DIFFERENCES BETWEEN RESIDENT ADVISORS AND UNDERGRADUATE RESIDENTIAL STUDENTS ON RESILIENCE, MENTAL HEALTH, BURNOUT, AND PERCEIVED STRESS

By

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ABSTRACT

CORRINE JENAE HARRIS. Differences Between Resident Advisors And Undergraduate Residential Students On Resilience, Mental Health, Burnout, And Perceived Stress. (Under the direction of DR. SUSAN FURR)

The mental health and well-being of college students has become a growing concern for colleges and universities. Research has shown that prevalence rates of mental health in college students is growing and there are multiple complicating impacts of mental health on student well-being and academic success. Resident advisors play a crucial role in campus life as student employees that live amongst students and have a high level of responsibility as first responders to emergencies and as rule enforcers. Despite their importance, there is little research on the mental health of resident advisors and how different aspects of the resident advisor role impact their mental health.

The purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress. The study also examined how different aspects of the resident advisor position may impact resident advisor mental health, burnout, and stress and if resilience had a mediating impact on these variables. A total of 551 college students (including 84 resident advisors) were included in this research study. Participants completed an online survey, which included the Mental Health Inventory, Copenhagen Burnout Inventory, Perceived Stress Scale, Scale of Protective Factors, and a demographic questionnaire. The multivariate analysis of variance indicated that there were no statistically significant differences between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress. A multivariate analysis of covariance indicated that there was not a significant difference between the groups on the combined dependent variables after controlling for resilience. The findings of the present study

suggest that resident advisors and residential college students are experiencing symptoms of mental health, burnout, and perceived stress that exist despite moderate levels of resilience. Results suggest that university staff who work with students should be aware of the mental health challenges of students and work to find ways to support them.

DEDICATION

I would like to dedicate this dissertation to God without whom none of this would be possible. May this PhD be used for your glory and to fulfill your purpose for my life. I would also like to dedicate this work to my ancestors whose strength, dedication, and sacrifice made everything I do possible. May my work and my life make you proud.

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CHAPTER I: INTRODUCTION

In the fall of 2019, approximately 16.6 million students were enrolled in undergraduate programs at colleges and universities across America (Digest of Education Statistics, 2021a). College enrollment rates have been rising over the years (Digest of Education Statistics, 2021b) which is ushering in a new generation of college students who are facing more diverse pressures and stressors than ever before. Historically, college students have always had to deal with certain developmental and situational stressors associated with higher education such as having to adapt to a new learning and living environment, increased academic rigor and workload, and exploring personal identity formation. Generational and cultural changes have added new, complicating stressors for today's students who are being forced to deal with skyrocketing college costs, racial and economic tensions, and unprecedented access to technology. In addition, social media is reshaping society daily and creates stressors that impact students' abilities to learn and grow in college environments.

Higher education is full of competing role demands and responsibilities that complicate the mission of providing students with opportunities for growth and advancement in multiple aspects of their lives. Students who cannot balance these demands or the accompanying stress are often at risk for long-term emotional and behavioral maladjustment (Klibert et al., 2014); for this and other reasons, the mental health and well-being of college students has become a bigger concern on college campuses. About 12-18% of the college student population has been found to meet the criteria for a diagnosable mental illness with the most common disorders including personality disorders, major depression, bipolar disorder, schizophrenia, other psychotic disorders, anxiety disorders, eating disorders, and self-injury issues (Gallagher, 2014; Mowbray et al., 2006). Alcohol use and abuse have also been found to be an issue. It has been noted that an

estimated 80% of college students drink and that over 40% of those students are classified as binge drinkers (Rimsza & Moses, 2005). While the data shows that a significant portion of the college student population is dealing with at least one diagnosed mental illness, the actual scope of the issue might be much larger as there are many college students who do not seek treatment but admit to feeling symptoms of depression, anxiety, and stress on a regular basis. In the Spring 2020 National College Health Assessment, stress was cited as having the single greatest impact on academic performance with depression and anxiety also ranking among the top five academic impacts (2020). Additionally, 41% of students reported feeling moderate to serious psychological distress over the last school year. The Healthy Minds Study looked more specifically at the mental health symptoms that college students experience and found that 37% of students met the criteria for moderate or severe depression, 31% met the criteria for moderate or severe anxiety, and only 39% had scores that indicated positive mental health (Healthy Minds Network, 2020).

Colleges are typically thought of as one of the best places to handle mental health issues due to the close proximity and interconnectedness of multiple supportive resources. However, studies show that in addition to having high incidences of untreated mental disorders (Hunt & Eisenberg, 2010), college students are less likely than their same aged peers to receive treatment for alcohol and drug abuse issues (Blanco et al., 2008). Most college students who experience mental health problems also do not receive early intervention services (Thombs et al., 2015); therefore, many of the college students most in need of mental health services may not be utilizing these services (Pasco et al., 2012). The negative effects of untreated and unsupported mental health disorders for college students can be devastating. Untreated depression and anxiety have been found to cause academic impairment, decreased social involvement, increased risk of

self-injury and substance dependence, and suicide attempts in students (Boden et al., 2007; Goodwin et al., 2004; Hysenbegasi et al., 2005; Kisch et al., 2005; Mackenzie et al., 2011). The increased prevalence of mental health issues in students has forced colleges and universities to work to figure out how to best support their students (Hunt & Eisenberg, 2010; Mowbray et al., 2006).

College Issues

Undergraduate students face many challenges and stressors due to the unique nature of the secondary educational system. These challenges come in the form of developmental issues and systemic culture issues. Some of the developmental issues that accompany young adulthood include working to develop a unique adult personal identity, the establishment of friendships and intimate relationships, exploration of sexuality, and learning to handle interpersonal issues (Kadison & DiGeronimo, 2004). The college environment is characterized by competitive academic pressure, struggles to balance multiple time-consuming extracurricular activities, potential social isolation as students transition to a new environment, and an undergraduate culture of excessive alcohol use and rising sexual assault issues (Kadison & DiGeronimo, 2004). College life presents stressors that can potentially trigger and exacerbate psychological problems in vulnerable individuals in multiple domains of their life. Students who deal with symptoms of mental health disorders may struggle to succeed academically and accomplish necessary class requirements such as maintaining concentration, making public presentations, attending classes, and appropriately handling test anxiety. They may also struggle with balancing personal and professional priorities, interacting with groups, and interacting with classmates and faculty (Mowbray et al., 2006).

An additional stress that plagues many college students is the burden of increased financial costs. Once admitted to college, students are faced with tuition costs that have more than doubled in the past 30 years (Ma et al., 2020). Between 2009 and 2019, prices for undergraduate tuition, fees, room, and board at public institutions rose 24% and prices at private nonprofit institutions rose 23% (Digest of Education Statistics, 2020a). To help offset the costs of education many students obtain financial aid. In 2018, about 84% of full-time undergraduate students received financial aid of some form (Digest of Education Statistics, 2020b). An additional option for helping defray some of the costs of college is getting a job either on or off campus. As many as 45% of full-time college students were employed in 2019 with about 14% of full-time students working less than 20 hours per week, 17% working 20 to 34 hours per week, and 11% working 35 or more hours per week (Digest of Education Statistics, 2020c). While having a job is a necessary reality for many students, studies have shown that work can negatively influence academics (American College Health Association, 2016), and college students who worked over 20 hours were also less involved with campus activities than their peers who did not work (Miller et al., 2008).

Resident Advisors

Many colleges and universities have residence halls on campus where students can live while they work to attain their degrees. As a way to help provide support services for students who might otherwise fall through the cracks of the system, colleges and universities hire about 51,000 resident advisors (RAs) to live and work in student residence halls each year (Reingle et al., 2010). The RA position is essentially a live-in 24 hour/7 day a week job in which college students "handle multiple issues on a regular basis including roommate conflicts, date rape, interpersonal violence, academic problems, depression and substance misuse" (Reingle et al.,

2010, p. 326). Resident advisors are a part of the campus community and are therefore forced to juggle multiple, conflicting roles as students, employees, mentors, and friends (Everett & Loftus, 2011). They are often the first to respond to situations that happen in the halls and function as a liaison between residents and other student affairs professionals with the important responsibility of reporting mental health incidents and other issues as they arise (Blimling, 2015). When a resident exhibits problematic behavior or experiences significant distress or crisis, the RA is responsible for recognizing the problem and referring the student for professional assistance (Reingle et al., 2010). This combination of factors makes the RA position difficult, especially considering that resident advisors are undergraduate students who also have their own academic, social, and personal well-being and growth that they are responsible for (Paladino et al., 2005).

Although resident advisors have an increasing responsibility and role in campus life (Everett & Loftus, 2011), specific standards for RA training have not been developed and standardized (Reingle et al., 2010). This is concerning considering that "training is often seen as more important than selection because training may compensate for possible shortcomings in the RA candidate or flaws in the selection process" (Bowman & Bowman, 1995, p. 39). Most resident advisor trainings devote at least some time to teaching about alcohol, drug, and mental health first-aid of residential students with the focus being on teaching RAs effective referral skills for these problems; however, few mention the personal mental health considerations for resident advisors despite the documentation of several risks of the RA position (Deluga & Winters, 1991; Everett & Loftus, 2011; Hetherington et al., 1989). Burnout has been studied the most in resident advisors and it has been found that RAs suffered from burnout and that department size, gender, race, and hall style were predictors of the type of burnout RAs would feel (Paladino et al, 2005; Stoner, 2017). Perceived stress has also been examined in this

population and it was found that RAs experience some levels of stress related to their interactions with their residents (Swanbrow Becker & Drum, 2015). Miller and Conyne (1980) found that due to the stressors of the resident advisor position, resident advisors were more likely to report having issues than students who were not RAs. Although resident advisors and certain aspects of their mental health have been studied before, few studies speak to the direct incidence with which RAs deal with mental health, burnout, and perceived stress, issues that plague the general student body and could be exacerbated by a position of this type. The presence of these issues in the RAs is concerning due to the important role they play as first responders and university representatives in their halls. RAs who are dealing with concerning levels of mental health, burnout, and perceived stress may be unable to do their jobs at full capacity and therefore be unable to respond to important situations properly. There is a gap in the knowledge concerning current mental health, burnout, and stress among RAs. By creating greater understanding of this issue, training and support can be developed to enhance the functioning of students in the RA position and ensure better support and care for residential students.

Resilience

Typically scholars have used the stress-diathesis model to suggest that mental health issues are a precondition in some individuals that gets activated under certain conditions, typically some kind of triggering, stressful event, which can lead to adverse symptoms and outcomes (Mowbray et al., 2006). As the positive psychology movement has grown and developed, resilience has emerged as an alternative, asset-based approach to help explain why some individuals behave adaptively under great stress whereas others do not (Hartley, 2012; Masten, 2001). Masten et al. (1990) defined resilience as “the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426).

Resilience can also be thought of as "a flexible set of attitudes that helps individuals successfully navigate through acute or chronic adversities" (Klibert et al., 2014, p. 75). When stress becomes overwhelming, habitual, or intense in either the professional or personal domain of a person's life, other mental health issues such as burnout, depression, and anxiety can be manifested or intensified (Southwick et al., 2014). Resilience works to buffer the effects of everyday and major life events in an effort to reduce the chances that an individual will be pushed into diagnosable levels of mental pathology (Klibert et al., 2014).

In regard to college students, resilience encompasses the idea that students can rely on different intrinsic and external protective factors to ensure their success in college despite negative backgrounds, high-risk conditions, or maladaptive coping skills (Hartley, 2012; Masten, 2001). Consistent with this notion, low levels of resilience have been associated with depression, neuroticism, and low self-esteem and are predictive of anxiety/stress symptoms in samples of college students (Klibert et al., 2014). Due to the competing demands and responsibilities of the college environment, resilience is crucial to student success and wellbeing (Hartley, 2011). While resiliency has been studied in college students, the literature has not examined how resiliency may impact the mental health of resident advisors. The current study examined if resiliency had a mediating effect on the mental health, stress, and burnout of resident advisors and college students.

Overview of Main Concepts

Among the various issues identified in the literature that may negatively affect the wellbeing and development of college students and resident advisors, three were selected for examination in this study. Mental health, burnout, and perceived stress were examined to determine if there are differences in the ways that resident advisors experience college as

compared to their undergraduate residential student counterparts. Resilience also was examined to see if it has a mediating effect on the psychological impact of the resident advisor position and college experience. Demographic variables were included in the current study to support the major analyses and to answer the research questions. The issues selected for the current study have never been examined together to determine how they interact and if they cause significantly different experiences for resident advisors than for general college students.

Mental Health

The mental health of all college students is a top priority of colleges and universities due to the multiple physical and emotional changes that take place throughout the undergraduate years. Shooting tragedies, such as the Virginia Tech University mass shooting, have caused colleges to recognize the importance of being aware and supportive of the mental health needs of students (Giggie, 2015). Managing the needs of students can be difficult but is important because "the college years represent a developmentally challenging transition to adulthood, and untreated mental illness may have significant implications for academic success, productivity, substance use, and social relationships" (Hunt & Eisenberg, 2010, p. 3). The various mental health issues of college students have been documented repeatedly (Blanco et al., 2008; Hunt & Eisenberg, 2010; Rimsza & Moses, 2005), but the mental health of students was considered in this study due to the large impact that mental health, especially depression and anxiety, has on college students. Mental health is important to consider for college students as well as resident advisors who face the same transitional and academic issues that residential college students face, but with the added burden of being paraprofessional student staff members. This additional burden could possibly cause an increase in mental health issues for resident advisors due to their job requirements, but this possible job consequence has not previously been studied. As we learn

more about college student mental health, we can work to better meet the needs of today's students and prepare them to be successful in school and in the future (Byrd & McKinney, 2012).

Burnout

Maslach and Jackson (1981) defined *burnout* "as a syndrome that is composed of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment" (p. 99). While initially described in human services professionals, burnout in college students has come to "refer to feeling exhausted because of study demands, having a cynical and detached attitude toward one's study, and feeling incompetent as a student" (Schaufeli et al., 2002, p. 465). These feelings of burnout have been hypothesized to affect students' performance, school dropout rates, and levels of distress due to the multiple roles and responsibilities that are a part of college life (Maroco & Campos, 2012) and should be taken into consideration when examining the well-being of college students. While burnout has been studied in the general college student population, it has also been seen in resident advisors who can become fatigued by job burnout in addition to feelings of academic burnout (Hetherington et al., 1989; Paladino et al., 2005; Stoner, 2017). Because of the high demands of their jobs, RAs may be particularly prone to developing burnout (Deluga & Winters, 1991). There has not been a recent comparison between college students and resident advisors on measures of burnout to evaluate if there is a current trend for RAs to experience higher rates of burnout than other residential students.

Perceived Stress

Stress has become an expected part of the college experience and is a prevalent cause of concern for many college students. Research shows that stress impedes the academic performance of approximately a third of the college population (American College Health Association, 2009). Abouserie (1994) found that the majority of students experienced either

moderate or serious stress and that the bulk of their stress was related to their academic studies or social stressors such as financial or relationship issues. Although stress is a common occurrence on college campuses, research has shown that most stress is related to the academic pressures of college and can negatively impact student mental health (Byrd & McKinney, 2012). While most students will experience stress, their perceived stress, the ways in which they perceive events in their life to be stressful, can be a better predictor of how stress will affect a person's health (Cohen et al., 1983). Both college students and resident advisors have been found to be vulnerable to stress for different reasons (Deluga & Winters, 1991; Jones et al., 2016; Swanbrow Becker & Drum, 2015), but the two groups have not been compared on the measure of perceived stress to see how both groups feel about the different potentially stressful events in their lives and if their levels differ significantly.

Purpose of the Study

As college enrollment continues to rise along with the prevalence of mental health issues in students, it is important to study how colleges handle the inevitable adjustment process of their students. Given that colleges have the most contact with residential students, resident advisors play a core role in the engagement with and evaluation of their residents, although they themselves are also college students with their own issues. While research has shown that the resident advisor position has some effects on the well-being of resident advisors, the mental health of resident advisors has not been examined independently or in conjunction with stress and burnout. There have been no studies that have conducted a quantitative comparison of resident advisors to undergraduate residential college students on multiple measures of mental health to see if there is a statistically significant difference between the populations. Resilience also has not been studied with this population. The purpose of this study was to examine the

differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress and to determine if resilience has a mediating effect on these scores.

Significance of the Study

A review of the literature shows that there is a need for a better understanding of how the current stressors of college student life impact college students and whether or not the resident advisor position significantly impacts resident advisors' mental health and well-being. This study is significant because there is limited literature on how the resident advisor position affects students' mental health and well-being, despite the fact that they serve in a critical capacity in the university system. Resident advisors work as mentors, disciplinarians, friends, and first responders to the students that they serve, and they work to connect students to university staff and services while also being students themselves. Resident advisor competency and well-being is essential to colleges and universities being able to adequately respond to issues in residence halls, identifying and providing support to students in need, and maintaining residential student satisfaction with on-campus life. With increasing rates of mental health, drug, and sexual assault issues happening on college campuses and new and complex stressors affecting students' lives, it is important that higher education and mental health professionals understand whether or not there are significant differences in the mental well-being of resident advisors compared to the general population of college students. Higher education professionals should also know how to train and work with the resident advisors if RAs are at risk for higher levels of mental health issues, burnout, and perceived stress. Identifying protective factors that can mediate the possible negative impacts of the resident advisor position can also help staff know how to better teach RAs to take care of themselves. Findings from this study provided information about ways to

provide additional support for the RA staff as well as recommendations for higher education professionals for how to improve mental health support for all students. This information could improve retention rates of staff, residential student satisfaction, employee performance and also improve the mental health and help-seeking of college students. The current study added quantitative information about resident advisor mental health to a research base that has not been studied as frequently in the 21st century.

Research Questions

The research questions for this study were as follows:

1. Are there differences between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress?
2. After controlling for resilience, are there differences between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress?
3. Are there relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors?
4. Does resilience mediate the relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors?

Research Design

This study used a non-experimental, descriptive causal-comparative study design to address the research questions. A multivariate analysis of variance was used to determine if there were statistically significant differences between resident advisors and undergraduate residential

college students on three variables: mental health, burnout, and perceived stress. A causal-comparative research design was recommended for the study because the purpose of the study was to determine whether aspects of the resident advisor position were related to differences between RAs and residential college students on measures of mental health, burnout, perceived stress, and resiliency. Participants completed the Mental Health Inventory, Copenhagen Burnout Inventory, Perceived Stress Scale, and the Scale of Protective Factors. The survey contains empirically constructed and validated instruments and a demographics questionnaire that provided data about student factors that may affect their mental health and resiliency. The following inferential statistical analyses were run in order to answer the research questions: (a) multivariate analysis of variance (MANOVA), (b) multivariate analysis of covariance (MANCOVA), (c) path analysis, and (d) mediation analysis. Descriptive statistics also were run and reported in the study's results.

Operational Definitions

The following operational definitions were used in this study:

Resident Advisors

Resident advisors are defined as paraprofessional staff members who live and work on-campus with college students to support residential students in various capacities (also known as resident assistants). This was self-reported by a yes or no question on the demographics survey.

Resilience

Resilience is defined as the extent to which students have the presence of protective factors that contribute to overall resilience. In this study, resilience was measured by the Scale of Protective Factors (Ponce-Garcia et al., 2015). The SPF measures resilience across four factors:

social support, social skills, prioritizing/planning behavior, and goal efficacy. Resilience was measured by the total score on the SPF-24.

Mental Health

Mental health is defined by the extent to which students feel clinically significant levels of anxiety and depression, as well as an overall level of psychological well-being. In this study mental health was measured by the Mental Health Inventory (Berwick et al., 1991). The MHI -5 is designed to assess mental health in the previous month by measuring depression, anxiety, and psychological well-being. The total score of the MHI-5 was used.

Burnout

Burnout is defined as the amount to which students feel exhausted by their studies, have a cynical attitude about their studies, and feel incompetent as a student. In this study burnout was assessed by the Copenhagen Burnout Inventory (Kristensen et al., 2005). The CBI measures burnout across three subscales: personal burnout, work-related burnout, and client-related burnout. Burnout was measured by the personal burnout scale scores of the CBI for comparing RAs and residential students and all three subscales when examining RAs only.

Perceived Stress

Perceived stress is defined as the students' perceptions of how stressful events in their life are. In this study, perceived stress was assessed by the Perceived Stress Scale (Cohen et al., 1983). Perceived stress was measured by the total score of the PSS.

Assumptions

The following assumptions have been made in this study:

1. Participants responded willingly and honestly.

2. Participants accurately comprehended and responded to the survey items.
3. Instruments were valid and measured variables accurately.
4. The sample was appropriate.

Delimitations

The following delimitations have been found in this study:

1. The study only included undergraduate students who were currently attending an institution in the Southeastern portion of the United States
2. The participants were limited to individuals who were able to read and respond to English.

Limitations

The following limitations have been found in this study:

1. Social desirability may have limited this survey. Participants may have attempted to answer in a way that would be viewed as favorable by the researcher.

Validity

Threats to Internal Validity

Internal validity is related to the idea that a study measures what it intends to measure and that changes observed in the experiment were not caused by extraneous factors (Creswell, 2013). One threat to internal validity can be the instruments a researcher chooses. In order to increase internal validity, the instruments used have been examined for validity and reliability in previous studies. Another threat to internal validity is social desirability. In order to guard against this threat, students filled out surveys anonymously to protect them from feeling pulled one way or another by the researcher.

Threats to External Validity

External validity normally refers to the extent to which findings can be generalized outside the study (Creswell, 2013). The researcher was clear about the expectations for generalizability. Due to the convenience sample that the researcher used, the findings are not be generalizable to those outside of the Southeastern United States.

Summary

Chapter one introduced topics related to the importance of investigating whether or not there are differences between resident advisors and undergraduate residential college students on measures of mental health, burnout, and perceived stress. College students can face multiple challenges adjusting to college and have high incidences of mental health complications that make it hard for higher education institutions to promote and provide services for student wellness. Resident advisors are college students who live and work in residence halls with students as mentors, friends, and rule enforcers, a complicated position which puts strain on RAs. While stress and burnout have been measured before with RAs, they have never been measured in conjunction with mental health and RAs are not often compared to the regular college student population on these measures. The differences between resident advisors and undergraduate residential college students were measured in a causal-comparative study. College undergraduate students supplied self-reported data via surveys based on the respective constructs. To address the identified gaps in the literature, the purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress.

Organization of the study

There are five chapters in this dissertation. In chapter one, the statement of the problem, the specific research questions, significance of the study, and definition of key terms are presented. Chapter two presents a comprehensive literature review of the variables and their relationships to one another. In chapter three, the research methodology is outlined, including participants, instruments, and methods. Chapter four includes the results of this study including a description of the participants, the analysis of the data related to each of the research questions, and a summary of the chapter. A discussion of the results is presented in chapter five.

