A CORRELATIONAL STUDY OF THE DEMOGRAPHIC AND JOB FACTORS RELATED TO JOB SATISFACTION AND BURNOUT AMONG SCHOOL PSYCHOLOGISTS

by

Carla Donahue

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

School psychologists are uniquely trained to provide a variety of services within a school setting. Because of the diversity in job responsibilities and the growing expectations of school psychologists across different settings, low rates of job satisfaction and high rates of burnout are contributing to school psychologists leaving the profession, and fewer students enrolling in school psychology programs. The shortage of school psychologists exacerbates the problems, with low job satisfaction and high rates of burnout as practicing school psychologists often serve more students and schools than is recommended by the National Association of School Psychologists. Studies of job satisfaction and burnout among school psychologists are outdated, and many studies draw participants from sample populations of school psychologists affiliated with state or national professional organizations. Because of the changing role of school psychologists and the limited sample populations studied, results of previous studies may not be generalizable to contemporary school psychologists. This study examines the demographic and job-related factors that affect job satisfaction and burnout among school psychologists drawn from a national sample of school psychologists accessed through social media networking groups. Scores from the Oldenburg Burnout Inventory (OLBI) and Job Satisfaction Scales (JSS) represent the criterion variables and 17 demographic and job-related factors represent the predictor variables in this correlational study. Two hierarchical regression analyses were used to determine which predictor variable(s) most significantly affected job satisfaction and which predictor variable(s) most significantly affected burnout among school psychologists. Overall, the results of the first hierarchical regression analysis show that the addition of all 17 variables increases predictability of OLBI total scores, though the change is not statistically significant (R^2 change = .000, $F(1, 121) = .024$, $p = .88$). Results of the second hierarchical regression analysis

shows that the largest R^2 change is observed with the addition of all 17 variables of interest, though the increase is not statistically significant, R^2 change =.000, $F(1,121) = .03$, $p = .85$.

Keywords: school psychologists, burnout, job satisfaction

Dedication

This dissertation is dedicated to Hayden and Harper. My prayer is that you always trust in the Lord and follow His path for you.

Proverbs 3:5-6

"Trust in the Lord with all your heart

and lean not on your own understanding;

in all ways acknowledge Him,

and He will make your paths straight."

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First, I thank my Lord and Savior, Jesus Christ. From the beginning of this journey, every word I have written and every word I have spoken has been Yours. Thank you for guiding me and strengthening me when I needed it. I pray that You always lead me and use me for Your purpose.

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Table of Contents

List of Tables

List of Figures

CHAPTER ONE: INTRODUCTION

Overview

School psychologists provide vital services to students within a school or in multiple schools. Traditionally, the role of school psychologists has been to conduct psychoeducational assessments with students who are referred for special education in order to determine eligibility for services. With increased school-based mental health initiatives, the role of the school psychologist has evolved to encompass individual and group counseling (Hart & Hart, 2014). The National Association of School Psychologists (NASP) requires training programs seeking accreditation to ensure student proficiency in areas of assessment, data-based decision making, teacher consultation, parent communication, special education law, individual and group counseling, cognitive processes, behavior analysis, behavior modification, and intervention strategies for academic achievement (Skalski et al., 2015). Because of the range of job responsibilities, school psychologists often feel that they are stretched too thin to be effective at any one duty. High rates of burnout have been reported among school psychologists and the profession has experienced a decline in full- and part-time practitioners in the field (DeNisco, 2015; Love, 2009; Wilczenski, 1997; Worrell, Skaggs, & Brown, 2006). Despite high rates of burnout, research has shown that school psychologists often report feeling satisfied in their job (Huebner, Gilligan, & Cobb, 2002; Mackonienė & Norvilė, 2012; Proctor, & Steadman 2003). It is important to understand factors that relate to job satisfaction and burnout among school psychologists in order to retain professionals in the field and to recruit and retain students in school psychology training programs. Chapter One includes a summary of previous research regarding job satisfaction and burnout among school psychologists followed by an explanation of the purpose of the current study and the significance the study may have on school psychology

training programs and school psychology as a profession. Finally, terms and concepts are defined as they relate to this study.

Background

The profession of school psychology is unique among others in the helping professions. School psychologists are highly trained in a myriad of techniques to provide a wide variety of services to the schools they serve. Traditionally, school psychologists have been responsible for completing psychoeducational evaluations to assess the learning styles and achievement of students who are referred for special education in order to determine eligibility for services. As the practice of school psychology has evolved, contemporary school psychology practitioners, in addition to completing psychoeducational evaluations, must collaborate with teachers and administration regarding behavior management, curriculum development, crisis prevention and intervention, and special education policy. School psychologists can also be a central part in the provision of school-based mental health services such as group and individual counseling and developmental guidance (Gilman & Gabriel, 2004; Gonzalez, Nelson, Gutkin, & Shwery, 2004; Hart & Hart, 2014; Shriberg, 2007; Watkins, Crosby, & Pearson, 2001).

In order to be accredited by NASP, a school psychology training program must maintain high standards and show evidence that graduates demonstrate knowledge and skill across 10 domains of professional competency. Included among the 10 domains of professional competency are: (1) data-based decision making and accountability, (2) consultation and collaboration, (3) interventions and instructional supports to develop academic skills, (4) interventions and mental health services to develop social and life skills, (5) school-wide practices to promote learning, (6) preventive and responsive services, (7) family-school

collaboration services, (8) diversity in development and learning, (9) research and program evaluation, and (10) legal, ethical, and professional practices (Skalski et al., 2015).

Because of diverse roles and expectations for school psychologists, it can be difficult for school psychologists to balance the variety of roles required of their job. School psychologists experience ethical dilemmas when general education goals, special education policies, and professional standards are incongruent. Because of the variety of roles and job duties performed by school psychologists, they must constantly balance the expectations of administrators, teachers, and stakeholders with professional and ethical expectations, many of which may be conflicting (Lasser & Klose, 2007). Dissonance between expectations for the job and actual job responsibilities can contribute to decreased job satisfaction and increased rates of burnout among school psychologists (Love, 2009; Wilczenski, 1997; Worrell et al., 2006). High caseloads and contention between general education and special education can contribute to job-related stressors and are additional factors related to job burnout (Huebner, 1992; Huebner et al., 2002; Love, 2009; Proctor, & Steadman, 2003).

In 2010, NASP lowered the recommended ratio of school psychologists to students to 1:500-700 from the previous recommended standard of 1:1000 (Brock, 2014). Despite this change, the profession of school psychology continues to experience a shortage and the shortage is projected to grow over the next 10 years as school psychologists retire or leave the field (Brock, 2014). High rates of burnout exacerbate the shortage of school psychologists in public schools in the United States (DeNisco, 2015). It is important to understand factors that relate to job satisfaction and burnout among school psychologists in order to retain professionals in the field and to recruit and retain students in school psychology training programs.

This current study is based on the theories of job burnout first implied by the work of Freudenberger (1974) and more thoroughly investigated by Maslach (2003). Burnout is characterized by physical exhaustion, depersonalization, and lack of accomplishment on the job, and can be related to decreased productivity and a desire to leave the profession (Maslach, 2001, 2003). Most simply, the definition of job satisfaction describes the extent to which one likes or dislikes her job (Spector, 1997). More thoroughly, the definition of job satisfaction includes components of reasoning and emotional reactions and describes one's feelings or beliefs about her job (Cetin, 2011; Saari & Judge, 2004). Job satisfaction relates to one's emotional reaction to the job and results from the dissonance experienced between job expectations and actual factors of the job (Hirschfield, 2000).

In addition to the expanding training requirements, changing job duties and expectations for school psychologists, the demographics of professionals working as school psychologists evolved to be comprised of nearly 70% female in 2000, up from 41% female practicing as school psychologists in 1970 (Curtis, Grier, & Hunley, 2004). Furthermore, Curtis et al. (2005) correctly predicted that the trend would continue toward the feminization of the field. In 2010, more than 78.1% of all practicing school psychologists were female (Curtis, Castillo, & Gelley, 2012). Racial demographics of practicing school psychologists have also evolved over the last 30 years. School psychologists who identify themselves as Caucasian have decreased slightly from 96 percent to 90 percent over the 30-year span. School psychologists who identified themselves as Black/African American and Hispanic doubled over 30 years, from 1.5% to 3.0% Black/African American and from 1.5% to 3.4% Hispanic. Significant changes in the demographics of school psychology are also represented in age, with an increase for the median

age of more than 18% over the 30-year span, with a mean of 47.4 years in NASP 2010 demographic study (Curtis et al., 2012).

Problem Statement

Peer reviewed research regarding the correlates to job satisfaction and burnout among school psychologists is outdated, with much of the literature published in the 1980s and 1990s (Huberty & Huebner, 1988; Huebner, 1992; Huebner, & Mills, 1994; Mills & Huebner, 1998; Sandoval, 1993; Wise, 1985). The profession of school psychology has evolved and continues to evolve with changing political, economic, and social climates (Oakland & Cunningham, 1999). School psychologists' wide range of job responsibilities contribute to work-related stressors and burnout in the profession (Bell & McKenzie, 2013; Etscheidt, 2012; Kucer, 2018; Love, 2009; Huberty & Huebner, 1988; Huebner, 1992; Huebner & Mills, 1994; Mills & Huebner,1998; Shriberg, 2007; Watkins et al., 2001). Though peer reviewed research is outdated, several doctoral dissertations have focused on components related to job satisfaction and burnout among school psychologists (Crosson, 2015; Kucer, 2018; Mackonienė & Norvilė, 2012). Research findings suggest certain personality factors that contribute to job satisfaction and burnout; however, demographic factors related to burnout have shown inconsistencies across studies (Crosson, 2015; Hussar, 2015; Kucer, 2018; Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003; Reece, 2010; Worrell et al., 2006). Sample populations have been limited and sample sizes may have been insufficient to yield results that can be generalizable to school psychologists in a variety of settings and a variety of specific job characteristics (Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003). The problem is current research provides little understanding of the job factors related to job satisfaction and burnout among contemporary school psychologists who

do not match the demographics, training requirements, and job duties of school psychologists represented in studies completed in the 1980s and 1990s.

Purpose Statement

The purpose of this quantitative, correlational study is to examine the relationship between demographic and job-related factors on job satisfaction and burnout among school psychologists. In this study, demographic and job-related factors represent the predictor variables and job satisfaction and burnout represent the criterion variables. Demographics and job-related factors include: (a) gender, (b) age, (c) race, (d) level of education, (e) credentials, (f) contract, (g) salary, (h) number of students served, and (i) job responsibilities. Simply, job satisfaction is how much a person likes or dislikes a job (Spector, 1997). Burnout refers to the psychological response to work place stressors (Maslach, 2001). Job satisfaction is measured by participants' self-report rating on the Job Satisfaction Scales (JSS), and burnout is measured by participants' self-report rating on the Oldenburg Burnout Inventory (OLBI). Research is based on the assumptions that job satisfaction and burnout rates can be attributable to specific responsibilities of individual school psychologists. Because of the high rates of attrition among school psychologists, understanding the relationships between role expectations, burnout, and job satisfaction is important to maintaining school psychologist and recruiting new students to enter training programs. Participants were recruited from a national sample of school psychologists who are members of a particular social media networking group.

Significance of the Study

This study is useful from several empirical and practical perspectives. Results of this study can be useful in helping to maintain practicing school psychologists in the field and students in school psychology training programs. By understanding job factors that decrease job

satisfaction and lead to burnout, school districts and entities that employ school psychologists can develop best practices to support their staff and to utilize a service delivery model that is beneficial to the school psychologists as well as to all stakeholders. School psychologists can use results of this study to advocate for themselves and the profession and to work with their employers to develop best practices that can benefit all stakeholders. School psychology training programs can use the results of this study to design program curriculum to prepare future school psychologists for stressors and demands that decrease job satisfaction and lead to burnout.

The sample population used in this study also provides important significance. Most of the previous research regarding job satisfaction and burnout among school psychologists elicited participants from membership rosters of national and state professional associations. NASP is the largest professional association for school psychologists with more than 20,000 members nationally and in more than 25 countries internationally (NASP, 2017a). NASP's current membership of more than 20,000 school psychologists is estimated to contain roughly 70% of all school psychologists practicing in the U.S., leaving a significant portion of practicing school psychologists unrepresented in previous research (Curtis et al., 2004).

Research Questions

This study answers the following research questions:

RQ1: Which demographic and job factors are related to burnout among school psychologists?

RQ2: Which demographic and job factors are related to job satisfaction among school psychologists?

Hypotheses

The research hypotheses for this study are:

$H_1$1: Which demographic and job factors are related to burnout among school psychologists?

$H_1$2: Which demographic and job factors are related to job satisfaction among school psychologists?

Definitions

1. *Burnout* – "a psychological syndrome that involves prolonged response to stressors in the workplace" (Maslach, 2001, p. 189).
2. *Job satisfaction* - includes components of reasoning as it relates to one's emotional reaction to a job and the feelings or beliefs that result when dissonance is experienced between job expectations and actual factors of the job (Cetin, 2011; Hirschfield, 2000; Saari & Judge, 2004; Spector, 1997).
3. *Traditional role of school psychologists* - a model of psychological services delivery in which school psychologists are assigned to multiple schools and are largely responsible for conducting psychoeducational evaluations and other activities necessary for special education identification (Brown, Holcombe, Bolen, & Thomson, 2006; Proctor & Steadman, 2003).
4. *Expanded role of school psychologists* - a model of psychological services delivery in which school psychologists are assigned to a single school and work in a capacity that encompasses traditional roles of school psychologists, school counselors, and school social workers. Job responsibilities may include: psychoeducational assessment, counseling, and consultation with teachers and parents (Brown et al., 2006).
5. *Itinerant school psychologists* - school psychologists working within a traditional model of service delivery who are assigned to multiple schools and travel between the schools

they serve as needed to fulfill assigned duties. Itinerant school psychologists often do not have designated offices or workspaces at their assigned schools (Braden, Linnen, & Good, 2001).

6. The *National Association of School Psychologists (NASP)* - a national professional organization in the United States (U.S.) and 25 other countries that supports school psychologists and "works to advance effective practices to improve students' learning, behavior, and mental health" (NASP, 2017a).

CHAPTER TWO: LITERATURE REVIEW

Overview

Traditionally, the role of school psychologists was to complete special education evaluations and determine eligibility for services. Though school psychologists are still largely responsible for special education assessment and eligibility in many school districts, the standards for school psychologist training programs require graduate students to demonstrate proficiency with many other skills. School psychologists can also be a central part in the provision of school-based mental health services such as group and individual counseling and developmental guidance (Filter, Ebsen, & Dibos, 2013; Gilman & Gabriel, 2004; Gonzalez et al., 2004; Hart & Hart, 2014; Shriberg, 2007; Watkins et al., 2001). Chapter Two discusses the theoretical framework for the current study, including definitions of burnout and job satisfaction, and also presents a review of the related literature regarding the history of school psychology, school psychologists' job descriptions and role preferences, school psychology training programs and certification requirements, and job satisfaction and burnout among school psychologists.

Theoretical Framework

School psychologists experience decreases in job satisfaction and increased rates of burnout when role expectations of school administrators conflict with expectations that school psychologists often have for their professional practice (Love, 2009; Wilczenski, 1997; Worrell et al., 2006). High caseloads and contention between general education and special education can contribute to job-related stressors and are additional factors related to job burnout (Huebner, 1992; Huebner et al., 2002; Love, 2009; Proctor, & Steadman 2003). In 2010, NASP lowered the recommended ratio of school psychologists-to-students to 1:500 – 700 from the previous recommended standard of 1:1000 (Brock, 2014). Despite this change, studies show that school

psychologists report an average of more than 1,525 students in their caseloads, a ratio that is two- to three-times the NASP recommendation (Boccio, Weisz, & Lefkowitz, 2016). Additionally, the profession of school psychology continues to experience a shortage of practitioners, one that is projected to grow over the next 10 years as school psychologists retire or leave the field (Brock, 2014). High rates of burnout exacerbate the shortage of school psychologists in public schools in the U.S. (Brock, 2014; Huebnar et al., 2002; Worrell et al., 2006). It is important to understand factors that relate to job satisfaction and burnout among school psychologists in order to maintain professionals in the field and to recruit and retain students in school psychology training programs.

This current research is based on the theory of job burnout first implied by the work of Freudenberger (1974) and more thoroughly investigated by Maslach (2003). Burnout is characterized by physical exhaustion, depersonalization, and lack of accomplishment on the job and can be related to decreased productivity and a desire to leave the profession (Maslach, 2001, 2003). Continued research supports an inverse relationship between burnout and job satisfaction among those within helping professions (Brewer & Clippard, 2002).

As burnout is an emotional response to job stressors, job satisfaction is an attitudinal response to the job (Spector, 1997). The definition of job satisfaction includes components of reasoning and emotional reactions and describes one's feelings or beliefs about one's job (Cetin, 2011; Saari & Judge, 2004; Spector, 1997). Job satisfaction relates to one's emotional reaction to one's job and declines as dissonance is experienced between job expectations and actual factors of the job (Hirschfield, 2000).

Burnout

Burnout as a theoretical construct has been the subject of many studies over nearly 50 years. First observed and explained by psychologist Herbert Freudenberger (1974), the construct was initially studied by occupational psychologists examining workplace productivity and then studied by social psychologists examining emotions in the workplace (Cordes & Dougherty, 1993). Researchers began to recognize burnout symptoms among workers in human services positions, and developed theories to explain the symptoms they observed (Maslach, 2001). The cause of burnout is comprised of insurmountable demands and the lack of resources to manage the overload (Maslach, Leiter, & Jackson, 2012).

