). To determine the level of impact, this study was guided by four research questions:

1. What stressors are GAs experiencing?
2. To what degree do GAs' awareness (high, low) of campus resources influence their perception of stress across a three-year time frame (Spring 2016 to Spring 2019)?
3. To what degree do GAs' utilization of campus resources (high, low) influence their self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?
4. What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

Research Design

To answer these research questions, I selected a quantitative archival dataset collected by Grad University through their 2016 and 2019 Graduate Experience Survey. This study only focused on sections of the dataset that relate to stressors experienced, advisement and mentorship, and use of campus resources and services. An ex-post facto research design was used to examine the factors that lead to stress in GAs. Ex-post facto, or *after the fact,* is the approach utilized to answer the research questions in this quantitative study due to the longitudinal data collected.

Respondents

For this longitudinal study, I selected a public research-intensive university with over 3,300 doctoral students working in GA positions in 2016 and 2019. During the Spring 2016 data collection, 1751 doctoral students serving in GA positions completed the Graduate Experience Survey. In Spring of 2019, 689 doctoral level GAs completed the survey. The 2016 Graduate Experience Survey was administered through a secure link on the institution's website. Once the student met the consent requirements, they were taken to a web-based form that included the questions from the survey instrument. In 2019, the same procedures were in place, except the survey instrument was put into Qualtrics for secure data collection and analysis instead of a webform.

Findings

This study utilized parametric statistics to analyze the two data sets collected in 2016 and 2019. Descriptive statistics and zero-order, bivariate correlations, Pearson's *r*, were requested of the data to answer the first research question. The year 2016 and 2019 were demi-coded as variables and a composite score on stress was calculated using frequencies based on a 1-10 scale with 1 being no stress and 10 being extremely high stress. Respondents were asked to rate their level of stress across 21 factors including academics/workload, relationship with their principle advisor, finances, establishing a healthy work-life balance, teaching or research responsibilities associated with their assistantship, employment responsibilities, relationships with other students, social life, finding opportunities for professional networking, career and mentoring support, physical health, emotional health, finding support resources, family responsibilities, romantic relationships, employment or internship opportunities, campus safety, department or program environment, qualifying exams, adjusting to a new campus or culture, separation from

family. Composite scores for stress based on frequency of factors for 2016 and 2019 variables can be found in Table 2. In the table, higher mean values indicate higher levels of stress across each factor.

Table 2

2016 and 2019 Composite Stress Score based on Frequencies of Stress

	2016			2019		
Variables	M	Median	SD	M	Median	SD
Academics (Workload, rigor, classroom interactions, interactions with faculty	6.32	7.00	2.26	6.10	6.00	2.81
Relationship with principle advisor (thesis or research project)	5.08	4.00	2.92	4.22	4.00	2.54
Finances	6.90	7.00	2.49	6.22	5.00	3.46
Work/life balance	6.70	7.00	2.43	6.60	7.00	2.17
Responsibilities related to funding (teaching or research)	5.70	6.00	2.72	5.89	6.00	2.80
Employment Responsibilities	5.61	5.50	2.49	6.22	7.00	2.54
Establishing/Maintaining Relationships with other Grad Students	4.18	4.00	2.49	4.33	5.00	2.12
Social Life	4.54	4.00	2.56	5.00	6.00	2.45
Finding Opportunities for Professional Networking	4.76	5.00	2.44	4.75	4.00	3.33
Finding Career Mentoring Support	5.07	5.00	2.71	4.86	5.00	3.02
Physical Health	5.06	5.00	2.60	5.11	6.00	2.89
Emotional Health	6.14	7.00	2.80	5.44	6.00	3.32
Finding Graduate Student Support Services	4.47	4.50	2.53	3.78	4.00	1.99

Family responsibilities or Family Issues	4.75	4.00	2.72	5.43	6.00	3.74
Personal Romantic Relationships	4.85	5.00	2.92	5.22	6.00	3.60
Finding Employment Opportunities or internships	5.94	6.00	2.72	6.38	7.00	2.50
General Environment in my department or program	4.90	5.00	2.57	4.00	4.00	2.06
Campus Safety	3.58	3.00	2.20	4.75	5.00	3.06
PhD Qualifying Exams	7.23	8.00	2.68	6.88	7.50	3.00
Adjusting to new culture	3.78	3.00	2.62	3.33	2.00	2.60
Separation from family	4.58	4.00	2.67	5.67	6.00	3.94

Note: *2016 N*=128 and *2019 N*=10

In 2016, participants indicated higher frequencies of stress related to PhD qualifying exams with a mean of 7.23, finances of 6.90, work-life balance of 6.70, and workload at a mean of 6.32. The lowest frequencies of stress reported were for campus safety at 3.58 and adjusting to a new culture at 3.78. Participants in the 2019 Graduate Experience Survey indicated lower frequencies of stress overall as compared to 2016 with the highest frequencies reported on PhD qualifying exams with a mean of 6.88, work-life balance of 6.60, employment opportunities or internships of 6.38, Finances and GRA/GTA responsibilities of 6.22, and workload with a mean of 6.10. The lowest frequencies of stress reported were for adjusting to a new culture at 3.33 and finding graduate student support resources at 3.78.

Utilizing the composite stress scores from 2016 and 2019, I calculated the correlation between stress and the participant's awareness of campus resources, services, and programming to answer research question two. As seen in Table 3 below, awareness was calculated high vs

low with zero being equal to not applicable, one being equal to not aware, and two equaling aware. The total mean for high awareness results was 5.0 and the low awareness score resulted in a mean of 5.5.

Table 3: Awareness of Resources High vs Low

Dependent Variable: Composite Stress Scale				
	Awareness High vs. Low	Mean	Std. Deviation	N
2016	Low	5.42	1.71	45.00
	High	5.04	1.59	31.00
	Total	5.27	1.67	76.00
2019	Low	7.38	0.13	2.00
	High	3.62	0.54	2.00
	Total	5.50	2.20	4.00
Total	Low	5.50	1.72	47.00
	High	4.96	1.58	33.00
	Total	5.28	1.68	80.00

To further answer the second research question, a mixed-model analysis of variance (ANOVA) was conducted using the composite stress scores for 2016 and 2019 as the within-subjects variable and awareness (high, low) serving as the between-subjects factor. The awareness x year interaction was statistically significant, $F(1,76) = 4.01$, $p = .04$, $\eta^2_p = .050$. The awareness main effect was also statistically significant, $F(1,76) = 6.01$, $p = .01$, $\eta^2_p = .073$; however, the year main effect was not statistically significant, $p = .75$. The significant simple effects and simple contrasts for the interaction were interpreted next.

Simple contrasts of the estimated marginal means (EMMs) within year showed that there were significant differences in awareness only for the 2019 year ($\eta^2_p = .064$), in which those with high awareness (EMM = 3.62, S.E. = 1.16) reported significantly less overall stress than those with low awareness (EMM = 7.38, S.E. = 1.16). No other simple effect or simple contrast

reached significance, all *p*-values ≥ .10. The results also show a significant correlation (-.08) between awareness of campus resources, services, and programming with lower composite stress scores in 2016 and in 2019. As would be expected, the awareness main effect showed that those with high awareness reported less stress compared to those with low awareness.

In keeping with the statistics conducted for research question two, to answer the third research question on the correlation between the participants utilization of campus resources, services, and programming and reported stress, I conducted a descriptive statistics analysis using the composite stress scores for 2016 and 2019 as dependent variables, resulting in total mean of 5.28. A test of between-subjects effects was also conducted using an alpha of .05. As seen in Table 4 below, utilization was calculated high vs low with zero being low utilization and one being high utilization. No utilization of campus services, resources, and programming were reported by the participants in 2019. Neither the utilization (high, low) x year (2016, 2019) interaction nor either main effect reached statistical significance, all *p*-values ≥ .47.

Table 4

Utilization of Resources High vs Low

Dependent Variable: Composite Stress Scale				
Data for 2016 and 2019	High vs. Low Utilization of Campus of Resources	Mean	Std. Deviation	N
2016 AY	0	5.20	1.71	61.00
	1	5.55	1.49	15.00
	Total	5.27	1.67	76.00
2019 AY	0	5.50	2.20	4.00
	Total	5.50	2.20	4.00
Total	0	5.22	1.72	65.00
	1	5.55	1.49	15.00
	Total	5.28	1.68	80.00

To answer the fourth and final research question, I conducted group statistics and an independent samples test to determine if any changes in awareness or utilization occurred after the period between 2016 and 2019 when new campus resources, services, and programming were introduced. The group statistics, shown in Table 5, resulted in a mean of 5.26 for 2016 and a 5.5 mean for 2019. A difference of 0.23, which was not statistically significant, p=.78.

Table 5

Group statistics comparison pre and post change

	Data for 2016 and 2019	N	Mean	Std. Deviation	Std. Error Mean
Composite Stress Scale	2016 AY	76	5.27	1.67	0.2
	2019 AY	4	5.50	2.20	1.1

Chapter Summary

A composite stress score was calculated for 21 factors for both the 2016 and 2019 results of the Graduate Experience Survey. Using these composite scores as a dependent variable, tests were run for correlations between these composite stress scores and awareness and utilization of campus resources, services, and programming pre change in 2016 and compared to post implementation of new campus resources, services, and programming in 2019. Overall, the results showed lower composite stress scores in 2019 as compared to 2016, with a slight variation in the factors that indicated higher levels of stress. There is a strong statistically significant negative relationship between reported stress and awareness. As awareness goes up, stress goes down. Due to the lack of participant responses on reported utilization of campus resources, services, and programming in 2019, a correlation between a lower composite stress

score and utilization of newly implemented campus resources, services, and programming could not be determined. Chapter five presents a detailed analysis of these findings, implications of the findings, and recommendations for further research and practice.