CHAPTER II: REVIEW OF THE LITERATURE

Introduction

The purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress and to determine if resilience has a mediating effect on these scores. The focus of this chapter is to review the conceptual and empirical literature related to these topics and demonstrate a need for this study.

This chapter is divided into five main sections. The first section covers the relevant literature on college students and the main issues that they face in college environments. The second section covers the theoretical background of student development. The third section is related to resident advisors and provides information about the position and its associated training. The fourth section focuses on the individual constructs of resilience, mental health, burnout, and perceived stress and the relevant literature about how they are related to college students and resident advisors. The fifth section concludes the chapter and includes a summary based on the findings from the literature review. The information in this chapter summarizes the relevant literature, highlights the scarcity of empirical data on the concepts and sample included in this study, and demonstrates a need for this particular study.

Research on the Problem

College Students

Colleges and universities have a mission "to produce well-rounded graduates holistically prepared with the knowledge, skills, and resiliency necessary to address contemporary problems of an increasingly complex society" (Fink, 2014, p. 380). This mission is complicated by several factors including the diversity of the college student population, abundance of mental health and

substance abuse issues and stressors, transitional nature of the college experience, and progression of life and student development that occurs for the majority of the young adult college students.

Enrollment in degree-granting postsecondary institutions has been increasing over the years with an 26% increase seen between 2000 and 2018 as more students have chosen to pursue higher education. In the fall of 2018, there were 16.6 million students enrolled in undergraduate programs across the United States (National Center for Education Statistics, 2020b). The defining characteristics for college students are multifaceted and vary across demographics. Contrary to the demographic makeup of the nation overall, the majority of college students are female and young adults with most students attending school full-time. The ethnic and racial diversity of American colleges has been steadily increasing over the years as more minorities have gained access to higher education. Of the total fall 2018 undergraduate population, some 8.7 million students were White, 3.4 million were Hispanic, 2.1 million were Black, 1.1 million were Asian, 640,000 were two or more races, 120,000 were American Indian/Alaska Native, and 45,000 were Pacific Islander showing that attendance rates vary by race/ethnicity (National Center for Education Statistics, 2020b). The demographics also show that 56% of students were female and 44% were male with females continuing to make gains in their enrollment over men. There were 10.3 million full-time and 6.3 million part-time undergraduate students (National Center for Education Statistics, 2020b) and over 870,000 students were classified as international students (Institute of International Education, 2020). These statistics show that the higher education environment is the most diverse it has ever been which presents unique challenges for the students and the higher education faculty and staff that work with them.

Major Issues

College students deal with many major issues over the course of their educational studies including mental health issues, adjustment issues, and environmental stressors of college. Three of the most common issues center on mental health, adjustment issues, and college stressors. Each of these issues is addressed in the following sections.

Mental Health Issues

Young adulthood is filled with many transitions including graduating from high school, getting jobs, and leaving home. It is also the time that many mental health issues begin to show symptoms. Approximately 20% of adolescents have a diagnosable mental health disorder and the National Comorbidity Survey found that 25% of young adults in the 16–24 year age group experience depressive disorders by the age of 24 (Kessler et al., 2005; Maulik et al., 2011). Young adults ages 18-25 frequently have the highest prevalence of mental illness among U.S. adults as well as the lowest usage of mental health services (Substance Abuse and Mental Health Services Administration, 2020). Many of these young adults then go on to colleges and universities where the frequency of mental health incidences is increasing. A 2003 study found that over a 10-year period the number of students seen each year with depression doubled, the number of suicidal students tripled, and the number of students seen after a sexual assault quadrupled. Data from the Center for Collegiate Mental Health's annual reports indicated that "between fall 2009 and spring 2015 counseling center utilization increased by an average of 30-40% while enrollment increased by only 5%" (Center for Collegiate Mental Health, 2021). The various mental health issues that college students deal with on a regular basis are well-documented and include personality disorders, major depression, bipolar disorder, schizophrenia, anxiety disorders, eating disorders, and self-injury issues (Blanco et al., 2008; Byrd &

McKinney, 2012; Eisenberg et al., 2011; Hunt & Eisenberg, 2010). In a study by Blanco et al. (2008), it was discovered that almost one half of college students met DSM-IV qualifications for at least one disorder in the past year. Substance use and abuse also continues to be a problem on campuses. College students tend to have higher rates of alcohol use than their same-aged peers and are more likely to not seek help for drug abuse (Blanco et al., 2008). Additionally, "each year in the U.S., alcohol use is associated with approximately 1,400 student deaths, 500,000 injuries, more than 600,000 assaults (by another student who has been drinking), and 70,000 reported incidents of sexual assault or 'date rape'" (Reingle et al., 2010, p. 326).

While the college environment is difficult for vulnerable individuals who are more prone to mental illness, there are large numbers of college students who deal with adjustment issues of stress, depression, and anxiety but do not report it or seek treatment to detrimental results (Hunt & Eisenberg, 2010). The prevalence of depressive and anxiety symptoms is a top issue in college and universities (Megivern et al., 2003), and the majority of students report dealing with levels of stress, depression, and anxiety that have a significant impact of mental health and academic performance (American College Health Association, 2016). The negative effects of depression, anxiety, and stress on student well-being and academic functioning have been well documented and can cause deficits in short-term memory, problems meeting deadlines, sleep issues, substance use, and elevated risk of withdrawal among other educational, economic, and social outcomes (Bray et al., 1999; Goodwin et al., 2004; Hysenbegasi et al., 2005; Mowbray et al., 2006). Unfortunately, although the rates of mental health issues are on the rise on college campuses, the high number of untreated mental health issues continues to make it difficult to adequately address the situation and provide proper treatment and support for students. Leaving mental health issues untreated in college students is dangerous because it has been shown that

the failure to provide mental health services to adolescents and young adults in need of such services can have a negative impact on the individual and society and cause lost productivity at work, school dropout, and strained peer and family relationships (Eisenberg et al., 2007, 2011; Hunt & Eisenberg, 2010; Keyes et al., 2012). This gap in treatment seeking makes it easier for students to miss out on meaningful connections to staff and resources and further encourages students to turn to more readily available resources such as their peers. The mental health of all college students is a top priority of colleges and universities due to the multiple physical and emotional changes and developmental growth that occur throughout the undergraduate years.

Adjustment Issues

In addition to mental health issues, students are challenged by adjustment issues that arise from transitioning to the college environment (Bowman et al., 2019; Feldman, 1969). The adjustment to new, rigorous academic standards and lack of a standard schedule forces students to learn how to study and manage their time. In a new setting, students are surrounded with new people and must learn how to build relationships with students, staff, and faculty (Conley et al., 2013). The experience of being away from home and support systems allows them to have new experiences, forces them to examine their belief systems, and encourages them to form an greater sense of independence (Blimling, 2015). Students who fail to adjust appropriately are less likely to have academic success and more likely to withdraw from college (Kerr et al., 2004).

College Stressors

College students are becoming more diverse overall in terms of their socioeconomic status, religion, race/ethnicity, and mental health status, but most still deal with the typical issues that come with being in college, which may or may not be complicated by their diverse identity. Hurst et al. (2013) completed a review of the literature about the most common college student

stressors and found that most of the stressors that college students face could fit into the eight categories of relationships, lack of resources, expectations, academics, environment, diversity, transitions, and other stressors. These stressors can occur at different levels including the individual (i.e., academic stressors, expectations, lack of resources, and transitions), dyadic (relationships), and group (environment and diversity stressors) levels (Hurst et al., 2013). Specific stressors that have been identified include (a) high-stakes academic pressure, (b) minimal academic support as compared with support in high school, (c) faculty and staff who are more distant as compared with high school teachers, (d) potential social isolation as students transition to a new environment, (e) an undergraduate culture of excessive alcohol use, and (f) the pressure of long-term financial debt (Kadison & DiGeronimo, 2004). In addition to the stressors of the college environment, students also "face a myriad of developmental issues that accompany young adulthood, such as individuation and connectedness to family, the development of friendships and intimate relationships, and the pursuit of personal and career goals" (Mowbray et al., 2006, p. 228). The numerous stressors of college life could trigger psychiatric symptoms in vulnerable individuals and strain the coping mechanisms of emotionally healthy students (Mowbray et al., 2006).

One of the biggest stressors for college students involves a lack of financial resources. Due to the high costs of higher education, students often have to make tough decisions about how to finance their education. Prices for undergraduate tuition, fees, room, and board at public institutions have increased 24% between 2009 and 2019, and prices at private nonprofit institutions rose 23% while the number of financial aid options has stayed the same (Digest of Education Statistics, 2020a). The 2019–20 average total cost of attendance ranged from $3,3120 for students living off campus with their families at 2-year public institutions to a high of

$44,314 for students living on campus at 4-year private nonprofit institutions. Financial aid options are limited to grants, loans, and scholarships with a number of these options requiring a high level of financial need that leaves out many middle-class students. Many students and their families pay less than the full price of attendance because they receive financial aid to help cover their expenses, but there is often a gap between the total cost and the amount of financial aid offered by the institution that can cause students to scramble to make up the difference.

One of the ways that students try to ease their financial burdens in college is through student employment. College student employment is defined as undergraduate and graduate students working during any part of the week as paid employees. Based on the Current Population Survey, 43% of full-time college students and 81% of part-time college students ages 16 to 24 years old were employed in 2018 (National Center for Education Statistics, 2020a) which is a slight decrease from 2000. Since 2000, the percentage of full-time students working more than 20 hours a week has decreased. The percentage of full-time students with part-time jobs has also decreased, but the percentage of part-time students with part-time jobs has increased. In 2018, about 13% of full-time college students worked less than 20 hours per week, 17% worked 20 to 34 hours per week, and 10% worked 35 or more hours per week. Among part-time students, about 8% worked less than 20 hours per week, 24%worked 20 to 34 hours per week, and 47% worked 35 or more hours per week (National Center for Education Statistics, 2020a). Part-time students are working more hours which means that they could be earning more money than full-time students; however, their lower-class load equates to it taking longer to earn their degrees which could end up costing them more depending on their level of study and financial aid. Of the students who work, there were no statistically significant differences between female and male students at the full-time (44% vs. 41%) and part-time (81% vs. 82%)

work levels. Among full-time students, the percentage of employed students was lower for Asian students (24%) than for White (45%) , Hispanic (45%), and Black (43%) students with no differences found by race for part-time students (National Center for Education Statistics, 2020a). Working can have a significant impact on the mental health of college students. Students can spend a large portion of their time at work which interferes with their ability to engage in extracurricular activities and decreases the amount of time available to study. Work environment and relationships can also have an impact on mental health and life satisfaction as a large amount of time is spent at work (Vaughn et al., 2016).

Learning and Development

College is a period filled with many changes for the students who are placed into this environment. Part of the changes can be attributed to the developmental stage that most young adult college students are in when they come into college. Student development theory was developed to help apply principles of development to a higher education context and provide ways to understand how people experience higher education (Arnold & King, 1997). As student development has grown, multiple theories have been developed to explain the growth processes that students experience. One of the major ways to understand the complex interplay of factors that influence college student development, student behavior, and context is through the integrated developmental ecological model proposed by Urie Bronfenbrenner.

Bronfenbrenner's Ecological Theory

Urie Bronfenbrenner was a developmental psychologist who specialized in child development and developed an ecological systems theory, also known as Human Ecology Theory, to explain how human development is influenced by different types of environmental systems. Bronfenbrenner's theory (1979) posits that there are interactions among the four

components of process, person, context, and time that influence the development of the individual in the environments of family, school, and work. While originally developed for use with children, this theory has led to the creation of an bioecological systems model (Bronfenbrenner & Morris, 2006) that has been extrapolated to explain how college student development is impacted by the multiple environmental factors that students encounter. Bronfenbrenner's bioecological model is an interactive developmental model featuring four components: process, person, context, and time, or PPCT. The components interact with each other to influence development across the multiple environments that individuals live in. The model is useful in understanding how an individual's characteristics (person) mutually shape relationships (process) with people and objects in the environment (context) over time to promote or inhibit various developmental outcomes.

The first component of the model is process. The process component is the main component through which development occurs. It "encompasses particular forms of interaction between organism and environment, called proximal processes, that operate over time and are posited as the primary mechanisms producing human development" (Bronfenbrenner & Morris, 2006, p. 795). These proximal processes represent reciprocal interactions over time between individuals and the different dynamics in their environment including people, objects, and symbols that influence the development of the individual (Bronfenbrenner & Ceci, 1993). Proximal processes increase the complexity of the developing individual.

The second component of the model is person. The person component of the PPCT model encompasses background and demographic characteristics, abilities, and preferred ways of interacting with the environment. In student development, the person would be the individual student. There are three types of person characteristics that encompass the person component of

the PPCT model: force, resource, and demand. These characteristics represent the different aspects of a person that influence their development. The first characteristic, force, is most likely to influence a person's developmental outcomes, either through generative (growth-oriented) or disruptive forces. Generative forces encourage the creation and maintenance of environmental interactions while disruptive forces interrupt and hinder these interactions (Bronfenbrenner & Morris, 2006). These include variations in motivation, persistence, and temperament that will influence development and interactions with the environment despite available resources. Students who are better able to stay academically motivated and willing to study as hard as necessary will impact their development despite the resources available to them.

The second characteristic, resource, represents the individual's ability to engage appropriately with resources that activate development versus limiting it (Rosa & Tudge, 2013). Resources that stimulate development include "ability, knowledge, skill, and experience," while resources that constrain proximal processes "include genetic defects, low birth weight, physical handicaps, severe and persistent illness, or damage to brain function" (Bronfenbrenner & Morris, 1979, p. 812). In student development, this relates to the skills, experiences, and abilities that students bring with them to college that will be either an assistance or hindrance to their development.

Finally, the last person characteristic is the demand characteristic which is described as qualities of the person that influence the way the environment either engages or disengages with the individual including noticeable aspects of appearance including age, gender, and physical attractiveness. Students will be judged based off of their appearance which then influences how people treat them, for better or worse.

The third component of the model, context, refers to the various intellectual, relational, and human-built environments in which students live, learn, and work. In Bronfenbrenner's bioecology model (1979; 1993; 2006), the context is composed of multiple levels or systems in which developmental encounters take place between the student and his or her environment. The four systems in the model are known as microsystems, mesosystems, exosystems, and macrosystems. Microsystems are the site of direct interactions between the individual and the environment. According to Bronfenbrenner (1993), a microsystem is a "pattern of activities, roles, and interpersonal relations experienced by the developing persons in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interactions with, and activity in, the immediate environment" (p. 15). Microsystems for college students might include residence halls, family, classes, clubs, athletic teams, and workplaces.

Mesosystems are created by the coexistence and comingling of microsystems which then form "an interactive development field in which an individual is embedded" (Renn, 2004, p. 37). Mesosystems focus on the interactions that occur between multiple settings and the individual and may contain competing or complementary microsystems that either support or challenge the individual. One example of a mesosystem is the peer culture groups of classmates and friends that have been shown repeatedly to be one of the greatest influences on college students, their learning, and their development (Renn & Reason, 2012).

Exosystems include the higher-level organizational systems that indirectly influence the environment of the individual. For students this could include university policies about housing and bathroom use as well as federal and state financial aid policies. The final level is the macrosystem which is "an all-encompassing sociohistorical context that contains historical

trends, social forces, and cultural expectations that shape the developmental possibilities for individuals and groups of students" (Renn & Reason, 2012, p. 123). The macrosystem is the totality of the environmental influences and systems that impact development and changes over time as systems and society changes.

The final component of Bronfenbrenner's PPCT model is time. In the model, time has three meanings including the times in which one lives, the timing of an event in an individual's life, and changes in the person and context over time. Time is a major factor that influences human development as well as societal expectations, changes, and opportunities. Each student will be greatly impacted by the time in which they begin their higher education and have a different developmental experience than every other student. Bronfenbrenner's bioecological model helps explain how personal characteristics impact and interact with people and objects in the environment to encourage or discourage developmental outcomes.

The learning and development process is an essential part of the college experience that all college students go through in some shape or form. This transformational process can be made more complex by the addition of professional roles and responsibilities that call for students to interact with other students, faculty, and staff in new, conflicting ways. Resident advisors are college students whose learning and development is challenged in this way and who must learn to deal with the challenges that come with being a college student as well as professional staff members.

Resident Advisors

Student assistants have been common in educational settings for hundreds of years, but the resident advisor position as it is today has evolved as student affairs professionals have attempted to find ways to connect and support the students who reside on campus. Resident

advisors (RAs) are paraprofessional staff who support on-campus students thorough their work in shaping and monitoring the residence hall environment. This work is accomplished through various capacities including mentorship, community building and programming, and rule enforcement. In addition to being employees of the university, RAs are typically full-time, upperclassmen undergraduate students who are also involved in various extracurricular activities and student organizations around campus. The resident advisor position has high turnover with most students only working one or two years. As student workers, RAs are legally limited to working 20 hours per week, but this limit can easily be passed due to the unique nature of the RA position requiring that RAs live where they work. RAs are essentially on call because they can be forced to respond to an issue as soon as they return to their building and are still within reach of their residents when off-duty.

A resident advisor's duties will vary slightly depending on the housing community that they work in, and housing communities vary by population, size, and type of building. Some residential communities are open to all students while others cater to specific student populations based on their major, classification, Greek affiliation, and international status. Residential communities can be as small as a house that holds 16 students to large buildings made to house hundreds of students. Historically, most students who lived on campus resided in traditional, communal buildings where rooms only contained enough space for students and their belongings, common areas existed in central locations, and bathrooms were shared by groups of students. More housing options have emerged over the years and current students are also able to choose suite or apartment style buildings that feature more individual living space and amenities. Students in traditional buildings tend to have more contact with each other than those in suite and apartment style buildings due to having to share more space. Resident advisors accomplish the

mission of supporting their residential students by working and living among their residents 24 hours a day, 7 days a week and by performing in multiple roles as counselors, friends, role models, programmers, administrators, and rule enforcers (Blimling, 2015).

Job Roles and Responsibilities

Resident advisors have five main roles: student, administrator, role model, teacher, and counselor (Blimling, 2003). Resident advisors are students first; in fact, they are required to maintain certain GPA levels to keep their employment. They have all of the academic responsibilities of their fellow students and are also going through similar developmental challenges. RAs are typically selected based on their previous experiences and are therefore often some of the most involved students in student development organizations. Resident advisors are responsible for several administrative tasks such as maintaining paperwork related to residents and their bed spaces, check in and out, and on call reports. As administrators, they also "serve as the eyes and ears of the university" (Blimling, 2015, p. 162) and are responsible for reporting facilities issues and student conflict and crisis events that they encounter.

By nature of their position of influence in the halls, RA's sometimes function as role models for their students. They are expected to model and uphold all of the rules of the housing community and mentor students who need additional guidance. This means that RAs are always required to be on good behavior in order to continually set a good example for their residents and not be hypocritical when enforcing rules. As part of the teacher role, resident advisors are responsible for psychoeducational programming for the residents that facilitates learning about relevant cultural, emotional, physical, and developmental domains as well as the dissemination of information from the university and varying departments. In the counselor role, RAs are required to be accessible to all of their residents, provide emotional support for students with

minor issues, and to identify and refer students who are facing bigger issues to the counseling center (Blimling, 2015; Everett & Loftus, 2011).

There can be some conflict between the different roles, and the position has some characteristics that have the potential to make it stressful (Everett & Loftus, 2011). As students, RAs are encouraged to put their academics first, but this prioritization is often challenged by the constant and continual demands of the resident advisor position. Resident advisors are required to spend a large part of their time in the residence halls on-call, programming, or getting to know their residents, which puts a strain on the amount of time they have available for academics and extracurricular activities. Because resident advisors live with their residents and are in similar peer groups, they sometimes develop friendships with their residents, a situation that has the potential to make enforcing policy and reporting sensitive information difficult. The RA position places students under large amounts of attention and responsibility that can be draining and hard to manage for some resident advisors, especially in addition to their responsibilities as college students. There are few jobs on campus that are as demanding on students. RAs regularly deal with roommate conflicts, date rape, interpersonal violence, academic problems, depression and substance misuse (Reingle et al., 2010), and there is always a chance that a crisis will occur. Conflict is caused for resident advisors when their numerous responsibilities become overwhelming or their roles overlap and have conflicting priorities which can make RAs particularly prone to stress and burnout (Deluga & Winters, 1990)

Training Guidelines

While resident advisors have a plethora of responsibilities that impact the safety and well-being of students and their universities, professional standards for resident advisor training are recent developments. The Council for the Advancement of Standards in Higher Education

publishes the Professional Standards for Higher Education (2015), the student affairs profession's guide for best practices and professional standards. In the ninth edition, they recommend that resident advisors "are trained to contribute to the accomplishment of the following functions: (a) community development (b) educational programming, (c) administration, (d) group and activity advising, (e) leadership development, (f) student conduct, (g) role modeling, (h) individual assistance and referral, (i) providing information, (j) crisis intervention, and (k) facilities management" (Council for the Advancement of Standards in Higher Education, 2015, p. 15). Although most of these training topics have been around for a while, more recently there has been an increased focus on suicide prevention and gatekeeper training that works to enhance students' abilities to identify and refer at-risk students (Koch, 2016; Pasco et al., 2012; Swanbrow Becker & Drum, 2015) but does not train them to look for mental issues in themselves. Some other training areas that have been suggested include diversity, peer helping/counseling skills, and knowledge of campus resources (Blimling, 2015).

The guidelines for how trainings should be implemented are less clear. Trainings have varied since early in the development of the student affairs field across goals, depth, content, structure, and timing, even though training has been shown to significantly affect multiple aspects of the resident advisor job performance and satisfaction (Bowman & Bowman, 1995). The timing and length of training varies widely across institutions. The most recent study on RA training indicated most universities host one- or two-week trainings before the academic year begins to get their staffs up to speed as well as mid-year in-service trainings to share new information (Koch, 2016). Semester-long academic training courses were popular in previous decades but their use is declining. In studies evaluating the different kinds of RA training academic courses, researchers found the topics covered varied and tended to include topics such

as “safety and security (crisis management, emergency response, discipline/student conduct, administrative tasks, institutional policies and procedures, sexual assault, and fire safety), community development (roommate problems, community development, campus resources, and programming/event planning), and student concerns (referral procedures, peer helping/counseling skills, alcohol use/ abuse, and conflict resolution)”(Koch, 2016, p. 88). However, no training included coverage of RA emotional well-being separate from burnout (Bowman & Bowman, 1995; Koch, 2016). Despite documented issues with burnout and stress, there is little in most training recommendations for resident advisors on how to handle their own mental health issues, stress, or burnout.

Variables

The available empirical psychology, counseling, social work, and education literature contain research studies that have examined the different aspects of the experiences of college students and resident advisors. This has resulted in multiple studies about the factors of resilience, mental health, burnout, and perceived stress with these populations. Many of the studies involving resident advisors are no longer considered current literature (older than 10 years) due to research in this area becoming less frequent. Additionally, some of the variables have not been quantitatively tested with both groups, specifically the resident advisors, which may result in an inability to identify differences across various factors for the identified populations.