Though research exploring job burnout began as early as the 1970s, continued research has often confused burnout with related constructs, or included inaccurate definitions. Studies claiming to examine job burnout may actually explore workplace stressors, as burnout is actually a response to workplace stressors (Swider & Zimmerman, 2010). Similarly, studies claiming to examine job burnout may, in fact, measure depression. The key difference between job burnout and depression is that job burnout only impacts work-related activities and does not necessarily permeate other aspects of one's life, as is observable in individuals with depression (Armon, Shirom, & Melamed, 2012). Maslach's (2003) definition describes job burnout as a "psychological syndrome that involves prolonged response to stressors in the workplace" (p. 189). Job burnout and the related physical symptoms may lead to high absenteeism, avoidance of job responsibilities, reduced job performance, and reduced feelings of self-efficacy (Maslach, 2001).

Continued research regarding the symptoms, causes, and effects of burnout have defined three classifications of symptoms of burnout as well as three classifications of causes of burnout.

The symptoms of burnout can be characterized by three key components: overwhelming emotional exhaustion, feelings of cynicism and detachment from the job (depersonalization), and feelings of ineffectiveness and lack of accomplishment, or decreased personal accomplishment (Maslach, 2003). Maslach (2003) theorized that the components of burnout are interrelated. Employee burnout often begins with feelings of exhaustion as a physical response to job stressors. The physical exhaustion leads to detachment from and loss of enjoyment in the job, as well as feelings of diminished self-efficacy (Maslach, 2003). In other words, burnout is experienced when job demands and stressors produce a severe physical response that interferes with enjoyment in and effectiveness of job duties.

The causes of burnout are also characterized into three interrelated categories: environmental and organizational factors, personality factors, and demographic characteristics (Brewer & Clippard, 2002). Environmental and organizational factors leading to burnout may include work overload, role conflict, and poor work environments. Work overload occurs when work demands exceed the available time to meet them. Work overload has been shown to be the biggest determinant leading to exhaustion, the beginning of burnout symptomology (Bakker, Demerouti, & Verbeke, 2004). Role conflict occurs when one job demand is in conflict with other job demands. When employees' job duties cause role conflict, they report higher rates of burnout (Brewer & Clippard, 2002). Additionally, poor work environments contribute to burnout among employees. A poor work environment may be one that is physically uncomfortable, rigid, impersonal, bureaucratic, controlling, or encompasses other negative factors (Brewer & Clippard, 2002).

Results of research into personality factors related to burnout have suggested that individuals who are sensitive, empathic, overly enthusiastic, idealistic, anxious, introverted, or

obsessive are at higher risk for experiencing burnout (Alvarez, 1999; Brewer & Clippard, 2002; Engphaiboon, 2012; Swider & Zimmerman, 2010). In order to investigate the relationship between certain personality factors and job burnout, Swider and Zimmerman (2010) used a meta-analysis procedure to search literature databases that yielded 115 studies to be coded according to various dimensions related to their hypotheses. Their study focused on the *big five* personality traits of neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience. Results of the meta-analysis suggested that neuroticism is positively related to emotional exhaustion (.52), and depersonalization (.42) and is negatively related to personal accomplishment (-.38). Extraversion is negatively related to emotional exhaustion (-.29) and depersonalization (-.23), but positively related to personal accomplishment (.41). Agreeableness is negatively related to emotional exhaustion (-.18) and depersonalization (-.31), but positively related to personal accomplishment (.31). Conscientiousness is negatively related to emotional exhaustion (-.19) and depersonalization (-.24), and is positively related to personal accomplishment (.28). Openness to experience is negatively related to emotional exhaustion (-.09) and depersonalization (-.10) and positively related to personal accomplishment (.21) (Swider & Zimmerman, 2010).

In a longitudinal study investigating the effects of the big five personality factors on job burnout across time, participants completed a health screening, demographic questionnaire, self-report personality assessment, and self-report rating of burnout, repeating the process approximately 24 months later. Upon screening for exclusionary factors, data from 1,105 participants was used (Armon et al., 2012). Consistent with findings from the Swider and Zimmerman (2010) study, Armon et al. (2012) found that neuroticism was positively related to burnout ($ß = .21$, $p < .05$) and conscientiousness was found to be significantly negatively related

to burnout (ß = -.21, $p < .05$). Despite similarities found in baseline data, neither neuroticism nor conscientiousness were found to be a significant predictors of burnout during follow up data collection (Armon et al., 2012). Overall results of the study did not find a significant predictive relationship among personality factors on burnout across time (Armon et al., 2012).

In other studies of personality traits related to job burnout, D'Souza, Egan, and Rees (2011) used regression analysis in order to investigate perfectionism, stress, and job burnout. Results of self-report measures of anxiety, stress, depression, perfectionism, and burnout from 87 clinical psychologists showed a significant relationship between perfectionism and job burnout (β = .247, p = .019).

Certain demographic characteristics have indicated women are more likely than men to experience emotional exhaustion; however, men experienced higher rates of depersonalization and lower rates of personal accomplishment than women (Brewer & Clippard, 2002). Employees who are younger are more likely to experience burnout than their older counterparts (Brewer & Clippard, 2002). Unmarried employees are more likely to experience burnout than their married counterparts (Brewer & Clippard, 2002).

Job Satisfaction

Spector (1997) simply defined job satisfaction as "the extent to which people like or dislike their jobs" (p. 2). As early as the 1930s, industrial and organizational psychologists began studying job satisfaction in order to address employees' social adjustment, physical health, and mental health (Solly, 1983). In 1938, Roethlisberger and Dickson published the results of their Hawthorne studies. The Hawthorne studies took place at an electric factory in Hawthorne, Illinois with the purpose of investigating worker productivity. Results of the Hawthorne studies concluded that, though employee productivity increased when important changes were made in

work environments, the increase in productivity was related to inter-employee personal relationships and informal employee groups. In addition to providing insight into effective managerial practices for improving productivity in industry, the Hawthorne studies concluded that employees' job performance is affected by job responsibilities and social relationships among co-workers (Spector, 1997). Extensive research has been conducted investigating the causes, implications, and improvement of job satisfaction, including demographics, environmental, social, and personality factors (Solly, 1983).

The observable components related to job satisfaction are in direct opposition to the components of burnout. Whereas burnout and the related physical symptoms may lead to high absenteeism, avoidance of job responsibilities, reduced job performance, and reduced feelings of self-efficacy, job satisfaction is associated with increased job performance, increased productivity, lower absenteeism, and positive professional attitudes (Levinson, Fetchkan, & Hohenshil, 1988; Maslach, 2001). Employees who report higher levels of job satisfaction are less likely to miss work, with a correlation of .25, and higher rates of life satisfaction, with a correlation of .44 (Saari & Judge, 2004).

Studies of the relationship between job performance and job satisfaction have shown inconsistent significance. Earlier studies published prior to 1985 concluded that there was little correlation between job satisfaction and job performance, with a correlation coefficient of .17 (Iaffaldano, & Muchinsky, 1985). According to Organ and Ryan (1995), later studies showed that the previous definition of job performance was too narrow to incorporate some facets of job performance related to organizational citizenship. With a broader definition, the correlation between job satisfaction and job performance in later studies is .30. Additionally, later studies

also conclude that job satisfaction is predictive of job performance, and the significance is greater in professional jobs than in less complex jobs (Judge, Thoresen, Bono, and Patton, 2001).

Several research studies have investigated general correlates to job satisfaction. Overall, job satisfaction remains stable, even when an individual changes jobs. The stability of job satisfaction across time and across jobs has led researchers to conclude that job satisfaction is related to one's disposition (Staw & Ross, 1985). Staw, Bell, and Clausen (1986) reported that childhood temperament was related to job satisfaction in adulthood. Though the components of disposition that influence job satisfaction remain unclear, some personality traits related to job satisfaction include extraversion and conscientiousness (Judge, Heller, & Mount, 2002).

Spector (1997) reported a "curvilinear relation in which job satisfaction declines early in life, levels off in middle age, and rebounds after approximately 45 years of age" (p. 25). Though not all studies have been able to replicate the same findings, findings from subsequent studies have revealed that the sample population must range from the late teenage years to the late 60s in order to detect the curvilinear relationship. Additionally, a curvilinear relationship may not be detected when women are highly represented in the sample population. The relationship between age and job satisfaction is typically linear among women (Spector, 1997). Though the cause of the curvilinear relationship between job satisfaction and age is unclear, some suggested theories include: generational changes to the American value system, older workers being more skilled and having better jobs, and changes in employees' expectations as they age (Spector, 1997).

Additionally, Spector (1997) reported that job satisfaction varies by country and gender. Various limitations to the validity of many studies have been identified, including cultural differences and samples that cannot adequately allow for inter-country comparisons. Job

satisfaction undoubtedly varies across countries, but the extent of that variation has not been accurately quantified (Spector, 1997).

Overall, studies investigating job satisfaction within the U.S. have shown that there is no significant difference between men and women; however, men and women within the samples do not have the same jobs. Men largely hold positions within management or professional sectors and are more likely to earn higher salaries than women. The lack of difference between job satisfaction levels despite lower paying positions for women has been hypothesized to stem from generations of women earning less money and fewer promotions, and having fewer expectations of their job (Spector, 1997).

The prominent theoretical frameworks regarding job satisfaction have, historically, placed emphasis on job satisfaction as it relates to one of three categories: personal values (job satisfaction increases human dignity), life satisfaction (job satisfaction leads to better psychological and physical health), and workplace productivity and organizational functioning (employees who are satisfied with their jobs will be more productive in the workplace) (Kalleberg, 1977). This current research has implications for all three categories for the personal and professional lives of school psychologists.

Related Literature

School Psychologists

Since 1989, NASP conducts a demographic study every five years in order "generate a comprehensive description of the field of school psychology across the United States" (Curtis et al., 2012, pg. 1). Since regular demographic studies have begun, the profession of school psychology has become feminized, has aged, and has remained overwhelmingly White. In 2010, the demographic study analyzed information from usable surveys from 1,272 participants elicited

from NASP member databases (Curtis et al., 2012). Results showed that 76.1% of full-time school psychologists are women. The mean age of school psychologists is 47.4 years, with 17.9% of school psychologists being 60 years or older. More than 90% of all school psychologists are Caucasian, 3.4% are Hispanic, 3% are Black/African American, and 1% identify as "other" (Curtis et al., 2012).

According to results of the 2010 demographic study, 25.1% of practicing school psychologists reported having a master's degree, 45.8% having a specialist degree (Ed.S.), and 24.2% having a doctoral degree in school psychology (Curtis et al., 2012). Additionally, 55.9% of school psychologists hold the credential of Nationally Certified School Psychologist (NCSP), 86.7% of school psychologists hold certification from state boards of education (Curtis et al., 2012). It is of note that the NCSP credential is not required for professional practice. Each state in the U.S. requires certification for professional practice through the state board of education; however, some states accept NCSP credentials as sufficient documentation to obtain state certification (NASP, 2010c).

In addition to NASP, to which more than 70% of school psychologists belong, more than 86% of school psychologists are members of their state associations (Curtis el., 2012; NASP, 2017a). School psychologists are also members of various additional professional education associations, such as: the National Education Association (31.1%), local teacher union (28%), the American Federation of Teachers (7.6%), the Council for Exceptional Children (5.4%), the American Psychological Association (15.7%), and 10.9% to the Division of School Psychology of the American Psychological Association (Curtis et al., 2012).

Though school psychologists may work within a myriad of settings, most school psychologists work primarily within public school settings. More than 80% of respondents

reported employment within a public school and 9% of respondents reported employment within faith-based or private school settings. Seven percent of school psychologists are employed in settings of higher education and three percent in independent practice. School psychologists also report working in hospital or medical settings (0.8%) and state departments of education (0.6%). Three percent of school psychologists report working in "other" settings (Curtis et al., 2012).

Most school psychologists report working within suburban school settings, with 43.4% of respondents falling into this category. Twenty-six percent of respondents reported working within urban school districts and 24% reported working within rural school districts. According to the 2010 NASP demographic study, the average school psychologist-to-student ratio is 1:1,383, down from the average ratio of 1:1,482 in the 2005 demographic study (Curtis et al., 2012). Though the ratio of school psychologist-to-student has decreased, the average continues to fall above the NASP-recommended ratio of 1:500-700 necessary in order for school psychologists to provide comprehensive and preventative services (Brock, 2014).

Role of School Psychologists

School psychology as a profession began in the late 19th-century when psychologist Lightner Witmer opened a clinic to help children with academic difficulties. Soon, school districts began employing psychologists and in 1915, the first "school psychologist" was hired in Connecticut (Fagan & Wells, 2000). Since that time, the role of school psychologists has grown and changed. The role of school psychologists evolves continually in response to changing political, economic, and social demands (Oakland & Cunningham, 1999). Despite the unique and specific training of school psychologists, school staff members continue to view school psychologists as gatekeepers to special education (Bradley-Johnson & Dean, 2000; Love, 2009). School psychologists are forced to prove their worth as change agents within a school, and as

more than gatekeepers to special education (Love, 2009). School psychologists are the experts in child development and learning within the school setting. They understand how to meet the social, emotional, physical, and intellectual needs of all students; they can provide direct services to individual students, or they can assist classroom teachers in techniques for supporting all students (Hart & Hart, 2014).

School psychology as a profession began as schools recognized the need to assess students' individual learning needs and design remediation strategies (Fagan, 1999). Though the profession was born out of the need for assessment, school psychology practitioners and researchers began advocating for a shift away from individual assessment and toward a professional practice that encompasses prevention, intervention, program evaluation, and work with various stakeholders (Bradley-Johnson & Dean, 2000). Despite more than 60 years of literature advocating for a change in the provision of school psychological services, school psychologists report that individual assessment accounts for the majority of their professional duties (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002). Further, when examining the perceived roles of school psychologists by other school staff, Watkins et al. (2001) found that school service personnel regarded evaluations and eligibility decisions as the primary role of school psychologists.

Research suggests teachers and school administrators desire a more consultative and collaborative relationship with school psychologists (Gilman & Gabriel, 2004; Watkins et al., 2001). They want school psychologists to be involved in providing school-based mental health services, parent training and professional development, and to be involved in curriculum development. Additionally, school psychologists want to be able to provide the diverse continuum of services that schools desire and decrease the number of evaluations they complete

each year (Gilman & Gabriel, 2004; Watkins et al., 2001). School psychologists strive to consult with and work collaboratively with teachers and school stakeholders to promote the best possible outcomes for all students (Shriberg, 2007). Despite the aligned desires of schools and school psychologists, assessment and evaluation caseloads and time constraints often prevent school psychologists from expanding the level of services they are able to provide (Gilman & Gabriel, 2004).

In a survey of 522 school staff members, respondents rated nine areas of psychological service on a Likert Scale (1 = Very Important, 2 = Fairly Important, 3 = Somewhat Important, 4 = Slightly Important, and 5 = Not Important). Of the nine areas measured, the areas of assessment, special education input, consultation, counseling, crisis intervention, and behavior management were rated as Very Important. The areas of school-community relationships, parent education, and staff development were rated as Fairly Important. There were no areas of school psychological service that school staff reported as Not Important (Watkins et al., 2001). Further, 82% of school staff surveyed reported that they would like school psychological services to be provided at their school five or more days per week (Watkins et al., 2001).

NASP Standards

Though assessment marks the most prominent role of school psychologists, school psychologists are encouraged to perform a myriad of duties and act as change agents to promote the equal and ethical education of all students (Skalski et al., 2015). The first document to provide guidance for the ethical and professional practice of school psychology was the *Guidelines for the Provision of School Psychological Services* in 1978. Since that time, the guidance document has undergone five revisions and updates: 1984, 1992, 1997, 2000, and 2010 (NASP, 2010a). New revisions to the guidance document began in February 2018 with an open

forum discussion at the 2018 NASP Annual Convention and were currently expected to be completed and released by 2020 (NASP, 2017c). Until new guidelines are adopted, NASP continues to follow the updates from 2010, written as four documents: *Model for Comprehensive and Integrated School Psychological Services, Standards for Graduate Preparation of School Psychologists, Standards for Credentialing of School Psychologists,* and *Principles for Professional Ethics*. Together, these four guidance documents comprise the NASP Professional Standards, a unified guide intended to define and promote the practice of school psychology through graduate education, credentialing, professional practices, and ethical behavior (NASP, 2010a). The *Model for Comprehensive and Integrated School Psychological Services,* also known as the NASP Practice Model, outlines 10 domains for comprehensive and integrated school psychology practice, including: data-based decision making and accountability; consultation and collaboration; interventions and instructional support to develop academic skills; interventions and mental health services to develop social and life skills; school-wide practices to promote learning; preventative and responsive services; family-school collaboration services; diversity in development and learning; research and program evaluation; and legal, ethical, and professional practice (NASP, 2010a; Skalski et al., 2015).

Data-based decision making and accountability. Data-based decision making and accountability is expected to pervade all aspects of service delivery for school psychologists. School psychologists are expected to have knowledge of various models and methods of data collection and assessment necessary to identify a student's individual strengths and weaknesses, to develop interventions and provide recommendations, and to monitor progress and outcomes of those programs and interventions ((NASP, 2010a; Skalski et al., 2015). As school psychologists have knowledge of the foundations of both psychology and education, they may utilize

psychological assessments along with classroom formative and summative assessments in order to identify a student's problems, select evidence-based interventions, and assess the student's progress toward academic and behavioral goals (NASP, 2010b; Skalski et al., 2015).

Consultation and collaboration. The other domain that is expected to permeate all areas of school psychology practice is consultation and collaboration. School psychologists are proficient in a variety of methods of consultation, collaboration, and communication that are applicable to individuals, families, groups, and systems. Consultation and collaboration strategies are used during all stages of the intervention process, including designing, implementing, and evaluating interventions while promoting effective implementation of services (NASP, 2010a; NASP 2010c; Skalski et al., 2015). School psychologists may also use their consultation and collaboration skills to act as change agents to promote necessary changes at all levels of the educational system, student, classroom, building, district, state and federal (NASP, 2010a; Skalski et al., 2015).