CHAPTER 5

SUMMARY, DISCUSSION, AND IMPLICATIONS

The purpose of this study was to examine the stressors experienced by doctoral level graduate students working in GA positions and their corresponding awareness and use of campus resources at a research-intensive university in the southeastern Unites States. This study sought to determine what impact, if any, providing additional services, resources, and programming in support of GAs had after a three-year implementation period from 2016 to 2019. The longitudinal study employed a quantitative approach along with descriptive data analysis of four research questions:

1. What stressors are GAs experiencing?
2. To what degree do GAs' awareness (high, low) of campus resources influence their perception of stress across a three-year time frame (Spring 2016 to Spring 2019)?
5. To what degree do GAs' utilization of campus resources (high, low) influence their self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?
6. What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

Following Quick and Quick's (1979) Organizational Theory of Preventative Stress Management (1979) as a framework, Grad University identified and implemented campus-wide preventative and intervention initiatives surrounding services, resources, and programs designed to mitigate stress within the graduate student population. To measure the impact of these changes, Grad University deployed the Graduate Experience Survey in 2016 (pre) and again in

2019 (post). The archival data from each iteration of the survey were utilized to quantify the impact of the changes on doctoral GA stress.

Summary of Findings

Parametric statistics were used to analyze two data sets collected in 2016 and 2019 to determine the impact on reported stress in doctoral graduate students working in GA positions before and after the implementation of additional campus resources, services, and programing. In each implementation of the Graduate Experience Survey, the respondents were asked to rate their level of stress cross 21 factors to give a composite stress score. The composite stress scores for each year, 2016 (pre) and 2019 (post) implementation, were used as demi-coded variables to calculate correlations between awareness and utilization of campus resources, services, and programming.

The results for the general composite stress score for 2016 provide a solid baseline measuring the factors and levels of stress that doctoral GAs were experiencing. In aggregate, the composite stress scores in 2019 were lower than 2016 and there were significant changes in the levels of stress for specific factors that can be attributed to the changes made in campus resources, services, and programming for this population. Moreover, the correlations between awareness of resources, services, and programming and the reported composite stress score show a significant reduction in reported stress and promising results.

RQ #1: What stressors are GAs experiencing?

The first research question sought to establish a baseline of reported stress across 21 factors. The results of the Graduate Experience Survey in 2016 and 2019 allowed the researcher to calculate a composite stress score for comparison across each factor before and after implementation of new resources, services, and programming, (2016 and 2019 respectively).

Using the data from the 2016 survey and in keeping with Quick and Quick's (1979) organizational theory of preventative stress, the institution focused on developing additional resources, services, and programming to address the factors that brought on the highest amount of reported stress. The factors included emotional health, doctoral qualifying exams, finances, relationship with their principal advisor, and academic workload. In 2019, the survey results for each of these factors showed an overall reduction of reported stress and a statistically significant reduction of stress for each factor except qualifying exams. Factors that showed an increase in reported stress, like campus safety and separation from family, could be attributed to external influences like increased crime in areas surrounding campus and an increase in the international graduate student population.

RQ #2: To what degree does GAs' awareness (high, low) of campus resources influence their perception of stress across a three-year time frame (Spring 2016 to Spring 2019)?

The second research question sought to uncover the correlation between awareness of campus resources, services, and programming and the reported level of stress that doctoral GAs were experiencing. Descriptive statistics analysis were run using the composite stress score results from RQ#1 to calculate a mixed model analysis of variance (ANOVA) within-subjects variable and awareness (high, low) for the between-subjects factor. The awareness x year (2016 and 2019) interaction and the awareness main effect both were statistically significant, and the year main effect was not significant. Using simple contrasts of the estimated marginal means (EMMS), significant differences in awareness were reported only for 2019, demonstrating that those respondents that reported higher levels of awareness of resources, services, and programming also reported less stress compared to those with low awareness. These are promising results with clear implications for practice.

RQ #3: To what degree does GAs' utilization of campus resources (high, low) influence their self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

The third research question addressed the correlation between reported stress and utilization of campus resources, services, and programming. Identical descriptive statistics analysis was used for RQ #2 and RQ #3. No utilization of campus resources, services, and programming were reported in the 2019 survey results. No statistical significance for either the utilization (high, low) x year (2016, 2019) interaction or main effect were found.

RQ #4: What impact does an increase in programming and resources for alleviating stress have on GAs self-reported stress level across a three-year time frame (Spring 2016 to Spring 2019)?

To answer the fourth and final research questions, I conducted group statistics and independent samples tests to determine any change in the composite stress score for awareness or utilization for the period between 2016 and 2019 when new campus resources, services, and programming were introduced. While there was a slight positive change demonstrating lower stress overall, the results were not statistically significant. While the impact of awareness of campus services, resources, and programming showed a statistically significant impact on lowering GA stress, a larger sample size or indices of utilization would be needed to truly determine the impact of utilization.

Discussion of the Findings

The findings of this study yielded both expected and unexpected results. As indicated in the literature and in the results of both the 2016 and 2019 surveys, graduate study and working in a GRA or GTA position can be both a transformational and stressful experience. Grady et al. (2014) noted that the structure and culture of graduate programs at academic institutions shape a

GA's stress by determining the demands graduate students are expected to meet, the advisement and mentorship available, and the resources allocated. This is reflected in the 21 factors for stress and the various levels of reported stress for each factor in both 2016 and 2019. The participants reported higher levels of stress in areas that corresponded with the areas of stress found in the literature including role strain and social position (Bandura, 1997; Duba-Biedermann, 1991; Grady et al., 2013; Payne et al., 2015), advisement and mentorship (Corbett & Paquette, 2011; Hoessler & Godden, 2015; Queens University, 2015; Rossouw & Niemczyk, 2013), managing stress and wellbeing Mazzola et al., 2011), academic workload and workload burnout (Hopwood & Stocks 2008; Maslach & Jackson, 1981; Muzaka 2009), and funding (e.g., Corbett & Paquette, 2011; Else, 2015; Gillion & Hoad, 2001; Hayden, 2001; Janson 2010; Lafer, 2003; Payne, et al., 2015).

Survey participants in 2016 reported high levels of stress regarding academic and GA appointment workload, finding work-life balance, PhD qualifying exams, and finances. The reported stress levels for these factors are not surprising and are supported by the literature. For example, when considering workload, Chadha (2013) notes that GAs find themselves managing work previously taken on by tenue-track faculty and find themselves balancing their work as both a student and employee. This can lead to competing priorities and time pressure that may require more proactive advisement on the part of the primary advisor to achieve a reasonable work-life balance (Mazuka 2009). Similar outcomes for workload burnout and competing priorities are reflected in Stoliker and Lafreniere's (2015) study on student burnout within educational settings.

Although the results for stress surrounding the relationship between the principal advisor and the student were just under the highest reported areas of stress in 2016 and 2019, mitigating

the stress surrounding workload and work-life balance are directly impacted by the students-advisor relationship and the assignment of workload (Corbett & Paquette, 2011; Chadha, 2013; Hoessler & Godden, 2015). Mazzola, et al. (2011) also found that workload was a commonly reported stressor that led to frustration, anger, and anxiety in GAs. Additionally, the advisor or mentor relationship can also have an impact on the GAs stress surrounding PhD Qualifying exams. Roussouw and Niemczyk (2013) found that the GA and supervisor relationship should not just focus on the acquisition of skills, but on the fostering of learning, academic success, and furthering professional development of the student, including guidance on completing successful milestones in the GAs research and study of the discipline. While funding options for GAs can vary across institutions and availability of grants, researchers agree that GAs are offered less benefits, bargaining rights, and pay for the services they provide (Else, 2015; Gillon & Hoad, 2001; Hayden, 2001; Janson 2010; Lafer, 2003; Payne, et al., 2015).

Using Lewin's Change Model (1947), the institution evaluated the levels of stress GAs were experiencing and services offered in 2016, implemented an organizational change by introducing new campus resources, services, and programming including: opening of the CARE center to triage student issues; Question, Persuade, Refer (QPR) suicide prevention training for faculty, staff, and students; launch of a health and well-being unit that offers year-round workshops and programming; workshops on conflict resolution; new funding models for GA support; expanded career develop programming; and new communication, feedback, and grievance pathways. Completing the cycle of Lewin's Model, the institution reevaluated GA stress, services, programming, and resources via the 2019 survey. The overall reported levels of stress in 2019 were lower compared to 2016. Although still high on the composite stress scale, PhD qualifying exams, work-life balance, workload, and funding all ranked lower in 2019 when

compared to the 2016, indicating student stress was lowered after the introduction of new services, resources, and programming that were implemented by the institution over a three-year period. This aspect of the results was expected and in keeping with the findings in Oswalt and Riddock's 2007 study on campus resources as coping mechanisms for graduate student stress.

The finding that was unexpected and surprising is the correlation between lower reported stress and the participants awareness of campus resources, services, and programming. The results indicate a statistically significant correlation between awareness of primary and secondary preventions and tertiary interventions via current campus resources, services, and programming and lower GA stress in the factors with the highest stress scores and overall. In short, developing and introducing new services, programming, and resources can lower GA stress, but awareness of support resources can be equally as effective. This is positive news for many institutions that may be strapped for the resources needed to introduce new initiatives.

This unexpected finding on awareness is supported by research conducted by Pignata et al. in 2016 on the impact of awareness of stress-reduction interventions on employee well-being. They found a statistically reliable association between awareness of support resources and and improvement of employee well-being over time. Pignata et al. also noted a gap in the literature on awareness stating, "as we are not aware of any research examining intervention awareness, this study contributes to the literature by highlighting the value of intervention awareness in reducing psychological strain" (2016, p.241).