Resilience

Historically, mental health has been viewed from a deficit model with people being viewed and labeled as if they are the problem and inferior/broken if they struggle with adapting to various issues in life. Resilience has grown from the positive psychology and strengths models

that developed as researchers worked to understand why some people adapt better to stress than others. The American Psychological Association (2014) defines resilience as ‘‘the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress” (para. 4). Resilience is not the absence of psychopathy; instead, it is the capacity of an individual or system to adequately adapt to crises and changing situations that threaten the viability, function, or development of that system (Masten, 2001). It focuses on the strengths and protective factors that individuals have that help them to cope, move forward, and thrive in the face of risks or challenges. Protective factors are the means through which resilience is measured and include social-interpersonal and cognitive-individual factors (Reich et al., 2010). Research has determined that social-interpersonal factors include social skills, social support, and the quality of familiar relationships and cognitive-individual factors include aspects of self-regulation, planning, executive functioning, problem-solving skills, and self-efficacy (Reich et al., 2010).

Resilience is determined and influenced by the interactions of biological, physical, social, and cultural factors that determine how people react and respond to stressful situations (Southwick et al., 2014). Because of the interactions of different factors, resilience can look different in different domains of life. A person who is resilient at work or school could be more susceptible to stress in their personal life. Resilience can also change over time as people develop and move through different environments where they are exposed to different stressors and resources.

Resilience has been shown to lead to better coping in college students (Steinhardt & Dolbier, 2008). In a study of students with mental health issues and those who were not seeking assistance, students with mental health issues were more likely to have lower scores on resilience

and have more issues coping with adversity (Hartley, 2013). For college students, resilience is the idea that all college students can succeed if they have the right protective factors (Masten, 2001). Resilient youth have been found to have certain qualities that help them to succeed as compared to others; those who had high levels of resilience were found to have the ability to regulate their emotions, maintain feelings of hope and self-worth, make realistic goals and expectations, and have problem-solving skills as well as good interpersonal skills and coping strategies (Short & Russell-Mayhew, 2009). While an RA or college student might be resilient one year, changes in the environment (residents, staff, manager, class schedule, professor, friends, organizations) might change their ability to be resilient from semester to semester.

Research into resilience in young adults has been somewhat limited by struggles with how to define and measure resilience. One of the main scales that has been used in research is the Connor Davidson Scale (Connor & Davidson, 2003), but this inventory has limits in that it only measures cognitive/individual factors of resilience. To fill the gap in adequate measures, Ponce-Garcia et al. (2015) created the Scale of Protective Factors. The Scale of Protective Factors (SPF-24) was hypothesized and designed with the intention of assessing both the cognitive/individual and social/interpersonal protective factors that comprise resilience. The SPF-24 features 24 items that measure resilience across the four subscales of social support, social skills, planning and prioritizing behavior, and goal efficacy. The researchers used exploratory and confirmatory factor analysis to confirm the factor structure of the inventory and have found strong reliability (α=.86-.92), criterion validity, and convergent validity.

Madewell and Ponce-Garcia (2016) completed a study in which they compared several measures of resilience, including the SPF-24, in college students who have experienced servere trauma or loss. The study recruited 451 college students from three southwestern universities and

then administered the Resilience Scale-25, Resilience Scale-14, Connor Davidson Resilience Scale-25, Connor Davidson Resilience Scale-10, Scale of Protective Factors-24, and the Life Stressor Checklist Revised. Through confirmatory factor analysis, researchers confirmed the dual factor structure of the inventory. They also discovered that subscales of the SPF-24 were all significantly correlated with the other resilience scales and that the SPF-24 had the best model fit of all the scales for the sample. While this study had the limitation of only using students who have experienced severe trauma, it also establishes empirical data for the use of a new resilience scale with college students.

Relationship Between Resilience and College Students

There have been several studies that have investigated the relationship between resilience and the mental health of college students (Campbell-Sills et al., 2006; Davydov et al., 2010; DeRosier et al., 2013; Houston et al., 2017; Jayalakshmi & Magdalin, 2015; Klibert et al., 2014; Steinhardt & Dolbier, 2008). Researchers have established that as psychological distress increases, increased levels of resilience are shown to mediate negative psychological issues, which is why resilience is being examined in this study. Hartley conducted two studies showing the relationship resilience has with mental health in college students. Using paper and pencil as well as web surveys, Hartley (2012) conducted quantitative research on the resilience of college students using two groups of participants from two Midwestern colleges in the United States. The first group consisted of 427 general undergraduate students recruited from classrooms on campus while the second group consisted of 121 undergraduate students recruited from campus mental health offices. The students were given the Connor Davidson Resilience Scale, Mental Health Inventory-5, and Social Support Questionnaire-6. Results found that students who request psychological assistance had lower levels of resilience, less satisfaction with social supports, and

higher levels of psychological distress. Hartley concluded that students with lower levels of resilience also had less belief in their ability to cope with adversity in college (Hartley, 2012). One limitation of the study is that it used two different survey modalities, which could introduce the possibility for error.

Hartley (2013) also conducted a quantitative, empirical research study to examine whether measures of intra- and interpersonal resilience factors contributed to explaining variance in academic persistence variables. Using an online survey, Hartley surveyed 121 participants with mental health issues seeking assistance from campus mental health offices at two Midwestern US universities. This study also used the Connor Davidson Resilience Scale, Mental Health Inventory-5, and Social Support Questionnaire-6 but added a demographics questionnaire that focused on the academic variables and demographics of: (a) cumulative university GPA; (b) high school GPA; (c) ACT or SAT score; (d) if employed, number of hours per week; (e) if involved in extracurricular activities, number of hours per week; (f) number of credits completed; (g) sex; (h) race; and (i) age. The results indicated that (a) students who reported being able to tolerate stress had lower cumulative GPAs, (b) higher intrapersonal resilience correlates with higher academic persistence, and (c) mental health did not significantly interact with resilience in the regression analysis until the sample was divided by mental health score. Resilience had a noticeable effect on students with higher psychological distress and was a more critical part of their ability to succeed academically. These studies were helpful in expanding the literature on how resilience interacts with aspects of college students' lives, including mental health.

Klibert et al. (2014) conducted a quantitative survey in which their purpose was to examine whether resilience mediates the relationship between perfectionism and prevalent

emotional distress symptoms in college students. After studying these concepts in 413 students from a Midwestern university, the researchers discovered that resilience accounted for some of the variance between socially prescribed perfectionism and the emotional distress symptoms of depression and anxiety, which indicate partially mediated effects. While different from the variables considered in this study, the ability of resilience to mediate between perfectionism, depression, and anxiety reaffirms that resilience can serve as a protector against maladaptive coping, which is what was hoped for in the current study. A literature search of peer reviewed articles related specifically to resilience and resident advisors found no studies that attempted to investigate this topic. This current study contributes to the literature on resilience in college students and resident advisors in comparison to each other and in the amount of resilience that RAs experience.

Mental Health

The mental health of college students has grown in importance as it has gained increased attention through shooting tragedies and caused an increase in the demand of services due to increasing numbers of student coming to college with mental health issues or developing them due to the multiple stressors of the college environment (Giggie, 2015; Hunt & Eisenberg, 2010). Even psychologically healthy students can struggle with the multiple physical and emotional changes that take place during college as well as the competing demands and responsibilities that exist throughout the undergraduate years; for some vulnerable students the college experience can serve as a trigger for mental health complications (Mowbray et al., 2006). While there has been an increase in the severity of mental health issues that students are facing on college campuses, the mental health issues that students deal with the most after stress are depression and anxiety (American College Health Association, 2016). These also tend to be the mental

health issues that students are most reluctant to seek treatment for. These issues are interconnected and interact with other mental health issues and stressors that students come in contact with. RAs face the same developmental issues that general college students experience but with the added burden of being student staff members that have to live where they work. This additional burden could possibly cause an increase in mental health issues for resident advisors due to their job requirements, but this possible job consequence has not previously been studied outside of stress and burnout.

Relationship Between Mental Health and College Students

Several studies have examined the relationship between mental health and college students on (a) depression (Hysenbegasi et al., 2005; Mackenzie et al., 2011), (b) anxiety (Goodwin et al., 2004; Lindsey, 2014; Mahmoud et al., 2015), and (c) multiple mental health symptoms (Blanco et al., 2008; Hunt & Eisenberg, 2010). The mental health of college students is often the result of the interaction of mental health issues and higher education systems. Mahmoud et al. (2015) created a study in which they measured student anxiety through a multidimensional approach that included coping, negative thinking, and social support. The researcher examined the responses of 257 college students to complete a path analysis of the data. The results showed that anxiety is related to negative thinking and maladaptive coping, things that are indirectly related to aspects of resilience.

Byrd and McKinney (2012) collaborated to create a quantitative study of the mental health of college students across multiple domains of their life, consistent with Bronfenbrenner's model. The researchers surveyed 2,2000 students using the MHI-17 in addition to individual, interpersonal, and institutional level variables. The results showed individual factors such as coping abilities, suicidal tendencies, confidence in communication skills, strong spiritual

identity, and heterosexual orientation and institutional level factors such as perceptions of the campus climate and institutional satisfaction accounted for half of the variance in mental health scores. A limitation of the study is that it does not measure stress although it is a large component of the mental health issues of college students. A literature search of peer-reviewed articles related specifically to the mental health of resident advisors found no studies that attempted to investigate this topic. This study contributes to the current literature on mental health in college students and resident advisors by providing information about the mental health of undergraduate college students and resident advisors in comparison to each other as well as about how the mental health of resident advisors is potentially related to aspects of the resident advisor position.

Burnout

The concept of burnout has been around since the late 1970s when Christina Maslach (1981) and Herbert Freudenberger (1974) began studying the phenomenon after they noticed that people who worked as human services professionals and had frequent emotional encounters with people were exhibiting signs of emotional exhaustion and cynicism over time (Schaufeli et al., 2009). Burnout was originally defined as "a syndrome that is composed of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment" (Maslach & Jackson, 1981, p. 99). Burnout was initially conceptualized as a condition that occurred mainly in human service workers; but, as the research on the topic has developed, the concept of burnout has spread to numerous disciplines and changed how people theorize job stress (Maroco & Campos, 2012) which necessitated a review of the original definition and corresponding instruments (Kristensen et al., 2005). Researchers began to find that the original definition and the main instrument created to measure it, the Maslach Burnout Inventory (Maslach & Jackson,

1981), did not accurately measure what was being seen in the population (Kristensen et al., 2005; Maroco & Campos, 2012). The expanded definition states that burnout is ‘‘a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding’’(Schaufeli & Greenglass, 2001, p. 501) which allows for a more encompassing view of burnout that is applicable across occupations and fields.

In response to the expanded definition, new instruments were created to measure the aspects of burnout that are related to work and life experiences. One of the instruments that was created is the Copenhagen Burnout Inventory (CBI) created by Kristensen et al. (2005) which measures burnout as the three dimensions of personal burnout, work-related burnout, and client-related burnout. The three scales were designed to be used separately to measure burnout across different domains. The personal burnout scale measures general burnout or the amount of exhaustion and fatigue a person is experiencing in their life. The work-related burnout scale measures the amount of exhaustion that a person attributes to their work while the client-related scale is directly related to the amount of burnout that comes from work with people. The three scales of the questionnaire were developed using related survey instruments and field research which led to high reliability (α=.85-.87), criterion validity, and convergent validity. Subsequent exploratory and confirmatory factor analyses indicated that the factors were highly intercorrelated with each other, which showed that the scales could be used independently or together to form a general burnout score (Milfont et al., 2008).

Relationship Between Burnout and College Students

One of the newer fields in which burnout is being studied in is higher education. The multiple, competing academic and social demands that students routinely face in college make them susceptible to burnout which has been found to be a real harm to their mental and

emotional well-being (Koeske & Koeske, 1991; Schaufeli et al., 2002; Watson et al., 2008). Student burnout was first studied by Schaufeli et al. (2002) using an adapted version of the Maslach Burnout Inventory. They discovered that student burnout is defined as "feeling exhausted because of study demands, having a cynical and detached attitude toward one's study, and feeling incompetent as a student" (p. 465). More recent studies have found that burnout can dampen students' self-efficacy and negatively impact students' academic self-concept and performance as well as dropout rates and psychological distress (Dyrbye et al., 2010; Maroco & Campos, 2012).

One researcher has examined student burnout using the Copenhagen Burnout Inventory. Maroco and Campos (2012) conducted a nonexperimental survey in which they evaluated the psychometric principles of three surveys, the Maslach Burnout Inventory, Oldenburg Burnout Inventory, and Copenhagen Burnout Inventory, designed to measure burnout in students. The authors used a modified version of the CBI that was created specifically for students that features a fourth factor, teacher-related burnout, to address burnout from various interactions with teachers (Campos et al., 2011) and was translated to Portuguese. The study examined the burnout of 1,570 undergraduate students from multiple majors and college across Brazil and Portugal. After a confirmatory factor analysis, the CBI was again found to have high reliability (α=.88-.93) and construct-validity, and the study proved that students are experiencing statistically significant levels of burnout. Student burnout was shown to be the experiencing of physical and psychological exhaustion as a result of their experiences as students. While helpful in providing a confirmation for the use of the Copenhagen Burnout Inventory with students, the study lacked a description of and explanation for the varying levels of burnout experienced by the students, preventing an exploration of the way that burnout is experienced across demographics which the

current study provides. One difference from this study is that this researcher used the original Copenhagen Burnout Inventory as the modified version has not been validated with American students.

There have been several studies that examined how burnout impacted college students in different ways, mostly using the Maslach Burnout Inventory-Student Survey as the indicator for burnout in students. In the process of validating the MBI-SS, Schaufeli et al. (2002) conducted a nonexperimental survey of 1,661 undergraduate students from three different European universities in Spain, Portugal, and the Netherlands. The researchers found that burnout is negatively related to academic performance. This study began the empirical study of student burnout and provided a beginning definition for the phenomenon in the student population. The study also showed that the MBI-SS was not invariant across countries, which calls into question how well the instrument would work in measuring the burnout of a diverse group of students from different cultures.

Galbraith and Merril (2012) conducted a longitudinal study of academic and work-related burnout in 215 business undergraduate students throughout a semester. The researchers used two modified versions of the Maslach Burnout Inventory to measure academic and work burnout at the beginning and end of two semesters for students who were full-time students and also employed. Researchers found that there were distinct differences in how the different types of burnout ebb and flow over the course of a semester. Work cynicism, or the development of negative attitudes towards work, increased significantly across the semesters. Additionally, whereas academic exhaustion and efficacy increased over the semester, work-related exhaustion and efficacy both had significant decreases. They also found that female students had higher levels of academic burnout but lower levels of work burnout. Although students developed

negative attitudes towards their schoolwork over the semester, they also increased in their beliefs about their ability to succeed which could increase with greater understanding of the material. One limitation of the study was that it measured two aspects of burnout with the same instrument thereby increasing the risk for test-retest error. The current study used different scales to measure the different aspects of burnout that students may be experiencing.

Jacobs and Dodd (2003) extended the empirical knowledge of student burnout by conducting a study to examine burnout in students who were fully adapted to the college setting. Specifically, researchers measured the influence of intrapersonal, interpersonal factors, and workload on psychological burnout. Jacobs and Dodd surveyed 149 juniors and seniors at two different points in the semester. Results of the study indicated that extracurricular activities and social support were protective factors against burnout, subjective workload was more closely related to burnout than actual workload, and there were some differences in the scores of the personal accomplishment scale for some racial groups. These results are important for multiple reasons. First, they show that aspects of resiliency might help protect students from negative mental health issues such as burnout. Secondly, they show that the way individuals perceive their situation will determine how they feel about it which shows support for the measure of perceived stress. Racial differences existed between African Americans and Asian Americans who reported the highest and lowest personal accomplishment scores, respectively. The results are important but limited because Jacobs and Dodd only used third- and fourth-year students who are not representative of all undergraduate students. There have been few studies that have looked at the differences between college students and resident advisors' burnout levels although burnout is a common phenomenon that college students face that affects multiple aspects of their lives.

Relationship Between Burnout and Resident Advisors

The different ways that burnout can impact resident advisors has also been evaluated in the literature. Studies have investigated burnout in resident advisors for decades (Benedict & Mondloch, 1989; Fuehrer & McGonagle, 1988; Hetherington et al., 1989; Nowack et al., 1985; Stoner, 2017). As early as 1974, studies have found that the resident advisor position and its requirements have the potential to drain student staff and deplete their emotional resources and well-being; however, this study is unique as burnout has not been studied in association with other mental health issues and with resilience.

RA burnout arises from circumstances in three primary areas: personal factors, training, and work environment. Only one study has ever compared RAs to general students on burnout. Hetherington et al. (1989) completed a study using the Maslach Burnout Inventory with 113 RAs and 113 general students to determine the types of RA burnout and compare RAs to general students. They found that the biggest differences in burnout in RAs were largely determined by gender. Female RAs reported having higher levels of emotional exhaustion than male RAs. The main difference between the RA and general student groups in burnout were that despite the high levels of responsibility that come with their jobs, the RAs reported having higher levels of personal accomplishment, feelings of competency and accomplishment, than the general student body. The study also confirmed gender differences in non-RAs as female general students scored higher on depersonalization than general male students. General men students also scored lower on personal accomplishment than general female students. One limitation to this study was that they used general students who did not work which could prevent an accurate comparison from being made for the groups. This study added significantly to the literature by showing the differences between RAs and general students.

Conversely, Hardy and Dodd (1998) surveyed 57 RAs to look specifically at how burnout changes based on gender and floor assignment and found no differences in any of the burnout scales between males and females; instead, the biggest differences in the study came from floor assignments. The researchers noted that RAs assigned to work with first year students had higher depersonalization and emotional exhaustion than RAs on mixed classification floors. The lack of difference in gender could possibly be due to the fact that RAs in Hardy and Dodd's study worked on two-person co-ed teams, but this could not be confirmed because Hetherington et al. (1989) did not provide RA descriptions. Benedict and Mondloch (1989) also surveyed RAs and reported higher levels of emotional exhaustion among staff members in first-year halls, as opposed to mixed-class halls. Fuehrer and McGonagle (1988) conducted a non-experimental quantitative research study in order to examine the relationships between multiple individual and situational factors and RAs' experiences with burnout. The researchers recruited 164 resident advisors to complete the Resident Assistant Stress Inventory (RASI) and the Maslach Burnout Inventory. The RASI measures emotional resiliency as one of six subscales that measure the amount of stress a resident advisor feels in certain situations. Results of the study were similar to the studies of Benedict and Mondloch (1989) and Hardy and Dodd (1998) in that RAs in freshmen halls had higher levels of burnout. Resident advisors working with freshmen are often at a higher risk of burnout due to having to cope with the demands and challenges of first-year students such as adjusting to campus life and increased academic demands, establishing a young adult identity, and increased access to drugs and alcohol. This study also studied gender and found that women had higher levels of burnout in emotional exhaustion and personal accomplishment but not depersonalization. This study was complicated in that it viewed

multiple dimensions of burnout as stress caused by individual and situational factors, which is actually closer to the definitions of perceived stress and resilience.

Paladino et al. (2005) completed a survey of 193 resident advisors at two universities on measures of burnout. The results showed that the size of the institution that a resident advisor worked at, in addition to gender, predicted certain measures of burnout. Resident advisors that were in a smaller institution were more likely to have higher scores on depersonalization as were males and non-Caucasians. This study adds to the mixed findings on gender and burnout but is significant when examining depersonalization. Stoner (2017) attempted to expand and update the research on burnout and RAs in a study he conducted featuring 153 RAs from four institutions. The study utilized the Maslach Burnout Inventory and found a lack of difference between male and female RAs on emotional exhaustion, depersonalization, or personal accomplishment. There were also no differences between the different RA communities/building styles on emotional exhaustion and depersonalization although RAs working in mixed communities reported feeling more personal accomplishment than RAs working with freshmen. Lastly, the study found that "RAs with higher levels of job satisfaction reported lower levels of burnout"(Stoner, 2017, p. 42). Some limitations of the study are the sample lacked diversity and did not account for differences between calendars and workload requirements of the different institutions surveyed. Elleven et al. (2001) found that if RAs are not properly trained or have poor boundary skills, they become overly involved with their students and emotionally exhausted which is an important characteristic of burnout (Maslach et al., 1981). The studies have shown that resident advisors can easily be susceptible to burnout due to the characteristics of the job and begin to check out from the job and its responsibilities. This is troubling because RAs serve as an important first line of defense for student affairs departments, and serious incidents could go undetected if they

are not fully performing their job duties. While it has been documented that RAs experience burnout, there is conflicting evidence to whether or not they experience it at the same levels as undergraduate residential college students. This study adds more information about burnout in undergraduate residential college students as measured by the Copenhagen Burnout Inventory as well as the amount of and types of burnout that RAs experience related to their personal lives, jobs, and work with residents.

Perceived Stress

Stress has become an expected part of the college experience and is a prevalent cause of concern for many college students given that the effects of stress have been well documented. Students who are stressed are less likely to practice healthy behaviors, exhibit lower levels of self-esteem and reduced perceptions of their health status, and are at a higher risk for poor academic performance (Byrd & McKinney, 2012; Hudd et al., 2000). Despite these findings, stress continues to impede the academic performance of approximately a third of the college population (American College Health Association, 2016). Stress related to academic performance and expectations has grown over the years as students face higher pressures to succeed in their studies (Byrd & McKinney, 2012). While the majority of students experience stress in at least one area of their life, their perceived stress, or the ways in which they perceive events in their life to be stressful, can be a better predictor of how stress will affect a person's health (Cohen et al., 1983). As opposed to standard, more objective measures of stress, Cohen et al. believed that perceived stress could be viewed "as an outcome variable measuring the experienced level of stress as a function of objective stressful events, coping processes, personality factors, etc." (1983, p. 386). This definition posits that it is not an event itself that precipitates stress; instead, the way an individual feels about the event and their ability to handle

it will determine the accompanying levels of stress. This measure of stress could then be used to better understand the ways in which individual students make sense of and cope with the different factors of stress in their lives.

The Perceived Stress Scale was created by Cohen et al. (1983) to measure individual's subjective views of the degree to which they felt their lives were unpredictable, uncontrollable, and overloading in addition to some questions about current levels of experienced stress. It provides a direct measure of the level of stress experienced by the respondents. The questionnaire was developed using related survey instruments and field research which led to high reliability (α=.89), criterion validity, and convergent validity. The PSS was validated and normed on two groups of college students and one more diverse group of adults enrolled in a smoking cessation group. The PSS proved to be a better predictor of health and health-related outcomes than two life-event scales and was also found to measure a different construct than depression although they are highly correlated (Cohen et al., 1983).