Interventions and instructional support to develop academic skills. Using their knowledge of biological, cultural, and social bases of learning and development, school psychologists collaborate with other educational professionals to implement and evaluate services to facilitate cognitive and academic growth in children and youth (NASP, 2010a; Skalski et al., 2015). School psychologists use data from all available assessments, along with effective communication to collaborate with many school professionals to promote evidence-based programs, provide instructional support, and design interventions to target a student's academic deficits and to promote student-centered learning practices and allowing all students to be self-regulated learners (Skalski et al., 2015).

Interventions and mental health services to develop social and life skills. Using their knowledge of biological, cultural, and social bases of learning and development, school psychologists collaborate with other educational professionals to implement and evaluate services to promote mental health and social-emotional functioning in children and youth (NASP, 2010a; Skalski et al., 2015). School psychologists used data from all available assessments, along with effective communication for collaborating with many school professionals to promote evidence-based programs, provide instructional support, and design interventions to target students' social-emotional functioning and mental health. School psychologists support students' growth in mental health social-emotional functioning and mental health areas include social, emotional, behavioral, and life skills development and adaptive behaviors (NASP, 2010a; Skalski et al., 2015). In direct service delivery, school psychologists may provide individual or group counseling, behavioral coaching, provide academic interventions, or assessment (Skalski et al., 2015).

School-wide practices to promote learning. School psychologists must understand schools as systems and understand theories of organization, as well as have knowledge of teaching pedagogy, curriculum, general education, special education, technology, and resources to promote mental health. School psychologists collaborate with other school professionals to assess needs, develop interventions, and monitor outcomes of school-wide practices that promote learning. School psychologists assess risk and protective factors and help school professionals address systemic problems (NASP, 2010a; Skalski et al., 2015). School psychologists serve on school crisis teams to intervene with consultation, collaboration, and direct services regarding crisis intervention, response, and recovery and work to promote schools that are safe (Skalski et al., 2015). Additionally, school psychologists may collaborate with community resources and

agencies to coordinate multi-disciplinary and comprehensive care for children and youth (NASP, 2010a).

Preventive and responsive services. School psychologists are expected to be school experts regarding risk and resilience factors for learning and mental health. School psychologists have knowledge of community resources available to students and their families, as well as school-based services available to students that may support targeted and intensive prevention and intervention strategies for crises (NASP, 2010a). Specifically, school psychologists use principles of data-based decision making and collaboration with other educational professionals to recognize and address risk factors for school-wide problems such as truancy, dropout, bullying, or suicide, and on an individual level, providing counseling, behavioral coaching, and implementing interventions with students. Additionally, school psychologists often participate in the design, implementation, and evaluation of school-wide programs that promote safe schools and communities that are free of violence (NASP, 2010a; Skalski et al., 2015).

Family-school collaboration services. School psychologists understand families as systems, and have knowledge of research-based strategies to support families, using practices that are responsive to cultural strengths, differences, and needs. School psychologists promote (a) family, school and community partnerships; (b) provide services to families to address cultural factors that may hinder family-school collaboration; (c) promote safety in school, families, and communities; and (d) inform educators about the influences of families on children's learning and mental health (NASP, 2010a; Skalski et al., 2015).

Diversity in development and learning. Using knowledge of individual strengths, weaknesses, abilities, and disabilities, school psychologists also use available data to collaborate with other educational professionals to promote effective development and learning for students,

families, and schools. School psychologists must design and implement interventions that are responsive and respectful to individuals, families, and schools of diverse cultures, backgrounds, and other diverse characteristics. Other diverse characteristics may include age, gender, gender identity, cognitive capabilities, social-emotional skills, developmental level, race, ethnicity, national origin, religion, sexual and gender orientation, disability, chronic illness, language, and socioeconomic status. School psychologists must provide professional practices that promote fairness and advocacy for social justice. Additionally, school psychologists must be aware of their own individual racial, class, gender, cultural, and other biases in order to mitigate the effects of personal biases on decision-making, instructions, behavior, and outcomes for students (NASP, 2010a; Skalski et al., 2015).

Research and program evaluation. In order to understand research and interpret data, school psychologists are trained in research design, statistics, measurement, data collection and analysis techniques, and program evaluation. In collaboration with other educational professionals, school psychologists use technology and other resources to collect data, measure variables of interest, and analyze data to promote the provision of effective services to students, families, schools, and communities (NASP, 2010a). In professional practice, school psychologists may work with classroom teachers to design, implement, and assess instructional strategies and student learning; collect data in order to determine the effectiveness of direct services, such as individual or group counseling; and monitor implementation fidelity of academic and mental health instruction and intervention (NASP, 2010a; Skalski et al., 2015).

Legal, ethical, and professional practice. Legal and ethical professional practice for school psychologists requires responsive problem-solving and decision-making, respect for diversity in individuals, advocacy for social justice; effective interpersonal and communication

skills, responsibility, adaptability, initiative, and dependability. School psychologists must practice and behave consistently with ethical and legal standards, and maintain effective and ethical relationships with collaborators. As school psychologists work to promote communication and collaborative relationships, they must guide administrators, teachers, and parents to understand policies, regulations, and laws and in differentiating between general education programs and special education programs. School psychologists maintain a commitment to life-long learning, and engage in continued professional development and education (NASP, 2010a; NASP, 2010d; Skalski et al., 2015).

The NASP Professional Standards includes a separate document dedicated to legal and ethical professional practice. *Principles for Professional Ethics* (NASP, 2010d) addresses a variety of topics to clarify the legal and ethical expectations of a professional school psychologist. Topics covered within the text include: respect and dignity for all individuals; confidentiality; professional competence and responsibility; (a) honesty and integrity in professional relationships; (b) presentation of professional qualifications; (c) informed consent and assent; (d) responsibility to schools, families, communities, and students; (e) understanding and respect for legal issues; (f) contributing to the profession through teaching and supervision; and (g) contributing to the knowledge base of school psychology through original research and publication (NASP, 2010d).

Nationally-certified school psychologists. School psychologists who meet NASP's rigorous training standards earn the credential of Nationally Certified School Psychologist (NCSP). Upon completion of a NASP-approved graduate training program and earning a requisite score on the Praxis School Psychologist test, graduates may apply for NCSP (NASP, 2017b). Graduates of training programs that are not NASP-approved may apply for NCSP by

providing documentation of coursework that meets standards of the NASP Practice Model and earned the requisite score on the Praxis test (NASP, 2017b). School psychologists who are NCSP commit to high standards of professional, ethical, and legal practice and continuing professional development. Many states regard the NCSP credential as sufficient documentation to apply for licensure through the state board of education (NASP, 2017b).

School Psychologists' Job Description

The federal government requires that school districts provide students with disabilities the same opportunities as peers without disabilities to equally access the general education curriculum (IDEA, 2004). The reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) in 2004 sought to align with the standards outlined in No Child Left Behind Act of 2002 and required ample documentation to support decision-making, including monitoring student progress to ensure that students with disabilities show gains equal to the adequate yearly progress of their peers without disabilities (Etscheidt, 2012). No Child Left Behind (2002) requires all students to participate in standardized assessments, though a limited percentage of students with disabilities may participate in alternative forms of assessment (No Child Left Behind, 2002). Because students with disabilities are expected to show adequate yearly growth on standardized assessments, the role of school psychologists has expanded to helping teachers understand the learning styles and strengths of all students, including those with disabilities, and helping teachers support all students with strategies for taking standardized assessments (Etscheidt, 2012).

The traditional role of school psychologists is itinerant in nature. Traditionally, school psychologists traveled between several schools, completing psycho-educational evaluations and determining student eligibility for special education services. When school psychologists

practice within a traditional itinerant model, teachers are less willing to engage in collaborative relationships than when school psychologists are regularly in the same building and are recognized by teachers as part of the building staff (Gonzalez, Nelson, Gutkin, & Shwery, 2004). The itinerant nature of the traditional model of school psychology practice not only affects teachers' perceptions of school psychologists, but affects the school psychologist's self-efficacy (Proctor & Steadman, 2003). School psychologists who serve only one school report experiencing higher levels of self-efficacy and job satisfaction and lower levels of burnout than do school psychologists who provide psychological services within the traditional model of serving multiple schools (Proctor & Steadman, 2003).

Despite the views of school staff and advocacy of school psychologists, individual assessment remains the job function on which school psychologists spend the most time (Bramlett et al., 2002). In a study of 370 school psychologists, respondents indicated that they spend a vast majority of their time on assessment-related activities. Bramlett et al. (2002) reported that school psychologists spend 46% of their time on assessment, 16% on consultation, 13% on interventions, 8% counseling, 7% conferencing, 3% on supervision, 2% providing in-service training, 1% on research, 1% on parent training, and 3% on other tasks.

School Psychologists' Role Preferences

The professional practice of school psychology continues to evolve as practitioners advocate for a shift away from the traditional roles of evaluations and "gatekeepers to special education" to practice oriented toward problem-solving and prevention. With the implementation of response to intervention (RtI) models of academic and behavioral supports in schools, school psychologists can apply their knowledge of problem-solving, assessment, and

data-based decision making to the development and implementation of school-wide interventions to support learning for all students (Filter et al, 2013).

Few peer-reviewed studies have been published that evaluate characteristics that lead to dissatisfaction among practicing school psychologists. Filter et al. (2013) compared the actual amount of time that school psychologists spent in various activities to the amount of time school psychologists reported they would prefer to spend on the same activities. Results of paired-sample *t*-tests suggested that school psychologists would prefer to spend less time writing reports, administering IQ tests, and participating in special education eligibility meetings. Results of additional paired-sample *t*-tests indicated that school psychologists would prefer to spend more time than they actually spend administering curriculum-based assessments and conducting educational research. As a secondary purpose of their study, Filter et al. (2013) sought to determine the specific barriers school psychologists face in their effort to practice according to their preferred roles. Results of multiple regression analyses indicated that time, administrative expectations, and school psychologist-to-student ratios prevented school psychologists from practicing their preferred roles (Filter et al., 2013).

Workplace Stressors for School Psychologists

Because of the unique job description for school psychologists practicing within a traditional itinerant model, school psychologists face workplace stressors and barriers to effective practice that other school staff may not experience. Overall, school psychologists are typically not administrators. Though school psychologists are expected to be change-agents within the school and district, they have no power to enforce the changes or interventions they recommend (Crosson, 2015). Additionally, because school psychologists typically serve multiple schools within a district and do not keep full-time hours at any one school, 61% of

school psychologists report frustration with difficulty finding adequate space to conduct evaluations and interviews (Clair, Kerfoot, & Klausmeier, 1972).

Like psychotherapists in a clinical setting, school psychologists are also vulnerable to experiencing secondary trauma and related stressors as a result of a therapeutic relationship with students who engage in self-harm or are subject to chronic abuse (Lee, Lim, Yang, & Lee, 2011; Voss Horrell, Holohan, Didion, & Vance, 2011). Other stressors that have been shown to effect job satisfaction of school psychologists include: (a) insufficient support and resources; (b) challenging demands from administrators, teachers, and parents; (c) disproportionate caseloads; (d) federal and state mandated timelines; (e) accountability standards; and (f) isolation from colleagues (Clair et al., 1972; Huebner et al., 2002).

Further, in some school districts, school psychologists are among the first professional personnel to experience job loss as budgets are cut (Weir, 2012). As many administrators, teachers, and board officials do not fully understand the role of school psychologists, school psychologists are too often deemed as "nonessential" and positions are eliminated. Even when school districts value their school psychologists and do not eliminate positions during times of budget strain, the positions that often are eliminated are those that directly affect school psychologists. For example, when technology or interventionist positions are cut, a school psychologist may step in to troubleshoot augmentative communication devices for non-verbal students or consult with general education teachers on in-class academic interventions. When school psychologists spend time on tasks that could be allocated to additional staff members, they lose time necessary to complete additional tasks directly related to their caseload (Weir, 2012).

Burnout Among School Psychologists

With the exception of doctoral research, much of the research regarding burnout among school psychologists is outdated. Continued research suggests that the effects of burnout across the helping professions and mental health services are higher than in other professions and school psychologists in particular are at a higher risk for experiencing burnout (Crosson, 2015; Kucer, 2018; Mackonienė, & Norvilė, 2012). Repeated research has determined that, overall, high numbers of school psychologists report experiencing burnout (Huberty & Huebner, 1988; Huebner, 1992; Huebner & Mills, 1994; Mills & Huebner, 1998; Sandoval, 1993). One study showed that, of the three components of burnout, more school psychologists reported experiencing emotional exhaustion than depersonalization or feelings of ineffectiveness (Huebner, 1992).

Huebner and Mills (1998) found that school psychologists reported higher rates of emotional exhaustion than the normative population of helping professionals on a measurement of job burnout; however, they reported lower rates of depersonalization and lower rates of reduced personal accomplishments than the normative sample. Forty percent of school psychologists reported symptoms of emotional exhaustion whereas only 10% reported depersonalization and 18% reported reduced personal accomplishments (Huebner & Mills, 1998).

In a doctoral dissertation, Crosson (2015) examined the effects of occupational stress and psychological hardiness on self-efficacy among the 112 school psychologists practicing in Georgia. Using multiple regression analyses, results showed that school psychologists' self-report ratings of psychological hardiness has a significant positive relationship to self-efficacy, $t(109) = 5.10$, $p < .001$. Further results showed that psychological hardiness moderates the

effects of workplace stress, $t(108) = 1.82$, $p = .072$. Results of this study suggest that school psychologists who self-report higher levels of psychological hardiness experience high levels of self-efficacy at low levels of stress; however, as workplace stressors increased, those who reported higher levels of psychological hardiness experienced decreases in self-efficacy. Similarly, school psychologists who self-reported lower levels of psychological hardiness experienced increases in self-efficacy when workplace stressors were increased (Crosson, 2015).

In a study of 291 school psychologists practicing across the U.S., 31.9% of participants reported they had personally been confronted by building and district administrators who pressured them to engage in activities they believed to be unethical. Additionally, 39% of participants reported that an administrator had asked them to make decisions that were in direct conflict with state or federal law. In both scenarios, only 6% of participants reported that their jobs had been threatened upon their refusal to comply. Types of unethical or unlawful pressures from administrators included: pressure to make improper special education eligibility decisions, withholding recommendations for support services, use of improper or outdated assessments, and inappropriate placement decisions. Further, school psychologists who had earned tenure or who were members of a union were no less likely to report administration requests to act unethically than school psychologists who had not earned tenure and who were not union members (Boccio et al., 2016).

Engphaiboon (2012) administered a personality inventory to 25 school psychologists and school counselors in Kentucky in order to examine the big five personality traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness) and burnout among school mental health professionals. Of the five personality factors measured, results showed that only

neuroticism is significantly predictive of emotional exhaustion and depersonalization among school psychologists (Engphaiboon, 2012).

School Psychologists' Job Satisfaction

Studies examining school psychologists' job satisfaction began when an overwhelming number of surveyed school psychologists reported their desire to leave the profession within a five-year time span (Reschly & Wilson, 1995). Follow up studies could not replicate the initial findings. Anderson, Hohenshil, and Brown (1984) found that, overall, school psychologists from a national sample were satisfied with their jobs and only 14% of participants reported being dissatisfied in their role. Later studies of school psychologists within individual states supported previous research with more than 80% of respondents reporting being satisfied to very satisfied in their jobs (Worrell et al., 2006). Among the states in which school psychologists' job satisfaction has been studied, including Georgia, North Carolina, and Pennsylvania, school psychologists' job satisfaction is lowest in West Virginia where 64% of participants reported being satisfied or very satisfied in their job (Solly & Hohenshil, 1986).

Worrell et al. (2006) compiled the results of research completed over a 22-year span, from 1982 through 2004, regarding school psychologists' job satisfaction. According to their analysis, no significant changes were reported in the areas of degree status. The most prevalent degree earned by school psychologists remained a master's of science degree with an additional 30 credit hours earned (MS + 30), though the education specialist (Ed.S) degree and doctorate in school psychology degree increased in prevalence over the 22-year span of the study. Significant variations were found for age, gender, and school psychologist-to-student ratio. Compared to the 1989 demographics data, school psychologists in 2002 classified themselves more often in the older age categories, women entered the field of school more than men, and

school psychologists reported lower caseloads. Additionally, fewer school psychologists reported holding national certification, with 75% of school psychologists nationally certified in 1992 and only 54% in 2002. Slightly fewer school psychologists reported in 2002 that they intended to remain in the profession (83%) than in 1992 (91%). Overall levels of job satisfaction remained consistent across studies from 1982, 1992, and 2004. In 2004, more than 90% of school psychologists reported they were satisfied or very satisfied with their job. In 1982 and 1992, 85% of school psychologists reported being satisfied or very satisfied with their job. Results of the 2004 study indicated that demographic factors did not significantly impact job satisfaction, with the exception of intent to remain in the profession and supervision. School psychologists who reported intending to remain in the profession for more than five years reported higher levels of jobs satisfaction than those who intended to leave the profession within five years. School psychologists reported higher levels of job satisfaction when their direct supervisor was a school psychologist than those who reported to direct supervisors who were not school psychologists (Worrell et al., 2006).

Relationship Between Job Satisfaction and Burnout

Brewer and Clippard (2002) contributed to the literature demonstrating the relationship between burnout and job satisfaction, particularly within helping professions. The research population in their study consisted of 166 participants employed with student support services working in institutions of higher education who are funded under federal programs aimed at providing educational opportunities and assistance to increase graduation rates of disadvantaged, low-income, and first-generation college students. Consistent with results of previous research among the helping professions, student support services personnel reported high rates of burnout and low levels of satisfaction. For their study, Brewer and Clippard (2002) used total scores of

the Job Satisfaction Scale (JSS) and the scores for each subscale of the Maslach Burnout Inventory (MBI): emotional exhaustion, depersonalization, and personal accomplishment. Results were analyzed using the Spearman rho and regression analyses and indicated that a significant negative correlation was found between emotional exhaustion and job satisfaction while a significant positive correlation was found between personal accomplishment and job satisfaction. No significant relationship was found between depersonalization and job satisfaction. Results of the regression analysis suggested a significant relationship between overall burnout, as rated by a composite score on the MBI, and overall job satisfaction, as rated by the total score on the JSS (Brewer & Clippard, 2002).