Although the study sought to determine clear impacts of utilization of improved campus resources, services, and programming, lack of reported utilization in 2019 made it impossible to calculate outcomes for changes in utilization, despite the sample size. Without further research, it is unclear if the utilization of campus resources, services, or programming implemented at Grad

University had a direct impact on stress or specific factors that contribute to stress in doctoral GAs.

Implications for Practice

This study demonstrates that GAs are stressed and identifies several factors impacting their stress. The literature supports the findings for these factors including role strain and social position, advisement and mentorship, stress and well-being, workload burnout, and funding thus, the findings of this study have several implications. First, the results of this study indicate a significant correlation between awareness of campus services, resources, and programming and lower instances of overall stress and specifically lowering levels of stress based on the factors identified above. As I am not aware of research examining the impact of awareness of support resources on GA stress, this study contributes to the literature by highlighting the value of awareness of support mechanisms as a prevention or intervention tool to mitigate GA stress.

Second, evaluating GA stress via a survey allows institutions to identify stress factors and establish a baseline for assessment and continuous improvement, both before and after implementing new services, resources, or programming. The study results imply that institutions should focus on communicating awareness of services, resources, and programming, as well as putting these preventions and interventions in place. This can yield a better return on investment for dissemination of resources and positively impact the quality of the services, resources, or programming offered. Third, for those institutions who have limited resources for managing the stress of their GA population, promoting awareness of existing services, resources, and programming can yield positive results for minimal cost.

Fourth, the findings allow for generalization beyond the GA population. Overlaying Quick and Quick's organizational TPSM as a framework and using awareness of services,

resources, and programming as a primary or secondary prevention for mitigating stress could serve other university populations including undergraduates, faculty, staff, and administrators. Although this study did not capture enough responses for clear indications around utilization of services, resources, and programming, it should be noted that GAs' awareness of intervention and prevention support services, resources, or programs indicates that they perceive such support systems as a means of coping with stress.

Recommendations

This study offers valuable insight into the stress that GAs experience, the factors that impact their stress, and positive correlations between raising awareness of campus services, resource, and programming and lower instances of reported stress by GAs. It is also important to consider these findings in relation to the broader set of recommendations put forth by CGS and JED in their report on Supporting Graduate Student Mental Health and Well-being and their Statement of Principles and Commitments of Graduate Deans (2021). As a result, I have provided the following recommendations for practice as well as future research.

Recommendations for Practice

The following recommendations are for consideration by those serving in leadership positions at higher education institutions and faculty employing GAs. The recommendations build upon the implications and findings of this study. First, primary preventions to address GA stress should include awareness campaigns and communications that remind GAs of campus services, resources, and programming regularly during their matriculation. GAs typically receive information about campus services and resources during their orientation and onboarding period at the start of their graduate program. Although this is a natural time to introduce GAs to support

mechanisms for mitigating stress, GAs would benefit from being reminded of these services and resources when they achieve certain milestones in their progression towards a degree.

Likewise, faculty would also benefit from being reminded of resources for mentoring and advising students regularly. A simple solution can include deploying direct email messages from the graduate faculty program director or graduate program coordinator automatically when the student system of record is updated with a milestone achievement. For example, when a GA passes their qualifying exams, an email is sent that expresses congratulations, encouragement, and reminder of ways the institution can support them on developing a dissertation.

Second, to address the factors that GAs rated high on the stress scale, secondary preventions for mitigating stress should include making GAs aware of services and programming that focus on work-life balance, health and wellness, social interaction, professional or self-development, conflict resolution, prepping for qualifying exams, and dissertation writing workshops. These awareness reminders of available resources, services, and programming should also be timed according to where the GA is in their degree progression. Keeping faculty, staff, and administrators informed of available support mechanisms also allows them to direct GAs to the services, resources, and programs when they need them. Third, faculty and staff awareness of support services and resources is critically important for the implementation of tertiary interventions when a student is in crisis, including counseling services, grievance pathways, policies for GA leave or reduction of duties, and emergency funding.

It is important to not only increase faculty awareness of support services and resources, but to also empower them to act upon that knowledge. Providing training, guidance and workshops for faculty on assisting a student in crisis and suicide prevention (i.e. Question, Persuade, Refer (QPR) training) is key. Faculty training should include a comprehensive

introduction to the support services and resources offered at the institution, didactic instruction, and role-playing exercises on how to intervene with an at-risk individual, persuade the at-risk individual to get help, and how to guide the individual to the appropriate resources.

Recommendations for Future Research

Due to the nature of how the survey instruments were developed and the limitations surrounding the use of archival data sets, I was limited in the sample size and comparisons that could be made between the 2016 and 2019 data. The survey instruments were developed by committee for use by Grad University exclusively and referenced support resources specific to the institution. Slight variations in the 2016 and 2019 survey made it challenging to align direct comparisons or impacts over time. Future studies of a similar nature would benefit from developing a standard survey that could be utilized over multiple years and by multiple institutions. Using archival data sets led to limitations in sample size in relation to the utilization of campus services, resources, and programming, resulting in an inability to answer the fourth research question. Only four GAs reported utilization of campus services resources and programming in 2019. This did not allow for a large enough sample size for comparison to 2016 or variability.

Research was also found that supported the outcomes of this study, however many of the sources are dated or are from other disciplines like psychology or organizational theoretical frameworks outside of higher education. There are also several related topics of interest that may be of consideration for future studies. Future research recommendations include the following:

1. It is recommended that the study be replicated to determine if significant findings or patterns emerge in any factor that are similar across other institutions.

2. It is recommended that a standard graduate student experience survey be developed that could be used at other institutions and across multiple years for longitudinal results. This will allow for more direct comparisons over time.
3. It is recommended that future researchers plan robust communications with other campus partners, with support from student government, and others to yield a larger sample size so that utilization of campus resources, services, and programming can be evaluated.
4. It is recommended that replications of this study include a more detailed examination of the impact of awareness communications and reminders to GAs about the services, resources, and programs available.
5. It is recommended that this study be replicated for other populations (e.g., faculty, undergraduates, staff, post-docs) to determine if similar patterns around awareness and lower reported stress occur.

Dissemination

The findings in this study may be of interest to higher education leaders who oversee graduate studies, faculty and staff who lead graduate programs, faculty that advise graduate students or supervise GAs, staff in student engagement, or campus services. I plan to present this information to administrators, faculty, and staff stakeholders in graduate education at Grad University and at a regional conference for graduate education professionals in Fall 2021. Tailoring communications and awareness campaigns for new and existing campus services, resources, and programming will be of particular focus as it will benefit all graduate education stakeholders in mitigating GAs stress with minimal resources required. Administrators at Grad University will be provided with this dissertation study as well as a summary slide deck highlighting the data points and recommendations for improvement via email. Regional

conference attendees will receive a copy of the slide deck that includes a link to the published dissertation study.

As noted in the implications, awareness as preventative stress tool can be generalized to other populations. Higher education faculty, staff, postdocs, and administrators may be interested in the broader implications of this study as they work to minimize stress across their institutions or organizations. The results of this study will be made accessible to higher education leaders once this dissertation has been approved. The results will be accessible via the Electronic Thesis and Dissertation (ETD) system archives for Georgia Southern University housed and supported by the Zach S. Henderson Library upon final approval.

Conclusion

Graduate level doctoral students serving in GA positions at higher education institutions are stressed, some to the breaking point. Emphasis on how stress is linked to mental health, well-being, and graduate students continues to be an important area of inquiry. Their stress is shaped by many factors including role strain and social position, advisement and mentorship, health and well-being, and academic workload and burnout, and funding. The information in this study will contribute to decreasing the gap in recent research and literature on the subject of GA stress and provide a resource to higher education and graduate education leaders on mitigating GA stress. Current literature on GA stress is either out of date or the sample populations are limited to specific disciplines or subsets of the graduate student population. The findings of this study provide clear evidence that awareness of campus resources, services, and programming is an effective primary or secondary intervention for mitigating GA stress. This study also provides practical implications and recommendations on using awareness as a prevention and intervention for GAs in crisis and the utilization of a survey on stress to establish a baseline for continuous

improvement. The implications of this study are supported by the literature and can be generalized for use by education leaders for other populations and the recommendations for awareness campaigns that align with the student life cycle and enrollment management best practices are accessible and utilize limited resources.

REFERENCES

American Federation of Teachers (AFT). (2004). *Standards of good practice in the employment of graduate employees: Recognition and respect* (1–16). https://files.eric.ed.gov/fulltext/ED497922.pdf

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman

Breines, J. (2015, November 26). *Graduate school and mental illness: Is there a link?* Www.psychologytoday.com. https://www.psychologytoday.com/blog/in-love-and-war/201511/graduate-school-and-mental-illness-is-there-link

Chadha, D. (2013). Reconceptualising and reframing graduate teaching assistant (GTA) provision for a research-intensive institution. *Teaching in Higher Education*, *18*(2), 205–217. https://doi.org/10.1080/13562517.2012.696537

Charles, C. M. (1998). *Introduction to educational research* (3rd ed.). Longman.

Corbett, F., & Paquette, K. (2011). An investigation of mentorship as perceived by university faculty, teaching associates, and graduate assistants. *Education, 132*(2), 285–295.

Creswell, J. W. (2014). *Research Design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications, Inc.