Relationship Between Perceived Stress and College Students

Most studies tend to use the older, more standard objective measures of stress in their evaluations. Lee and Jang (2015) studied the nature of college students' stress and explored its impact on student satisfaction. They recruited 220 undergraduate students from colleges in South Korea and created their own inventories that measured levels of stress, satisfaction with school life, and demographics. They verified that stress had a negative impact on student satisfaction with college life and noted that academic and interpersonal forms of stress had the highest negative impact on students. One limitation of this study is that they did not use previously empirically validated survey instruments or include the questions that they used for other

researchers to replicate their findings. There is no way to know how their measures of stress relate other than what they have reported.

Multiple studies confirmed that higher levels of stress negatively impacted the ease of adjustment that college students faced as they transitioned to college environments (Conley et al., 2013; Kerr et al., 2004), challenged students' abilities to cope (Dwyer &Cummings, 2001), and could impact the identity development process (Burt& Paysnick, 2014). There were only a few specific studies that explored how college students more specifically perceived stressful events in their lives. Jones et al. (2016) created a study in which they explored possible gender differences in how college students perceive stress and use coping strategies. The researchers recruited 197 undergraduate students from a small, southeastern college and then administered the Bem Sex Role Inventory, Coping Orientations to Problems Experienced Inventory, and Perceived Stress Scale. They found that perceived stress tended to vary depending on whether a student was considered a nontraditional student or not. It was also reported that in traditional-aged males, androgyny was related to higher levels of perceived stress, but for their female counterparts was related to lower perceived stress. A limit to this study was that it featured a small sample and small effect sizes that make the results less generalizable to other samples and impactful in terms of effect of the differences between groups.

In another study, Stoliker and Lafreniere (2015) measured how perceived stress, loneliness, and burnout impacted students' educational experiences. The researchers surveyed 150 undergraduate students by administering the Perceived Stress Scale, Academic Coping Strategies Scale, Maslach Burnout Inventory-Student Survey, Utrecht Work Engagement Scale for Students, University of California, Los Angeles Loneliness Scale-Version 3, Academic Performance Survey, and Demographic Questionnaire. They found that perceived stress was

negatively impacted by feelings of loneliness and burnout and could be predicted by exhaustion, professional efficacy, and loneliness. This study confirmed that students perceive stress at levels that could negatively impact their academic performance but does not look at how stress and burnout are related to mental health. While there is evidence that college students experience stress and perceive different events in their lives to be stressful, there needs to be more studies that examine perceived stress in college students, especially in comparison with mental health and burnout.

Relationship Between Perceived Stress and Resident Advisors

There have been multiple studies that have looked at the different sources of stress that resident advisors can have from being in their position, including one study that measured perceived stress in resident advisors. Swanbrow Becker and Drum (2015) surveyed a group of 99 resident advisors to determine the impact of gatekeeper training and serving as a gatekeeper on RA stress levels as measured by perceived stress. The RAs in the study were measured on their perceived stress before participating in gatekeeper training and at the end of the semester. Throughout the semester the RAs were measured on their intervention load to determine the frequency, associated stress, and duration of instances in which RAs had to respond to resident situations. The study examined the impact of working with residents' suicidal ideation and general mental health situations and found RAs reported feeling stressed by these interactions as they occurred and also found correlations between situational stress and the frequency and duration of resident situations. The study confirmed the presence of perceived stress in resident advisors who had pre- and post-study PSS scores of 15 and 17. One limitation of the study is the RAs were asked to self-report their experiences with their residents over the course of a semester

and may not have been able to accurately recall all of their interactions with students and associated feelings.

Additionally, burnout (Hetherington et al., 1989) and role confusion (Deluga & Winters, 1990) have been identified as possible sources of job stress that could affect the way that resident advisors feel about and perform in their jobs. Deluga and Winters (1991) investigated the relationship between RAs' motivations for taking the job, interpersonal stress, and job satisfaction in 144 RAs from eight different colleges across the Northeast. The RAs were given the Resident Assistant Motivation Questionnaire, Responsibility for People subscale of the Stress Diagnostic Survey, and Hoppock Job Satisfaction Bank. The results of the study indicated that resident advisors who took the job out of a desire for power, career development, personal growth, or because of financial obligations had higher levels of stress than their fellow resident advisors. One limitation of the study is that the measure of stress seems to be more related to burnout or job-related stress than to interpersonal stress, which makes it hard to know which variables the study was actually measuring. Brunson and McKee (1982) created a qualitative case study in which counseling staff worked with student affairs staff to address the stress needs of the RAs, specifically related to the stress they feel when providing crisis responses to students and living and working on campus. The researchers conducted a three-hour crisis intervention workshop and three-hour stress management workshop and collected verbal and written feedback from workshop participants. The feedback showed that providing training on the crises that students face and the ways that stress can impact the lives of resident advisors caused a decrease in those stress levels. Stress has been shown to have negative impacts on resident advisors, but it is unknown if they face stress levels at similar rates to undergraduate residential college students. This study adds to the literature on the amounts of perceived stress that

undergraduate residential college students and resident advisors experience and how the perceived stress of resident advisors is potentially related to aspects of the resident advisor position.

Summary

This chapter outlined the relevant literature about the key concepts of this study. Specifically, literature about college students and resident advisors in the areas of mental health, burnout, and perceived stress are examined. As a way to better understand how the resident advisor position impacts students and the necessities of specific mental health topics in resident advisor training, this study examined the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, perceived stress, and resilience. This was the first study to examine mental health, burnout, perceived stress, and resilience of college students and resident advisors.

CHAPTER III: METHODOLOGY

Introduction

The purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress. This study also quantitatively examined whether the job factors of population served, number of years as a resident advisor, and number of residents served predict mental health, burnout, and perceived stress among resident advisors. Further, this study examined whether resilience mediates any differences between groups on these measures. The sections of this chapter describe the participants, data collection procedures, instruments used, research design, research questions, and the data analysis used for this study.

Description of Participants

Participants in this study were adults who were 18 years of age and older and were currently enrolled in undergraduate studies at a large, public urban Southeastern university. The resident advisors and undergraduate residential college students who participated lived on campus, were classified as full-time students, and had accumulated more than 12 credit hours. Convenience sampling was used and approximately 140 resident advisors and all residential students were invited to participate. The resident advisors lived in the residence halls on campus and were responsible for between 15-50 residents each. The residence halls housed freshmen and upper-class students and were either traditional, suite, or apartment styled buildings. The undergraduate residential college students were a representative sample of the total college population.

Description of Setting

This study was conducted at a large, urban research institution in the Southeast. Despite the large size and research designation, the institution maintains a 19:1 student-faculty ratio and places an emphasis on quality teaching. At the time of the study, the university had an enrollment of about 29,000 students from 85 countries and 49 states. The university emphasizes a commitment to diversity and inclusion that is seen in the diversity of the student body and variety of student life organizations and support programs offered. In additional to a sizeable international student population, underrepresented and underserved minority students comprised about 33% of the student body and 27% of the entering undergraduates were first-generation students. About 3% of the students were military affiliated and 76% of the student population received financial aid, with 54% of the students on financial aid qualifying for federal Pell grants (Office of Undergraduate Admissions, 2018). There are 400 student clubs, and students are encouraged to participate in leadership and internship opportunities. There are multiple academic support programs for students that include academic advising, peer mentoring, and peer counseling and tutoring as well as health and wellness student support services that include counseling and psychological services, wellness promotion, food pantry, health center, and university recreation.

The setting of the study also had an impact on the resident advisor position and experience. The Residence Life and Housing department at the institution had unique specifications for its resident advisor program in terms of selection criteria, benefits, training, and staff support. To be considered for employment potential resident advisors were required to possess a 2.5 GPA, carry at least 9 credit hours and maintain academic progress for at least two-thirds of their credit hours, and have and maintain good conduct standing. Once selected,

resident advisors were expected to work at least 20 hours per week in their building. They were required to limit outside time commitments and were not allowed to have any additional employment outside the RA position or hold time-intensive leadership positions such as SGA president. To compensate for the time commitment and work responsibilities of the position, RAs were compensated with the costs of their housing assignment and given $2,000 per semester as a stipend and $300 per semester for meal plans. The training process for the resident advisor position included a 2-week intensive training in the summer before classes began, a once a semester all-staff 2–3-hour training, and a 1-hour credit class for first time RAs. Training included topics such as community development, peer helping and counseling skills, communication skills, leadership, time management, and programming and event planning. Resident advisors worked on teams composed of 5-12 staff members and received support from their supervisors at weekly staff meetings and bi-weekly one-on-one meetings.

Data Collection Procedures

Before beginning data collection, the researcher gained approval from the Institutional Review Board at the study institution to complete the study. The researcher also contacted the creators of the MHI, CBI, PSS, and SPF-24 to get permission to use the surveys in the study. Following approval, the second procedural step involved gaining access to the identified student populations. The researcher contacted the Director of the Housing and Residence Life Department at the institution to gain permission to survey the resident advisors and residents. Once permission was granted, data collection began.

Data collection involved surveying the students through an electronic survey. Students were sent a personal email inviting them to participate in the survey that introduced the study, provided an electronic link to the online survey, and detailed the informed consent. The

researcher attended a campus-wide staff training meeting as well as individual community staff meetings to speak to the resident advisors and request their participation. The format of the recruitment email is in Appendix B. Before participants could begin the survey, they were required to read the informed consent and provide their consent by clicking on a survey button indicating their consent. The format of the informed consent is in Appendix A. Participants were given the opportunity to voluntarily enter a drawing for one of five $20 Amazon.com gift cards if they provided their email address at the end of the survey. The survey responses were not linked to participant email addresses. Once participants granted their consent, they were granted access to the self-report survey which is listed in Appendix C. The survey was available for three weeks after the initial recruitment email was sent out to all of the students. A follow-up email was sent to students two weeks after the initial recruitment email was sent out. After three weeks, the online survey closed and data collection was considered complete. After the data was collected, it was analyzed using the Statistical Package for Social Sciences (SPSS) application software.

Instrumentation

The current study featured three parts to the survey. The three parts included: (a) an informed consent form, (b) an introductory email to residents, and (c) a self-report survey. The self-report survey was composed of a Demographics Survey, the Mental Health Inventory, Copenhagen Burnout Inventory, Perceived Stress Scale, and the Scale of Protective Factors. The following section includes descriptions of each of these instruments.

Informed Consent (Appendix A). The informed consent form was included with all surveys that were given out to participants, and participants were encouraged to read the informed consent form prior to beginning the survey. The purpose of the informed consent form

was to give participants adequate information about the study, its associated risks, their rights as a participant, data collection information, and the benefits of the study.

Introductory email to residents (Appendix B). Residential students who lived on campus received an email from the researcher that included the informed consent and an electronic link to the survey. This email served as a way to introduce the researcher and the study to students.

Self –Report survey (Appendix C). The self-report survey was given to all students and included all of the instruments to measure demographics, mental health, burnout, perceived stress, and resilience. The researcher received permission from the creators of the Mental Health Inventory (Stewart et al., 1988), Copenhagen Burnout Inventory (Kristensen et al., 2005), Perceived Stress Scale (Cohen et al., 1983), and Scale of Protective Factors (Ponce-Garcia et al., 2015) to use the instruments in online formats. The instruments were combined into one survey and took approximately 15 minutes to complete. Each instrument will be described in detail below.

Mental Health Inventory

The first instrument used in the study is the Mental Health Inventory (MHI-5). Mental health was measured by the MHI-5 which is a subscale of the Short Form Health Survey (SF-36) that was created as a part of the RAND Medical Outcomes Study to measure different aspects of health (Stewart et al., 1988). The MHI-5 is an five-item instrument designed to assess mental health in the previous month by measuring depression, anxiety, and psychological well-being (Berwick et al., 1991). The items are bidirectional in that some questions ask about positive feelings and others ask about negative feelings. The questions are measured on a 6-point Likert scale from 1, “all of the time”, to 6, “none of the time”. The raw scores range from 5 to 30 but are then transformed to a standardized scale with ranges from 0 to 100 with higher scores

indicating greater health in respondents. A cutoff point on the standardized scale of 60 or lower refers to mental health problems (Kelly et al., 2008). While there are some concerns about the validity and reliability of using shortened inventories to measure mental health, the MHI-5 has been shown to have adequate validity and found to even be better than some longer surveys at measuring mental health (Berwick et al., 1991; Ware & Gandek, 1998). The reported internal reliability estimates range from .79 to .84. The MHI-5 was found to have good concurrent validity with the Life Satisfaction Questionnaire-9, General Health Questionnaire-12, the Neuroticism scale of the Eysenck Personality Questionnaire Revised Short Scale, the Vitality scale and the General Health scale of the SF-36, and divergent validity was good according to established criteria (McCabe et al., 1996; van Leeuwen et al., 2012). This study used the total score to measure mental health.

Copenhagen Burnout Inventory

The second survey used in this study was the Copenhagen Burnout Inventory (CBI). The CBI was used to measure the amount and different types of burnout that students experience. The Copenhagen Burnout Inventory (Kristensen et al., 2005) is a 19-item instrument that was created to provide an alternative to the widely used Maslach Burnout Inventory (Maslach & Jackson, 1981) that more accurately measured the theoretical concepts of burnout and was more applicable to various groups of people outside of person-oriented occupations. The CBI has three sub-dimensions of personal burnout, work-related burnout, and client-related burnout that are designed to be applied in different domains. Personal burnout features six items that measures the "degree of physical and psychological fatigue and exhaustion experiences by the person" (Kristensen et al., 2005) and is designed to be a generic scale to measure burnout across occupational status. Work-related burnout measures the amount of burnout that an individual

feels related specifically to their work and is composed of seven items. The six client-related burnout questions gauge the degree to which a person's burnout is caused by their work directly in service to others, which can include work with people across a variety of domains and include work with clients, patients, and students. The CBI utilizes a 5-point Likert system that measures from 1, "always", to 5,"never/almost never" or 1, "to a very high degree", to 5 "to a very low degree" depending on the question. The raw scores range from 6 to 30 and then are transformed to a standardized scale featuring ranges from 0-100 with higher scores indicating higher levels of burnout. The total score on a scale is the average of the scores on the items. An individual is considered to have a high degree of burnout if the scores are greater than 50 (Borritz & Kristensen, 2004).

The CBI scales have high internal reliability as shown by estimates of .87 for personal burnout, .87 for work-related burnout, and .85 for client-related burnout (Kristensen et al., 2005). The criterion and divergent validity have been demonstrated with the vitality, mental health, and general health scales of the SF-36. Each scale has proven to have acceptable internal consistency and homogeneity as well as an acceptable fit through confirmatory factor analysis independently; they have also been shown to have adequate construct validity when measured together to form a model of and corresponding score of general burnout (Milfont et al., 2008). Burnout was measured in two ways. The personal burnout scale of the CBI was given to all students in order to compare the resident advisors to the undergraduate residential college students. Additionally, the resident advisors were given the work-related and client-related scales of the CBI to measure the types of burnout that affect resident advisors specifically.

Perceived Stress Scale

The third measure used is the Perceived Stress Scale (PSS) that was developed by Cohen et al. (1983) to assess the degree to which respondents felt their lives were unpredictable, uncontrollable, and overloading. The PSS is a 10-item, self-reported instrument designed to measure the amount of perceived stress individuals have had over the past month and to be an indicator of individuals' stress levels. The scale has 10 items and uses a 5-point Likert system that measures from 0, "never", to 4, "very often". Scores on the instrument range from 0-40 with higher total scores suggestive of greater perceived stress. Perceived stress was measured by the total score on the PSS. The reported internal consistency estimate is .89 for the total score. The scale was found to be correlated to other established life-scales such as the State-Trait Anxiety Inventory and the State-Trait Depression Inventory (Roberti et al., 2006).

The Scale of Protective Factors

The fourth instrument used in this study is the Scale of Protective Factors (SPF-24) that was created by Ponce-Garcia et al. (2015) with the intention of assessing both the cognitive/individual and social/interpersonal protective factors which determine resilience. The SPF-24 measures resilience across the four subscales of social support, social skills, planning and prioritizing behavior, and goal efficacy. Each subscale has six corresponding items that utilize a 7-point Likert scale ranging from 1, "disagree completely", to 5, "completely agree" for a total of 24 items. Overall scores range from 7 to 168 and subscale scores range from 6 to 42. Based upon previous research, overall scores of 68 or lower indicate low resilience, scores between 69 and 132 indicate moderate resilience, and scores of 133 or higher indicate high resilience (Ponce-Garcia et al., 2016). The SPF-24 has been found to have an overall internal consistency estimated of .93 with reliability for the subscales being measured at .86 for social

support, .86 for planning and prioritizing behavior, .89 for goal efficacy, and .92 for social skills (Ponce□Garcia et al., 2016). Resiliency was measured by the total score on the SPF-24.

Demographic Questionnaire

The fifth instrument used was the demographics survey. The demographics survey was created specifically for this study to gather more information about students' demographics that were important to consider for descriptive statistics and data analysis. The survey featured seven questions about participants' age, gender, racial or ethnic background, year in school, type of building (i.e., traditional/hall-style, suite, or apartment), hours spent in extracurricular activities, and hours spent working for pay as well as three screening questions about full-time status, residential student status, and employment as a resident advisor. There were three additional questions for resident advisors to assess how many years they have worked as resident advisors, the population with which they work (i.e., freshmen or upperclassmen), and the number of residents that they are responsible for.

Research Design

This study was a non-experimental, descriptive causal-comparative research study in which multiple analyses were conducted to answer the multiple research questions. This research design was selected so that differences between the different groups of students on the multiple variables could be measured and analyzed. Descriptive research is used to provide more information about an unexplained phenomenon or situation. There have been no studies that compare the mental health states of resident advisors to their college counterparts outside of burnout and few studies in recent years that analyze the differences between different work factors of resident advisors. Causal-comparative research was used to determine the cause of differences in the behavior of different groups of individuals (Gay et al., 2012). A causal-

comparative design was recommended for this study because the purpose of the study was to determine whether the resident advisor position is related to differences between college students on measures of mental health, burnout, perceived stress, and resiliency.

Research Questions

The research questions for this study were:

1. Are there differences between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress?
2. After controlling for resilience, are there differences between resident advisors and undergraduate residential college students on mental health, burnout and perceived stress?
3. Are there relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors?
4. Does resilience mediate the relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors?

Data Analysis Procedure

The data was collected from an online survey created using Qualitrics software and entered into data analysis software, Statistical Package for the Social Sciences (SPSS) (IBM Corp., 2013) and LISREL 9.2 (Jöreskog & Sörbom, 2015). SPSS software was used to screen the data, produce descriptive statistics, and run a multivariate analysis of variance and covariance. LISREL software was used to run path and mediation analyses. A statistical power analysis was performed for sample size estimation using GPower 3.1 (Faul et al., 2007). With an alpha = .05

and power = 0.80, the projected sample size needed to have a medium effect size using Cohen's (1977) criteria is approximately N = 72 for this simplest between/within group comparison. Thus, our sample size of N=551 was adequate for the main objective of this study and allowed for expected attrition.

Screening Data

Before conducting the major analyses, the data were screened for accuracy, missing data, outliers, normality, and any other assumptions that are specific to these multivariate analyses (Tabachnick & Fidell, 2013).

Descriptive Statistics

Descriptive statistics were used to describe the participants in the study. Using SPSS (2015), the demographic variables of students' age, gender, racial or ethnic background, year in school, building type, hours spent in extracurricular activities, hours spent working for pay, years worked as a resident advisor, population served, and number of residents were examined and reported.

Data Analysis

Multiple analyses were proposed to be used to answer the multiple research questions.

Research question 1: Are there differences between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress? The first analysis used SPSS software (2015) to screen and perform a multivariate analysis of variance (MANOVA) of the data in order to determine if statistically significant differences exist between resident advisors and undergraduate residential college students on three variables: mental health, burnout, and perceived stress. The MANOVA allows the researcher to determine whether there are any differences between independent groups on more than one continuous dependent

variable (Tabachnick & Fidell, 2013) and is necessary when multiple dependent variables are correlated. SPSS Explore was used to screen the data and address the assumptions of missing data, outliers, and normality. SPSS General Linear Model was used to perform the multivariate analysis of variance. The MANOVA is an omnibus test statistic; therefore, a post hoc test was run to determine the specific differences between groups if they exist. The statistical differences ($p<.05$) are reported in Chapter 4.

Research question 2: After controlling for resilience, are there differences between resident advisors and undergraduate residential college students on mental health, burnout and perceived stress? The second analysis featured a multivariate analysis of covariance (MANCOVA), which examined if differences between resident advisors and undergraduate residential college students exist after controlling for resilience. This analysis allowed the researcher to utilize a covariate to help control for resiliency among college students and investigate whether this control adjusts the variability in scores within each group. SPSS General Linear Model was also used to perform the multivariate analysis of covariance. The appropriate post hoc tests were run after the analysis. The statistical differences ($p<.05$) are reported in Chapter 4.

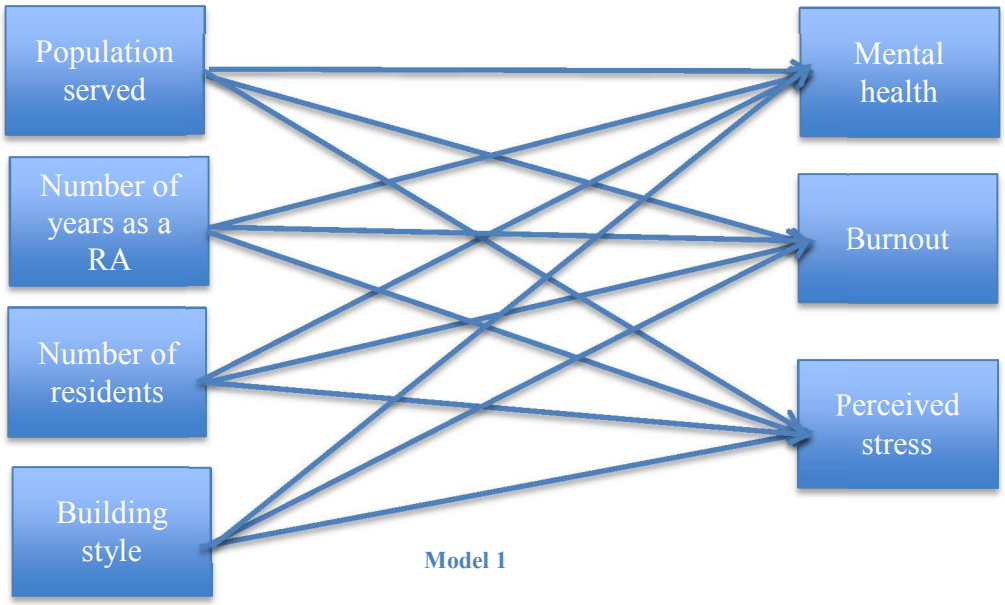
Research question 3: Are there relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors? The third analysis utilized LISREL software (Jöreskog & Sörbom, 2015) to conduct a path analysis to measure the strength of the relationships between the variables of population served, number of years as a resident advisor, and number of residents served and the resident advisors' mental health, burnout, and perceived stress. The path analysis is a type of structural equation modeling (SEM), which is a multivariate statistical

analysis that is used to analyze structural relationships between measured variables and latent constructs; SEM is helpful in this regard because it estimates the multiple and interrelated dependence relationships in a single analysis and decreases measurement error (Tabachnick & Fidell, 2013). The path analysis allowed the researcher to investigate the ways in which the different resident advisor factors are impacted by the variables of mental health, burnout, and perceived stress and provide estimates of the magnitude and significance of hypothesized causal connections between sets of variables. A theoretical path model has been developed depicting the relationships among the study variables. Specifically, I drew paths connecting the latent variables of population served, number of years as a RA, number of residents, and building style to mental health, burnout, and perceived stress.