Job Satisfaction and Burnout Among School Psychologists

Most studies suggest an inverse relationship between job satisfaction and burnout among school psychologists (Maslach, 2003). Though much of the peer-reviewed research investigating the relationship between burnout and job satisfaction among school psychologists was completed in the 1990s and early 2000s, overall findings suggest that the same inverse relationship does not exist for school psychologists as for the general population. Despite reporting high rates of burnout, 91% of the 308 school psychologist participants indicated they were "satisfied" or "very satisfied" with their jobs as measured by the Minnesota Satisfaction Questionnaire (Worrell et al., 2006). Wilczenski (1997) found that 77% of the 720 school psychologist survey participants reported being "somewhat satisfied" to "very satisfied" in the profession and would choose school psychology again if they had the opportunity to change careers. Though school psychologists report high rates of job satisfaction, Huebner and Mills (1994) found that 42% of their sample of school psychologists reported at least some desire to leave the profession and

33% of participants expressed a desire to leave the profession within their first five years (Huebner et al., 2002).

Proctor and Steadman (2003) investigated the difference in in-house versus traditional school psychologists regarding job satisfaction and burnout. According to the study, in-house school psychologists are defined as school psychologists who serve only one school and spend their time serving the students and teachers in that school. Traditional school psychologists serve multiple schools on an itinerant schedule and travel between the schools on a daily or weekly basis (Proctor & Steadman, 2003). Results of the study suggest that in-house school psychologists who serve only one school report lower rates of stress and job burnout than do school psychologists practicing within a traditional itinerant role (Proctor & Steadman, 2003).

Mackonienė and Norvilė (2012) investigated burnout, job satisfaction, self-efficacy, and proactive coping among 115 school psychologists across Lithuania. Burnout was measured by its two facets as described on the Oldenburg Burnout Inventory, disengagement and exhaustion. More than two-thirds, or 64% of Lithuanian school psychologists reported moderate to high levels of disengagement, though only 1.7% reported high levels of disengagement. Conversely, approximately 35% of Lithuanian school psychologists reported low levels of disengagement (Mackonienė & Norvilė, 2012). More than 83% of school psychologists reported moderate to high levels of exhaustion, with 7.8% reporting high levels of exhaustion. Conversely, only 16.5% of Lithuanian school psychologists reported low levels of exhaustion (Mackonienė & Norvilė, 2012). Despite reporting moderate to high levels of disengagement and exhaustion, the overwhelming majority of Lithuanian school psychologists reported moderate to high levels of job satisfaction. More than 98% of participants reported moderate to high levels of job satisfaction, 52.2% reported moderate levels of job satisfaction and 46.1% of participants

reported high levels of job satisfaction. Only 1.7% of Lithuanian school psychologists reported low levels of job satisfaction (Mackonienė & Norvilė, 2012).

Weaver and Allen (2017) studied the relationship between emotional labor, job satisfaction, and burnout among 192 school psychologists practicing in Iowa and Nebraska. Emotional labor was defined as one's effort required to manage and express emotions consistent with job expectations and professionalism (display rules) that may be dissonant to one's actual feelings experienced (surface acting). Consistent with results of similar studies among other professions, Weaver and Allen (2017) found that school psychologists who are expected to conform to display rules experience increased emotional exhaustion, increased depersonalization, and decreased personal accomplishments. Emotional exhaustion, increased depersonalization, and decreased personal accomplishments are contributing factors to burnout as defined by Maslach (2001). Additionally, Weaver and Allen (2017) also confirmed their hypothesis that emotional labor decreases job satisfaction among practicing school psychologists.

Though their research did not specifically evaluate burnout or job satisfaction, Bolnik and Brock (2015) studied the effects of crisis intervention on school psychologists including, physical reactions, emotional reactions, behavioral reactions, cognitive reactions, and job performance reactions. Questionnaires used in the study contained items describing the five researched domains, which are similar to the exhaustion and disengagement domains contained on the Oldenburg Burnout Inventory (Bolnik & Brock, 2005; Halbesleben, & Demerouti, 2005). Bolnik and Brock (2005) surveyed 172 school psychologists about their responses to providing crisis intervention. On the 37-item questionnaire, 90% of respondents endorsed experiencing symptoms of at least one of the five reaction domains. Symptoms from the physical reaction

domain were the most frequently endorsed (31.6%), and work performance reactions symptoms were endorsed the least (11.7%). Analyses determined no clinically significant relationships between the five reaction domains with demographic factors, such as experience, level of education, frequency of crisis intervention involvement, crisis intervention training, crisis intervention self-care, and crisis intervention attitudes (Bolnik & Brock, 2005).

Boccio et al.'s (2016) study evaluated school psychologists' responses when pressured to act unethically or illegally. Overall, study participants reported burnout rates commensurate with findings of previous studies of the prevalence of burnout among school psychologists. School psychologists who reported experiencing administrative pressures to practice unethically also reported higher rates of emotional exhaustion, higher rates of depersonalization, and lower levels of personal achievement than school psychologists who did not experience administrative pressures. Among school psychologists who reported experiencing administrative pressure to practice unethically, only 16% reported at least some desire to leave their current role and more than 80% indicated no desire to leave the profession of school psychology. These results suggest that, unlike other human services and mental health professions, higher rates of burnout do not lead to decreased job satisfaction among school psychologists (Boccio et al., 2016).

Summary

From the traditional role of school psychologists as evaluators and gatekeepers to special education, to a model of consultation and collaborative practice, to trends toward the school psychologist as a provider of school-based mental health services, the demands placed on school psychologists continue to grow. With increased responsibilities for the delivery of special education services mandated by the Individuals With Disabilities Education Act (2004) such as school team membership, data collection, and intervention documentation, along with

responsibilities for provision of *birth to three* services and accommodations according to Section 504 of the Rehabilitation Act (1973), school psychologists' job responsibilities contribute to work-related stressors and burnout in the profession (Etscheidt, 2012 Love, 2009; Huberty & Huebner, 1988; Huebner, 1992; Huebner & Mills, 1994; Mills & Huebner,1998; Shriberg, 2007; Watkins, et al., 2001).

Much of the peer-reviewed research investigating burnout and job satisfaction is outdated; however, the more recent research and several doctoral dissertations have focused on components related to job satisfaction and burnout among school psychologists. Research findings suggest personality factors that contribute to job satisfaction and burnout; however demographic factors related to burnout have shown inconsistencies across studies (Crosson, 2015; Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003; Reece, 2010; Worrell et al., 2006). Sample populations have been limited and sample sizes may have been insufficient to yield results that can be generalizable to school psychologists in a variety of settings and a variety of specific job characteristics (Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003).

To fill the gap in the literature, the purpose of this study was to determine the relationship of various demographic and job related factors on burnout and job satisfaction. Demographic variables to be considered include age, gender, years of experience, credentials held, race, ethnicity, martial status, and number of children. Variables of job-related factors include job location, responsibilities, school psychologists-to-student ratio, and number of schools served. This research is based on the assumptions that changes in job satisfaction and burnout rates from previous studies can be attributable to changes in the job and responsibilities of school psychologists over time. Because of the high rates of attrition among school psychologists, understanding the relationships between demographic and job factors with burnout and job

satisfaction is important to retaining school psychologists and recruiting new students to enter training programs.

CHAPTER THREE: METHODS

Overview

Peer reviewed research regarding the correlates to job satisfaction and burnout among school psychologists is outdated, with much of the current literature published in the 1980s and 1990s (Huberty & Huebner, 1988; Huebner, 1992; Huebner, & Mills, 1994; Mills & Huebner, 1998; Sandoval, 1993; Wise, 1985). The profession of school psychology has evolved and continues to evolve with changing political, economic, and social climates (Oakland & Cunningham, 1999). School psychologists' wide range of job responsibilities contribute to work-related stressors and burnout in the profession (Bell & McKenzie, 2013; Etscheidt, 2012; Love, 2009; Huberty & Huebner, 1988; Huebner, 1992; Huebner & Mills, 1994; Mills & Huebner,1998; Shriberg, 2007; Watkins et al., 2001). Recent research studies and doctoral dissertations have considered various correlates of job satisfaction and burnout among school psychologists, including: personality factors, coping skills, professional ethics, health factors, job stressors, social support, and self-efficacy (Crosson, 2015; Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003; Reece, 2010; Worrell et al., 2006). Demographic factors related to burnout have shown inconsistencies across studies (Crosson, 2015; Hussar, 2015; Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003; Reece, 2010; Worrell et al., 2006). Sample populations have been limited and sample sizes may have been insufficient to yield results that can be generalizable to school psychologists in a variety of settings and a variety of specific job characteristics (Mackonienė & Norvilė, 2012; Proctor & Steadman, 2003). Chapter Three describes the research design, participants, setting, instrumentation, procedures and data analysis.

Design

This quantitative study uses a nonexperimental correlational design to determine the relationship of demographic and job factors on job satisfaction and burnout among school psychologists. For this study, the predictor variables are represented by the demographic and job factors reported on the demographics questionnaire, a list of multiple-choice and open-ended questions adapted for this study based on previous research (Curtis et al., 2012; Filter et al., 2013; Smith, 1984). Predictor variables include age, gender, years of experience, credentials held, race, ethnicity, martial status, job location, responsibilities, school psychologists-to-student ratio, and number of schools served.

For this study, multiple predictor and criterion variables are assessed in order to determine factors of job responsibilities and demographics that relate to burnout and job satisfaction. Because multiple predictor and criterion variables are studied, a correlational design is preferred over a causal-comparative design (Gall, Gall, & Borg, 2007). Additionally, a correlational design is useful when variables fall along a wide range (Warner, 2013).

There are two criterion variables for this study, overall burnout and overall job satisfaction. Burnout is measured using the Oldenburg Burnout Inventory (OLBI), which includes two subscales and a total burnout composite score (Demerouti, Bakker, Vardakou, & Kantas, 2003). Job satisfaction is measured using the Job Satisfaction Survey (JSS), which includes nine subscales and a total job satisfaction composite score (Spector, 1997).

Research Questions

This study answers the following research questions:

RQ1: Which demographic and job factors are related to burnout, as measured by the Oldenburg Burnout Inventory, among school psychologists?

RQ2: Which demographic and job factors are related to job satisfaction, as measured by the Job Satisfaction Survey, among school psychologists?

Null Hypotheses

The null hypotheses for this research study are:

$H_0$1: There is no significant relationship between demographic and job factors and burnout, as measured by the Oldenburg Burnout Inventory, among school psychologists.

$H_0$2: There is no significant relationship between demographic and job factors and job satisfaction, as measured by the Job Satisfaction Survey, among school psychologists.

Participants and Setting

The target population for this study is school psychologists employed in the United States. According to NASP, approximately 30,000 school psychologists are employed in the U.S., with more than 80% of school psychologists working within a public school setting (Curtis et al., 2012). Additionally, NASP reported that over 14,000 school psychologists hold the credential of Nationally Certified School Psychologist (NCSP) (NASP, 2017d).

The sample for the present study consisted of 141 school psychologists practicing within the U.S. Three participants were male and 137 were female. One respondent did not select a gender. When asked their ethnicity, three respondents did not wish to answer, one respondent identified as American Indian or Alaskan Native, two respondents identified as Asian/Pacific Islander, two respondents identified as Black or African American, two respondents identified as multiple ethnicies, 10 participants identified as Hispanic, and 121 participants identified as White/Caucasian.

Due to the nonexperimental nature of the study, a convenience sample was used, soliciting participants from a Facebook group of school psychologists (Gall et al., 2010). School

Psychologists' Group is a pseudonym for the group used in this study. School Psychologists' Group is a closed group on Facebook with more than 13,700 members during the data collection period. A group administrator and multiple moderators monitor the group to ensure that posts and discussions maintain confidentiality of students and schools, protect confidentiality and copyrights of test materials, and ensure professionalism and human rights of all members. Membership to School Psychologists' Facebook Group is limited to current school psychologists, retired school psychologists, and school psychologist interns. Potential members must certify that they meet one of the school psychologist categories prior to approval for membership. Permission to solicit participants from School Psychologists' Facebook Group was granted by group administrator, Emily, and can be found in Appendix A.

An explanation of the study and directions for completing the questionnaires was posted in School Psychologists' Facebook Group. The recommended sample size for correlational research designs is a minimum of 66 participants for a medium effect size with .7 statistical power at the .05 alpha level (Gall et al., 2007).

Instrumentation

Oldenburg Burnout Inventory

The Oldenburg Burnout Inventory (OLBI) is used to measure burnout among school psychologists. The OLBI was developed by Demerouti, Bakker, Vardakou, and Kantas, (2002) in response to limitations of the Maslach Burnout Inventory (MBI), a widely-used measure of job burnout. Limitations of the MBI include: the evolution of burnout theory, imbalances in positively and negatively worded items, and incomplete conceptualization of burnout symptomology (Halbesleben & Demerouti, 2005). The MBI was developed according to a three-factor model of burnout including emotional exhaustion, depersonalization, and personal

accomplishment. The evolution of burnout theory has led many researchers to theorize that a two-factor model of burnout may be more accurate, including emotional exhaustion and depersonalization, with personal accomplishment is more closely related to certain personality traits, such as self-efficacy (Cordes & Daughtery, 1993; Halbesleben & Demerouti, 2005). Further, the personal accomplishment scale of the MBI was worded positively, whereas, the emotional exhaustion and depersonalization subscales were worded negatively. A limitation of the MBI was the imbalances in wording between the subscales that may inadvertently affect participants' response styles. Lastly, contemporary researchers investigating burnout believed that the facet of emotional exhaustion should be a broader conceptualization of exhaustion to include physical and cognitive burnout in order to provide a comprehensive assessment of the response to chronic work stressors (Halbesleben & Demerouti, 2005). In contrast to the MBI's three-factor model of burnout, the OLBI contains only two subscales, exhaustion and disengagement, which have been determined to be consistent with research investigating the phenomenon of burnout (Demerouti et al., 2002). The OLBI also balanced positive and negative wording and the exhaustion subscales included considerations for physical and cognitive exhaustion, in addition to emotional exhaustion components (Halbesleben & Demerouti, 2005).

The OLBI was originally written in German in 2002, and was translated into English in 2005 (Demerouti et al., 2002; Halbesleben, & Demerouti, 2005). The reliability and validity of the English translation of the OLBI are commensurate with the original German version. The internal consistency of the English translation of the OLBI was measured by Cronbach's alpha, with scores ranging from .74 to .87. The test-retest reliability of the OLBI was measured with approximately four months elapsing between two administrations. Scores between the first administration and second administration were moderately correlated ($r = .51$, $p < .001$ for

exhaustion and $r = .34$, $p < .01$ for disengagement). To determine the construct validity of the OLBI, Halbesleben and Demerouti (2005) used a mutli-trait, multi-method analysis to determine that the two subscales of the OLBI validly measured factors of burnout commensurate with the three subscales of the MBI.

Results of the OLBI yield scores for exhaustion, disengagement, and a total burnout score. The OLBI contains 16 questions with each subscale containing eight questions, balanced for positive and negative wording, in which respondents answer on a four-point Likert scale, including: Strongly Agree (1), Agree (2), Disagree (3), and Strongly Disagree (4) (Demerouti, Mostert, & Bakker, (2010). Once reverse scoring is considered, higher scores on the OLBI indicate higher levels of burnout. Conversely, lower scores on the OLBI indicate lower levels of burnout (Halbesleben & Buckley, 2004; Halbesleben & Demerouti, 2005; Kepple, 2018; Mackonienė, & Norvilė, 2012).

Korczak, Huber, and Kister (2010) completed a systematic literature review to investigate the medical, diagnostic, economic, and ethical concerns resulting from burnout. Results of their review determined there is no standardized instrument that validly assesses burnout (Korczak et al., 2010). The OLBI, and other instruments measuring burnout, do not provide descriptors of score ranges. Though cut scores were suggested to the MBI for use in clinical diagnostic purposes in the Netherlands, researchers investigating burnout have cautioned against the use of cut scores in an effort to promote the concept of burnout as a continuum of responses to work stressors rather than a psychiatric disorder (Halbesleben & Buckley, 2004).

Mackonienė, & Norvilė (2012) used the OLBI in their study investigating burnout, job satisfaction, and proactive coping among school psychologists in Lithuania. The OLBI has been used often to measure burnout in various professions, including mental health professionals, law

enforcement, and educational program directors (Adams, 2009; Hathaway, 2013; Kepple, 2018). Researchers have also used the OLBI in order to investigate job burnout and related correlates, including self-esteem, self-efficacy, demographic factors, stress, work engagement, and workplace factors (Costello, 2012; Demerouti, Mostert, & Bakker, 2010; Halbesleben, 2003; Hathaway, 2009; Mroczko, 2017). Additionally, the OLBI has been adapted to measure academic burnout among students, with the OLBI-S revision completed by Reis, Xanthopoulou and Tsaousis in 2015.

For the present study, OLBI was combined with the Job Satisfaction Survey and a demographics questionnaire for administration. Respondents completed questionnaire items administered electronically through SurveyMonkey online. The 16-item OLBI was expected to take less than five minutes to complete. Dr. Arnold Bakker (2011), an author of the OLBI, gives permission for use of the OLBI, at no cost, for noncommercial research purposes. Appendix C provides copyright information for the OLBI.