Council of Graduate Schools (CGS) & The Jed Foundation (JED). (2021). *Graduate student mental health and well-being: Evidence informed recommendations for the graduate community (pp.1-68).* *https://cgsnet.org/ckfinder/userfiles/files/CGS_JED_Grad%20Student%20Mental%20Health%20Report.pdf*

Duba-Biedermann, L. A. (1991). Graduate assistant experiences of role conflict and role ambiguity. *Dissertation Abstracts International*, *52*(7-A), 2423.

Else, H. (2015, August 27). *"We're worth more": Casual teaching staff fight back*. Times Higher Education (THE). https://www.timeshighereducation.com/features/were-worth-more-casual-teaching-staff-fight-back

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, *36*(3), 282–284. https://doi.org/10.1038/nbt.4089

Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Pearson.

Gillon, E., & Hoad, J. (2001). *Postgraduate students as teachers*. NPC. https://www.npc.org.uk/page/1003797676

Goodboy, A., Martin, M., & Johnson, Z. (2015). The relationships between workplace bullying by graduate faculty with graduate students' burnout and organizational citizenship behaviors. *Communication Research Reports*, *32*(3), 272–280. https://doi.org/10.1080/08824096.2015.1052904

Grady, R. K., La Touche, R., Oslawski-Lopez, J., Powers, A., & Simacek, K. (2013). Betwixt and between: The social position and stress experiences of graduate students. *Teaching Sociology*, *42*(1), 5–16. https://doi.org/10.1177/0092055x13502182

Hayden, G. (2001). "The university works because we do": Collective bargaining rights for graduate assistants. *Fordham Law Review*, *69*(4), 1233–1264.

Hoessler, C., & Godden, L. (2015). The visioning of policy and the hope of implementation: Support for graduate students' teaching at a Canadian institution. *Canadian Journal of Higher Education*, *45*(1), 83–101. https://doi.org/10.47678/cjhe.v45i1.184210

Hopwood, N., & Stocks, C. (2008). Teaching development for doctoral students: What can we learn from activity theory? *International Journal for Academic Development*, *13*(3), 187–198. https://doi.org/10.1080/13601440802242358

Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, *3*(3), 123–127. https://doi.org/10.1016/j.jik.2016.07.002

Janson, M. (2010). *Joe Cytrynbaum: Labor leader.* Perspectives on Urban Education. http://files.eric.ed.gov/fulltext/EJ912053.pdf

Kitchen, D.-P. (2014). Can graduate students re-energize the labor movement? *Thought & Action*, 47–62. https://eric.ed.gov/?id=EJ1047969

Lafer, G. (2003). Graduate student unions: Organizing in a changed academic economy. *Labor Studies Journal*, *28*(2), 25–43. https://doi.org/10.1353/lab.2003.0039

Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. L. Perrewe, & D. C. Ganste (Eds.), *Research in Occupational Stress and Well Being* (pp. 91-134). Elsevier. https://doi.org/10.1016/s1479-3555(03)03003-8

Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organization and mental health problems in PhD students. *Research Policy*, *46*(4), 868–879. https://doi.org/10.1016/j.respol.2017.02.008

Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science; equilibrium and social change. *Human Relations*, *1*(1), 5–41. https://doi.org/10.1177/001872674700100103

Maslach, C., Leiter, M. P., & Jackson, S. E. (2012). Making a significant difference with burnout interventions: Researcher and practitioner collaboration. *Journal of Organizational Behavior*, *33*(2), 296–300. https://doi.org/10.1002/job.784

Mazzola, J. J., Walker, E. J., Shockley, K. M., & Spector, P. E. (2011). Examining stress in graduate assistants. *Journal of Mixed Methods Research*, *5*(3), 198–211. https://doi.org/10.1177/1558689811402086

Mazerolle, S. M., Monsma, E., Dixon, C., & Mensch, J. (2012). An Assessment of burnout in graduate assistant certified athletic trainers. *Journal of Athletic Training*, *47*(3), 320–328. https://doi.org/10.4085/1062-6050-47.3.02

Moffitt, L. B., Garcia-Williams, A., Berg, J. P., Calderon, M. E., Haas, A. P., & Kaslow, N. J. (2014). Reaching graduate students at risk for suicidal behavior through the interactive screening program. *Journal of College Student Psychotherapy*, *28*(1), 23–34. https://doi.org/10.1080/87568225.2014.854675

Muzaka, V. (2009). The niche of graduate teaching assistants (GTAs): Perceptions and reflections. *Teaching in Higher Education*, *14*(1), 1–12. https://doi.org/10.1080/13562510802602400

Myers, S.A. (1997). Newcomer GTA perceptions of socialization activities. *The Journal of Graduate Teaching Assistant Development*, *4*, 15–21.

Naufel, K. Z., & Beike, D. R. (2013). The ethical treatment of research assistants: Are we forsaking safety for science? *Journal of Research Practice*, *9*(2), 1–11. http://jrp.icaap.org/index.php/jrp/article/view/360

Oswalt, S., & Riddock, C. (2007). *What to do about being overwhelmed: Graduate students, stress and university services*. https://files.eric.ed.gov/fulltext/EJ899402.pdf

Payne, H.J., Cummings, R.D. & Greunke, E.J. (2015). Graduate assistant dissent expression: Navigating the role of student and employee. *The Northwest Journal of Communication, 43*(1), 103–132.

Pollon, D., Herbert, M., Chahine, S., & Falenchuk, O. (2013). From research assistant to professional research assistance: Research consulting as a form of research practice. *Journal of Research Practice, 9*(2), 1–21.

Pressler, J. L., & Kenner, C. A. (2014). Best practice or last resort? Employing graduate teaching assistants as clinical instructors. *Nurse Educator, 39*(5), 207–208. https://doi.org/10.1097/nne.0000000000000067

Queens University. (2015). *Classification of research assistantships held by graduate students.* http://www.queensu.ca/humanresources/management-tools/graduate-student-research-assistant-income

Quick, J.C., & Quick, J.D. (1979). Reducing stress through preventive management. *Human Resource Management, 18*(3), 15–22.

Quick, J.C., Wright, T.A., Adkins, J.A., Nelson, D.L., & Quick, J.D. (2013). *Preventive stress management in organizations* (2nd ed.). American Psychological Association.

Rossouw, J. P., & Niemczyk, E. K. (2013). A dual perspective on risks and security within research assistantships. *Journal of Research Practice, 9*(2), 1–23. http://jrp.icaap.org/index.php/jrp/article/view/358

University of California, Berkeley. (2014). *Graduate student happiness & well-being report.* http://ga.berkeley.edu/wellbeingreport.

U.S. Department of Education. (2004). *2001 Fall staff survey-Washington, D.C.* https://nces.ed.gov/StatProg/handbook/pdf/ipeds.pdf

Yamada, S., Cappadocia, M. C., & Pepler, D. (2014). Workplace bullying in Canadian graduate psychology programs: Student perspectives of student–supervisor relationships. *Training and Education in Professional Psychology*, 8(1), 58–67. https://doi.org/10.1037/tep0000015

APPENDIX A

2016 GRADUATE STUDENT EXPERIENCE SURVEY

A note on privacy

Please be assured that your answers are confidential. All information you provide will be held in strict professional confidence and will only be reported in a format where your individual responses cannot be identified. The identifying token used to access this survey is managed in a separate database to protect your identity.

If you wish to be eligible for the survey incentives drawings, you will be asked to provide your email address at the end of the survey, solely for purposes of notification if you win an award.

Again, this will not be stored with your response information.

SECTION 1 – ABOUT YOU

[Q1] Highest degree you are currently pursuing at Grad University

** Please choose only one of the following:*

- o Ph.D.
- o Masters (thesis / guided project)
- o Masters (nonthesis)
- o Masters (online

[Q2] Initial graduate student enrollment year at Grad University

**Please choose only one of the following:*

- o 2015
- o 2014
- o 2013
- o 2012
- o 2011
- o 2010
- o Prior to 2010

[Q3] Citizenship

**Please choose only one of the following:*

- o U.S. citizen
- o U.S. permanent resident (green card holder) and citizen of another country
- o Citizen of another country with a student visa or other nonimmigrant
- o visa

[Q4] Which, if any, of the following types of exposure to the U.S. did you have prior to beginning graduate school at Grad University?

**Only answer this question if the following conditions are met: Answer was 'U.S. permanent resident (green card holder) and citizen of another country' or 'Citizen of another country with a student visa or other nonimmigrant visa' at question '3 [Q3]' (Citizenship)*

Please choose all that apply:

- Visited the U.S.
- Lived in the U.S.
- Studied in the U.S.
- Worked in the U.S.
- None of the above
- Other (please specify):_____

[Q5] Which, if any, of the following activities do you plan to pursue in the U.S. after you receive your graduate degree?

**Only answer this question if the following conditions are met:*

Please choose all that apply:

- Further education in the U.S.
- Working in the U.S.
- Living in the U.S.
- None of the above
- Other (please specify):_____

[Q6] What type of employer do you most desire to work for immediately following completion of your degree?

**Please choose only one of the following:*

- Business/industry
- Academia
- Government
- Nonprofit
- organization
- Other (please specify):_____

[Q7] Gender Identity

** Please choose only one of the following:*

- Man
- Woman
- Trans or transgender
- Other (please specify):-

  _____

[Q8] OPTIONAL Sexual Orientation

**Please choose only one of the following:*

- Heterosexual
- Gay/lesbian
- Bisexual
- Prefer not to answer
- Other (please specify):_____

[Q9] Do you have a disability?