The researcher hypothesized that resident advisors who work with freshmen, have worked multiple years as a resident advisor, and have higher numbers of residents will have higher rates of mental health incidence, burnout, and perceived stress. With respect to this hypothesis, a direct path model (Model 1) was tested so that the direct impact of each RA work variable on mental health, burnout, and perceived stress can be examined. The correlations and parameter estimates were reported. The root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), and comparative fit index (CFI) were used to assess model fit. RMSEA values less than .10, SRMR value less than or equal to .09, and CFI values greater than or equal to .90 were indicative of adequate model fit (Hu & Bentler, 1999)

FIGURE 1

Potential Path Model of Predictor Variables and Outcome Variables

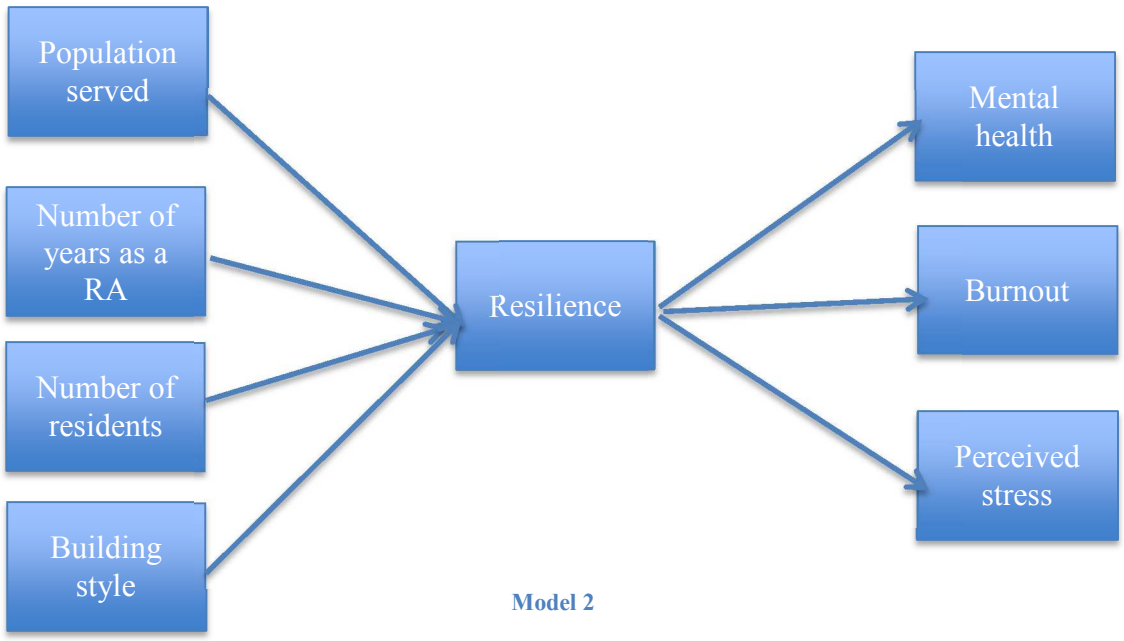


Research question 4: Does resilience mediate the relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors? The final research question was proposed to be answered using a mediation analysis. The mediation analysis is a modification of the path analysis in which an intermediate variable, or mediator, is used to help explain how or why an independent variable influences an outcome (Gunzler et al., 2013), similarly to how a covariate functions in a MANCOVA. The path analysis was proposed to see whether causal connections examined in research question four can be mediated by a change in resiliency. A theoretical path model was developed depicting the relationships among the study variables. Specifically, I drew paths connecting the latent variables of population served, number

of years as a RA, number of residents, and building style to resilience and paths from resilience to mental health, burnout, and perceived stress.

FIGURE 2

Potential Path Model of Predictor Variables and Outcome Variables With Mediating Variable



The researcher hypothesized that resilience would mediate the relationships between the resident work factors and mental health, burnout, and perceived stress. With respect to this hypothesis, a mediated path model (Model 2) was unable to be tested due to the lack of correlation between the resident work factors, mental health, burnout, and perceived stress. The results are reported in Chapter 4.

Summary

This chapter outlined the research methodology that was used in this study. The sections include the intended participants, relevant variables, research questions, research design, instrumentation, and data analysis for use in this study. A multivariate analysis of variance was

used to determine if there was a difference between resident advisor and undergraduate residential college students on measures of mental health, burnout, and perceived stress. A multivariate analysis of covariance was then used to determine if differences between resident advisors and undergraduate residential college students exist after controlling for resilience. Next a path analysis was run to measure the strength of the relationships between the variables of population served, number of years as a resident advisor, and number of residents served and the resident advisors' mental health, burnout, and perceived stress. Finally, a mediation analysis was run to determine if resilience mediates the relationships between the variables of population served, number of years as a resident advisor, and number of residents served and the resident advisors' mental health, burnout, and perceived stress.

CHAPTER IV: RESULTS

The purpose of this research study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress and to determine if resilience has a mediating effect on these scores. The primary research question was: Is there a difference between resident advisors and undergraduate residential college students on mental health, burnout, and perceived stress? A secondary question looked at the relationships between elements of collegiate residential communities and the mental health of resident advisors. That question was: Are there relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors? Both research questions were then analyzed to see if resilience was a mediating factor.

The results of the study are presented in this chapter. The first section provides information about the data collection process and presents a description of the sample population. The second section details the process of data screening and the processes used to address assumptions of normality. The next section of the chapter presents information regarding the reliabilities of the instruments used in the study. The fourth section presents the bivariate correlations and results of the multiple regression statistical procedures conducted to analyze the data. This chapter concludes with a summary.

Sampling and Data Collection

The population of interest in this study was college students, specifically resident advisors and residential college students. Resident advisors were defined as paraprofessional staff members who live and work on-campus with college students to support on-campus students in various capacities. Students who were at least 18 years old, lived on campus, were

classified as full-time students, and had accumulated more than 12-credit hours were included in the study. The researcher received permission from the university to disseminate the research survey electronically through email. Due to privacy constraints, the university agreed to create a listserv of all current, residential students and send an email to students on behalf of the researcher from their own account. Residential students were therefore recruited through an email sent from the university to their student accounts that included the informed consent and an electronic link to the online survey. Resident advisors were recruited via email and in-person. The RAs received the same email requests as the residential students and the researcher also went to RA group training meetings and staff meetings in order to tell them about the study and request their participation. The first email was sent out on April 27, 2017 and a follow-up email was sent out on May 5, 2017. The survey was closed two weeks after the follow-up email was sent. Of the 5,479 students that were emailed the survey, 595 students accessed the survey and attempted to complete it. Forty-four students exited the survey before submitting it and were excluded from the study as incomplete responses. The final number of participants included in this study was 551 (10% completion rate).

Description of Participants

Data collection resulted in a final sample size of 551 students. Demographic summary data are reported in Table 1. The vast majority of the population reported being between 18-21 years old (*n*=504; 91.5%) while a small percentage reported being 22-23 (*n*=31; 5.6%), and the remainder were 24 years old and above (*n*=16; 2.9%). Over half of the participants identified as male (*n*=352; 63.9%), while others identified as female (*n*=195, 35.4%), or other (*n*=4; 0.7%). This is in line with the reported gender ratio of the university of 51% male and 48% female (UNC Charlotte, n.d.). The majority of the participants identified as Caucasian/White (*n*=321;

58.3%), followed by African-American/Black (*n*=123; 22.3%), Asian-American/Asian (*n*=41; 7.4%), Multiracial (*n*=35; 6.4%), Hispanic/Latino (*n*=25; 4.5%), Other (*n*=5; 0.9%), and Native-American (*n*=1; 0.2%). Only one participant identified as an international student.

The participants were split among class statuses with most participants being freshmen (*n*=199; 36.1%), followed by sophomores (*n*=174; 31.6%), juniors (*n*=119; 21.6%), and seniors (*n*=59, 10.7%).These demographics are opposite of the normal distribution of students in which freshmen comprise the smallest percentage of enrolled students (16.4%; Office of Undergraduate Admissions, 2018). Almost half of the participants lived in suite-style buildings (*n*=265; 48.1%), while others lived in apartments (*n*=140; 25.4%), traditional/hall buildings (*n*=109; 19.8%), and Greek houses (*n*=37; 6.7%). The participants were actively involved in extracurricular activities with 61.9% spending 1-10 hours per week on extracurricular activities (*n*=341), 22.5% spending 11 hours or more each week on extracurricular activities (*n*=124), and only 15.6% not participating in any activities (*n*=86). The participants were split in the number of hours that they worked as most reported not having a job (*n*=289, 52.5%), followed by 81 working 1-10 hours a week (14.7%), 138 working 11-20 hours a week (25%), and 43 working 21 hours or more each week (7.8%). The data regarding the demographic factors is displayed in Table 1.

Table 1

Numbers and Percentages of Demographic Variables

Variable	Frequency	Percentage
Age		
17-19	280	50.8%
20-21	224	40.7%
22-23	31	5.6%
24+	16	2.9%
Gender		
Female	195	35.4%
Male	352	63.9%
Transgender	0	0%
Other	4	0.7%
Race/ethnicity		
Caucasian/White	321	58.3%
African American/Black	123	22.3%
Hispanic/Latino	25	4.5%
Native-American	1	0.2%
Asian-American/Asian	41	7.4%
Multiracial	35	6.4%
Other	5	0.9%
International Student Status		
Yes	1	0.2%
No	551	99.8%
Class Status		
Freshman	199	36.1%
Sophomore	174	31.6%
Junior	119	21.6%
Senior	59	10.7%
Building Type		
Traditional/hall style	109	19.8%
Suite	265	48.1%
Apartment	140	25.4%
Greek house	37	6.7%
Hours Extracurricular		
None	86	15.6%
1-10	341	61.9%
11-20	100	18.1%
21-30	17	3.1%
30+	7	1.3%
Hours Working		
None	289	52.5%
1-10	81	14.7%
11-20	138	25.0%
21-30	29	5.3%
30+	14	2.5%

Eighty-four of the participants identified as resident advisors (15.2%). There were 140 RAs on staff at the time which provides a response rate of 60% from this population. A particular interest of this study was the resident advisors and their working conditions. Participants were asked to share the following information: (a) years as a RA, (b) population worked with, and (c) number of residents. These items were chosen as they have been shown to be related to burnout in resident advisors (Benedict & Mondloch, 1989) and speculated to impact additional aspects of resident advisor mental health. In this sample, most of the RAs had only been working less than 2 years which is pretty typical in this role. The majority of RAs on this campus worked with both freshmen and upperclassmen but there was variety in the number of residents that RAs had. The data regarding participant work specific information is organized in Table 2.

Table 2

Numbers and Percentages of Resident Advisor Work Conditions

Variable	Frequency	Percentage
Years as RA		
Less than 1	19	22.6%
1	35	41.7%
2	16	19.0%
3	12	14.3%
4	2	2.4%
Population served		
Freshmen	29	34.5%
Upperclassmen	7	8.3%
Both	48	57.1%
Number of residents		
1-10	1	1.2%
11-20	16	19.0%
21-30	25	29.8%
31-40	24	28.6%
41-50	18	21.4%

Data Screening and Assumptions of Normality

Prior to running the major analysis, all variables were examined for accuracy of data entry, outliers, missing values, and normality of distribution. All values for all variables were within acceptable ranges suggesting that there were no data entry errors. Cases for which there were missing responses for multiple survey questions and instruments were considered incomplete responses. A listwise deletion was done for these cases due to concerns about being able to predict scores across survey instruments. This resulted in 18 out of the 551 cases being removed. Multiple missing values were detected with values as follows: perceived stress missed 6 (1.1%) and resilience missed 17 (3.1%). Little's MCAR test (X^2 =4.24, df=8, p=.834) suggests that the data can be treated as missing completely at random. There were no univariate or multivariate outliers detected in a visual inspection of the data. Mahalanobis distance was calculated to confirm that no multivariate outliers existed in the data. An examination of skewness and kurtosis, along with a visual inspection of frequency distribution did not indicate major departures from normality. An examination of scatterplots did not indicate issues for concern. Variation inflation factors ranged from 1.00 to 1.06 indicating no violation of the multicollinearity assumption.

Reliability of Instruments

Instrument reliability is a key component to ensure that research is reliable. Internal consistency is defined as the degree of relationship between items on an instrument to ensure that they measure the same thing ("Internal Consistency", 2018). Cronbach's α internal consistency measures were used to estimate reliability for each instrument in the study.

Cronbach's α for the total measurement of mental health from the Mental Health Inventory was .82. The Copenhagen Burnout Inventory's personal burnout subscales

demonstrated high reliability by having reliability estimates of .86 for the resident personal burnout subscale and .89 for the resident advisor personal burnout subscale. The internal consistency estimates for the work-related burnout and client-related burnout subscales were .84 and .83 respectively. The Perceived Stress Scale demonstrated high internal consistency with a Cronbach's α of .85. The Scale of Protective Factors had an overall internal consistency of .94 and estimates of .87 for social support, .92 for social skills, .87 for prioritizing and planning behavior, and .90 for goal efficacy.

Mean scores, standard deviations, and estimates of internal consistency for each scale are presented in Table 3. These data provide information regarding mental health, perceived stress, burnout, and resilience.

Table 3

Reliability Estimates, Items, Means, and Standard Deviations

Instrument	Coefficient α	Items	M	SD
MHI	.82	5	60.34	18.98
CBI				
RESPBO	.86	6	52.45	19.29
RAPBO	.89	6	51.98	22.61
WRO	.84	7	41.16	19.04
CRO	.83	6	37.85	18.40
PSS	.85	10	19.20	6.03
SPF-24	.94	24	127.10	21.39
SOCSUPP	.87	6	31.39	6.28
SOCSKILL	.92	6	31.12	7.56
GOAL	.90	6	33.71	5.89
PLANNPB	.87	6	30.89	6.95

Mental Health Inventory

The Mental Health Inventory (MHI-5) was used to assess participant mental health. The five-item instrument assesses mental health by measuring depression, anxiety, and psychological

well-being (Berwick et al., 1991). The standardized scores range from 0 to 100 with higher scores indicating greater mental health in respondents. A cutoff point on the standardized scale of 76 or lower refers to the presence of a common mental disorder (Kelly et al., 2008). In the current study, MHI-5 scores ranged from 4 to 100 with an overall mean of 60.34 (*SD*=18.98). Based on the development of the scale by Kelly et al. (2008), the average score for the students indicates low mental health which could denote the presence of significant mental health disorders, including major depression, affective disorders, and anxiety disorders.

Copenhagen Burnout Inventory

The Copenhagen Burnout Inventory (CBI) was used to assess the amount and type of participant burnout. The CBI consists of three sub-dimensions of personal burnout, work-related burnout, and client-related burnout. The personal burnout subscale was used to measure general levels of burnout in all students while the work-related and client-related subscales measured the different kinds of burnout that resident advisors could experience from their work with students. The standardized scale has a range from 0-100 with higher scores indicating higher levels of burnout. An individual is considered to have a high degree of burnout if their average scores are greater than 50 (Borritz & Kristensen, 2004). In this study the scores ranged from 4-100 with a mean of 52.38 (*SD*=22.61), indicating both groups had high levels of personal burnout. Both resident advisors and residents reported having high personal burnout while resident advisors reported scores of 41.16 (*SD*=19.04) and 37.85 (*SD*=18.40) on the work-related and client-related subscales, respectively, indicating RAs did not experience high levels of burnout in these areas.

Perceived Stress Scale

The Perceived Stress Scale (PSS) was used to measure the amount of stress that participants perceived themselves to have experienced over the past month. Scores on the instrument range from 0-40 with higher total scores suggestive of greater perceived stress. This scale does not have any scoring cut-offs to denote a diagnosable level of perceived stress. In the current study, PSS scores ranged from 3 to 36 with an overall mean of 19.20 (*SD*=6.03).

The Scale of Protective Factors

The last instrument used was the Scale of Protective Factors (SPF-24). This instrument measured the cognitive/individual and social/interpersonal protective factors which determine resilience. The SPF-24 measures resilience across the four subscales of social support, social skills, planning and prioritizing behavior, and goal efficacy which have six items each. The standardized 7-point scale has a range from 7 to 168 and uses the cutoff ranges of 68 or lower to indicate low resilience, 69 to 132 to indicate moderate resilience, and 133 or higher to indicate high resilience. (Ponce-Garcia et al., 2015). Based on the data in this study, most students displayed moderate resilience with a mean of 127 (*SD*=21.39), and the range of scores was between 42-168.

Research Question Analysis

The purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health (as measured by the MHI-5), burnout (as measured by the CBI), and perceived stress (as measured by the PSS) and to determine if resilience (as measured by the SPF-24) has a mediating effect on these scores. The following section presents the results for the research questions.

Multivariate Analysis of Variance

A one-way multivariate analysis of variance (MANOVA) was conducted to answer the following research question: Are there differences between resident advisor and non-resident advisor college students on overall mental health, burnout, and perceived stress? The means and standard deviations of the groups are reported in Table 4. The study featured an unbalanced design between the residential student and resident advisor groups due to the considerably smaller number of RAs that participated in the study. The test for homogeneity of dispersion matrices was nonsignificant (Box's M = 8.67, F(6, 124477.7)=1.43, p=.200) indicating there was not a violation of homogeneity of covariance matrix. Using the Wilk's criterion, the combined dependent variables were not statistically different based on RA status, F(3, 541)=1.879, Wilk's Λ = .990, partial η^2=.01.

Table 4

Means and Standard Deviations of the Dependent Variables for the Two Groups

	RA Status	Mean	*SD*	*N*
MHI	RA	63.81	18.19	84
	Not RA	59.71	19.07	449
	Total	60.39	19.00	533
PSS	RA	18.90	6.01	84
	Not RA	19.26	6.04	449
	Total	19.19	6.05	533
PBO	RA	51.98	22.61	84
	Not RA	52.59	19.16	449
	Total	52.37	19.66	533
SPF	RA	134.58	19.57	84
	Not RA	125.66	21.45	449
	Total	127.10	21.39	533

Note. MHI= Mental Health Inventory, PSS= Perceived Stress Scale, PBO= Personal Burnout Subscale, SPF= Scale of Protective Factors

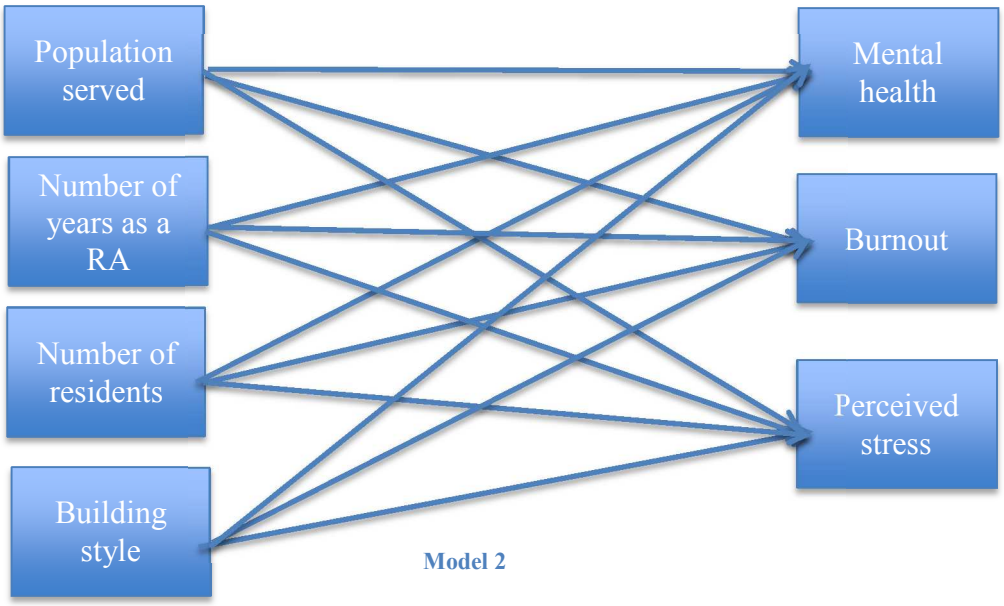
Multivariate Analysis of Covariance

A one-way multivariate analysis of covariance (MANCOVA) was conducted to answer the following research question: After controlling for resilience, are there differences between resident advisor and non-resident advisor college students on overall mental health, burnout and perceived stress? Box's test of equality of covariance matrices was satisfied, $F(6, 125088)=1.489$, $p=.177$. There was not a significant difference between the groups on the combined dependent variables after controlling for resilience, $F(3,528)=1.165$, $p=.322$, Wilks' $\Lambda=.993$, partial $\eta^2=.007$.

Path Analysis

A path analysis was attempted using SPSS to answer the question: Are there relationships between population served, number of years as a resident advisor, number of residents served, and building style and overall mental health, burnout, and perceived stress of resident advisors? Due to the small sample size, caution should be taken in interpreting the results and low statistical power is expected.

To run the analyses, categorical variables were dummy coded. The building type variable was dummy coded with traditional building type serving as the reference group. For the variable of population served, participants who worked with homogenous groups of students (e.g., freshmen or upperclassmen) were coded as '0' and compared to participants who worked with heterogeneous groups (e.g., both freshmen and upperclassmen) and were coded as '1'.



Three regressions were run. The standardized beta coefficients are reported in Table 5. None of the relationships between the predictor variables and outcome variables were statistically significant. Variance accounted was 5%, 6%, and 6% for mental health, burnout, and perceived stress, respectively.

Table 5

Standardized Beta Coefficients for the Path Analysis

Predictor variables	Standardized beta coefficients		
	Mental Health	Burnout	Perceived Stress
Population served	-.120^{NS}	.102 ^{NS}	.206 ^{NS}
# of years as RA	.172 ^{NS}	.009 ^{NS}	-.165 ^{NS}
# of residents	.069 ^{NS}	-.136 ^{NS}	-.005 ^{NS}
Suite	-.070 ^{NS}	.181 ^{NS}	.044 ^{NS}
Apartment	-.002 ^{NS}	.235 ^{NS}	-.135 ^{NS}
Greek house	-.049 ^{NS}	.104 ^{NS}	-.030 ^{NS}
	R^2=.052	R^2=.058	R^2=.062

*Traditional is the reference group

The final research question was: Does resilience mediate the relationships between population served, number of years as a resident advisor, number of residents served, and building style and mental health, burnout, and perceived stress of resident advisors? Due to a

small sample size and lack of significant relationships between the variables, we did not run the last analysis as a mediating effect.