Job Satisfaction Survey

The Job Satisfaction Survey (JSS) was used to measure job satisfaction. The JSS was developed as a shorter measure of job satisfaction than the Minnesota Satisfaction Questionnaire (MSQ), which has been a popular instrument used in studies of job satisfaction that contains 100 questions in the long version (Brown et al., 2006; Spector, 1997). Originally developed by Spector (1985), the JSS was designed to assess job satisfaction, specifically, among human services, public, and non-profit professions. According to Spector (1985), prior to the development of the JSS, instruments measuring job satisfaction were developed in order to assess job satisfaction in industry; therefore, results were not generalizable to human services professions.

The JSS measures nine facets of job satisfaction, including pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work, and communication. Scores are provided for each subscale with an overall job satisfaction score comprised of a composite of all nine scales. Respondents are asked to answer 36 questions on a six-point Likert scale, Disagree Very Much (1), Disagree Moderately (2), Disagree Slightly (3), Agree Slightly (4), Agree Moderately (5), Agree Very Much (6). Half of the questions are negatively worded, therefore, score reversals are necessary before scoring can begin (Spector, 1997).

Once reverse-scoring is considered, the possible score range for individual subscales is 4 to 24. The possible score range for overall job satisfaction is 36 to 216. Higher scores on the subscales and overall job satisfaction indicate higher levels of job satisfaction and lower scores indicate lower levels of job satisfaction (Spector, 1997). Norms for the JSS were developed using a sample of 8,113 individuals from 52 separate studies. Results yielded mean scores and standard deviations for each subscale and overall job satisfaction: (a) overall job satisfaction has a mean of 136.5 and a standard deviation of 12.1; (b) the pay subscale has a mean of 11.8 and a standard deviation of 2.6; (c) the promotion subscale has a mean of 12.0 and a standard deviation of 1.9; (d) the supervision subscale has a mean of 19.2 and a standard deviation of 1.5; (e) the benefits subscale has a mean of 14.2 and a standard deviation of 2.2; (f) the contingent rewards subscale has a mean of 13.7 and a mean of 2.0; (g) the operating procedures subscale has a mean of 13.5 and a standard deviation of 2.2; (h) the coworkers subscale has a mean of 18.3 and a standard deviation of 1.1; (i) the nature of work subscale has a mean of 19.2 and a standard deviation of 1.3; and (j) the communication subscale has a mean of 14.4 and a standard deviation of 1.8 (Spector, 1997).

Tests of the reliability and validity of the JSS suggests that the instrument adequately reflects internal consistency, test-retest reliability, and correlation with variables previously shown to correlate with job satisfaction. The internal consistency of each subscale is reflected by Cronbach's alpha: (a) the pay subscale is .75, (b) promotion is .73, (c) the supervision subscale is .82, (d) the benefits subscale is .73, (e) the contingent rewards subscale is .76, (f) the operating procedures subscale is .62, (g) the co-workers subscale is .60, (h) the nature of work subscale is .78, (i) the communication subscale is .71, and (j) overall job satisfaction is .91 (Spector, 1997). Cronbach's alpha represents internal consistency and scores greater than .70 indicate that the instrument's internal consistency is acceptable (Warner, 2013). The test-retest reliability of the JSS was measured in a small sample of 43 participants over two administrations of the questionnaire approximately 18 months apart. The test-rest reliability coefficient for overall job satisfaction is .71, with test-retest reliabilities ranging from .37 to .74 for the subscales (Spector, 1997). The JSS has been used to investigate job satisfaction among various helping professions, such as nursing, and social work, (Gómez García, Alonso Sangregorio, & Lucía, 2018; Khamisa, Oldenburg, Peltzer, & Ilic, 2015). The JSS has also been used to investigate a myriad of factors related to job satisfaction, including work stress, burnout, and physical health, (Khamisa et al., 2015)

For this study, the JSS was combined with the OLBI and demographics questionnaire for administration. Respondents completed questionnaire items administered electronically through SurveyMonkey. The 36-item questionnaire was expected to take less than five minutes to complete. Within the book *Job Satisfaction: Application, Assessment, Causes and Consequences* (1997), the author gives permission for adaptation and use of the JSS, at no cost, to researchers

for “noncommercial educational and research purposes.” Appendix D provides copyright information for the JSS.

Other Measures

In order to gather demographic information from participants, additional demographic questions were included, comprised from questionnaires from various studies investigating demographics and school psychologist’s roles. Eighteen questions were included on the demographic questionnaire, including 18 multiple choice and short-answer questions, to gather information that may be related to burnout and job satisfaction among school psychologists. Information gathered included age, gender, race, years of experience, prior job experiences, credentials, education level, job roles, job preferences, NASP membership, and affiliation with state professional associations. The demographic questionnaire is presented as Appendix B. It was expected to take less than 10 minutes for respondents to complete the demographics portion of the study.

When the OLBI, JSS, and demographics questionnaires were combined, respondents were asked to complete a total of 74 Likert-type, multiple choice, and open-ended short-answer questions. The three portions of the study were expected to take 15 to 20 minutes for respondents to complete; however, average completion time was just over eight minutes.

Procedures

Prior to beginning this study, the researcher obtained approval from the Institutional Review Board (IRB) of Liberty University, presented as Appendix G. Data collection began on January 14, 2019 and ended on January 19, 2019.

The participant recruitment letter, presented as Appendix E, was posted to School Psychologists’ Facebook Group. The post contained a link to informed consent procedures and

the questionnaire with the recruitment letter. The research posted all information together at one time in the group. Reposts were unnecessary due to the overwhelming response from participants. An adequate sample size was reached within just a few hours of the post and more than100 responses had been received within the first 24 hours, though the study link stayed open for several more days. Participants were given the option to provide their email address to be entered into a raffle drawing for a prize of a $50 Amazon e-gift card.

In order to ensure participant confidentiality, participants were not asked to provide identifying information. Once participants completed the questionnaire, they were asked to enter their email address for entry into a raffle drawing for an e-gift card from Amazon.com. Email addresses were stored separately from questionnaire responses. Data received from research questionnaires was stored on a password-protected computer. Any hard-copy paperwork that was produced remained in a locked filing cabinet for three years, and then shredded.

Data Analysis

Once data collection was complete, the OLBI and JSS were scored, applying reverse-scoring procedures as necessary. Criterion variables are represented by the total burnout score on the OLBI and the total job satisfaction score on the JSS. Predictor variables are represented by the items on the demographics portion of the questionnaire, including age, gender, race, education level, years of experience, number of years in present position, number of schools served, and school psychologists-to-students ratio. Overall burnout and job satisfaction scores from each participant was entered into SPSS version 24.0. Answers to demographics questions will be coded and entered into SPSS. Table 3.1 displays the coding assignments for each answer from the demographic portion of the survey.

Table 1

Coding assignments for predictor variables

Variable	Assigned Codes
Gender	1 – Male 2 – Female 3 – other/prefer not to answer
Marital Status	1 – Married 2 – Single 3 – Divorced 4 – Other
NASP Membership	1 – Yes 2 – No
Membership in state professional association	1 – Yes 2 – No
NCSP certification	1 – Yes 2 – No
Salary range	1 - < $25,000 2 - $25,000 - $35,000 3 - $35,000 - $45,000 4 - $45,000 - $55,000 5 - $55,000 - $65,000 6 - $65,000 - $75,000, 7 - > $75,000
Race/Ethnicity	1 - Black/African American 2 – Caucasian 3 - American Indian/Alaska Native 4 - Asian/Pacific Islander 5 - Hispanic 6 – Other
Highest Degree Earned (in school psychology)	1 - master's degree (M.A. or M.S) 2 - specialist degree (Ed.S.) 3 - doctorate in school psychology (Ph.D.)
Primary Employment Setting:	1 - public schools 2 - private schools 3 - faith-based schools 4 – university

	5 - independent practice 6 - hospital/medical 7 - state department of education 8 – other
Employment Setting:	1 – urban 2 – rural 3 – suburban
Contract Term:	1 - 180-189 days 2 - 190-199 days 3 - 200-209 days 4 - 210-219 days 5 - 220-229 days 6 - 230-239 days 7 - 240-249 days 8 - 250-259 days 9 - 260+ days
Rank time spent in job duties:	1 – Academic assessment 2 – Behavior assessment 3 – Consultation 4 – Report writing 5 – Individual counseling 6 – Group counseling 7 – Special Education meetings 8 – General Education meetings 9 – Behavioral interventions 10 – Academic interventions 11 – other school duties (lunch duty, drop-off/pick up, recess duty, teacher coverage, etc)

For this present study, hierarchical regression analyses were used in order to examine the relationship between the two criterion variables and the multiple predictor variables. Hierarchical regression analysis is useful when predictor variables use interval, ordinal, or categorical data (Gall et al., 2010). Prior to conducting hierarchical regression analyses, relevant assumptions must be met. First, the sample size must be considered adequate given the multiple predictor variables. Next, the assumption of singularity must be met and each predictor variable

cannot represent a combination of other variables. Further, assumptions of collinearity must be considered adequate. Scatter plots are utilized in order to ensure the satisfaction of assumptions of normality, linearity, and homoscedasticity (Warner, 2013).

Descriptive statistics are presented for each predictor and criterion variable. Inferential assumptions are satisfied using a box and whisker plot to identify any outliers. Prior to completing hierarchical regression analyses, it is necessary to screen data to check for violations to assumptions. To determine the assumptions are met, a histogram is used to determine normal distribution. A scatterplot is used to determine linear relationships between variables, homogenous variance, and no extreme bivariate outliers (Warner, 2013).

Two separate hierarchical regression analyses were conducted in order to answer each of the two research questions. Bonferroni procedures are used to limit the risk of Type I error (EW_{α} = .05). The alpha level chosen is .05 with a statistical power of .7 in order to achieve a medium effect size index based on Cohen's *d* between .20 and .79 (Warner, 2013). The first hierarchical regression analysis determines which demographic and job factors are most strongly predictive of burnout among school psychologists. The second hierarchical regression analysis determines which demographic and job factors are most strongly predictive of job satisfaction among school psychologists (Warner, 2013).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative, correlational study was to examine the relationship between demographic and job-related factors on job satisfaction and burnout among school psychologists. In this study, demographic and job-related factors represent the predictor variables and job satisfaction and burnout represent the criterion variables. Demographics and job-related factors include gender, age, race, level of education, credentials, contract, salary, number of students served, and job responsibilities. Results of this study will be useful in helping to maintain practicing school psychologists in the field and students in school psychology training programs. This study used convenience sampling recruit 141 participants from a closed Facebook group, School Psychologists' Facebook Group. Chapter Four presents the descriptive statistics, results for hierarchical regression analysis in order to answer the two research questions, and additional analyses.

Research Questions

RQ1: Which demographic and job factors are related to burnout, as measured by the Oldenburg Burnout Inventory, among school psychologists?

RQ2: Which demographic and job factors are related to job satisfaction, as measured by the Job Satisfaction Survey, among school psychologists?

Null Hypotheses

$H_0$1: There is no significant relationship between demographic and job factors and burnout, as measured by the Oldenburg Burnout Inventory, among school psychologists.

$H_0$2: There is no significant relationship between demographic and job factors and job satisfaction, as measured by the Job Satisfaction Survey, among school psychologists.

Descriptive Statistics

A total of 141 school psychologists participated in the current study. Of the 141 responses received, 139 were usable ($N = 139$). One response was omitted because many questions were left unanswered; the other response was omitted because the respondent reported employment outside of the U.S. Participants reported employment in 37 states, presented in Table 2.

Table 2

Number of Participants by State

State	*n*	State	*n*	State	*n*
Alabama	1	Kansas	1	Oklahoma	1
Alaska	1	Kentucky	1	Pennsylvania	3
Arizona	5	Louisiana	1	South Dakota	1
Arkansas	2	Maryland	4	Tennessee	1
California	17	Massachusetts	3	Texas	6
Colorado	4	Michigan	6	Utah	1
Connecticut	2	Minnesota	2	Virginia	8
Delaware	1	Nebraska	3	Washington	1
Florida	1	Nevada	3	West Virginia	2
Georgia	3	New Jersey	4	Wisconsin	3
Illinois	10	New York	13	Wyoming	1
Indiana	3	North Carolina	1		

Predictor Variables

Demographic variables. Table 3 contains descriptive data for each of the demographic variables, including age, gender, marital status, number of children, and race. Respondents included 135 females (97.1%), 3 males (2.2%), and one participant did not provide a response (0.01%). Eighty-five (61.2%) of respondents reported they are married, while 12 (8.6% are divorced and 37 (26.6%) are single. Five respondents (3.6%) reported their marital status as other. More than 85% of participants were Caucasian (n = 119), 7% were Hispanic (n = 10), and there were slightly over 1% of respondents who were Black/African American, Asian/Pacific

Islander and Other, with two participants from each category. One participant was American Indian/Alaska Native (0.7%). More than 91% of participants fell between the ages of 25 and 55 (n = 47 for 25 – 35 years, n = 42 for 36 to 45 years, and n = 28 for 46 to 55 years). Three respondents were under 25 (2.2%), eight respondents were between 56 and 65 (5.8%), and only one respondent was over 65 years old (0.7%). Respondents were asked to the number of children they had; however, the question did not exclude adult children who are no longer under the respondents' care. Fifty-six participants (40.3%) have no children, 22 (15.8%) participants have only one child, 43 participants (30.9%) have two children, 13 participants (9.4%) have three children, one participant (0.7%) has four children, and four participants have five or more children (2.9%).

Table 3

Descriptive Data for Demographic Variables

Variables		*N/n*	%
Total Participants		139	100%
Gender			
	Male	3	2.2%
	Female	135	97.1%
	No Answer	1	0.01%
Marital Status			
	Married	85	61.2%
	Single	37	26.6%
	Divorced	12	8.6%
	Other	5	3.6%
Ethnicity			
	Black/African American	2	1.4%
	Caucasian	119	85.6%
	American Indian/Alaska Native	1	0.7%
	Asian/Pacific Islander	2	1.4%
	Hispanic	10	7.2%
	Other	2	1.4%
Age Range			
	under 25	3	2.2%
	25 – 35	47	33.8%
	36 – 45	52	37.4%
	46 – 55	28	20.1%
	56 – 65	8	5.8%
	over 65	1	0.7%
Number of Children			
	0	56	40.3%
	1	22	15.8%
	2	43	30.9%
	3	13	9.4%
	4	1	0.7%
	5 or more	4	2.9%

Job-Related Factors. Table 4 contains descriptive data for each of the job-related variables. Job-related variables of interest include highest degree earned, experience, employment status, contract length, school setting, community setting, salary range, credentials, and membership in state and national professional associations.

Table 4

Descriptive Data for Job-Related Variables

Variables		*N/n*	%
Total Participants		139	100%
Highest Degree Earned in School Psychology			
	Master's Degree (M.A./M.S.)	44	31.7%
	Specialist's Degree (Ed.S.)	85	61.2%
	Doctorate (Ph.D./Ed.D.)	10	7.2%
Years Experience as a School Psychologist			
	Less than 1 year	15	10.8%
	1 – 5 years	35	25.2%
	6 – 10 years	24	17.3%
	11 – 15 years	25	18.0%
	16 – 20 yeas	19	13.7%
	21 – 25 years	10	7.2%
	26 – 30 years	9	6.5%
	More than 30 years	2	1.4%
Employment Status			
	Part-time	10	7.2%
	Full-time	129	92.8%
Contract Days			
	180 – 189	69	49.6%
	190 – 199	29	20.0%
	200 – 209	19	13.7%
	210 - 219	7	5.0%
	220 - 229	5	3.6%
	230 – 239	1	0.7%
	240 – 249	0	0.0%
	250 – 259	0	0.0%
	260 or more	5	3.6%
	Other/Unknown/No Response	4	2.9%
School Setting			
	Public School	137	98.6%
	Private School	1	0.7%
	Other	1	0.7%

Community Setting			
	Urban	42	30.2%
	Rural	31	22.3%
	Suburban	66	47.5%
Salary Range			
	$25,000 - $35,000	1	0.7%
	$35,000 - $45,000	8	5.8%
	$45,000 - $55,000	27	19.4%
	$55,000 - $65,000	34	24.5%
	$65,000 - $75,000	25	18.0%
	more than $75,000	44	31.7%
NCSP Credential			
	Yes	55	39.6%
	No	84	60.4%
NASP Membership			
	Yes	76	54.7%
	No	63	45.3%
Membership in State Professional Association			
	Yes	80	57.6%
	No	59	42.4%
Number of Schools Served			
	Whole District	3	2.2%
	Varying	1	0.7%
	1 school	32	23.0%
	2 – 3 schools	75	54.0%
	4 – 5 schools	14	10.1%
	6 or more schools	12	8.6%
	Other	2	1.4%

The final predictor variable of interest is the number of students that school psychologists serve. The descriptive statistics for number of students served is presented in Table 5. Participants were asked to provide their best estimate of students served and provide that number. Multiple choices were not provided. A wide range of responses were given, with participants providing answers as low as 150 students to as many as more than 35,000 students.

Table 5

Descriptive Statistics for Number of Students Served

Variables	*N/n*	%	*M*	95% Confidence Interval
Number of students served	139	100	1878.86	1240.29 – 2517.44

Criterion Variables

There are two criterion variables for this current study, job satisfaction as represented by total scores on the JSS and burnout as represented by total scores on the OLBI. The descriptive results of the OLBI total scores and the JSS total scores are presented in Table 6. The mean score for the OLBI is 39.95 and with *SD* of 6.48. Total scores for the OLBI range from 16 to 64. Cut scores were not given; however, higher scores on the OLBI indicate higher levels of burnout. The mean score for the JSS is 131.15 with a *SD* of 22.92. Total scores for the JSS range from 36 to 216. Higher scores on the JSS indicate higher levels of job satisfaction.