*Please choose only one of the following:
- Yes
- No

[Q10] Number of child or adult dependents
*Please choose only one of the following:
- 0
- 1
- 2
- 3
- 4
- 5+

[Q11] With whom, if anyone, do you currently share a residence?
*Please choose all that apply:
- Spouse
- Partner
- Other family member(s)
- Roommate(s)
- No one
- Other (please specify):_____

[Q12] Proximity of your residence to Grad University campus
**Please choose only one of the following:*
- On campus
- Within 2 miles of campus
- Between 2 and 5 miles of campus
- Between 5 and 10 miles of campus
- Greater than 10 miles from campus

[Q13] Transportation mode between campus and residence
**Please choose all that apply:*
- Automobile
- Biking
- Walking
- Grad University buses
- Public transportation (train or bus)
- Other (please specify):_____

SECTION 2 – OVERALL EXPERIENCE RATINGS

[Q14] Please rate the quality of your overall graduate student experience at Grad University, considering both academic and nonacademic aspects.
**Please choose the appropriate response for each item:*

1 =Poor	2	3	4	5	6	7	8	9	10 =Excellent

[Q15] Please rate the quality of your graduate student experience within your program of study, considering both academic and nonacademic aspects.
**Please choose the appropriate response for each item:*

1 =Poor	2	3	4	5	6	7	8	9	10 =Excellent

[Q16] Prior to this survey, how easy has it been for you to offer your own opinions and feedback to Grad University about issues that affect you as a student?
*Please choose the appropriate response for each item:

1 =Extremely Difficult	2	3	4	5	6	7	8	9	10 =Extremely Easy

[Q16a] How responsive has Grad University been to input or feedback that you have offered?
Please choose the appropriate response for each item:

N/A

1 Not Responsive	2	3	4	5	6	7	8	9	10 Extremely Responsive

[Q17] Prior to this survey, how easy has it been for you to offer your own opinions and feedback to your program of study about issues that affect you as a student?
Please choose the appropriate response for each item:

1 =Extremely Difficult	2	3	4	5	6	7	8	9	10 = Extremely Easy

[Q17a] How responsive has your program been to input or feedback that you have offered?
Please choose the appropriate response for each item:

1 Not Responsive	2	3	4	5	6	7	8	9	10 Extremely Responsive

N/A

[Q18] How likely are you to recommend Grad University to a qualified prospective graduate student as a place to attend graduate school?
Please choose the appropriate response for each item:

1 = Extremely Unlikely	2	3	4	5	6	7	8	9	10 =Extremely Likely

[Q19] How likely are you to recommend your program of study at Grad University to a qualified prospective graduate student?
Please choose the appropriate response for each item:

1 =Extremely Unlikely	2	3	4	5	6	7	8	9	10 = Extremely Likely

SECTION 3 – PROGRAM SUPPORT
[Q20]
Please indicate your level of agreement with the following statements:
* Please choose the appropriate response for each item:

My program provided an effective orientation to help me understand the process of completing my graduate degree.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

In general, students in my program are supportive of each other.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

In general, the faculty in my program are supportive of graduate students in the program.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I have as many professional development opportunities in my program as I would like to have.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I have as many social engagement opportunities in my program as I would like to have.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

My program is supportive of my personal commitments outside of graduate school (family, health, social, etc.)

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

My program encourages informal mentoring by advanced graduate students.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

My program makes me aware of good opportunities to interact across academic disciplines.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I am confident that the faculty in my program care about my overall wellbeing.

1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

Students in my program have the opportunity to influence program decisions

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

SECTION 4 – ADVISING AND MENTORING

[Q21] Thus far in your program, which of the following faculty members have you considered to be your PRIMARY mentor? (e.g., giving you advice about your education, research, career development, or other matters of concern to you as a graduate student)?

**Only answer this question if the following conditions are met: Answer was 'Ph.D.' or 'Masters (thesis / guided project)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University). Please choose only one of the following:*

- o My principal thesis / guided project advisor
- o Another faculty member in my program
- o A faculty member in another program
- o Thus far, I have not considered any faculty member to be a mentor and I am comfortable with this.
- o I have been unable to find a faculty member as a mentor, although I would like to have one.
- o Other (please specify):- _____

[Q22A] Please rate the helpfulness of the advice and assistance you have received from your current, principal thesis / guided project advisor in the following areas.

*Only answer this question if the following conditions are met: Answer was 'Ph.D.' *or* 'Masters (thesis / guided project)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University). Please choose the appropriate response for each item:

Mentoring on navigating the systems and culture of graduate education

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Course selection

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Preparation for qualifying exams

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Selection of a thesis /guided project topic

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Assistance with thesis /guided project topic proposal

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Advice on research for my thesis / guided project topic

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Advice on writing and revising the thesis / guided project topic

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Advice on writing and reviewing publications

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Feedback on my progress and next steps on my thesis / guided project topic

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Guidance on career options in academia

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

Guidance on nonacademic or other professional career options

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

N/A

[q22aComment]
OPTIONAL: Please share any more specific comments that explain these ratings.
**Only answer this question if the following conditions are met: Answer was 'Ph.D.' or 'Masters (thesis / guided project)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)*

Please type your answer here:_

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

[q22a1] How timely has the advice and assistance been that you have received from your current, principal thesis / guided project advisor?
** Only answer this question if the following conditions are met: Answer was 'Ph.D.' or 'Masters (thesis / guided project)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)*
Please choose the appropriate response for each item:

1 Not at All Timely	2	3	4	5	6	7	8	9	10 Extremely Timely

N/A

[q22a2] Please indicate your level of agreement with the following statements about your relationship with your current, principal thesis / guided project advisor.
** Only answer this question if the following conditions are met: Answer was 'Ph.D.' or 'Masters (thesis / guided project)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)*
Please choose the appropriate response for each item:
My thesis / guided project advisor treats me in a professional and respectful manner.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

I am satisfied with the degree of access/interaction I have with my thesis / guided project advisor.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

My thesis / guided project advisor provides clear expectations.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

I feel comfortable sharing my professional goals with my thesis / guided project advisor.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

I know where graduate students can go to get help with addressing any difficulties in advisor relationships.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

[q22a2Comment]
OPTIONAL: Please share any more specific comments that explain these ratings, or that provide feedback on other mentoring / advising resources you used at Grad University.
*Please type you answer here:

[Q22b] Please rate the helpfulness of the advice and assistance you have received from your program in the following areas.
*Only answer this question if the following conditions are met: Answer was 'Masters (nonthesis)' *or* 'Masters (online)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)
Please choose the appropriate response for each item:

Mentoring on navigating the systems and culture of graduate education

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

Course selection

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

Guidance on career options

1 Not at All Helpful	2	3	4	5	6	7	8	9	10 Extremely Helpful

[q22bComment]
OPTIONAL: Please share any more specific comments that explain these ratings.
**Only answer this question if the following conditions are met: Answer was 'Masters (nonthesis)' or 'Masters (online)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)*
Please write your answer here:

[Q22b1] How timely has the advice and assistance been that you have received from your program?
**Only answer this question if the following conditions are met: Answer was 'Masters (nonthesis)'or 'Masters (online)' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)*
Please choose the appropriate response for each item:

1 Not at All Timely	2	3	4	5	6	7	8	9	10 Extremely Timely

SECTION 5 – COURSEWORK/DEGREE PROGRESS
[Q23] Please rate the following academic dimensions of your program of study.
*Please choose the appropriate response for each item:

Relevance of required courses to my professional objectives

1 Poor	2	3	4	5	6	7	8	9	10	Excellent

Availability of courses I need to complete my degree

1 Poor	2	3	4	5	6	7	8	9	10	Excellent

Quality of teaching

1 Poor	2	3	4	5	6	7	8	9	10	Excellent

Clarity of graduation requirements

1 Poor	2	3	4	5	6	7	8	9	10	Excellent

[q23comment]
OPTIONAL: Please share any more specific comments that explain your rating on quality of teaching.
*Please write your answer(s) here:
Practices you think are particularly effective and why:

Practices you would like to see improved and how

[q24] Please indicate your level of agreement with the following statements related to your program of study. If a particular statement is not relevant to the degree you are currently pursuing, select "N/A."
* Please choose the appropriate response for each item:

My courses are up to date and incorporate recent developments in my field.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

There is adequate support for students in my program who are having academic difficulties.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Ph.D. qualifying exams are conducted in a manner that fairly assesses a student's ability to undertake dissertation research.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

The subject area knowledge required to successfully pass Ph.D. qualifying exams is clearly conveyed to me in advance.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

The process of Ph.D. qualifying exams has negatively impacted my quality of life beyond what one would deem reasonable.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

There is sufficient feedback for students who do not pass Ph.D. qualifying exams to understand why they did not pass and what areas should be addressed.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

[Q24a]OPTIONAL Please share any additional comments that explain your ratings related to Ph.D. qualifying exams.
Only answer this question if the following conditions are met:
Answer was 'Ph.D.' at question '1 [Q1]' (Highest degree you are currently pursuing at Grad University)
Please write your answer here:

SECTION 6 – FINANCIAL CONSIDERATIONS

[q25] Please indicate which of the following sources you have used or will use to pay for your graduate education at Grad University

* Please choose all that apply:
  - o Personal/family funds
  - o Internal Grad University fellowship or scholarship
  - o Fellowship or scholarship NOT from Grad University (from any external source, including U.S. or non U.S. governments)
  - o Graduate teaching assistantship
  - o Graduate research assistantship
  - o Grader position
  - o Other employment with Grad University
  - o Non Grad University employment
  - o Loans
  - o Other (please specify):_____

[Q26grid] What is your estimated monthly income from each of the following sources (after taxes, but before any payroll deductions such as fees, etc.)