Summary

The purpose of this research was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress and to determine if resilience has a mediating effect on these scores. A secondary objective was to examine the mental health, burnout, and perceived stress of resident advisors. The software SPSS was used to analyze the data. Participants were recruited from a local university through email using a listserv of all residential students. Multiple multivariate analyses were conducted. A multivariate analysis of variance was conducted using mental health, perceived stress, and burnout as the dependent variables, and resident advisors and residents are the grouping variables. Results indicated that there was not a statistically significant difference between the resident advisor and resident groups. A multivariate analysis of covariance was conducted using mental health, perceived stress, and burnout as the dependent variables, resident advisors and residents are the grouping variables and resilience as the covariate. Results indicated that there was no statistically significant difference between the resident advisor and resident groups. A path analysis was attempted using population served, number of years as a resident advisor, number of residents served, and building style as predictor variables and mental health, burnout, and perceived stress as outcome variables. The results indicated that there were no statistically significant relationships between the predictor variables and the outcome variables. The final analysis could not be run due to lack of significant relationships between the variables.

CHAPTER V: DISCUSSION

The purpose of this study was to examine the differences between resident advisors and undergraduate residential students on measures of mental health, burnout, and perceived stress and to determine if resilience had a mediating effect on these scores. The findings of this study, as they relate to previous research and relevant literature, are presented in this chapter. The chapter includes a brief overview of the study, a discussion of demographic data and the variables of interests, limitations and implications of the study, recommendations for future research, and concluding remarks.

Overview of the Study

College student mental health is a growing focus and concern for mental health professionals and higher educational institutions. Research on various aspects of college student mental health has grown and studies have shown that students experience mental health concerns (Hysenbegasi et al., 2005; Kessler et al., 1995; Kisch et al., 2005; Mackenzie et al., 2011), perceived stress (Civitci, 2015; Hui Chian Teh et al., 2015), and burnout (Campos et al., 2011; Dyrbye et al., 2010). These concepts have not been investigated simultaneously to determine what contributions they have together and on each other. Additionally, research has shown that resilience helps people move through difficult situations and can be an important mediating factor into the differing responses that people have to similar events (Davydov et al., 2010). Resilience may also mediate some of the impact of mental distress that students experience (Campbell-Sills et al., 2006; Chung et al., 2017; DeRosier et al., 2013), but resilience has not been studied in conjunction with mental health, perceived stress, and burnout, and has not been investigated in a residential advisor population.

Resident advisors have been commonplace on college campuses since the 1960s. Due to their unique role as students and university employees, they have cross-functional duties as mentors, friends, rule enforcers, and crisis responders. Some research has been conducted and found students in these positions experience burnout (Benedict & Mondloch, 1989; Stoner, 2017) and stress (Swanbrow Becker & Drum, 2015), but existing research is limited and has not examined the overall mental health of RAs or investigated the multiple impacts that mental health, perceived stress, and burnout can have on students in these positions.

The primary focus of this study was to determine how the roles and responsibilities of resident advisors might be related to their mental health. Additionally, the study examined the differences between resident advisors and the general student population on multiple facets of mental health. A secondary objective was to determine if resilience had a mediating effect on mental health, perceived stress, and burnout.

Methodology

For this study, college students living on campus were the population of interest. Participants were recruited from a large urban university in the Southeastern US through email using a listserv of all residential students and the researcher did additional recruitment of the RAs through in-person attendance at staff and training meetings. The final number of participants included in this study was 551 after accounting for students who accessed the survey but did not complete a majority of it. The population was varied across demographics and was a representative sample of the total university population. All survey instruments were found to have adequate validity and reliability.

Multiple multivariate analyses were conducted to answer the four research questions and the software SPSS was used to analyze the data. A multivariate analysis of variance was

conducted to determine if there were differences between resident advisors and residential students on measures of mental health, perceived stress, and burnout. Results indicated that there was not a statistically significant difference between the groups. A multivariate analysis of covariance was conducted to see if there were any differences between the two groups on the same measures after controlling for resilience. The results for this analysis indicated that there were no statistically significant differences between the resident advisor and resident groups.

When looking specifically at the resident advisor population, a path analysis was conducted to determine which aspects of the resident advisor position, including population served (i.e., freshmen, upperclassmen, or both freshmen and upperclassmen), number of years as a resident advisor, number of residents served, and building style were potentially related to RA mental health, burnout, and perceived stress. Results indicated that there were no statistically significant relationships between the RA mental health, burnout, and perceived stress and the resident advisor position conditions. The final research question could not be answered because the path analysis could not be run due to the small sample size and lack of significant relationships between the variables.

Discussion of Results

The findings from this study add to the growing body of research about college student mental health. The discussion section highlights demographic findings followed by the results of the multivariate analyses. All the findings are discussed in relation to previous literature and research.

Data Collection

There were multiple factors that could have impacted the survey response rate and results of this study. The actual data collection happened at a noteworthy time of the academic year.

Due to multiple colliding factors, the email surveys that were initially supposed to be sent out in the beginning of April ended up being sent out the week before finals at the end of the spring semester. The end of the semester tends to be the busiest, most stressful part of the semester due to the amount of work that must be done to wrap up classwork and complete all university responsibilities. A lot must be done in a short amount of time including preparing for tests, final exams, projects, and for many, moving out of their on-campus living spaces. The amount of stress present at the end of the semester could impact how students feel about their mental health and wellbeing, especially their perceived stress. About 10% of the residential students participated in the study; however, the timing of the dissemination of the surveys may have had an impact on the survey results given the stress of the environment that students were experiencing.

Timing may have also impacted the participation rates of the resident advisor population. Eighty-four of the 140 resident advisors completed the survey. At the end of the semester, resident advisors have to complete their academic responsibilities and also work to ensure the smooth and complete transition/move-out of all students in the buildings through meetings, written communication, and room inspections. The researcher made in-person requests for RA participation at a campus-wide staff training meeting as well as at individual community staff meetings to try to ensure high RA participation. Although RAs were encouraged to participate, their increased level of responsibilities at this time of the year may have made it difficult for some to find the time and energy to participate in the study.

Demographics

A majority of the participants fit into the average age range of college students (i.e., 18-21). This was expected due to the large, traditional undergraduate population at the surveyed

institution. Unexpectedly, the number of male participants was almost double that of female participants. This gender discrepancy was not completely representative of the campus population where the genders are typically evenly divided in their presence on campus. Research is mixed on the differences between genders on mental health measures, but when surveyed, women are more likely to report experiencing some symptoms of depression, anxiety, burnout, and stress (Liu et al., 2019; McIntyre et al., 2014). Having more males in the survey may have skewed the results towards less symptomology than would have been reported in a sample featuring more female students. There was also a good amount of ethnic and racial diversity in the sample and the resident advisor group had ethnic and racial diversity that was representative of the college population.

Half of the participants reported having no employment, while over 30% reported working at least part time hours. This included the resident advisors, as the RA position requires at least 20 hours of work per week. This is a sizeable number of working students who had to balance job responsibilities with their roles as students and is slightly greater than the national rate of percentage of college student workers (Digest of Education Statistics, 2020c). Although the data shows that half of the participants did not work, most students reported having at least minimal involvement in extracurricular activities, and over 20% had involvement equal to the commitment of a part-time job. Resident advisors were not allowed to have other jobs, but they were allowed to participate in extracurricular activities that also required their time and energy. The data did not assess for those students who worked and also had extracurricular commitments.

Variables of Interest

The current study was the first to compare resident advisors and residential students on measures of mental health, perceived stress, and burnout. The initial analysis showed that there was no statistically significant difference between the two groups on these variables. This did not support the researcher's hypothesis that resident advisors would have a higher prevalence of mental health concerns, burnout, and perceived stress. The lack of statistical significance does not negate how stressful the RA position may be, but it could possibly show that the RA position provides some benefits to encourage positive wellbeing in a supportive environment. Although the results did not show a statistically significant difference between the mental health, perceived stress, and burnout of resident advisors and general college students, resident advisors and residential students both scored in the clinically significant range for all three variables indicating the presence of depression, anxiety, perceived stress, and personal burnout. These mental health concerns are characteristic of many students living on campus and the increasing numbers may indicate a need for increased mental health services, education and awareness, and skill building. The overall mental health and wellbeing of residential advisors is important given that their mental and emotional state will have an impact on the quality of work that they do within residence life. Colleges and universities should be aware of the types of issues that their resident advisors are facing so that they can work to best support their well-being and success.

In contrast to what the researcher expected to find, resident advisors had lower, but not significantly different, scores than the general residential population on all of the measures of mental health, personal burnout, and perceived stress. This may be indicative of potential protective factors that might be present in the resident advisor work force, the RA position, or the RA environment. The selection process may focus on choosing individuals who are more

resilient, and the work environment may provide support that helps resident advisors be less impacted by depression, anxiety, perceived stress, and burnout, at least on a minor scale. There are also several factors inherent in the position that could impact, positively or negatively, the resident advisor experience. The position tends to attract highly motivated and successful students due to the job requirement and expectations. The resident advisors are required to have a 2.5 minimum grade point average (equivalent to a B- average) which would suggest the ability to perform well academically and to manage multiple course requirements. Resident advisors are expected to be role models and mentors to their residents in addition to rule enforcers, which attracts students who desire to be in helping roles, are involved on campus, and able to share campus information with their residents. The position requires RAs to learn how to multi-task, be organized, and complete demands on time which are transferable skills that can also help students be successful in college. RAs tend to be well compensated for their work which may help counteract some of the burnout and stress that RAs feel about aspects of the RA position. Resident advisors are typically given ongoing training which could help them to feel prepared to deal with the issues they face on the job. They also work on teams and have one or two managers to help support them in their positions which could increase the sense of connection that they have to people and the university. The team experiences can have either a positive or negative impact on their RA experience and play a role in RA well-being and increasing resilience. The resident advisors spend a lot of time in their buildings which could either increase burnout or help them to feel a sense of community depending on the state of the relationships in their area. Further exploration of the positive contributions of being a RA is needed to gain a deeper understanding of the benefits of the role.

Mental Health

Mental health has been shown to have a substantial impact on the ability of students to learn and perform well academically (Keyes et al., 2012) as well as impact multiple areas of their physical and emotional well-being (Cvetkovski et al., 2018; Hysenbegasi et al., 2005; Mowbray et al., 2006). The results of this study confirmed that the majority of students experienced mental health symptoms at clinically measurable levels at least once in the previous 12 months. This aligns with results from self-reported surveys (American College Health Association, 2016) as well as other research on mental health in college populations (Blanco et al., 2008; Cvetkovski et al., 2018; Hunt & Eisenberg, 2010; Hysenbegasi et al., 2005; Mackenzie et al., 2011). With lower scores indicating worse mental health, students in this study reported having worse mental health (M=60.34) in comparison to students surveyed using a similar assessment tool (M=66.64; Byrd & McKinney, 2012). This difference could possibly be explained by the timing of the survey. The end of the semester is filled with multiple academic requirements that must be completed in a short amount of time. The increasing numbers of students with mental health concerns underscores the importance of campus communities, including faculty and staff, making mental health a focus of the entire community and having the resources to support students at varying levels of mental health to ensure that students persist in their studies, maintain adequate academic performance, and remain safe while in the college's care.

This was the first study that measured the mental health of resident advisors. The resident advisors scored in the clinically significant range for mental health which indicates the presence of some symptoms of depression, anxiety, or psychological disease. This is a significant finding as mental health concerns have not been identified in this population previously, but correspond to research about mental health in the college population (Byrd & McKinney, 2012; Cvetkovski

et al., 2018; Mackenzie et al., 2011) as well as research about other side effects of the RA position such as burnout (Hardy & Dodd, 1998; Stoner, 2017).While having a job has been shown to have some positive benefits for students in terms of helping them gain real world experience, self-awareness, and helpful productivity skills (Swanson et al., 2006), the negative side effects that working have on mental health that have been documented include increased anxiety, less sleep, and unhealthy coping behaviors (Carney, McNeish, & McColl, 2005; Miller et al.2008; Mounsey et al. 2013). Resident advisors may not recognize the presence of mental health concerns in themselves due to their focus on caring for their residents and may actually have their mental health impacted by vicarious traumatization through job responsibilities such as helping assess for and respond to suicide ideation, sexual assault, and drug use (Canto et al., 2017). Residence Life staff should consider how to consistently assess for RA mental health and provide adequate supports for their workers, and RA mental health needs to be a focus and consideration for all who work with this population.

Burnout

Studies have shown that burnout exists in student populations and can have a negative impact on student achievement, functioning, and well-being for years (Dyrbye et al., 2010; Koeske & Koeske, 1991; Schaufeli et al., 2002; Watson et al., 2008). The current study confirmed the presence of statistically significant student burnout in this population and was one of the first to measure U. S. college student burnout using the Copenhagen Burnout Inventory. The definition of burnout continues to be debated across research, but this study agrees with conceptualization by Kristensen et al. (2005) that views burnout as physical exhaustion and emotional turmoil due to continuous and strenuous academic demands. The results of this study were similar to results of the study by Maroco and Campos (2012) that recognized the presence

and validity of personal burnout in the college student population. The levels of burnout that were measured are concerning due to the potential for burnout to have a negative impact on student's self-efficacy, academic self-concept and performance, dropout rates, and psychological distress at the end of the semester when final exams and projects can have a significant impact on student grades (Dyrbye et al., 2010; Maroco & Campos, 2012).

Previous research that compared resident advisors and general students on measures of burnout found that resident advisors had higher levels of personal accomplishment than general students (Hetherington et al., 1989). Conversely, this study found no statistically significant differences between resident advisors and residential students on burnout. This discrepancy could possibly be related to differences in the measures of burnout and the ways the different surveys conceptualize burnout and its components.

This was the first study to measure burnout in RAs using the Copenhagen Burnout Inventory. Previous research on burnout in RAs has used the Maslach Burnout Inventory (Benedict & Mondloch, 1989; Fuehrer & McGonagle, 1988; Hetherington et al., 1989; Nowack et al.,1985; Stoner, 2017) and examined the differences in the dimensions of depersonalization, emotional exhaustion, and personal accomplishment across genders, population type, and building style. In contrast, this study measured RA burnout in the areas of personal burnout, work-related burnout, and client-related burnout. Resident advisors only had clinically significant scores in the personal burnout domain of the Copenhagen Burnout Inventory. The results signify that they were "burned out" from their academic and life responsibilities and experiencing physical and emotional fatigue from their personal lives, similar to residential students. This is notable because it shows that RAs are experiencing a level of exhaustion separate from their duties as resident advisors that should be taken into consideration of their

well-being as employees and monitored to ensure that it does not negatively impact their ability to perform their job responsibilities.

When measuring how RAs felt about burnout related to their work, RAs did not have clinically significant scores on measures of work-related and client-related burnout. This suggests that they did not attribute their fatigue to their job requirements or their work with their residents. This finding was unexpected due to the complex demands and emotional toll of the position and is also at odds with earlier research that showed resident advisors experiencing symptoms of burnout in relation to their position as RAs in multiple studies (Benedict & Mondloch, 1989; Fuehrer & McGonagle, 1988; Hardy & Dodd, 1998; Hetherington et al., 1989; Paladino et al., 2005; Stoner, 2017).

The potential difference in results could be caused in part by the use of a different burnout measuring tool, the Copenhagen Burnout Inventory, as opposed to previous research studies that relied on the Maslach Burnout Inventory. Criticisms about the Maslach Burnout Inventory's construct validity across its domains and its propensity to potentially measuring side effects of burnout, personal accomplishment or self-efficacy, as a construct (Kristensen et al., 2005; Maroco & Campos, 2012) led the researcher to use The Copenhagen Burnout Inventory. The CBI separates personal and work-related aspects of burnout in ways that the Maslach Burnout Inventory does not, which could contradict earlier research results using the Maslach Burnout Inventory that attributed burnout to work factors that might actually be caused by other factors. Alternatively, a critique of the Copenhagen Burnout Inventory is that it does not measure for low or moderate levels of burnout in respondents. Of the studies that used the MBI with resident advisors and reported their scores, the scores in the emotional exhaustion, depersonalization, and personal accomplishment subscales ranged from moderate to high

depending on the study (Hardy & Dodd, 1998; Hetherington et al., 1989; Stoner, 2017). The presence of the moderate scores in other studies indicates that there may be a lower, but still impactful level of burnout that RAs believe is connected to their employment as RAs that may not have been reflected in this study.

Resident Advisors' scores might also reflect how their academic and personal needs supersede their stress from the job at the end of the semester. Galbraith and Merril (2012) support the notion that students' burnout from work decreases over time, in comparison to academic burnout as students cope with multiple responsibilities by decreasing attention and concern about their jobs. Despite continuing to have demands at the end of the semester, the RA work schedule and workload is typically flexible and streamlined which can give RAs the time they need to handle their academic concerns and decrease potential work burdensomeness. Additionally, RAs could begin to have less contact with their residents as the residents become busier themselves and begin the move out processes. This is a potential concern for Residence Life staff as any decrease in the attention and concern that RAs have for their job responsibilities could potentially cause harm for the residential buildings and the people who live in them. It is also important for residence life staff to recognize and understand the experience RAs have as students is significant and may not be easily managed.

Perceived Stress

Multiple studies have confirmed the presence of stress in the collegiate population (Byrd & McKinney, 2012; Hudd et al., 2000), and it is one of the highest self-reported mental health symptoms by college students (American College Health Association, 2016). The levels of perceived stress that students experience are less definitive. While there are no official cutoff points that denote differing levels of perceived stress, the results of this study confirm the

presence of considerable levels of perceived stress in RAs and residential students and are in line with previous research measuring the perceived stress of college students (S. Cohen et al., 1983; Hubbs et al., 2012; Jones et al., 2016; Stoliker & Lafreniere, 2015). With higher scores indicating higher levels of perceived stress, students in this study reported higher perceived stress in comparison to students in some previous studies (*M*=19.2; Leppink et al., 2016), but lower than others (*M*=27.9; Stoliker & Lafreniere, 2015). These results were surprising given that the survey was given at a busy time of the academic year; however, the discrepancy could possibly be attributed to the varying sample sizes, institution sizes, and different living situations (on campus versus at home with their parents). These results are also in line with the number of stressors that are present for college students across multiple domains as well as the additional stressors that accompany the end of the academic year (Lee & Jang, 2015b). The levels of perceived stress are concerning due to the fact that studies have suggested that students' perceived stress can impact multiple physical, emotional, and academic outcomes. Considering the impact that stress has on academic performance, colleges and universities may benefit from investing in more preventative measures and support services to help students learn better ways to cope, especially at more stressful academic periods.

This was the second study to measure perceived stress in RAs using the Perceived Stress Scale. Previous research on perceived stress in RAs found RAs experience perceived stress in relation to their work with residents (Swanbrow Becker & Drum, 2015) and the resident advisors in that study reported lower pre- and post-study PSS scores (*M*=15;17) than RAs in this study. These results were surprising given that both groups of RAs were surveyed at the end of the semester; however, differences in the scores may be influenced by the gender composition of the groups. The gender division in Swanbrow Becker and Drum's study was opposite of this study

and featured almost double the number of female RAs to male RAs which could have had an influence on the scores. Other research on stress in RAs used varying, non-validated survey tools (Brunson & McKee, 1982; Deluga & Winters, 1991) and measured previous generations of college students making it not as representative of the current stressors that college students face. In this study, the researcher examined how stressful RAs perceived their current experiences to be and found that RAs have levels of perceived stress similar to that of the residential population. This finding is significant in that it sheds more light on the RA experience and is a point of concern for Residence Life staff. While the impact of perceived stress on students has been studied, more research needs to be done to better understand the potential impact of perceived stress on RAs and their job performance.

Resilience

As the rates of mental health issues in college students increase, it is important for college and universities to find ways to support their students in multiple ways. One method that has shown promise is by helping students utilize their resilience skills to better manage the challenging aspects of college life. While there was some variation in the resilience scores of the college students in this study, most of the students were found to have moderate levels of resilience (M=127) as measured by the Scale of Protective Factors, which is in the same range as the scores that were reported by the survey's original author (M=96.69; Ponce-Garcia et al., 2015). The presence of resilience indicates strengths in the areas of social support, social skills, prioritizing and planning behavior, and goal efficacy. Some other studies that measured resilience in college students used the Connor-Davidson Resilience Scale and also found moderate levels of resilience in students (Campbell-Sills & Stein, 2007; Hartley, 2013). Students is this study may have benefited from the support services provided by the university that

promote aspects of resilience through campus organizations, academic support program, and health and wellness program that include peer mentoring, tutoring and advising, leadership training, mental health counseling, and recreational services. The institution was well-funded and provided a variety of benefits, especially for underrepresented and underserved student populations that are not available on all campuses. Conversely, the large size of the institution may have made it harder for some students to access needed resources and feel connected to the institution. Given the benefits of resilience to help students cope with adversity and persist academically (Hartley, 2013; Klibert et al., 2014), it may be helpful for colleges and universities to provide a variety of support services for their students, encourage social connectivity among students, increase awareness and understanding of the benefits of resilience, and teach resilience skills to help college students better manage their mental health and academic stressors.

This study was the first study to measure resilience in resident advisors and the first to use the Scale of Protective Factors with this population. The resident advisors were found to exhibit moderate levels of resilience. Multiple aspects of the resident advisor position may promote resilience in this population including the job and team structure, supervisor support, and connection to university resources. The RA position requires RAs to work closely with others including their teammates and residents, which could help improve their social skills including communication and empathy. RAs work on teams and the structure of the role necessitates continual teamwork and communication. They also have supervisors who are full-time professionals who provide weekly or bi-weekly check-ins focused on ensuring their professional and emotional well-being and can provide quick referrals to university resources. Due to the various responsibilities of the position, most RAs receive training on time management and organizational skills that will help them to be successful as RAs and as

students. These aspects of the position may help facilitate increases in resilience for RAs, provide buffers for RA mental health, burnout, and perceived stress, and be helpful in maintaining job performance at stressful periods; however, there is need for more research into the benefits of resilience in the RA population.