Table 6

Descriptive Statistics of Criterion Variables

Variables	*N/n*	%	*M*	*SD*
OLBI Total	139	100	39.95	6.48
JSS Total	139	100	131.15	22.92

Results

Data Screening

Prior to data entry, all data was screened for missing data and one response was omitted. Another response was omitted as the respondent indicated residence outside of the U.S. These two cases were identified as outlier and were removed from the analysis. When data screening was complete, 139 data files were used in analysis ($N = 139$). The sample size of 139 met requirements for generalizability, with a large effect size (Gall et al., 2007).

Assumptions Testing

Prior to completing the hierarchical regression analysis, four assumptions were required: the assumptions of the absence of extreme outliers, normal distribution of residual errors, homoscedasticity, a linear relationship between the criterion variable and each of the predictor variables, and the absence of multicollinearity. Separate assumptions testing was required for each criterion variable, JSS score and OLBI score.

Null Hypothesis One. Total OLBI score represents the criterion variable in null hypothesis one. To assess the assumption of the absence of extreme outliers, visual inspection of predictor variables revealed no outliers. Further, Cook's and Mahalanobis distances were calculated using chi-square statistics. Cook's and Mahalanobis distances are presented in Table

7. No violations were present. Cook's distance is not greater than three times the mean, and though Mahalanobis distance exceeds the critical value, it is not expected to significantly influence the regression analysis. Additionally, examination of the box and whisker plot presented in Figure 1 shows that no outliers are present.

Table 7

Cook's and Mahalanobis' Distances for OLBI Total score

Test	Output (Maximum)
Cook's Distance	.131
Mahalanobis Distance	112.50

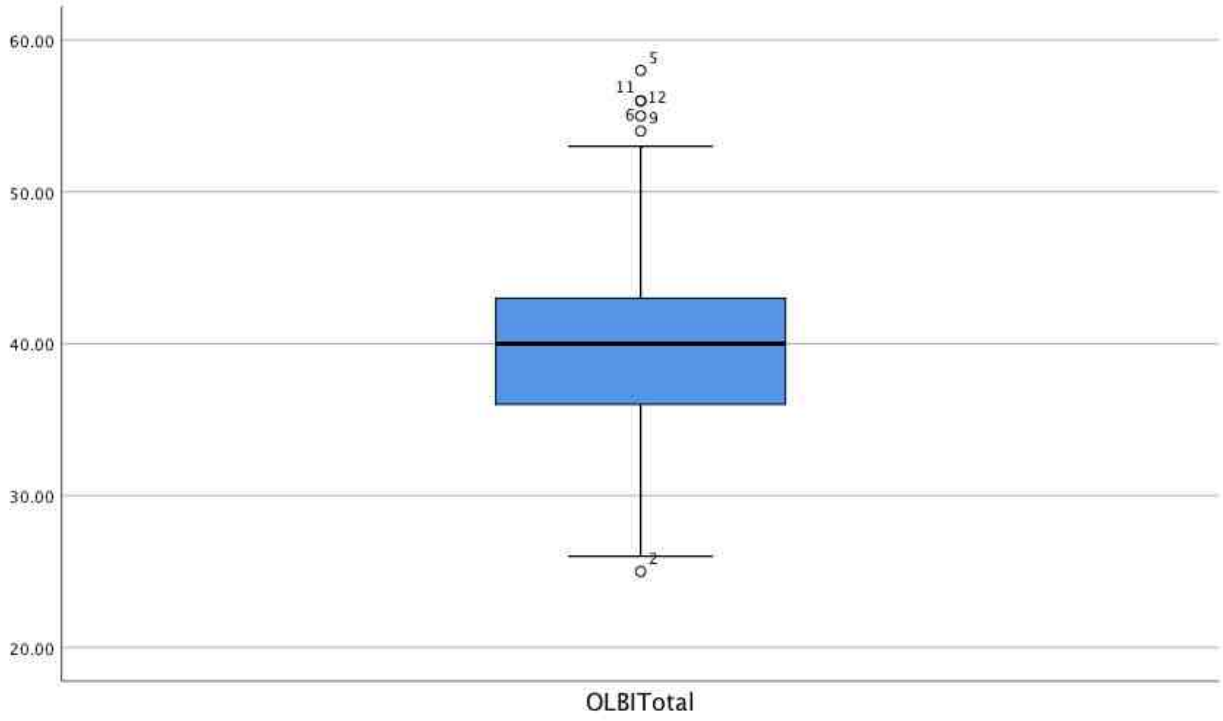

Figure 1. *Box and whisker plot of burnout scores as represented by total OLBI Total.*

Next, to assess the assumption of the normal distribution of regression residuals, a histogram of the regression residuals was created. After visual inspection of the histogram presented in Figure 2, regression residuals were considered normally distributed, indicating the assumption was met. The probability-probability plot presented in Figure 3 suggests normal distribution, indicating there is no deviation and the assumption of normality is acceptable for the OLBI.

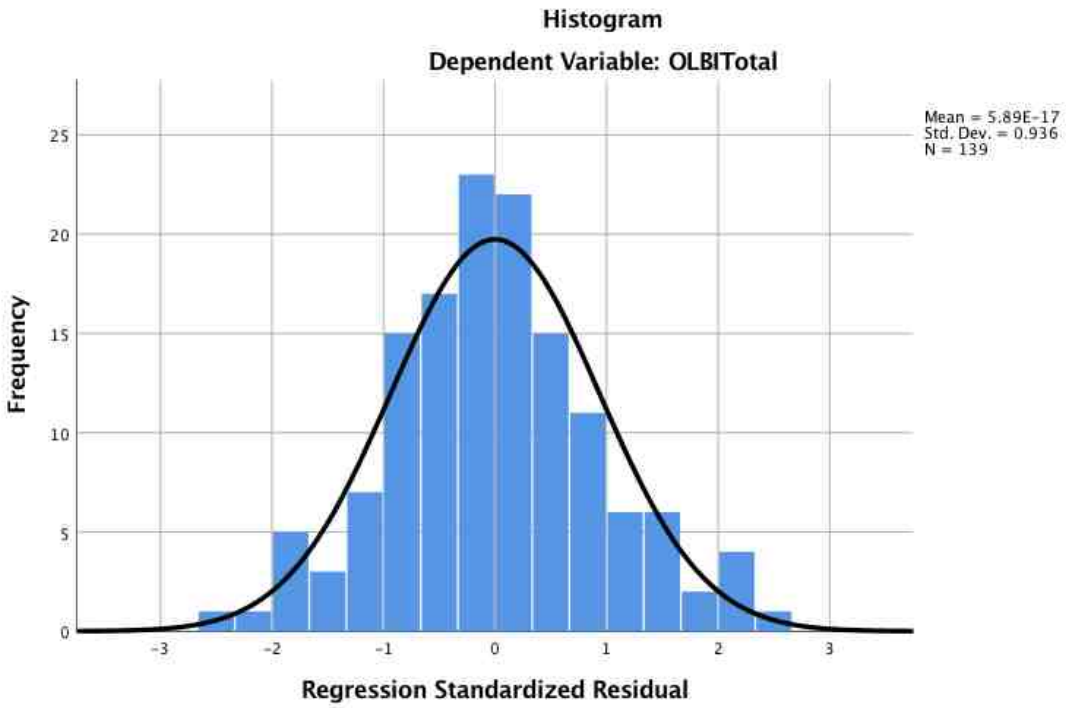

Figure 2. Histogram of Normally Distributed OLBI Scores

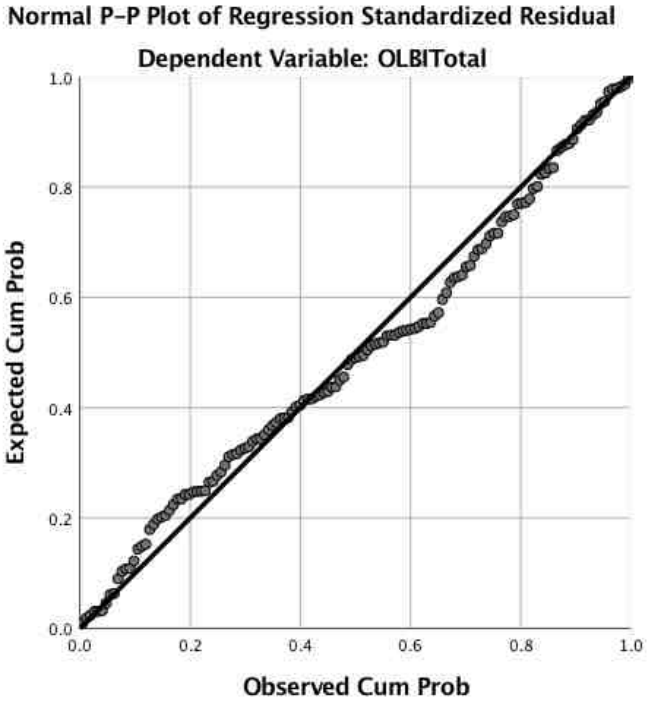

Figure 3. P-P Plot of the Standardized Residuals for OLBI Total Scores

Next, a scatterplot of the standardized residuals against the unstandardized predictor variables was created to check for homocedasticity. Based on the visual inspection of the scatterplot presented in Figure 4, the assumption of homocedasticity was met.

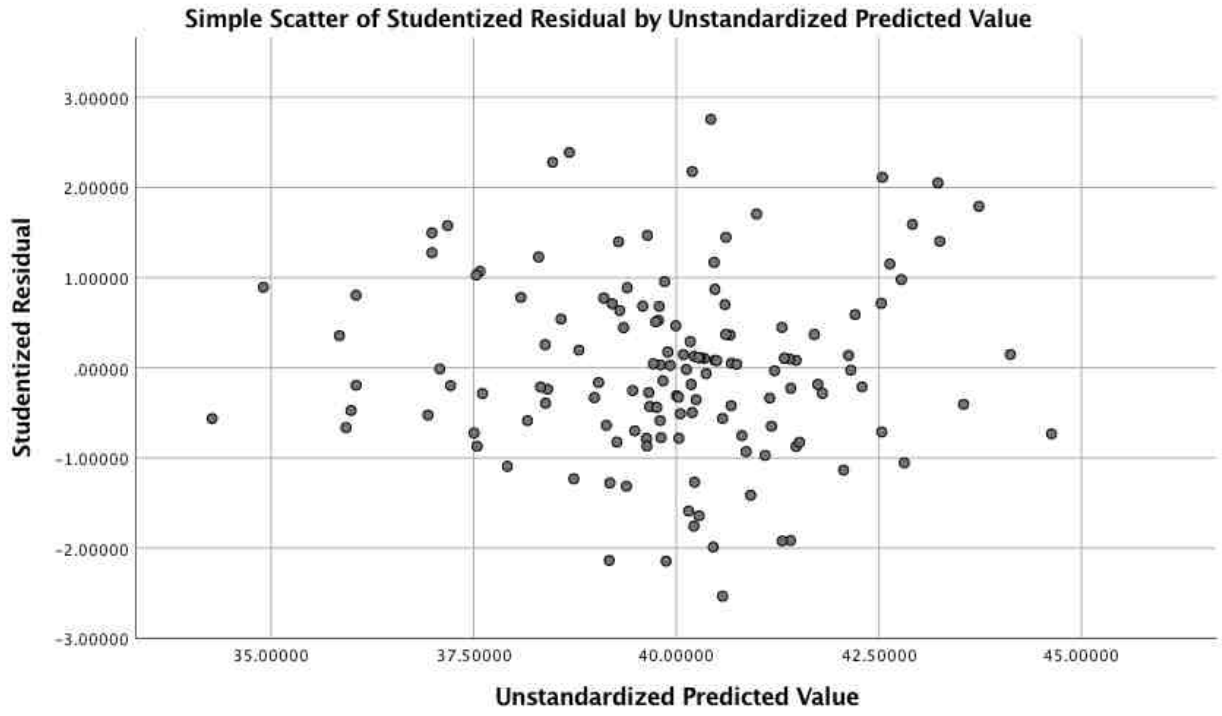

Figure 4. Scatterplot of Studentized Residuals by Unstandardized Predicted Value

To assess for the linear relationship assumption, bivariate regression plots were created between each of the predictor variables and the criterion variable. Seventeen plots are presented in Appendix H. Each of these plots show evidence of linearity, indicating the assumption of linearity was met.

Finally, to assess for the absence of multicollinearity, correlations between the predictor variables were calculated. An examination of Table 8 provides further evidence that there is no problem with mulitcollinearity as the tolerance level is not too small (because it is above .10 for each variable) and the variance inflation factor (VIF) is not too high (because it is below 10 for each variable) (Warner, 2013).

Table 8

Coefficients for OLBI Total Scores

	Unstandardized Coefficients		Standard Coeff.			Correlations			Collinarity Statistics	
Model	B	Std. Err.	Beta	t	Sig.	Zero Ord.	Partial	Part	Toler	VIF
1 (Con)	36.079	7.153		5.044	.000					
Gen	1.733	3.273	.045	.529	.597	.045	.045	.045	1.000	1.000
SchSt	.421	2.936	.012	.143	.886	.013	.012	.012	1.000	1.000
2 (Cons)	31.208	8.439		3.698	.000					
Gen	1.881	3.273	.049	.574	.567	.045	.050	.049	.999	1.001
SchSt	.243	2.939	.007	.083	.934	.013	.007	.007	.998	1.002
EmStat	2.755	2.158	.110	1.277	.204	.114	.110	.109	.984	1.016
Race	-.230	.483	-.041	-.477	.634	-.053	-.041	-.041	.984	1.017
3 (Con)	27.419	9.050		3.030	.003					
Gen	2.471	3.324	.065	.743	.459	.045	.065	.064	.974	1.027
SchSt	.406	3.017	.012	.134	.893	.013	.012	.012	.951	1.052
EmStat	3.200	2.195	.128	1.458	.147	.114	.126	.125	.955	1.047
Race	-.122	.492	-.022	-.248	.805	-.053	-.022	-.021	.950	1.053
Degree	1.081	.994	.096	1.087	.279	.078	.094	.093	.946	1.057
Marital	-.364	.721	-.045	-.505	.614	-.028	-.044	-.043	.928	1.077
4 (Con)	23.442	9.886		2.371	.019					
Gen	3.142	3.389	.082	.927	.356	.045	.081	.080	.942	1.062
SchSt	.623	3.039	.018	.205	.838	.013	.018	.018	.942	1.061
EmStat	3.253	2.203	.103	1.477	.142	.114	.128	.127	.954	1.048
Race	-.129	.494	-.023	-.262	.794	-.053	-.023	-.023	.949	1.053
Degree	1.253	1.010	.111	1.241	.217	.078	.108	.107	.922	1.084
Marital	-.403	.725	-.050	-.555	.580	-.028	-.049	-.048	.923	1.083
NCSP	1.276	1.292	.097	.988	.325	.067	.086	.085	.774	1.291
NASP	.032	1.253	.003	.026	.979	.025	.002	.002	.794	1.259
5 (Con)	29.054	10.20		2.848	.005					
Gen	2.435	3.377	.064	.721	.472	.045	.064	.062	.932	1.073
SchSt	.947	3.031	.028	.312	.755	.013	.028	.027	.931	1.074
EmStat	2.499	2.241	.100	1.115	.267	.114	.098	.095	.906	1.104
Race	-.277	.496	-.050	-.559	.577	-.053	-.049	-.048	.924	1.082
Degree	1.022	1.010	.091	1.011	.314	.078	.089	.086	.906	1.104
Marital	-.609	.729	-.075	-.835	.405	-.028	-.074	-.071	.898	1.114
NCSP	1.608	1.291	.122	1.245	.215	.067	.109	.106	.762	1.313
NASP	.962	1.336	.074	.720	.473	.025	.063	.061	.686	1.457
StAssoc	-1.500	1.225	-.115	-1.22	.223	-.090	-.108	-.104	.828	1.208