**Please choose the appropriate response for each item:*

Internal Grad University fellowship or scholarship

N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Fellowship or scholarship NOT from Grad University (from any external source, including U.S.or non U.S. governments)

N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Graduate Teaching assistantship

N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Graduate research Assistantship

N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Grader Position
N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Other employment with Grad University
N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

Non Grad University Employment
N/A $1- $499 $500-$999 $1,000-$1,499 $1,500-$1,999 $2,000-$2,499 $2,500-$2,999 $3,000 or more Don't Know

[Q27] Immediately prior to beginning graduate school at Grad University, how clear was your understanding of the estimated cost of living (tuition, housing, board) for graduate students attending this institution?
** Please choose the appropriate response for each item:*
1 Not at All Clear 2 3 4 5 6 7 8 9 10 Extremely Clear

Don't Know

[q27a] OPTIONAL: Please share any suggestions on the type of information that would most help new, incoming students clearly understand the estimated cost of living for Grad University graduate students.
Only answer this question if the following conditions are met: Answer was '2015' at question '2 [Q2]' (Initial graduate student enrollment year at Grad University)
Please write your answer here:

[q28] Please indicate your level of agreement with each of the following statements related to funding your graduate education.
*Please choose the appropriate response for each item:

Grad University provides adequate information about financial support that is available to graduate students.
1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I am comfortable approaching my program/department about financial support needs.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

I believe I am getting paid fairly for the work I perform for my program.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

My program/department has resources to assist me in finding financial support.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

The current compensation level I receive from Grad University for graduate student employment is competitive with that of comparable institutions.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

I am confident that I will have the funds I need to complete my graduate education at Grad University.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

My take home pay (after paying fees) is competitive with that of comparable institutions.

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

[q29] As part of your graduate education, Grad University provides certain services based in part, or in whole, on the mandatory student fees listed below. Considering that these are mandatory fees, for each group of services specified, how would you rate its value for the price paid in these student fees? (Amounts listed are the ANNUAL fees paid by a student taking greater than 4 credits per semester).
*Please choose the appropriate response for each item:

Student Activity Fee (Funds operations of Campus Recreation Center, Student Center, and student organizations) $ 308 annually

1 Poor Value	2	3	4	5	6	7	8	9	10 Excellent Value

Transportation Fee $216 annually

1 Poor Value	2	3	4	5	6	7	8	9	10 Excellent Value

Student Health Fee (Funds unlimited visits at the Health Center for outpatient medical treatment) $ 427 annually

1 Poor	2	3	4	5	6	7	8	9	10 Excellent

Value Value

Technology Fee (Funds refurbishment of existing technology based equipment and innovative projects for the use of technology in education) $ 321 annually

1 Poor 2 3 4 5 6 7 8 9 10 Excellent
Value Value

Athletic Fee (Funds a portion of the Grad University Athletic Association budget) $296 annually

1 Poor 2 3 4 5 6 7 8 9 10 Excellent
Value Value

Recreation Facility Fee (Funds debt service payments on the Campus Recreation Center building) $144 annually

1 Poor 2 3 4 5 6 7 8 9 10 Excellent
Value Value

Special Institutional Fee (Funds a portion of Grad University academic operations) $1,432 annually

1 Poor 2 3 4 5 6 7 8 9 10 Excellent
Value Value

[q29comment] OPTIONAL: What one thing can Grad University do in order to improve the value of the services you receive through mandatory student fees?
Please write your answer here:

SECTION 7 – UNIVERSITY RESOURCES

[q30] Please rate your satisfaction with the following Grad University resources, based on your experience during the current academic year. If you are not familiar with a particular resource or it is not relevant to your needs, select "N/A".
*Please choose the appropriate response for each item:

Library facilities

1 Very 2 3 4 5 6 7 8 9 10 Very
Dissatisfied Satisfied

Grad University student health insurance

1 Very 2 3 4 5 6 7 8 9 10 Very

Dissatisfied Satisfied

Research facilities (laboratories, instrumentation, infrastructure, etc.)

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Health care services

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Graduate Studies office

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Office of International Education

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Graduate student housing

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Child care services Fellowships Office

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Office of Scholarships and Financial Aid

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Campus transportation services

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Center for Career Discovery and Development (formerly “Career Services” and “Department of Professional Practice”)

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Center for the Enhancement of Teaching and Learning (CETL)

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Communications Center

1 Very 2 3 4 5 6 7 8 9 10 Very

Dissatisfied Satisfied

Counseling Center
1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Campus Recreation Center
1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Student Center
1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Graduate Student Government
1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

Office of Minority Educational Development (OMED Educational Services)

1 Very Dissatisfied 2 3 4 5 6 7 8 9 10 Very Satisfied

SECTION 8 – STUDENT WELL-BEING AND STRESS

[q31] Please indicate your level of agreement with the following statements.
* Please choose the appropriate response for each item:

I have enough good opportunities to participate in campus social events that are open to all graduate students.
1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I feel isolated in my program or lab, with few opportunities to network with Grad University students
beyond my program of study.
1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

I am optimistic about my post-graduation career prospects.
1 Strongly Disagree 2 3 4 5 6 7 8 9 10 Strongly Agree

[q32] During their graduate student years, many students sometimes experience frustrations that contribute to personal stress. Please rate the level of stress, if any, that you have experienced in each of the following areas while a graduate student at Grad University.
If an area is not relevant to your Masters or Ph.D. program, select "N/A".
*Please choose the appropriate response for each item:

Academics (workload, rigor, classroom experiences, interactions with faculty)

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Relationship with principal thesis / guided project advisor

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Finances

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Establishing a healthy work/life balance

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Grad University responsibilities related to obtaining funding (teaching, research, etc.)

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Employment responsibilities

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Establishing/maintaining relationships with other Grad University graduate students

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Social life (making friends, attending social functions)

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Finding opportunities for professional networking

1 Strongly Disagree	2	3	4	5	6	7	8	9	10 Strongly Agree

Finding career mentoring support

1 Strongly	2	3	4	5	6	7	8	9	10 Strongly

Disagree Agree

Physical health Emotional health
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Knowing where to find graduate student support resources
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Family responsibilities/issues
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Personal romantic relationships
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Finding employment opportunities or internships
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

General environment in my department/program of study
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Campus safety
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Ph.D. qualifying exams Adjusting to a new culture
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

Separation from family
1 Strongly 2 3 4 5 6 7 8 9 10 Strongly
Disagree Agree

[q33] In a typical week, approximately how much time do you spend on each of the following activities?
*Please choose the appropriate response for each item:

Attending scheduled classes/labs
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Working on scheduled courses outside of class
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Research (dissertation, thesis) Exercise/fitness
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Socializing with friends Clubs/organized groups
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Watching TV or playing video games
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Working for pay/stipend at Grad University
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Working for pay/stipend outside of Grad University
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

Volunteer work/activity
0 hrs. Up to 2 hrs. 3-5 hrs. 6-10 hrs. 11-15 hrs. 16-20hrs. 21-30hrs. 31-40hrs. More than 40hrs.

[q33b] On the typical weekday, how many hours do you sleep?
* Please choose the appropriate response for each item:

- o less than 4hrs.
- o 4-5 hrs.
- o 6-7 hrs.
- o 8 hrs. or more

[q34] Based on what you know about the following campus services, which ones do you think could serve as support resources for students like you when experiencing stress?

*****Please choose **all** that apply:

- o Counseling Center
- o Primary dissertation advisor
- o Other faculty in my program

- Nonfaculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for the Enhancement of Teaching and Learning (CETL)
- Graduate Studies office
- None of the above
- Other (please specify):_____

[q35] Which, if any, campus services have you actually used as a source of support when experiencing stress?
* Please choose all that apply:

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program
- Nonfaculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for the Enhancement of Teaching and Learning (CETL)
- Graduate Studies office

- None of the above
- Other (please specify):_____

[q36] Have you ever wanted to seek support from a campus resource due to experiencing stress, but then decided not to contact that resource?
*Please choose only one of the following:

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program
- Nonfaculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for the Enhancement of Teaching and Learning (CETL)
- Graduate Studies office
- None of the above
- Other (please specify):_____

[q37] Which campus resource did you decide not to contact, after initially wanting to do so?
*Only answer this question if the following conditions are met: Answer was 'Yes' at question '50 [q36]' (Have you ever wanted to seek support from a campus resource due to experiencing stress, but then decided not to contact that resource?)
Please choose all that apply:

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program
- Nonfaculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center

- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for the Enhancement of Teaching and Learning (CETL)
- Graduate Studies office
- None of the above
- Other (please specify):_____

[q38] Why did you decide not to contact that resource(s)?
*Only answer this question if the following conditions are met:
Answer was 'Yes' at question '50 [q36]' (Have you ever wanted to seek support from a campus resource due to experiencing stress, but then decided not to contact that resource?) Please choose all that apply:

- Issue resolved itself first
- Unsure where to go for appropriate type of support
- Stigma associated with seeking help
- Contacted off campus
- resource instead
- Concerned about confidentiality
- Did not think I could get an appointment soon enough
- Concerned about cost
- Thought I should be able to manage the issue on my own
- Was not sure they could help me
- Other (please specify):_____

[q39] What one thing would most improve the quality of your overall experience as a graduate student at Grad University, and why?
Please write your answer here:

APPENDIX B

2019 GRADUATE STUDENT EXPERIENCE SURVEY

Section 1 Intro Please be assured that your answers are confidential. All information you provide will be held in strict professional confidence and will only be reported in a format where your individual responses cannot be identified. The identifying token used to access this survey is managed in a separate database to protect your identity.

If you wish to be eligible for the survey incentives drawings, you will be asked to provide your email address at the end of the survey, solely for purposes of notification if you win an award. Again, this will not be stored with your response information.

Thank you for taking the time to complete this survey. Your honest answers are appreciated, and the survey should take no longer than 15 minutes to complete.