Limitations

There were several limitations in this study that should be acknowledged. One limitation is the sample size of the resident advisor population. The sample size of the RA group was too small to run all of the analyses about the possible influences of certain community characteristics of aspects of RA mental health. Additionally, the uneven group sizes limited the ability to compare across the RA and residential student groups. Future research should include a larger sample of resident advisors to increase the types of research analyses that can be done and improve the statistical power of the results. In addition, the study was conducted at just one campus in the Southeast and may not be generalizable to all college and university campuses. A third limitation is the timing of the surveys. The surveys were administered the week before finals when the level of academic responsibility increases, and levels of stress are typically higher. It is unclear how much the time of year impacted the results. Future research should work to survey students at the mid-point of the semester and also possibly at the beginning of the semester to measure change in mental health over time. A fourth limitation is the differences between genders. There were almost double the numbers of males versus females in the study (64% vs 34%) which is not representative of most college student populations and limits the generalizability to other institutions. A fifth limitation of the present study is social desirability. Although the survey was administered anonymously and confidentially, students, especially the

resident advisors, may have answered questions in a way that they perceive would be viewed more favorably by the researcher.

Implications of the Study

This study expands the literature on the mental health and well-being of resident advisors, an under-researched, but vital population. The current study was the first to examine the mental health of resident advisors independently and in conjunction with perceived stress and burnout. This is also the first study to complete a quantitative comparison of resident advisors to undergraduate residential college students to see if there is a statistically significant difference on mental health variables other than burnout. Research has shown that college students experience symptoms of mental health issues at high levels which makes it unsurprising to find these symptoms in the general student population, but it is important to better understand how RAs are similar and different from the residential students due to their significant responsibilities and the importance of their role on campus.

It is critical to note that the RAs exhibited clinically significant levels of mental health, burnout, and perceived stress. This is an important consideration for university staff and residence life departments as the mental health of resident advisors should not overlooked. Resident advisors are students and staff members. From a student standpoint, the concerns about RAs' mental health are similar to those of residential students; however, from a staff standpoint, concerns about RAs' mental health are higher due to the importance of their role in the university setting. Resident advisors are first responders and rule enforcers who work to ensure the safety of buildings and their residents and any impaired job performance can have disastrous consequences. The mental health of resident advisors should be a focal point for residence life departments and include training for supervisors and RAs and regular monitoring of staff mental

health. Trainings for RA supervisors could include learning how to spot warning signs of mental health challenges in their staff, listening skills and supportive management styles, and how to help RAs get connected to appropriate resources. Ideally there should be trainings for RAs about aspects of their mental health that include partnerships with college counseling center staff and ensure RAs know how to identify warning signs in their mental health and get connected to helpful resources. Resident advisors should also be taught to recognize and enforce their boundaries and continually practice resilience and self-care skills so that they can protect their mental health from consequences of working as an RA.

This study provided a snapshot of the mental health of college students at the end of the school year and the results are concerning in multiple areas. This provides a reminder for school administrators, faculty, and staff on what to be mindful of regarding students' and RAs' mental health and well-being. School administrators should be aware that students may not be as likely to use campus resources or consistent coping skills use during stressful times of the year which could further exacerbate mental health issues and work to decrease the gap between students dealing with mental illness and those who seek services. RA supervisors should monitor for any RA mental health issues that may cause difficulties in RA functioning and encourage the use of coping skills and campus resources to help RAs navigate challenges that could cause further mental health complications.

As mental health concerns in college students increase, colleges and universities will have to continue to find ways to support them. Counseling center utilization rates have increased in recent years but are still below the rates of reported psychological distress (American College Health Association, 2016; Eisenberg et al., 2011) indicating that a multi-dimensional approach involving multiple stakeholders and departments to supporting students may be needed. Colleges

and universities should work to improve their campus' understanding of mental health by expanding the responsibility for student mental health from the college counseling center to the entire campus community, using marketing and programming to improve awareness and understanding of mental health and to decrease stigmas associate with help-seeking behaviors, and increasing gatekeeper training of faculty and staff. They should also work to increase the resilience and wellness of their students through education and promote social connectedness and connection to the institution. This can be done by building wellness and resilience into academic courses and student programming, promoting inclusiveness and diversity, maintaining consistent outreach to isolated students, providing support for a variety of student organizations, and working to have diverse programming and safe spaces on campus. Coping skills and resilience have also been shown to positively influence mental health and academic success (Byrd & McKinney, 2012; Hartley, 2011). Resilience training could be used to help students manage their mental health and college and universities should be consider integrating it through programming and education campaigns alongside the campus resources students are encouraged to use. Student support services that provide emotional, academic, and physical aspects are typically present on campuses, but they should be well-rounded, available for underrepresented and underserved student populations, and should be marketed to and easily accessible to students.

Recommendations for Future Research

This was the first study to look specifically at multiple aspects of resident advisor mental health. This topic should be further studied due to the importance of the RA position and the desire of universities and colleges to ensure student success. The level of responsibility that RAs are required to have continues to increase as does the severity of issues that RAs are required to respond to, yet the bulk of research on this important group of student workers is from the 1980s.

As aspects of RA mental health are explored, it would also be worthwhile to explore the impact of mental health, stress, and burnout on RA decision making and job performance. Additional research could help higher education administrators better understand how they can support their front-line employees and ensure adequate care and assistance for residential students.

Due to a small sample size of resident advisors the researcher was not able to fully explore multiple aspects of the resident advisor position in relation to mental health. Future research should look more closely at the resident advisor position and the different aspects of the position that change due to population type and building style as well as the potential benefits and challenges of the role. Additionally, it would be helpful to compare resident advisor populations at different colleges and universities. While the job position, functions, and responsibilities are similar across institutions, the actual job requirements and challenges vary across type, size, and location of schools. Future research might also explore the different responsibilities that students may have and work to better match residential students who have responsibilities and work contact hours equivalent to the RA position to do a better causal comparison. This could include taking into account residential students' part-time and full -time jobs and extracurricular activities as studies have found that work can be an additional stressor that negatively influences students' academic success (American College Health Association, 2016).

Concluding Remarks

The mental health of college students continues to be an important factor that influences multiple aspects of the student experience. Resident advisors straddle the divide between student and staff member and have multiple, conflicting roles that could attach additional stressors to their responsibilities as students. Despite the significance of their role, the mental health of

resident advisors has not been previously researched and there few studies have compared RAs to residential students on multiple measures of mental health. This study aimed to contribute to the literature and understanding of the mental health of resident advisors.

The results of this study indicate that there were not statistically significant differences between resident advisors and residential students on measures of mental health, perceived stress, and burnout; however, resident advisors and residential students both scored in statistically significant ranges for all of the mental health measures. The results of this study are in line with most research on mental health, perceived stress, and burnout in college students, but this study differs from previous literature on the levels of burnout that were identified in resident advisors. Further research is necessary to better understand multiple aspects of RA mental health and to identify ways for colleges and universities to support this population.

References

Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology*, *14*(3), 323–330. https://doi.org/10.1080/0144341940140306

American College Health Association. (2009). American college health association-National college health assessment spring 2008 reference group data report (Abridged). *Journal of American College Health*, *57*(5), 477–488. https://doi.org/10.3200/JACH.57.5.477-488

American College Health Association. (2020). *National college health assessment III: Undergraduate student reference group executive summary Spring 2020.* https://www.acha.org/documents/ncha/NCHA-III_Spring_2020_Undergraduate_Reference_Group_Executive_Summary.pdf

American Psychological Association. (2014). *The road to resilience*. American Psychological Association. http://www.apa.org/helpcenter/road-resilience.aspx

Arnold, K. D., & King, I. C. (1997). *College student development and academic life: Psychological, intellectual, social, and moral issues*. Garland Publishing.

Benedict, J., & Mondloch, G. (1989). Factors affecting burnout in paraprofessional residence hall staff members. *Journal of College Student Development*, *30*(4), 293–297.

Benton, S. A., Robertson, J. M., Tseng, W. C., Newton, F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology-Research and Practice*, *34*(1), 66–72. https://doi.org/10.1037/0735-7028.34.1.66

Berwick, D. M., Murphy, J. M., Goldman, P. A., Ware, J. E., Barsky, A. J., & Weinstein, M. C. (1991). Performance of a five-item mental health screening test. *Medical Care*, *29*(2), 169–176. https://doi.org/10.1097/00005650-199102000-00008

Blanco, C., Okuda, L., Wright, C., Hasin, D., Grant, B., Liu, S., & Olfson, M. (2008). Mental health of college students and their non–college-attending peers: Results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry*, *65*(12), 1429–1437. https://doi.org/10.1001/archpsyc.65.12.1429

Blimling, G. (2003). *The Resident Assistant: Applications and strategies for working with college students in residence halls*. Kendall Hunt.

Blimling, G. (2015). *Student learning in college residence halls: What works, what doesn't, and why*. Jossey-Bass.

Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2007). Anxiety disorders and suicidal behaviours in adolescence and young adulthood: Findings from a longitudinal study. *Psychological Medicine*, *37*(3), 431–440. https://doi.org/10.1017/S0033291706009147

Borritz, M., & Kristensen, T. (2004). *Copenhagen burnout inventory: Normative data from a representative Danish population on personal burnout and results from the PUMA study on personal burnout, work burnout, and client burnout*. http://www.arbejdsmiljoforskning.dk/upload/omi/copenhagen%20burnout%20inventory%20-%20normative%20data%20from%20a%20representative%20danish%20population.pdf

Bowman, N. A., Jarratt, L., Jang, N., & Bono, T. J. (2019). The unfolding of student adjustment during the first semester of college. *Research in Higher Education*, 60(3), 273–292.

Bowman, R. L., & Bowman, V. E. (1995). Academic courses to train resident assistants. *Journal of College Student Development*, *36*(1), 39–46.

Bray, N. J., Braxton, J. M., & Sullivan, A. S. (1999). The influence of stress-related coping strategies on college student departure decisions. *Journal of College Student Development*, *40*(6), 645–657.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3–44). Erlbaum.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In *Handbook of Child Psychology*. John Wiley & Sons, Inc. https://doi.org/10.1002/9780470147658.chpsy0114

Brunson, B. I., & McKee, K. D. (1982). Crisis intervention and stress management: Giving resident advisors what they need. *Journal of College Student Personnel*, *23*(6), 547–548.

Burt, K. B., & Paysnick, A. A. (2014). Identity, stress, and behavioral and emotional problems in undergraduates: Evidence for interaction effects. *Journal of College Student Development*, *55*(4), 368–384. https://doi.org/10.1353/csd.2014.0036

Byrd, D. R., & McKinney, K. J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health*, *60*(3), 185-193. https://doi.org/10.1080/07448481.2011.584334

Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, *44*(4), 585–599. https://doi.org/10.1016/j.brat.2005.05.001

Campos, J. A. D. B., Zucoloto, M. L., Bonafé, F. S. S., Jordani, P. C., & Maroco, J. (2011). Reliability and validity of self-reported burnout in college students: A cross randomized comparison of paper-and-pencil vs. online administration. *Computers in Human Behavior*, *27*(5), 1875–1883. https://doi.org/10.1016/j.chb.2011.04.011

Canto, A. I., Cox, B. E., Osborn, D., Becker, M. S., & Hayden, S. (2017). College students in crisis: Prevention, identification, and response options for campus housing professionals. *Journal of College and University Student Housing*, 43(2), 44–57.

Carney, C., McNeish, S., & McColl, J. (2005). The impact of part time employment on students' health and academic performance: A Scottish perspective. *Journal of Further and Higher Education*, *29*, 307–319. https://doi.org/10.1080/03098770500353300

Chung, E., Turnbull, D., & Chur-Hansen, A. (2017). Differences in resilience between "traditional" and "non-traditional" university students. *Active Learning in Higher Education*, *18*(1), 77–87. https://doi.org/10.1177/1469787417693493

Civitci, A. (2015). Perceived stress and life satisfaction in college students: Belonging and extracurricular participation as moderators. *Procedia - Social and Behavioral Sciences*, *205*, 271–281. https://doi.org/10.1016/j.sbspro.2015.09.077

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. Academic Press.

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

Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, *61*(2), 75–86. https://doi.org/10.1080/07448481.2012.754757

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76–82. https://doi.org/10.1002/da.10113

Council for the Advancement of Standards in Higher Education. (2015). *CAS Professional Standards for Higher Education* (9th ed.). Council for the Advancement of Standards in Higher Education.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th edition). SAGE Publications, Inc.

Cvetkovski, S., Jorm, A. F., & Mackinnon, A. J. (2018). Student psychological distress and degree dropout or completion: A discrete-time, competing risks survival analysis. *Higher Education Research & Development*, *37*(3), 484–498. https://doi.org/10.1080/07294360.2017.1404557

Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, *30*(5), 479–495. https://doi.org/10.1016/j.cpr.2010.03.003

Deluga, R. J., & Winters, J. J. (1990). The impact of role ambiguity and conflict on resident assistants. *Journal of College Student Development*, *31*(3), 230–236.

Deluga, R. J., & Winters, J. J. (1991). Why the aggravation? Reasons students become resident assistants, interpersonal stress, and job satisfaction. *Journal of College Student Development*, *32*(6), 546–552.

DeRosier, M. E., Frank, E., Schwartz, V., & Leary, K. A. (2013). The potential role of resilience education for preventing mental health problems for college students. *Psychiatric Annals*, *43*(12), 538–544. https://doi.org/10.3928/00485713-20131206-05

Digest of Education Statistics. (2020a). *Average undergraduate tuition and fees and room and board rates charged for full-time students in degree-granting postsecondary institutions, by level and control of institution: 1963-64 through 2019-20*. https://nces.ed.gov/programs/digest/d20/tables/dt20_330.10.asp

Digest of Education Statistics. (2020b). *Full-time, first-time degree/certificate-seeking undergraduate students enrolled in degree-granting postsecondary institutions, by participation and average amount awarded in financial aid programs, and control and level of institution: 2000-01 through 2018-19*. https://nces.ed.gov/programs/digest/d20/tables/dt20_331.20.asp

Digest of Education Statistics. (2020c). *Percentage of college students 16 to 24 years old who were employed, by attendance status, hours worked per week, and selected characteristics: 2000, 2010, and 2019*. https://nces.ed.gov/programs/digest/d20/tables/dt20_503.40.asp

Digest of Education Statistics. (2021a). *Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, sex of student, level and control of institution, and attendance status of student: 2019*. https://nces.ed.gov/programs/digest/d20/tables/dt20_303.60.asp

Digest of Education Statistics. (2021b). *Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, sex, attendance status, and race/ethnicity or nonresident alien status of student: Selected years, 1976 through 2019*. https://nces.ed.gov/programs/digest/d20/tables/dt20_306.10.asp

Dwyer, A. L., & Cummings, A. L. (2001). Stress, self-efficacy, social support, and coping strategies in university students. *Canadian Journal of Counselling*, *35*(3), 208–220.

Dyrbye, L. N., Thomas, M. R., Power, D. V., Durning, S., Moutier, C., Massie, F. S. Jr., Harper, W., Eacker, A., Szydlo, D. W., Sloan, J. A., & Shanafelt, T. D. (2010). Burnout and serious thoughts of dropping out of medical school: A multi-institutional study. *Academic Medicine*, *85*(1), 94–102. https://doi.org/10.1097/ACM.0b013e3181c46aad

Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care*, 45(7), 594-601. https://doi.org/10.1097/MLR.0b013e31803bb4c1

Eisenberg, D., Hunt, J., Speer, N., & Zivin, K. (2011). Mental health service utilization among college students in the United States. *Journal of Nervous and Mental Disease*, *199*(5), 301–308. https://doi.org/10.1097/NMD.0b013e3182175123

Elleven, R. K., Allen, J., & Wircenski, M. (2001). Resident assistant training: A southwestern perspective. *College Student Journal*, *35*(4), 609.

Everett, D. D., & Loftus, Z. V. (2011). Resident assistants as rule enforcers versus friends: An exploratory study of role conflict. *Journal of College and University Student Housing*, *37*(2), 72–89.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/bf03193146

Feldman, K. A. (1969). Studying the impacts of colleges on students. *Sociology of Education*, *42*(3), 207-237. https://doi.org/10.2307/2111978

Fink, J. E. (2014). Flourishing: Exploring predictors of mental health within the college environment. *Journal of American College Health*, *62*(6), 380–388. https://doi.org/10.1080/07448481.2014.917647

Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, *30*(1), 159–165.

Fuehrer, A., & McGonagle, K. (1988). Individual and situational factors as predictors of burnout among resident assistants. *Journal of College Student Development*, *29*(3), 244–249.

Galbraith, C. S., & Merrill, G. B. (2012). Academic and work-related burnout: A longitudinal study of working undergraduate university business students. *Journal of College Student Development*, *53*(3), 453–463. https://doi.org/10.1353/csd.2012.0044

Gallagher, R. (2014). *2014 National Survey of College Counseling Centers*. http://www.collegecounseling.org/wp-content/uploads/NCCCS2014_v2.pdf

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

Giggie, M. A. (2015). Virginia Tech as a sentinel event: The role of psychiatry in managing emotionally troubled students on college and university campuses. *Harvard Review Of Psychiatry*, *23*(6), 413–425. https://doi.org/10.1097/HRP.0000000000000088

Goodwin, R., Fergusson, D., & Horwood, L. (2004). Association between anxiety disorders and substance use disorders among young persons: Results of a 21-year longitudinal study. *Journal of Psychiatric Research*, *38*(3), 295–304. https://doi.org/10.1016/j.jpsychires.2003.09.002

Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai Archives of Psychiatry*, *25*(6), 390–394. https://doi.org/10.3969/j.issn.1002-0829.2013.06.009

Hardy, S. E., & Dodd, D. K. (1998). Burnout among university resident assistants as a function of gender and floor assignment. *Journal of College Student Development*, *39*(5), 499–501.

Hartley, M. T. (2011). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, *59*(7), 596–604. https://doi.org/10.1080/07448481.2010.515632

Hartley, M. T. (2012). Assessing and promoting resilience: An additional tool to address the increasing number of college students with psychological problems. *Journal of College Counseling*, *15*(1), 37–51. https://doi.org/10.1002/j.2161-1882.2012.00004.x

Hartley, M. T. (2013). Investigating the relationship of resilience to academic persistence in college students with mental health issues. *Rehabilitation Counseling Bulletin*, *56*(4), 240–250. https://doi.org/10.1177/0034355213480527

Healthy Minds Network. (2020). *The healthy minds study: 2020 winter/spring data report.* https://healthymindsnetwork.org/wp-content/uploads/2020/08/w2020_HMS_national_Final.pdf

Hetherington, C., Oliver, M., & Phelps, C. (1989). Resident assistant burnout: Factors of job and gender. *Journal of College Student Development*, *30*(3), 266–269.

Houston, J. B., First, J., Spialek, M. L., Sorenson, M. E., Mills-Sandoval, T., Lockett, M., First, N. L., Nitiéma, P., Allen, S. F., & Pfefferbaum, B. (2017). Randomized controlled trial of the Resilience and Coping Intervention (RCI) with undergraduate university students. *Journal of American College Health*, *65*(1), 1–9. https://doi.org/10.1080/07448481.2016.1227826

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Hubbs, A., Doyle, E. I., Bowden, R. G., & Doyle, R. D. (2012). Relationships among self-esteem, stress, and physical activity in college students. *Psychological Reports*, *110*(2), 469–474. https://doi.org/10.2466/02.07.09.PR0.110.2.469-474

Hudd, S., Dumlao, J., Erdmann-Sager, D., Murray, D., Phan, E., Soukas, N., & Yokozuka, N. (2000). Stress at college: Effects on health habits, health status and self-esteem. *College Student Journal*, *34*(2), 217–227.

Hui Chian Teh, Archer, J. A., Weining Chang, & SH Annabel Chen. (2015). Mental well-being mediates the relationship between perceived stress and perceived health. *Stress & Health: Journal of the International Society for the Investigation of Stress*, *31*(1), 71–77. https://doi.org/10.1002/smi.2510

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, *46*(1), 3–10. https://doi.org/10.1016/j.jadohealth.2009.08.008

Hurst, C. S., Baranik, L. E., & Daniel, F. (2013). College student stressors: A review of the qualitative research. *Stress & Health: Journal of the International Society for the Investigation of Stress*, *29*(4), 275–285. https://doi.org/10.1002/smi.2465

Hysenbegasi, A., Hass, S. L., & Rowland, C. R. (2005). The impact of depression on the academic productivity of university students. *Journal of Mental Health Policy and Economics*, *8*(3), 145–151.

IBM Corp. (2013). *IBM SPSS Statistics for Windows* (22.0) [Computer software]. IBM Corp.

Institute of International Education. (2020). *International student enrollment trends, 1948/49-2019/20.* Open Doors Report on International Educational Exchange. Retrieved April 25, 2021, from https://opendoorsdata.org

Internal Consistency. (2018). In *APA Dictionary of Psychology*. American Psychological Association. https://dictionary.apa.org/internal-consistency

Jacobs, S. R., & Dodd, D. (2003). Student burnout as a function of personality, social support, and workload. *Journal of College Student Development*, *44*(3), 291–303. https://doi.org/10.1353/csd.2003.0028

Jayalakshmi, V., & Magdalin, S. (2015). Emotional intelligence, resilience and mental health of women college students. *Journal of Psychosocial Research*, *10*(2), 401–408.

Jones, K., Mendenhall, S., & Myers, C. A. (2016). The effects of sex and gender role identity on perceived stress and coping among traditional and nontraditional students. *Journal of American College Health*, *64*(3), 205–213. https://doi.org/10.1080/07448481.2015.1117462

Jöreskog, K. G., & Sörbom, D. (2015). *LISREL 9.20 for Windows*. Scientific Software International, Inc.

Kadison, R., & DiGeronimo, T. F. (2004). *College of the overwhelmed: The campus mental health crisis and what to do about it*. Jossey-Bass.

Kelly, M. J., Dunstan, F. D., Lloyd, K., & Fone, D. L. (2008). Evaluating cutpoints for the MHI-5 and MCS using the GHQ-12: A comparison of five different methods. *BMC Psychiatry*, *8*(1), 10. https://doi.org/10.1186/1471-244X-8-10

Kerr, S., Johnson, V. K., Gans, S. E., & Krumrine, J. (2004). Predicting adjustment during the transition to college: Alexithymia, perceived stress, and psychological symptoms. *Journal of College Student Development*, *6*, 593. https://doi.org/10.1353/csd.2004.0068

Kessler, R., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national

comorbidity survey replication. *Archives of General Psychiatry*, *62*(6), 593–602. https://doi.org/10.1001/archpsyc.62.6.593

Kessler, R. C., Foster, C. L., Saunders, W. B., & Stang, P. E. (1995). Social consequences of psychiatric disorders I: Educational attainment. *The American Journal of Psychiatry*, *152*(7), 1026–1032. https://doi.org/10.1176/ajp.152.7.1026

Keyes, C. L. M., Eisenberg, D., Perry, G. S., Dube, S. R., Kroenke, K., & Dhingra, S. S. (2012). The relationship of level of positive mental health with current mental disorders in predicting suicidal behavior and academic impairment in college students. *Journal of American College Health*, *60*(2), 126–133. https://doi.org/10.1080/07448481.2011.608393

Kisch, J., Leino, E. V., & Silverman, M. M. (2005). Aspects of suicidal behavior, depression, and treatment in college students: Results from the spring 2000 National College Health Assessment Survey. *Suicide and Life-Threatening Behavior*, *35*(1), 3–13. https://doi.org/10.1521/suli.35.1.3.59263

Klibert, J., Lamis, D. A., Collins, W., Smalley, K. B., Warren, J. C., Yancey, C. T., & Winterowd, C. (2014). Resilience mediates the relations between perfectionism and college student distress. *Journal of Counseling & Development*, *92*(1), 75–82. https://doi.org/10.1002/j.1556-6676.2014.00132.x

Koch, V. A. (2016). Current practices in resident assistant training. *Journal of College & University Student Housing*, 42(3), 80–97.