#Child	-.784	.494	-.152	-1.59	.115	-.140	-.139	-.135	,798	1.253
6 (Con)	28.531	10.47		2.726	.007					
Gen	2.580	3.419	.068	.754	.452	.045	.067	.065	.922	1.084
SchSt	.975	3.072	.028	.317	.751	.013	.028	.027	.919	1.088
EmStat	2.639	2.312	.106	1.141	.256	.114	.101	.098	.864	1.158
Race	-.293	.501	-.052	-.585	.560	-.053	-.052	-.050	.918	1.089
Degree	.985	1.043	.087	.945	.346	.078	.084	.081	.863	1.159
Marital	-.610	.738	-.075	-.827	.410	-.028	-.074	-.071	.890	1.124
NCSP	1.604	1.302	.121	1.232	.220	.067	.109	.106	.760	1.316
NASP	.930	1.350	.072	.689	.492	.025	.061	.059	.682	1.465
StAssoc	-1.621	1.278	-.124	-1.27	.207	-.090	-.112	-.109	.772	1.296
#Child	-.777	.498	-.150	-1.56	.121	-.140	-.138	-.134	.796	1.256
#Schs	-.076	.591	-.012	-.128	.898	.015	-.011	-.011	.858	1.166
Comm	.255	.704	.034	.362	.718	.005	.032	.032	.832	1.201
7 (Con)	28.043	10.71		2.618	.010					
Gen	2.647	3.452	.069	.767	.445	.045	.069	.066	.918	1.089
SchSt	1.048	3.114	.031	.336	.737	.013	.030	.029	.908	1.101
EmStat	2.665	2.331	.107	1.143	.255	.114	.102	.099	.862	1.160
Race	-.299	.510	-.054	-.587	.558	-.053	-.053	-.051	.902	1.108
Degree	.973	1.051	.086	.926	.356	.078	.083	.080	.861	1.161
Marital	-.684	.767	-.084	-.891	.375	-.028	-.080	-.077	.835	1.198
NCSP	1.613	1.313	.122	1.229	.222	.067	.110	.106	.758	1.319
NASP	.890	1.363	.069	.653	.515	.025	.059	.057	.679	1.473
StAssoc	-1.58	1.295	-.121	-1.22	.224	-.090	-.109	-.106	.763	1.310
#Child	-.846	.561	-.164	-1.51	.134	-.140	-.134	-.131	.637	1.569
#Schs	-.102	.602	-.016	-.170	.865	.015	-.015	-.015	.838	1.193
Comm	.213	.735	.028	.289	.773	.005	.026	.025	.774	1.292
Days	.120	.332	.033	.362	.718	.023	.032	.031	.901	1.110
Age	.160	.685	.024	.233	.816	-.056	.021	.020	.724	1.381
8 (Con)	26.300	10.93		2.407	.018					
Gen	3.272	3.514	.086	.931	.354	.045	.084	.081	.891	1.122
SchSt	1.181	3.133	.034	.337	.707	.013	.034	.033	.902	1.109
EmStat	1.771	2.390	.071	.711	.478	.114	.064-	.062	.760	1.316
Race	-.388	.519	-.069	-.747	.457	-.053	.067	-.065	.874	1.145
Degree	1.180	1.077	.105	1.096	.275	.078	.099	.095	.825	1.212
Marital	-.588	.777	-.073	-.757	.451	-.028	-.068	-.066	.819	1.220
NCSP	1.655	1.320	.125	1.254	.212	.067	.113	.109	.755	1.324
NASP	.913	1.402	.070	.651	.516	.025	.059	.057	.646	1.549
StAssoc	-.553	1.314	-.119	-1.18	.239	-.090	-.106	-.103	.746	1.341
#Child	-.937	.569	-.181	-1.65	.102	-.140	-.148	-.143	.624	1.602
#Schs	-.046	.606	-.007	-.076	.939	.015	-.007	-.007	.832	1.202
Comm	.111	.745	.015	.149	.882	.005	.013	.013	.759	1.318
Contract	.125	.333	.034	.376	.708	.023	.034	.033	.900	1.111

Age	-.441	1.036	-.065	-.425	.671	-.056	-.038	-.037	.319	3.138
YrsExp	.217	.551	.060	.394	.695	-.006	.036	.034	.327	3.057
Salary	.519	.554	.105	.938	.305	.034	.085	.081	.602	1.660
9 (Con)	26.308	10.97		2.398	.018					
Gen	3.253	3.531	.085	.921	.359	.045	.083	.080	.890	1.123
SchoolSt	1.191	3.147	.035	.378	.706	.013	.034	.033	.902	1.109
EmpStat	1.771	2.500	.071	.708	.480	.114	.064	.062	.760	1.316
Race	-.391	.522	-.070	-.750	.455	-.053	-.068	-.065	.872	1.147
Degree	1.184	1.082	.105	1.095	.276	.078	.099	.095	.825	1.213
Marital	-.579	.782	-.072	-.741	.460	-.028	-.067	-.065	.815	1.227
NCSP	1.654	1.325	.125	1.248	.214	.067	.113	.109	.755	1.324
NASP	.923	1.409	.071	.655	.514	.025	.059	.057	.654	1.552
StAssoc	-1.540	1.322	.118	-1.17	.246	-.090	-.105	-.102	.742	1.347
#Child	-.942	.572	-.182	-1.65	.102	-.140	-.148	-.144	.622	1.607
#Schs	-.056	.612	-.009	-.092	.927	.015	-.008	-.008	.823	1.215
Comm	.110	.748	.015	.147	.883	.005	.013	.013	.759	1.318
Days	.126	.335	.-.035	.376	.708	.023	.034	.033	.900	1.111
Age	-.445	1.041	-.066	-.428	.669	-.056	-.039	-.037	.318	3.141
YrsExp	.224	.555	.062	.403	.688	-.006	.037	.035	.325	3.077
Salary	.514	.557	--	.924	.358	.034	.084	.081	.600	1.666
#Stdnts	--	.000		.153	.878	.010	.014	.013	.954	1.049

Null Hypothesis Two. The same assumptions tests are completed for the second null hypothesis as are completed for the first null hypothesis. For null hypothesis two, the criterion variable is represented by total score on the JSS. To assess the first assumption, the absence of extreme outliers, visual inspection of predictor variables revealed no outliers. Further, Cook's and Mahalanobis distances were calculated using chi-square statistics. Cook's and Mahalanobis distances are presented in Table 9. No violations were present. Cook's distance is not greater than three times the mean and; though Mahalanobis distance exceeds the critical value, it is not expected to significantly influence the regression analysis. Additionally, examination of the box and whisker plot presented in Figure 5 shows that no outliers are present.

Table 9

Cook's and Mahalanobis' Distances for JSS Total score

Test	Output (Maximum)
Cook's Distance	.270
Mahalanobis Distance	112.495

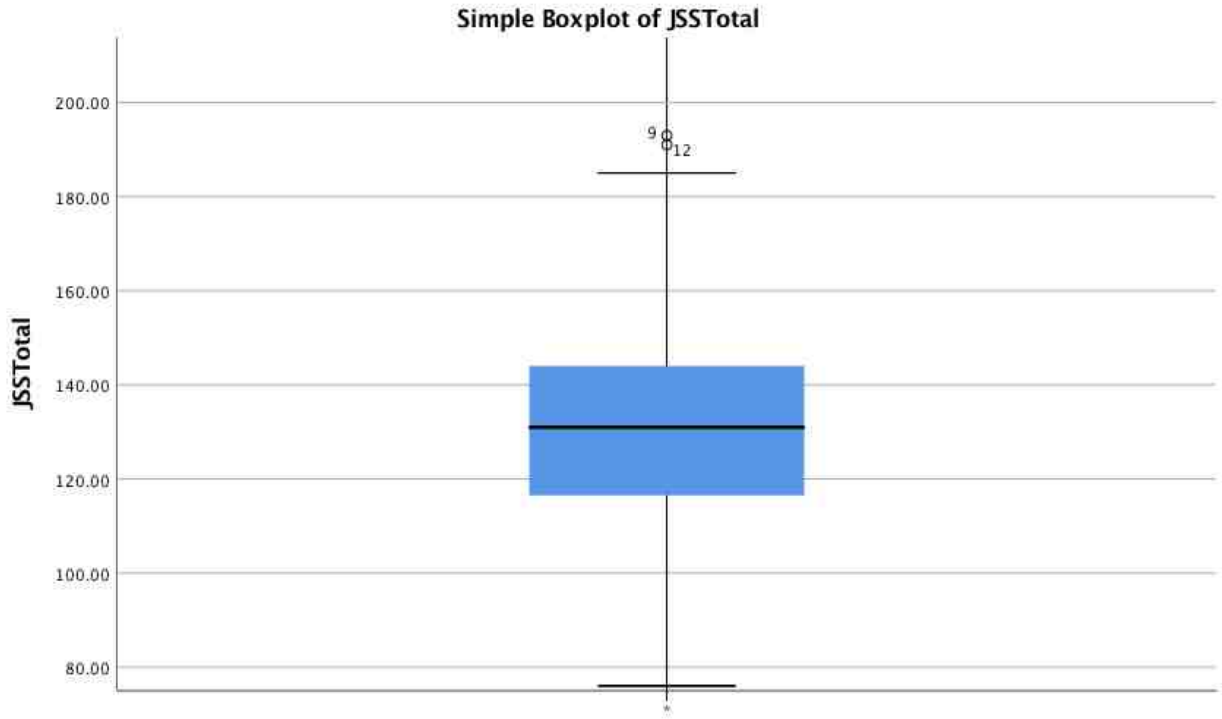

Figure 5. Box and whisker plot of burnout scores as represented by total JSS Total

Next, to assess the assumption of the normal distribution of regression residuals, a histogram of the regression residuals was created. After visual inspection of the histogram presented in Figure 6, the regression residuals were considered normally distributed, indicating the assumption was met. The probability-probability plot presented in Figure 7 suggests normal distribution, indicating there is no deviation and the assumption of normality is acceptable for the JSS.

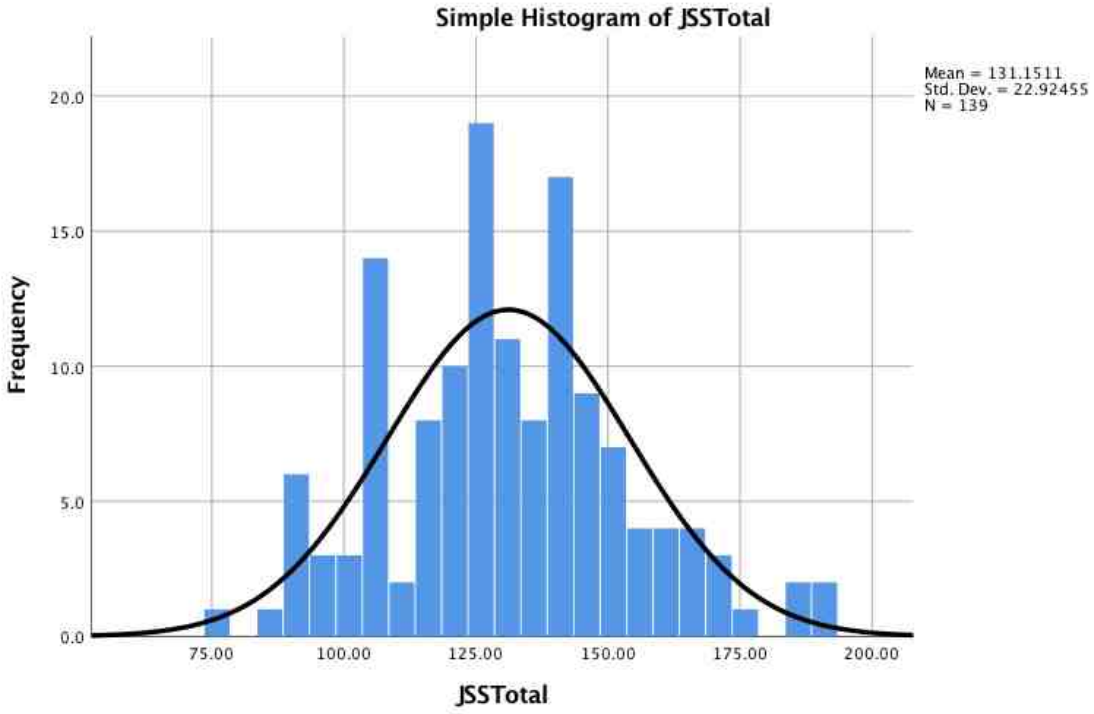

Figure 6. Histogram of JSS

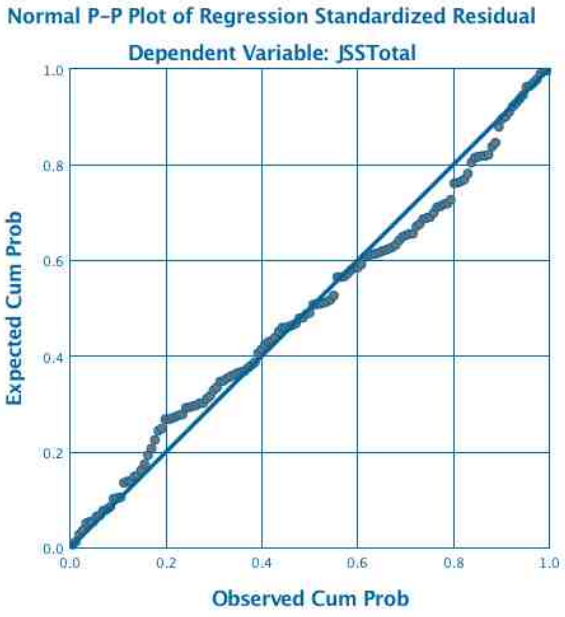

Figure 7. Plot of the Standardized Residuals for JSS Total Scores

Next, a scatterplot of the standardized residuals against the unstandardized predictor variables was created to assess for homocedasticity. Based on the visual inspection of the scatterplot presented in Figure 8, the assumption of homocedasticity was met.

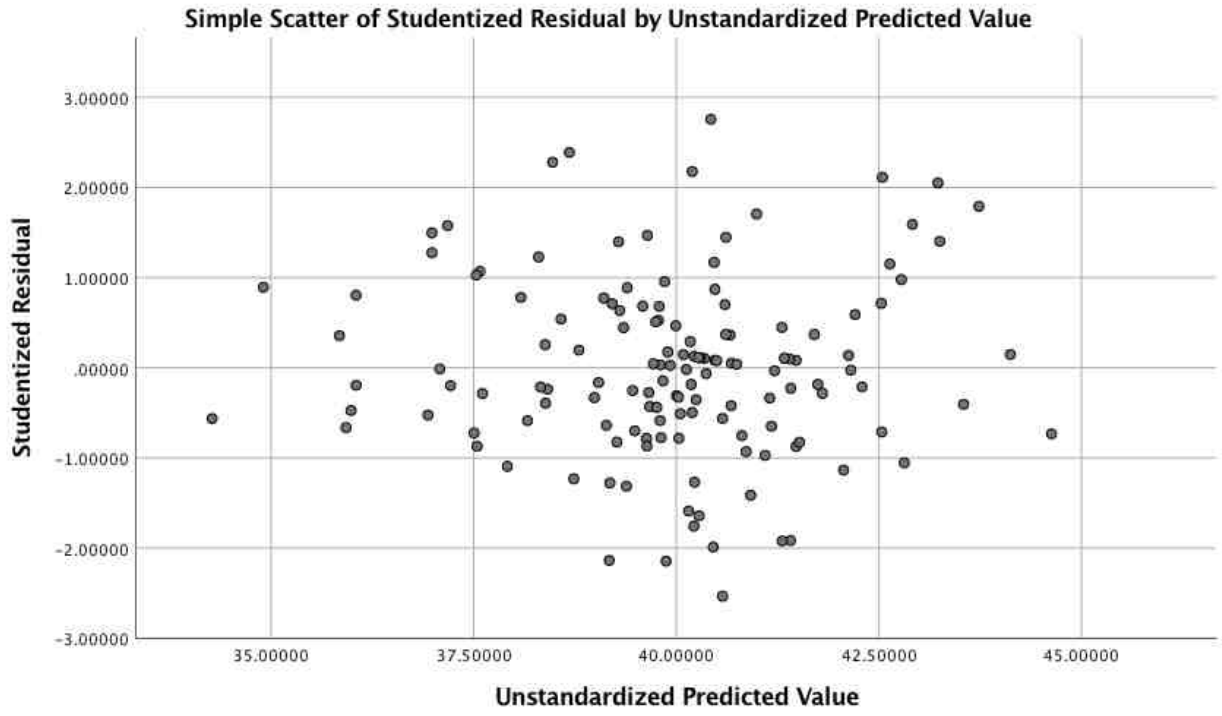

Figure 8. Scatterplot of Studentized Residuals by Unstandardized Predicted Value

To assess for the linear relationship assumption, bivariate regression plots were created between each of the predictor variables and the criterion variable. Seventeen plots can be found in Appendix H, showing evidence of linearity for each variable, indicating the assumption was met.

Finally, to assess for the absence of multicollinearity, correlations between the predictor variables were calculated. An examination of Table 10 provides further evidence that there is no problem with mulitcollinearity as the tolerance level is not too small (because it is above .10 for each variable) and the variance inflation factor (VIF) is not too high (because it is below 10 for each variable) (Warner, 2013).