Please review the informed consent linked below:
http://grad.gatech.edu/sites/default/files/documents/2019_grad_survey_informed_consent.pdf

Q1 Highest degree you are currently pursuing at Grad University
Please choose only one of the following:

- o Ph.D.
- o Masters (thesis / guided project)
- o Masters (non-thesis)
- o Masters (online)

Q1A Are you currently taking this survey from a location within the European Union?

- o Yes
- o No

Q2 Initial graduate student enrollment year at Grad University
Please choose only one of the following:

- o 2019
- o 2018
- o 2017
- o 2016
- o 2015
- o 2014
- o 2013
- o Prior to 2013

Q3 Citizenship: Please choose only one of the following:

- o U.S. citizen
- o U.S. permanent resident (green card holder) and citizen of another country
- o Citizen of another country with a student visa or other non-immigrant visa
- o Citizen of another country

Q4 Which, if any, of the following types of exposure to the U.S. did you have prior to beginning graduate school at Grad University? Please choose all that apply:

- Visited the U.S.
- Lived in the U.S.
- Studied in the U.S.
- Worked in the U.S.
- None of the above
- Other (please specify): _____

Q5 Which, if any, of the following activities do you plan to pursue in the U.S. after you receive your graduate degree? Please choose all that apply:

- Further education in the U.S.
- Working in the U.S.
- Living in the U.S.
- None of the above
- Other (please specify):_____

Q6 What type of employer do you most desire to work for immediately following completion of your degree?

- Business/industry
- Academia
- Government
- Non-profit organization
- Startup company
- Other (please specify) _____

Q7 Gender Identity: Which gender best describes you right now? (If your gender identity is doesn't match the sex you were assigned at birth, or you are expressing your gender differently in different parts of your life, please select the gender you are currently expressing most of the time.)

- Male
- Female
- Transgender
- Prefer not to answer
- Other (please specify)_____

Q8 Sexual Orientation
Which of the following best describes your sexual orientation?

- Heterosexual or straight
- Gay or lesbian
- Bisexual
- Asexual
- Other _____
- Prefer no labels
- Not sure what this question means

Q9 Do you have a disability?

- Yes
- No
- Prefer not to answer

Q10 Number of child or adult dependents. Please choose only one of the following:

0 1 2 3 4 5 6 6+

Q11 With whom, if anyone, do you currently share a residence? Please choose all that apply:

- Spouse
- Partner
- Other family member(s)
- Roommate(s)
- No one
- Other (please specify):_____

Q12 Proximity of your residence to Grad University campus. Please choose only one of the following:

- On campus
- Within 2 miles of campus
- Between 2 and 5 miles of campus
- Between 5 and 10 miles of campus
- Greater than 10 miles from campus

Q12B What is the zip code of your current residence (5-digit numeric code used for mail)?

_____

Q12 online Do you live close enough to Grad University's campus to travel to campus to utilize on-campus resources?

- Yes
- Maybe
- No

Q13 Mode of transportation between campus and your residence. Please choose all that apply:

- Automobile
- Biking
- Walking
- Grad University buses
- Public Transportation
- Other (please specify): _____

Section 2:The next few questions ask about your experience at Grad University. We ask these questions because we want to get feedback on both Grad University as a whole and your individual program of study.

Q14 Please rate the quality of your overall graduate student experience at Grad University, considering both academic and non-academic aspects.

1 = Poor 2 3 4 5 6 7 8 9 10 = Excellent

Q15 Please rate the quality of your graduate student experience within your program of study, considering both academic and non-academic aspects.

1 = Poor 2 3 4 5 6 7 8 9 10 = Excellent

Q16 Prior to this survey, how easy has it been for you to offer your own opinions/feedback to Grad University about issues that affect you as a student?

1 = Extremely Difficult 2 3 4 5 6 7 8 9 10 = Extremely Easy

Q16a How responsive has Grad University been to input or feedback that you have offered?

1 = Not Responsive At All 2 3 4 5 6 7 8 9 10 = Extremely Responsive

Q17 Prior to this survey, how easy has it been for you to offer your own opinions/feedback to your program of study about issues that affect you as a student?

1 = Extremely Difficult 2 3 4 5 6 7 8 9 10 = Extremely Easy

Q17a How responsive has your program been to input or feedback that you have offered?

1 = Not Responsive At All 2 3 4 5 6 7 8 9 10 = Extremely Responsive

Q18 How likely are you to recommend Grad University to a qualified prospective graduate student as a place to attend graduate school?

1 = Not Likely At All 2 3 4 5 6 7 8 9 10 = Extremely Likely

Q19 How likely are you to recommend your program of study at Grad University to a qualified prospective graduate student?

1 = Not Likely At All 2 3 4 5 6 7 8 9 10 = Extremely Likely

Section 3: The next few questions ask about how supported your program makes you feel.

Q20 Please tell us how much you agree or disagree with the following statements:

	1 = Strongly Disagree	2	3	4	5	6	7	8	9	10 = Strongly Agree
My program provided an effective orientation to help me understand the process of completing my graduate degree.										
In general, students in my program are supportive of each other.										
In general, the faculty in my program are supportive of graduate students in the program.										
I have as many professional development opportunities in my program as I would like to have.										
I have as many social engagement opportunities in my program as I would like to have.										
My program is supportive of my personal commitments outside of graduate school (family, health, social, etc.)										
My program encourages informal mentoring by advanced graduate students.										
My program makes me aware of good opportunities to interact across academic disciplines.										
I am confident that the faculty in my program care about my overall well-being.										
Students in my program have the opportunity to influence program decisions.										

Section 4 Intro The next few questions ask about your relationship with your mentor or advisor.

Q21 Thus far in your program, which of the following faculty members do you consider to be your PRIMARY mentor? (e.g., giving you advice about your education, research, career development, or other matters of concern to you as a graduate student)? Please choose only one of the following:

- My principal thesis / guided project advisor
- Another faculty member in my program
- A faculty member in another program
- Thus far, I have not considered any faculty member to be a mentor and I am comfortable with this.
- I have been unable to find a faculty member as a mentor, although I would like to have one.
- Other (please specify) _____

	1 = Not at All Helpful	2	3	4	5	6	7	8	9	10 = Extremely Helpful
Mentoring on navigating the systems and culture of graduate education										
Course selection										
Preparation for qualifying exams										
Selection of a thesis / guided project topic										
Assistance with thesis / guided project topic proposal										
Advice on research for my thesis / guided project topic										
Advice on writing and revising the thesis / guided project topic										
Advice on writing and reviewing publications										
Feedback on my progress and next steps on my thesis / guided project topic										
Guidance on career options in academia										

Guidance on non-academic or other professional career options										

Q22A Please rate the helpfulness of the advice/assistance you have received from your current, principal thesis / guided project advisor in the following areas.

q22aComment OPTIONAL: Please share any more specific comments that explain these ratings.

_____
_____
_____
_____
_____

q22a2 Please indicate your level of agreement with the following statements about your relationship with your current, principal thesis / guided project advisor.

	1 = Strongly Disagree	2	3	4	5	6	7	8	9	10 = Strongly Agree
My thesis / guided project advisor treats me in a professional and respectful manner.										
I am satisfied with the degree of access/interaction I have with my thesis / guided project advisor.										
My thesis / guided project advisor provides clear expectations.										
I feel comfortable sharing my professional goals with my thesis / guided project advisor.										
I know where graduate students can go to get help with addressing any difficulties in advisor relationships.										
My thesis/guided project adviser demonstrates concern for my personal well-being.										
I feel comfortable speaking to my thesis/guided project advisor about personal issues that may be affecting my academic or work performance.										
I experience my faculty-student relationship as respectful and non-exploitative										

q22a2Comment OPTIONAL: Please share any more specific comments that explain these

ratings, or that provide feedback on other mentoring / advising resources you used at Grad University.

_____
_____
_____
_____

Q22b Please rate the helpfulness of the advice and assistance you have received from your program in the following areas.

	1 = Not at All Helpful	2	3	4	5	6	7	8	9	10 = Extremely Helpful
Mentoring on navigating the systems and culture of graduate education										
Course selection										
Guidance on career options										

q22bComment OPTIONAL: Please share any more specific comments that explain these ratings.

_____
_____
_____
_____

Q22b1 How timely has the advice/assistance been that you have received from your program?

1 = Not Timely At All 2 3 4 5 6 7 8 9 10 = Extremely Timely

Section 5: The next few questions will ask about your degree programs.

Q23 Please rate the following academic dimensions of your program of study.

	1 = Poor	2	3	4	5	6	7	8	9	10 = Excellent
Relevance of required courses to my professional objectives										
Availability of courses I need to complete my degree										
Quality of teaching										
Clarity of graduation requirements										

q23Comment OPTIONAL: Please share any more specific comments that explain your rating on quality of teaching.

- Practices you think are particularly effective and why: _____
- Practices you would like to see improved and how: _____

Q24 Please indicate your level of agreement with the following statements related to your program of study. If a particular statement is not relevant to the degree you are currently pursuing, select "N/A."

	1 = Strongly Disagree	2	3	4	5	6	7	8	9	10 = Strongly Agree	N/A 11
My courses are up-to-date and incorporate recent developments in my field.											
There is adequate support for students in my program who are having academic difficulties.											
Ph.D. qualifying exams are conducted in a manner that fairly assesses a student's ability to undertake dissertation research.											
The subject-area knowledge required to successfully pass Ph.D. qualifying exams is clearly conveyed to me in advance.											
The process of Ph.D. qualifying exams has negatively impacted my quality of life beyond what one would deem reasonable.											
There is sufficient feedback for students who do not pass Ph.D. qualifying exams to understand why they did not pass and what areas should be addressed.											