Koeske, G. F., & Koeske, R. D. (1991). Student "burnout" as a mediator of the stress-outcome relationship. *Research in Higher Education*, *32*(4), 415-431.

Kristensen, T., Borritz, M., Villadsen, E., & Christensen, K. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, *19*(3), 192–207. https://doi.org/10.1080/02678370500297720

Lee, J., & Jang, S. (2015). An exploration of stress and satisfaction in college students. *Services Marketing Quarterly*, *36*(3), 245–260. https://doi.org/10.1080/15332969.2015.1046774

Leppink, E. W., Odlaug, B. L., Lust, K., Christenson, G., & Grant, J. E. (2016). The young and the stressed: Stress, impulse control, and health in college students. *The Journal of Nervous and Mental Disease*, *204*(12), 931–938. https://doi.org/10.1097/NMD.0000000000000586

Lindsey, C. (2014). Trait anxiety in college students: The role of the approval seeking schema and separation individuation. *College Student Journal*, *48*(3), 407–418.

Liu, C. H., Stevens, C., Wong, S., Yasui, M., & Chen, J. A. (2019). The prevalence and predictors of mental health diagnoses and suicide among U.S. college students: Implications for addressing disparities in service use. *Depression and Anxiety*, 36(1), 8–17. https://doi.org/10.1002/da.22830

Ma, J., Pendler, M., & Libassi, C.J. (2020). *Trends in college pricing and student aid 2020*. College Board.

Mackenzie, S., Wiegel, J. R., Mundt, M., Brown, D., Saewyc, E., Heiligenstein, E., Harahan, B., & Fleming, M. (2011). Depression and suicide ideation among students accessing campus health care. *American Journal of Orthopsychiatry*, *81*(1), 101–107. https://doi.org/10.1111/j.1939-0025.2010.01077.x

Madewell, A. N., & Ponce-Garcia, E. (2016). Assessing resilience in emerging adulthood: The Resilience Scale (RS), Connor–Davidson Resilience Scale (CD-RISC), and Scale of

Protective Factors (SPF). *Personality and Individual Differences*, *97*, 249–255. https://doi.org/10.1016/j.paid.2016.03.036

Mahmoud, J. S. R., Staten, R. "Topsy," Lennie, T. A., & Hall, L. A. (2015). The relationships of coping, negative thinking, life satisfaction, social support, and selected demographics with anxiety of young adult college students. *Journal of Child and Adolescent Psychiatric Nursing*, *28*(2), 97–108. https://doi.org/10.1111/jcap.12109

Maroco, J., & Campos, J. A. D. B. (2012). Defining the student burnout construct: A structural analysis from three burnout inventories. *Psychological Reports*, *111*(3), 814–830. https://doi.org/10.2466/14.10.20.PR0.111.6.814-830

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, *2*, 99–113. https://doi.org/10.1002/job.4030020205

Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1981). Maslach Burnout Inventory [Third Edition Manual]. *MBI-HSS*. https://librarylink.uncc.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=mmt&AN=test.1996&login.asp&site=ehost-live&scope=site

Masten, A. (2001). Ordinary magic—Resilience processes in development. *American Psychologist*, *56*(3), 227–238. https://doi.org/10.1037//0003-066x.56.3.227

Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, *2*(4), 425–444. https://doi.org/10.1017/S0954579400005812

Maulik, P., Mendelson, T., & Tandon, S. (2011). Factors associated with mental health services use among disconnected African-American young adult population. *Journal of*

Behavioral Health Services & Research, *38*(2), 205–220. https://doi.org/10.1007/s11414-010-9220-0

McCabe, C. J., Thomas, K. J., Brazier, J. E., & Coleman, P. (1996). Measuring the mental health status of a population: A comparison of the GHQ-12 and the SF-36 (MHI-5). *The British Journal of Psychiatry*, *169*(4), 516–521. https://doi.org/10.1192/bjp.169.4.516

McIntyre, D., Rowland, M., Choi, K., & Sarkin, A. (2014). Gender differences in the relationships between mental health symptoms, impairment, and treatment-related behaviors among college students. *Mental Health and Prevention*, 2(3–4), 80–85. https://doi-org.librarylink.uncc.edu/10.1016/j.mhp.2014.11.001

Megivern, D., Pellerito, S., & Mowbray, C. (2003). Barriers to higher education for individuals with psychiatric disabilities. *Psychiatric Rehabilitation Journal*, *26*(3), 217–231. https://doi.org/10.2975/26.2003.217.231

Milfont, T. L., Denny, S., Ameratunga, S., Robinson, E., & Merry, S. (2008). Burnout and wellbeing: Testing the Copenhagen Burnout Inventory in New Zealand teachers. *Social Indicators Research*, *89*(1), 169–177. https://doi.org/10.1007/s11205-007-9229-9

Miller, C. J., & Conyne, R. K. (1980). Paraprofessional problems: A comparison of residence hall paraprofessionals and regular students. *Journal of College and University Student Housing*, *10*(1), 10–12.

Miller, K., Danner, F., & Staten, R. (2008). Relationship of work hours with selected health behaviors and academic progress among a college student cohort. *Journal of American College Health*, *56*(6), 675–679. https://doi.org/10.3200/JACH.56.6.675-679

Mounsey, R., Vandehey, M. A., & Diekhoff, G. M. (2013). Working and non-working university students: Anxiety, depression, and grade point average. *College Student Journal,* 47(2), 379-389.

Mowbray, C. T., Megivern, D., Mandiberg, J. M., Strauss, S., Stein, C. H., Collins, K., Kopels, S., Curlin, C., & Lett, R. (2006). Campus mental health services: Recommendations for change. *American Journal of Orthopsychiatry*, *76*(2), 226–237. https://doi.org/10.1037/0002-9432.76.2.226

National Center for Education Statistics. (2020a). *The condition of education-College student employment (2020)*. Retrieved April 25, 2021, from http://nces.ed.gov/programs/coe/indicator_cha.asp

National Center for Education Statistics. (2020b). *The condition of education-Undergraduate Enrollment (2020)*. Retrieved April 25, 2021, from http://nces.ed.gov/programs/coe/indicator_cha.asp

Nowack, K. M., Gibbons, J.M., & Hanson, A.L. (1985). Factors affecting burnout and job performance of resident assistants. *Journal of College Student Personnel*, *26*(2), 137–142.

Office of Undergraduate Admissions. (2018). *Niners by the numbers* [Brochure]. https://enrollment.uncc.edu/sites/enrollment.uncc.edu/files/media/Niners_by_numbers_2018-web.pdf

Paladino, D. A., Murray Jr., T. L., Newgent, R. A., & Gohn, L. A. (2005). Resident assistant burnout: Factors impacting depersonalization, emotional exhaustion, and personal accomplishment. *Journal of College & University Student Housing*, *33*(2), 18–27.

Pasco, S., Wallack, C., Sartin, R. M., & Dayton, R. (2012). The impact of experiential exercises on communication and relational skills in a suicide prevention gatekeeper-training program for college resident advisors. *Journal of American College Health*, *60*(2), 134–140. https://doi.org/10.1080/07448481.2011.623489

Ponce-Garcia, E., Madewell, A., & Kennison, S. (2015). The development of the Scale of Protective Factors: Resilience in a violent trauma sample. *Violence and Victims*, *30*(5), 735–755. https://doi.org/10.1891/0886-6708.VV-D-14-00163

Ponce Garcia, E., Madewell, A. N., & Brown, M. E. (2016). Resilience in men and women experiencing sexual assault or traumatic stress: Validation and replication of the Scale of Protective Factors. *Journal of Traumatic Stress*, *29*(6), 537–545. https://doi.org/10.1002/jts.22148

Reich, J. W., Zautra, A., & Hall, J. S. (2010). *Handbook of adult resilience*. Guilford Press.

Reingle, J., Thombs, D., Osborn, C., Saffian, S., & Oltersdorf, D. (2010). Mental health and substance use: A qualitative study of resident assistants' attitudes and referral practices. *Journal of Student Affairs Research & Practice*, *47*(3), 321–338. https://doi.org/10.2202/1949-6605.6016

Renn, K. A. (2004). *Mixed race students in college: The ecology of race, identity, and community on campus*. State University of New York Press.

Renn, K. A., & Reason, R. D. (2012). *College students in the United States: Characteristics, experiences, and outcomes* (1st ed.). Jossey-Bass.

Rimsza, M. E., & Moses, K. S. (2005). Substance abuse on the college campus. *Pediatric Clinics of North America*, *52*(1), 307–319. https://doi.org/10.1016/j.pcl.2004.10.008

Roberti, J. W., Harrington, L. N., & Storch, E. A. (2006). Further psychometric support for the 10-Item version of the Perceived Stress Scale. *Journal of College Counseling*, *9*(2), 135–147. https://doi.org/10.1002/j.2161-1882.2006.tb00100.x

Rosa, E., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, *5*(4), 243–258. https://doi.org/10.1111/jftr.12022

Schaufeli, W. B., & Greenglass, E. R. (2001). Introduction to special issue on burnout and health. *Psychology & Health*, *16*(5), 501.

Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, *14*(3), 204–220. https://doi.org/10.1108/13620430910966406

Schaufeli, W. B., Martínez, I. M., Marques Pinto, A., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of Cross-Cultural Psychology*, *33*(5), 464–481. https://doi.org/10.1177/0022022102033005003

Short, J. L., & Russell-Mayhew, S. (2009). What counsellors need to know about resiliency in adolescents. *International Journal for the Advancement of Counselling*, *31*(4), 213–227. https://doi.org/10.1007/s10447-009-9079-z

Southwick, S., Bonanno, G., Masten, A., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, *5*. https://doi.org/10.3402/ejpt.v5.25338

Steinhardt, M., & Dolbier, C. (2008). Evaluation of a resilience intervention to enhance coping strategies and protective factors and decrease symptomatology. *Journal of American College Health*, *56*(4), 445–453. https://doi.org/10.3200/JACH.56.44.445-454

Stewart, A. L., Hays, R. D., & Ware, J. E. (1988). The MOS short-form general health survey: Reliability and validity in a patient population. *Medical Care*, *26*(7), 724–735. https://doi.org/10.1097/00005650-198807000-00007

Stoliker, B. E., & Lafreniere, K. D. (2015). The influence of perceived stress, loneliness, and learning burnout on university students' educational experience. *College Student Journal*, *49*(1), 146–160.

Stoner, J. C. (2017). Revisiting resident assistant burnout: Functions of gender, community composition, choice to continue employment, and job satisfaction. *Journal of College & University Student Housing*, *44*(1), 30–47.

Swanbrow Becker, D., & Drum, D. J. (2015). The influence of suicide prevention gatekeeper training on resident assistants' mental health. *Journal of Student Affairs Research & Practice*, *52*(1), 76–88. https://doi.org/10.1080/19496591.2015.996055

Swanson, V., Broadbridge, A., & Karatzias, A. (2006). Earning and learning: Role congruence, state/trait factors and adjustment to university life. *British Journal of Educational Psychology*, *76*(4), 895–914. https://doi.org/10.1348/000709905X65009

Substance Abuse and Mental Health Services Administration. (2020). Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/reports/rpt29393/2019NSDUHFFRPDFWHTML/2019NSDUHFFR1PDFW090120.pdf.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson Education.

Thombs, D. L., Gonzalez, J. M. R., Osborn, C. J., Rossheim, M. E., & Suzuki, S. (2015). Resident assistant training program for increasing alcohol, other drug, and mental health first-aid efforts. *Prevention Science*, *16*(4), 508–517. https://doi.org/10.1007/s11121-014-0515-x

UNC Charlotte. (n.d.). *University profile*. Retrieved February 1, 2020, from https://admissions.uncc.edu/about-unc-charlotte/university-profile

van Leeuwen, C. M. C., van der Woude, L. H. V., & Post, M. W. M. (2012). Validity of the mental health subscale of the SF-36 in persons with spinal cord injury. *Spinal Cord*, *50*(9), 707–710. https://doi.org/10.1038/sc.2012.33

Vaughn, A. A., Drake, R. R., & Haydock, S. (2016). College student mental health and quality of workplace relationships. *Journal of American College Health*, *64*(1), 26–37. https://doi.org/10.1080/07448481.2015.1064126

Ware, J., & Gandek, B. (1998). Overview of the SF-36 health survey and the International Quality of Life Assessment (IQOLA) project. Journal of Clinical Epidemiology, 51(11), 903–912.

Watson, R., Deary, I., Thompson, D., & Li, G. (2008). A study of stress and burnout in nursing students in Hong Kong: A questionnaire survey. *International Journal of Nursing Studies*, *45*(10), 1534–1542. https://doi.org/10.1016/j.ijnurstu.2007.11.003

APPENDIX A: INFORMED CONSENT

Department of Counseling
9201 University City Boulevard, Charlotte, NC 28223-0001
t/ 704-687-8960 f/ 704-687-8960 http://www.education.uncc.edu/counseling

Dear Student:

You are being invited to participate in a quantitative research study. The purpose of this study is to examine whether differences exist between resident advisors and undergraduate residential college students on measures of mental health, burnout, and perceived stress. Before taking part in this study, please read the statements below and click on the "I Agree" button at the bottom of the page if you understand the statements and freely consent to participate in the study.

This study involves completing a survey that will take approximately ten minutes. All responses are treated as confidential and your responses will not be linked to your identity. The data collected by the investigator will not contain any identifying information so that your participation is anonymous. Any information collected will be kept both anonymous and confidential to the extent possible. To ensure anonymity, survey data will be entered into the computer program using only numerical coding.

The benefits of your participation in this human study include contributing to a better understanding of the prevalence of mental health issues in college students. There are no known risks in participating in this study. You are a volunteer. The decision to participate in this study is your choice. If you decide to participate in the study, you may change your mind and stop at any time.

Upon completion of the survey, you will have the option to enter your email address into a random drawing to win one of five $20.00 Amazon.com gift cards. Participation in the drawing is voluntary as well. Your email address for the drawing will not be linked to your survey responses.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. If you have further questions or concerns about your rights as a participant in this study, contact the University's Compliance Office at (704) 687-1871. If you have questions concerning the study, contact me, Corrine Harris at (704) 687-7121 or my Dissertation Chair, Dr. Susan Furr at (704) 687-8967.Thank you for taking the time to participate.

Sincerely,

Corrine Harris, LPCA
Doctoral Candidate

You may print a copy of this form. If you are 18 years of age or older, are a full-time student who has earned at least 12 credit hours, understand the statements above, and freely consent to participate in the study, click on the "I Agree" button to begin the survey.

I Agree I Do Not Agree

APPENDIX B: INTRODUCTORY EMAIL TO STUDENTS

Email Title: Doctoral Dissertation Survey Request

Request for Research Participants

Dear student,

This email is to request your participation in an online survey. My name is Corrine Harris and I am a doctoral student at the University of North Carolina at Charlotte conducting a study with college students. The purpose of the proposed study is to examine the differences between resident advisors and undergraduate residential college students on measures of mental health, burnout, perceived stress, and resiliency. It is my hope to use this data to assist college students, housing departments, and universities to better understand how college students are feeling and work to implement strategies to improve the resident advisor position and training and provide adequate support to residential college students.

The online survey will take approximately ten minutes to complete. If you choose to participate in this study, your information will be kept confidential and anonymous. If you would like to be entered into a drawing to receive one of five $20 Amazon.com gift cards, your email address will not be linked to your survey responses.

If you would like to participate in this study, click on the link below and you will be directed to the Informed Consent Form. After your review the Informed Consent Form by clicking on the 'Accept' button, you will be taken directly to the online survey.

<hyperlink>

Thank you for your time and assistance with this study.

Sincerely,

Corrine Harris, MA, LPCA
Doctoral Candidate
Department of Counseling
University of North Carolina at Charlotte

Dr. Susan Furr, Ph.D.
Professor
Department of Counseling
University of North Carolina at Charlotte

APPENDIX C: SELF-REPORT SURVEYS

Mental Health Inventory-5

These questions are about how you feel and how things have been with you during the past month. For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

1. How much of the time during the last month have you been a very nervous person?
   All of the time=1 Most of the time =2 A good bit of the time =3 Some of the time=4 A little of the time =5 None of the time=6
2. How much of the time during the last month have you felt so down in the dumps that nothing could cheer you up?
   All of the time=1 Most of the time =2 A good bit of the time =3 Some of the time=4 A little of the time =5 None of the time=6
3. How much of the time during the last month have you felt calm and peaceful?
   All of the time=1 Most of the time =2 A good bit of the time =3 Some of the time=4 A little of the time =5 None of the time=6
4. How much of the time during the last month have you felt downhearted and blue?
   All of the time=1 Most of the time =2 A good bit of the time =3 Some of the time=4 A little of the time =5 None of the time=6
5. How much of the time during the last month have you been a happy person?
   All of the time=1 Most of the time =2 A good bit of the time =3 Some of the time=4 A little of the time =5 None of the time=6

-Developed at RAND as part of the Medical Outcomes Study

Copenhagen Burnout Inventory

Please select the answer that best matches how you feel or think.

Part one: Personal burnout

Questions:

1. How often do you feel tired?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
2. How often are you physically exhausted?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
3. How often are you emotionally exhausted?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
4. How often do you think: ”I can’t take it anymore”?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
5. How often do you feel worn out?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
6. How often do you feel weak and susceptible to illness?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5

Please answer the following questions if you are currently employed or have an internship.

Part two: Work-related burnout

Questions:

1. Is your work emotionally exhausting?
To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5
2. Do you feel burnt out because of your work?
To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5
3. Does your work frustrate you?
To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5
4. Do you feel worn out at the end of the working day?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
5. Are you exhausted in the morning at the thought of another day at work?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
6. Do you feel that every working hour is tiring for you?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5
7. Do you have enough energy for family and friends during leisure time?
Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5

Part three: Client-related burnout

Questions:

1. Do you find it hard to work with students?

To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5

2. Do you find it frustrating to work with students?

To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5

3. Does it drain your energy to work with students?

To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5

4. Do you feel that you give more than you get back when you work with students?

To a very high degree=1 To a high degree =2 Somewhat =3 To a low degree=4 To a very low degree =5

5. Are you tired of working with students?

Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5

6. Do you sometimes wonder how long you will be able to continue working with students?

Always=1 Often =2 Sometimes =3 Seldom=4 Never/almost never =5

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

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

___0=never ___1=almost never ___2=sometimes ___3=fairly often ___4=very often

This scale can be found in:

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

Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapam & S. Oskamp (Eds.), The social psychology of health: Claremont Symposium on applied social psychology. Newbury Park, CA: Sage. Link to full-text (pdf)

updated July 8, 2008

Scale of Protective Factors

The following sentences describe how you feel about yourself. Read each statement carefully. Please circle a number next to each statement that most reflects your life. There are no right or wrong answers.
1=disagree completely, 2=disagree moderately, 3=disagree somewhat, 4= neither disagree not agree,
5=agree somewhat, 6=agree moderately, 7=agree completely

1. I am good at starting new conversations	1 2 3 4 5 6 7
2. My friends and/or family, keep me up to speed on important events	1 2 3 4 5 6 7
3. I am good at making new friendships	1 2 3 4 5 6 7
4. My friends and/or family, are supportive of one another	1 2 3 4 5 6 7
5. When working on something, I make a list of things to do in order of importance	1 2 3 4 5 6 7
6. I am confident in my ability to solve problems	1 2 3 4 5 6 7
7. My friends and/or family, spend free time together	1 2 3 4 5 6 7
8. When working on something, I set priorities before I start	1 2 3 4 5 6 7
9. I am confident in my ability to succeed	1 2 3 4 5 6 7
10. I am confident in my ability to think out and plan	1 2 3 4 5 6 7
11. I am confident in my ability to think on my feet	1 2 3 4 5 6 7
12. I am good at working with others as part of a team	1 2 3 4 5 6 7
13. I am good at socializing with new people	1 2 3 4 5 6 7
14. I am confident in my ability to achieve goals	1 2 3 4 5 6 7
15. When working on something, I organize my time well	1 2 3 4 5 6 7
16. I am good at interacting with others	1 2 3 4 5 6 7
17. I am good at being with other people	1 2 3 4 5 6 7
18. When working on something, I plan things out	1 2 3 4 5 6 7

19. I am confident in my ability to make good decisions/choices	1	2	3	4	5
	6	7			
20. My friends and/or family see things the same way as I do	1	2	3	4	5
	6	7			
21. My friends and/or family are seen as united	1	2	3	4	5
	6	7			
22. When working on something, I do better if I set a goal	1	2	3	4	5
	6	7			
23. My friends and/or family are optimistic	1	2	3	4	5
	6	7			
24. When working on something, I can see the order in which to do things	1	2	3	4	5
	6	7			

Demographic Questions

Demographics
Directions: Please check or write the answer(s) that best describes you.

1. Are you currently enrolled as a full-time student?
   Yes ☐ No ☐
2. What is your current age?
   18-19 ☐ 20-21☐ 22-23☐ 24+☐
3. Select your gender.
   Female ☐ Male☐ Transgender☐ Other☐ Prefer not to say☐
4. Select your racial or ethnic background.
   Caucasian/white☐ African American/Black☐ Hispanic/Latino☐
   Native-American☐ Asian American/Asian☐ Multiracial☐
5. Are you classified as an international student?
   Yes ☐ No ☐
6. What is your class status at school?
   Freshman☐ Sophomore☐ Junior☐ Senior☐
7. Do you live on campus?
   Yes☐ No☐
8. What type of building (i.e. traditional/hall-style, suite, or apartment) do you live in?
   Traditional/hall-style☐ Suite☐ Apartment☐
9. How many hours per week do you spend on extracurricular and/or volunteer activities?
   None☐ 1-10☐ 11-20☐ 21-30☐ 30+☐
10. How many hours per week do you spend working for pay?
    None☐ 1-10☐ 11-20☐ 21-30☐ 30+☐
11. Are you currently employed as a resident advisor?
    Yes☐ No☐

    For resident advisors only
12. How many years have you worked as a resident advisor?
    Less than 1☐ 1☐ 2☐ 3☐ 4☐
13. What population do you work with?
    Freshmen☐ Upperclassmen☐ Both freshmen and upperclassmen☐
14. How many residents are you responsible for?
    1-10☐ 11-20☐ 21-30☐ 31-40☐ 41-50☐