Q24a OPTIONAL - Please share any additional comments that explain your ratings related to Ph.D. qualifying exams.

Section 6: The next few questions will ask you about financial matters related to your graduate education.

Q25 Please indicate which of the following sources you have used or will use to pay for your graduate education at Grad University.

- o Personal/family funds

- Internal Grad University fellowship or scholarship
- Fellowship or scholarship NOT from Grad University (from any external source, including U.S. or non-U.S. governments)
- Graduate teaching assistantship
- Graduate research assistantship
- Grader position
- Other employment with Grad University
- Non-Grad University employment
- Loans
- Other (please specify): _____

Q26 What is your estimated monthly income from each of the following sources (after taxes, but before any payroll deductions such as fees, etc.)

	N/A	$1 - $499	$500 - $999	$1000 - $1,499	$1,500 - $1,999	$2,000 - $2,499	$2,500 - $2,999	$3,000 or more	Don't Know
Internal Grad University fellowship or scholarship									
Fellowship or scholarship NOT from Grad University (from any external source, including U.S. or non-U.S. governments)									
Graduate teaching assistantship									
Graduate research assistantship									
Grader position									
Other employment with Grad University									
Non-Grad University employment									

Q27 Immediately prior to beginning graduate school at Grad University, how clear was your understanding of the estimated cost of attendance (applicable tuition, housing, board) for graduate students attending this institution?

1 = Not Clear At All 2 3 4 5 6 7 8 9 10 = Extremely Clear

q27a OPTIONAL: Please share any suggestions on the type of information that would most help new, incoming students clearly understand the estimated cost of living for Grad University graduate students. _____

q28 Please tell us how much you agree or disagree with each of the following statements related to funding your graduate education.

	1 = Strongly Disagree	2	3	4	5	6	7	8	9	10	N/A 11
Grad University provides adequate information about financial support that is available to graduate students.											
I am comfortable approaching my program/department about financial support needs.											
I believe I am getting paid fairly for the work I perform for my program.											
My program/department has resources to assist me in finding financial support.											
The current compensation level I receive from Grad University for graduate student employment is competitive with that of comparable institutions.											
I am confident that I will have the funds I need to complete my graduate education at Grad University.											
My take home pay (after paying fees) is competitive with that of comparable institutions.											

Q29 As part of your graduate education, Grad University provides certain services based in part, or in whole, on the mandatory student fees listed below. Considering that these are mandatory fees, for each group of services specified, how would you rate its value for the price paid in these student fees? (Amounts listed are the ANNUAL fees paid by a student taking greater than 4 credits per semester).

	1 = Poor Value	2	3	4	5	6	7	8	9	10 = Excellent Value	N/A 11
Student Activity Fee (Funds student organizations) - $100 annually											
CRC Operations Fee (Funds operations of the Campus Recreation Center) - $128 annually											
Student Center Operations Fee (Funds operations of the Student Center) - $80											
Transportation Fee (Funds operations of the Tech Trolley, Stinger, and Stingerette services) - $227 annually											
Student Health Fee (Funds unlimited visits at the Stamps Health Center for outpatient medical treatment) - $448 annually											
Technology Fee (Funds refurbishment of existing technology-based equipment and innovative projects for the use of technology in education) - $321 annually											
Athletic Fee (Funds a portion of the Grad University Athletic Association budget) - $296 annually (7)											
Recreation Facility Fee (Funds debt service payments on the Campus Recreation Center building) - $144 annually (8)											
Special Institutional Fee (Funds a portion of Grad University academic operations) - $1,032 annually for on campus students / $582 annually for online students (9)											

q29comment OPTIONAL: What one thing can Grad University do in order to improve the value of the services you receive through mandatory student fees?

Section 7: The next few questions ask about your attitudes towards campus resources.
Q30 Please rate your satisfaction with the following Grad University resources, based on your experience during the current academic year. If you are not familiar with a particular resource or it is not relevant to your needs, select “N/A”.

	1 = Very Dissatisfied	2	3	4	5	6	7	8	9	10 = Very Satisfied	N/A 11
Library facilities											
Grad University student health insurance											
Research facilities (laboratories, instrumentation, infrastructure, etc.)											
Health care services											
Graduate Studies office											
Office of International Education											
Graduate student housing (											
Childcare services											
Fellowships Office											
Office of Scholarships and Financial Aid											
Campus transportation services											
Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")											
Center for Teaching and Learning (CTL)											
Communications Center											
Counseling Center											
Campus Recreation Center											
Student Center											
Graduate Student Government											
Office of Minority Educational Development (OMED Educational Services)											

Q30online On-campus graduate students pay fees for additional student services. You indicated in a previous question that you live close enough to campus to utilize on-campus resources. If

you were able to opt-in to pay fees for on-campus services, which of these services would you utilize?

- Library facilities (1)
- Grad University student health insurance (2)
- Health care services (3)
- Graduate Studies office (4)
- Office of International Education (5)
- Office of Scholarships and Financial Aid (6)
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice") (7)
- Center for Teaching and Learning (CTL) (8)
- Communications Center (9)
- Counseling Center (10)
- Campus Recreation Center (11)
- Student Center (12)
- Graduate Student Government Association (13)
- Office of Minority Educational Development (OMED Educational Services) (14)
- Other (15) _____

Section 8 Intro The next few questions ask about your well-being and leisure.

Q31 Please indicate your level of agreement with the following statements.

	1 = Strongly Disagree	2	3	4	5	6	7	8	9	10 = Strongly Agree	N/A 11
I have enough good opportunities to participate in campus social events that are open to all graduate students.											
I feel isolated in my program or lab, with few opportunities to network with Grad University students beyond my program of study.											
I am optimistic about my post-graduation career prospects.											

Q32 During their graduate student years, many students sometimes experience frustrations that contribute to personal stress. Please rate the level of stress, if any, that you have experienced in each of the following areas while a graduate student at Grad University. If an area is not relevant to your Masters or Ph.D. program, select "N/A".

	1 = No Stress	2	3	4	5	6	7	8	9	10 = Extremely High Stress	N/A 11
Academics (workload, rigor, classroom experiences, interactions with faculty)											
Relationship with principal thesis / guided project advisor											
Finances											
Establishing a healthy work/life balance											
Grad University responsibilities related to obtaining funding (teaching, research, etc.)											
Employment responsibilities											
Establishing/maintaining relationships with other Grad University graduate students											
Social life (making friends, attending social functions)											
Finding opportunities for professional networking											
Finding career mentoring support											
Physical health											
Emotional health											
Knowing where to find graduate student support resources											
Family responsibilities/issues											
Personal romantic relationships											
Finding employment opportunities or internships											
General environment in my department/program of study											
Campus safety											
Ph.D. qualifying exams											
Adjusting to a new culture											

Separation from family											

Q33 In a typical week, approximately how much time do you spend on each of the following activities?

	0 hrs. (1)	Up to 2 hrs. (2)	3-5 hrs. (3)	6-10 hrs. (4)	11-15 hrs. (5)	16-20 hrs. (6)	21-30 hrs. (7)	31-40 hrs. (8)	More than 40 hrs. (9)
Attending scheduled classes/labs (1)									
Working on scheduled courses outside of class (2)									
Research (dissertation, thesis) (3)									
Exercise/fitness (4)									
Socializing with friends (5)									
Clubs/organized groups (6)									
Watching TV or playing video games (7)									
Working for pay/stipend at Grad University (8)									
Working for pay/stipend outside of Grad University (9)									
Volunteer work/activity (10)									
Spending time with family/spouse/partner. (11)									

Q33b On the typical weekday, how many hours do you sleep?

- less than 4 hrs.
- 4-5 hrs.
- 6-7 hrs.
- 8hrs. or more

Q34 Based on what you know about the following campus services, which ones do you think could serve as support resources for students like you when experiencing stress?

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program

- Non-faculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Stamps Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center (16)
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for Teaching and Learning (CTL)
- Graduate Studies office
- None of the above
- Other (please specify):

Q35 Which, if any, campus services have you used as a source of support when experiencing stress?

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program
- Non-faculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Stamps Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center (16)
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for Teaching and Learning (CTL)
- Graduate Studies office
- None of the above
- Other (please specify):

Q36 Have you ever wanted to seek support from a campus resource due to experiencing stress, but then decided not to contact that resource?

- Yes
- No

Q37 Which campus resource did you decide not to contact, after initially wanting to do so?

- Counseling Center
- Primary dissertation advisor
- Other faculty in my program
- Non-faculty academic advisor
- Center for Career Discovery and Development (formerly "Career Services" and "Department of Professional Practice")
- Campus religious/spiritual organizations
- Stamps Health Services (primary care, psychiatry, Health Promotion)
- Women's Resource Center
- Office of Scholarships and Financial Aid
- Dean of Students
- Office of Minority Educational Development (OMED)
- Office of Hispanic Initiatives
- Office of International Education (OIE)
- Campus Recreation Center (CRC)
- Office of Disability Services (ADAPTS)
- LGBTQIA Resource Center (16)
- Office of Student Diversity Programs
- Veterans Resource Center
- Center for Teaching and Learning (CTL)
- Graduate Studies office
- None of the above
- Other (please specify):

Q38 Why did you decide not to contact that resource(s)?

- Issue resolved itself first
- Unsure where to go for appropriate type of support
- Stigma associated with seeking help
- Contacted off-campus resource instead
- Concerned about confidentiality
- Did not think I could get an appointment soon enough
- Concerned about cost
- Thought I should be able to manage the issue on my own
- Was not sure they could help me
- Other (please specify):_____

Q39 What one thing would most improve the quality of your overall experience as a graduate student at Grad University, and why?

_____

_____