Table 10

Coefficients for JSS Total Scores

	Unstandardized Coefficients		Standard Coeff.			Correlations			Collinarity Statistics	
Model	B	Std. Err.	Beta	t	Sig.	Zero Ord.	Partial	Part	Toler	VIF
1 (Con)	148.23	25.05		5.917	.000					
Gen		11.46	.004	.045	.964	.002	.004	.004	1.000	1.000
SchSt	-17.73	10.28	-.146	-1.72	-1.72	-.146	-.146	-.146	1.000	1.000
2 (Cons)	168.78	29.59		5.704	.000					
Gen	.387	11.48	.003	.034	.973	.002	.003	.033	.999	1.001
SchSt	-17.56	10.31	-.145	-1.70	.091	-.146	-.146	-.145	.998	1.002
EmStat	-9.341	7.575	-.106	-1.24	.219	-.104	-.106	-.105	.984	1.016
Race	-1.016	1.693	-	-.600	.549	-.033	-.052	-.051	.984	1.017
3 (Con)	177.31	31.78		5.579	.000					
Gen	-1.442	11.67	-.011	-.124	.902	.002	-.011	-.011	.974	1.027
SchSt	-19.15	10.95	-.158	-1.81	.073	-.146	-.155	-.154	.951	1.052
EmStat	-10.58	7.707	-.120	-1.37	.172	-.104	-.119	-.117	.955	1.047
Race	-1.312	1.729	-.066	-.759	.449	-.033	-.066	-.065	.950	1.053
Degree	-1.977	3.491	-.050	-.566	.572	-.034	-.049	-.048	.946	1.057
Marital	2.125	2.533	.074	.839	.403	.025	.073	.072	.928	1.077
4 (Con)	195.51	34.64		5.644	.000					
Gen	-4.144	11.88	-.031	-.349	.728	.002	-.031	-.030	.942	1.062
SchSt	-20.39	10.65	-.168	-1.92	.058	-.146	-.166	-.163	.942	1.061
EmStat	-10.91	7.719	-.123	-1.41	.160	-.104	-.123	-.121	.954	1.048
Race	-1.302	1.731	-.066	-.752	.453	-.033	-.066	-.064	.949	1.053
Degree	-2.706	3.539	-.068	-.765	.446	-.034	-.067	-.065	.922	1.084
Marital	2.189	2.542	.076	-.861	.391	.025	.075	.073	.923	1.083
NCSP	-3.692	4.528	-.079	-.815	.416.	-.081	-.071	-.070	.774	1.291
NASP	-2.646	4.392	-.058	-.602	.548	-.068	-.053	-.051	.794	1.259
5 (Con)	171.10	35.51		4.819	.000					
Gen	-1.251	11.75	-.009	-.106	.915	.002	-.009	-.009	.932	1.073
SchSt	-21.06	10.55	-.174	-1.99	.048	-.146	-.174	-.168	.931	1.074
EmStat	-7.127	7.800	-.081	-.914	.363	-.104	-.080	-.077	.906	1.104
Race	-.627	1.727	-.032	-.363	.717	-.033	-.032	-.030	.924	1.082
Degree	-1.614	3.516	-.041	-.459	.647	-.034	-.041	-.039	.906	1.104
Marital	3.166	2.538	.111	-1.24	.215	.025	.110	.105	.898	1.114
NCSP	-5.125	4.495	-.110	-1.14	.256	-.081	-.100	-.096	.762	1.313
NASP	-5.926	4.651	-.129	-1.24	.205	-.068	-.112	-.107	.686	1.457
StAssoc	3.873	4.265	.084	.908	.365	.038	.080	.076	.628	1.208

#Child	3.835	1.720	.210	2.230	.028	.179	.193	.187	.798	1.253
6 (Con)	170.16	36.45		4.669	.000					
Gen	-1.001	11.91	-.007	-.084	.933	.002	-.007	-.007	.922	1.084
SchSt	-21.02	10.70	-.173	-1.97	.052	-.146	-.172	-.166	.919	1.088
EmStat	-6.893	8.050	-.078	-.856	.393	-.104	-.076	-.072	.864	1.158
Race	-.654	1.746	-.033	-.375	.709	-.033	-.033	-.032	.918	1.089
Degree	-1.681	3.631	-.042	-.463	.644	-.034	-.041	-.039	.863	1.159
Marital	3.165	2.569	.111	1.232	.220	.025	.109	.104	.890	1.124
NCSP	-5.130	4.535	-.110	-1.13	.260	-.081	-.100	-.096	.760	1.316
NASP	-5.979	4.701	-.130	-1.27	.206	-.068	-.113	-.108	.682	1.465
StAssoc	3.660	4.452	.079	.822	.413	.038	.073	.070	.772	1.296
#Child	3.848	1.735	.210	2.216	.028	.179	.194	.188	.796	1.256
#Schs	-.120	2.058	-.005	-.058	.954	-.032	-.005	-.005	.858	1.166
Comm	.448	2.451	.017	.183	855	.020	.016	.015	.832	1.201
7 (Con)	173.73	37.22		4.668	.000					
Gen	-1.484	11.99	-.011	-.124	.902	.002	-.011	-.011	.918	1.089
SchSt	-21.49	10.82	-.177	-1.99	.049	-.146	-.176	-.169	.908	1.101
EmStat	-7.083	8.10	-.080	-.875	.384	-.104	-.078	-.074	.862	1.160
Race	.-619	1.771	-.031	-.350	.727	-.033	-.031	-.030	.902	1.108
Degree	-1.595	3.652	-.040	-.437	.663	-.034	-.039	-.037	.861	1.161
Marital	3.685	2.666	.129	1.382	.169	.025	.123	.118	.835	1.198
NCSP	-5.186	4.562	-.111	-1.17	.258	-.081	-.102	-.097	.758	1.319
NASP	-5.701	4.738	-.124	-1.20	.231	-.068	-.107	-.102	.679	1.473
StAssoc	3.408	4.500	.074	.757	.450	.038	.068	.064	.763	1.310
#Child	4.346	1.950	.238	2.229	.028	.179	.196	.190	.637	1.569
#Schs	.057	2.092	.003	.027	.978	-.032	.002	.002	.838	1.193
Comm	.722	2.555	.027	.282	.778	.020	.025	.024	.774	1.292
Days	-.816	1.154	-.063	-.707	.481	-.036	-.063	-.060	.901	1.110
Age	-1.176	2.382	-.049	-.494	.622	.050	-.044	-.042	.724	1.381
8 (Con)	166.81	37.96		4.394	.000					
Gen	.195	12.21	.001	.016	.987	.002	.001	.001	.891	1.122
SchSt	-22.16	10.89	-.183	-2.04	.044	-.146	-.181	-.174	.902	1.109
EmStat	-9.421	8.649	-.107	-1.09	.278	-.104	-.098	-.093	.760	1.316
Race	-.913	1.805	-.046	-.506	.614	-.033	-.046	-.043	.874	1.145
Degree	-.874	3.742	-.022	-.233	.816	-.034	-.021	-.020	.825	1.212
Marital	3.583	2.698	.125	1.328	.187	.025	.119	.113	.819	1.220
NCSP	-5.431	4.585	-.116	-1.18	.239	-.081	-.107	-.101	.755	1.324
NASP	-4.526	4.870	-.099	-.929	.355	-.068	-.084	-.079	.646	1.549
StAssoc	2.712	4.565	.059	.594	.554	.038	.054	.051	.746	1.341
#Child	4.256	1.975	.233	2.154	.033	.179	.191	.184	.624	1.602
#Schs	.075	2.106	.003	.036	.972	-.032	.003	.003	.832	1.202
Comm	.786	2.588	.030	.304	.762	.020	.028	.026	.759	1.318
Contract	-.793	1.158	-.062	-.685	.495	-.036	-.062	-.058	.900	1.111

	Age	.132	3.600	.006	.037	.971	.050	.003	.003	.319	3.138
	YrsExp	-1.636	1.913	-.128	-.855	.394	.011	-.077	-.073	.327	3.057
	Salary	1.806	1.924	.103	.939	.350	.075	.085	.080	.602	1.660
9	(Con)	166.78	38.11		4.376	.000					
	Gen	.273	12.27	.002	.022	.982	.002	.002	.002	.890	1.123
	SchoolSt	-22.20	10.93	-.183	-2.03	.044	-.146	-.182	-.174	.902	1.109
	EmpStat	-9.418	8.684	-.107	-1.09	.280	-.104	-.098	-.093	.760	1.316
	Race	-.898	1.814	-.045	-.495	.622	-.033	-.045	-.042	.872	1.147
	Degree	-.890	3.757	-.022	-.237	.813	-.034	-.022	-.020	.825	1.213
	Marital	3.546	2.716	.124	1.306	.194	.025	.118	.112	.815	1.227
	NCSP	-5.430	4.603	-.116	-1.18	.241	-.081	-.107	-.101	.755	1.324
	NASP	-4.566	4.894	-.100	-.933	.353	-.068	-.085	-.080	.645	1.552
	StAssoc	2.655	4.593	.057	.578	.564	.038	.052	.049	.742	1.347
	#Child	4.276	1.986	.234	2.153	.033	.179	.192	.184	.622	1.607
	#Schs	.116	2.126	.005	.055	.956	-.032	.005	.005	.823	1.215
	Comm	.790	2.598	.030	.304	.761	.020	.028	.026	.759	1.318
	Days	-.795	1.162	-.062	-.684	.495	-.036	-.062	-.059	.900	1.111
	Age	.152	3.616	.006	.042	.967	.050	.004	.004	.318	3.141
	YrsExp	-1.665	1.927	-.130	-.864	.389	.011	-.078	-.074	.325	3.077
	Salary	1.826	1.934	.104	.944	.347	.075	.085	.081	.600	1.666
	#Stdnts		.001	-.016	-.185	.853	.001	-.017	-.016	.954	1.049

Summary of Assumptions Testing

Assumptions testing was completed for each criterion variable. First, assumptions testing was completed using total OLBI score as the criterion variable. For the second set of assumptions testing, total JSS score represented the criterion variable. Assumptions of the absence of extreme outliers, normal distribution of residual errors, homoscedasticity, a linear relationship between the criterion variable and each of the predictor variables, and the absence of multicollinearity were all met for each variable.

Results

Hierarchical Regression Analysis

For this present study, hierarchical regression analyses were used in order to examine the relationship between predictor variables and two criterion variables. Job satisfaction, as

determined by the total score on the JSS, represents the criterion variable in research question one. Burnout, as determined by the total score on the OLBI, represents the criterion variable in research question two. The hierarchical regression analysis was completed on both of the criterion variables separately. Multiple predictor variables include gender, school setting, employment status, race/ethnicity, highest degree obtained in school psychology, marital status, national certification, NASP membership, membership in state professional associations, number of children, number of school served, community setting, contract terms, age, years of experience in school psychology, salary, and number of students served. Total JSS score and total OLBI score were entered into SPSS as the two dependent variables. Hierarchical regression modeling was used in order for the researcher to choose the order when combining predictor variables. Additional predictor variables were added in subsequent steps in order to test the strength of each new set of variables (Laerd Statistics, 2015). Variables were entered, in sets, into SPSS to sequentially add those sets (in blocks) into the regression. Table 11 lists the variables that were entered for each model. Variables entered in each model are added to variables added in subsequent models. The final model contains the variable added (i.e., number of students served), as well all other added variables, for a total of 17 variables. Hierarchical regression analysis procedures were repeated using OLBI score as the criterion variable. Models remained the same for the subsequent analysis.

Table 11

Models

Model	Predictor Variables
1	Gender School Setting
2	Employment Status Race/Ethnicity
3	Highest Degree Marital Status
4	National Certification NASP Membership
5	Membership in State Professional Associations Number of Children
6	Number of School Served Community Setting
7	Contracts Terms Age
8	Years of Experience Salary
9	Number of Students

Results for Null Hypothesis One

Hierarchical regression analysis was used to determine which demographic and job-related variables predict burnout as measured by the OLBI. The addition of variables did not lead to a statistically significant increase in R^2. The largest R^2 change is observed with the additions of the variables of Model 5, though the increase is not statistically significant (R^2 change = .031, $F(2, 128) = 2.160$, $p = .12$). Overall, the addition of all 17 variables increases predictability of OLBI Total scores, though the change is not statistically significant (R^2 change =

.000, $F[1, 121] = .024$, $p = .88$). The results of the hierarchical regression analysis are presented in Table 12. An analysis of variance (ANOVA) showed that the model as a whole was not significant ($R^2 = .080$, $F[17, 121] = .623$, $p = .868$); therefore, the researcher accepted null hypothesis one. Results of the ANOVA are presented in Table 13. Table 14 presents the mean scores on the OLBI, standard deviations, and confidence intervals for each variable.

Table 12

Summary of the Hierarchical Regression Analysis for OLBI Total Scores

Model	Std. Error of the Estimate	R^2 Change	*F* Change	Sig. *F* Change
1	6.52	.00	.15	.86
2	6.52	.02	1.02	.37
3	6.54	.11	.72	.49
4	6.56	.01	.61	.55
5	6.50	.03	2.16	.12
6	6.54	.00	.89	.92
7	6.60	.00	.91	.91
8	6.61	.01	.63	.53
9	6.64	.00	.24	.88

Table 13

ANOVA Table for OLBI Total Scores

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.860	2	6.430	.151	.860
	Residual	5785.788	136	42.543		
	Total	5798.647	138			
2	Regression	99.212	4	24.803	.583	.675
	Residual	5699.436	134	42.533		
	Total	5798.647	138			
3	Regression	160.325	6	26.721	.626	.710
	Residual	5638.323	132	42.715		
	Total	5798.647	138			
4	Regression	212.632	8	26.579	.619	.761
	Residual	5586.016	130	42.969		
	Total	5798.647	138			
5	Regression	394.972	10	39.497	.936	.503
	Residual	5403.675	128	42.216		
	Total	5798.647	138			
6	Regression	402.522	12	33.544	.783	.667
	Residual	5396.125	126	42.826		
	Total	5798.647	138			
7	Regression	410.404	14	29.315	.675	.795
	Residual	5388.244	124	43.454		
	Total	5798.647	138			
8	Regression	465.518	16	29.095	.666	.823
	Residual	5333.130	122	43.714		
	Total	5798.647	138			
9	Regression	466.554	17	27.444	.623	.868
	Residual	5332.093	121	44.067		
	Total	5798.647	138			

Table 14

Mean Burnout Scores from the OLBI for Each Predictor Variable

Predictor Variable	M	SD	95% Confidence Interval Lower	Upper
Gender				
Male	41.33	9.29	35.00	52.00
Female	39.84	6.40		
No answer	51.00	1.00		
School Setting				
Public	39.93	6.57	25.00	58.00
Private	42.00		42.00	42.00
Other	40.00		40.00	40.00
Employment Status				
Part-time	37.30	3.86	32.00	46.00
Full-time	40.16	6.61	25.00	58.00
Race/Ethnicity				
Black/African American	37.50	12.68	25.00	50.00
Caucasian	40.08	6.53	26.00	58.00
American Indian/Alaska Native	41.00		41.00	41.00
Asian/Pacific Islander	42.50	7.78	37.00	48.00
Hispanic	39.70	5.12	30.00	44.00
Other	37.50	7.79	32.00	43.00
Highest Degree				
Master's (M.A/M.S)	39.41	5.36	28.00	53.00
Specialist (Ed.S.)	40.01	6.68	26.00	58.00
Doctorate (Ph.D./Ed.D.)	41.70	9.24	25.00	56.00
Marital Status				
Married	40.08	6.15	25.00	58.00
Single	39.86	7.56	26.00	56.00
Divorced	39.33	6.91	26.00	47.00
Other	39.80	2.95	35.00	43.00
National Certification				
Yes	39.42	5.02	26.00	58.00
No	40.30	6.17	25.00	54.00

NASP Membership				
Yes	39.80	6.59	25.00	58.00
No	40.13	6.40	26.00	56.00
Membership in State Association				
Yes	40.45	6.64	26.00	58.00
No	39.27	6.26	25.00	54.00
Number of Children				
0	40.91	7.48	26.00	58.00
1	40.18	4.93	29.00	48.00
2	39.19	5.65	26.00	53.00
3	38.77	7.57	25.00	52.00
4	37.00		37.00	37.00
5 or more	38.00	6.48	31.00	41.00
Number of Schools	42.67	1.53	41.00	44.00
Whole district	30.00		30.00	30.00
Varies	38.22	6.15	26.00	52.00
1 school	41.16	6.64	25.00	58.00
2 – 3 schools	37.43	7.04	28.00	53.00
4 – 5 schools	40.50	5.11	35.00	51.00
6 or more schools	37.50	0.71	37.00	38.00
Other				
Community Setting				
Urban	40.60	6.25	28.00	58.00
Rural	38.06	5.67	26.00	51.00
Suburban	40.42	6.90	25.00	56.00
Contract Terms				
180 – 189 days	39.52	6.74	25.00	58.00
190 – 199 days	39.38	5.05	29.00	50.00
200 – 209 days	41.89	7.48	31.00	56.00
210 – 219 days	39.43	5.68	30.00	46.00
220 – 229 days	37.80	6.76	26.00	43.99
230 – 239 days	55.00	3.56	55.00	55.00
240 – 249 days				
250 – 259 days				
260 or more days	39.20	3.56	36.00	45.00

Age Range				
Under 25	34.33	6.03	28.00	40.00
26 – 35 years	41.43	7.65	26.00	56.00
36 – 45 years	38.85	4.82	29.00	52.00
46 – 55 years	40.57	7.22	25.00	58.00
56 – 65 years	39.00	4.44	31.00	44.00
Over 65	35.00		35.00	35.00
Years of Experience				
Less than 1 year	38.27	7.06	28.00	56.00
1 – 5 years	40.09	7.54	26.00	56.00
6 – 10 years	41.92	6.85	29.00	53.00
11 – 15 years	39.04	6.19	25.00	58.00
16 – 20 years	40.11	4.46	31.00	52.00
21 – 25 years	40.70	6.53	29.00	50.00
26 – 30 years	38.78	5.33	31.00	49.00
More than 30 years	38.00	4.24	35.00	41.00
Salary Range				
$25,000 - $35,000	34.00		34.00	34.00
$35,000 - $45,000	40.25	5.09	31.00	46.00
$45,000 - $55, 000	40.48	7.37	26.00	56.00
$55,000 - $65,000	39.15	6.60	29.00	58.00
$65,000 - $75,000	39.60	6.70	26.00	53.00
More than $75,000	40.52	6.11	25.00	56.00

Results for Null Hypothesis Two

Hierarchical regression analysis was used to determine which demographic and job-related variables predict job satisfaction as measured by the JSS. The hierarchical regression analysis is presented in Table 15. The addition of variables did not lead to a statistically significant increase in R^2. The largest R^2 change is observed with the addition of all variables of interest, though the increase is not statistically significant R^2 change =.000, $F(1,121) = .03$, $p = .85$.

Table 16 presents the analysis of variance (ANOVA), which showed that the model as a whole was not significant ($R^2 = .113$, $F[17, 121] = .904$, p = .572); therefore, the researcher

accepted null hypothesis two. Finally, Table 17 presents the mean scores on the JSS, standard deviations, and confidence intervals for each variable.

Table 15

Summary of the Hierarchical Regression Analysis for JSS Total Scores

Model	Standard Error of the Estimate	R^2 Change	*F* Change	Sig. *F* Change
1	22.84	.021	1.49	.23
2	22.87	.013	.87	.42
3	22.95	.007	.51	.60
4	22.97	.013	.88	.42
5	22.62	.043	3.06	.05
6	22.79	.000	.02	.98
7	22.91	.005	.36	.70
8	22.97	.010	.66	.52
9	23.06	.000	.03	.85

Table 16

ANOVA Table for JSS Total Scores

Model		Sum of Squares	*Df*	Mean Square	*F*	Sig.
1	Regression	1550.758	2	775.379	1.486	.230
	Residual	70973.070	136	521.861		
	Total	72523.827	138			
2	Regression	2457.524	4	614.381	1.175	.325
	Residual	70066.303	134	522.883		
	Total	72523.827	138			
3	Regression	299.601	6	499.100	.948	.464
	Residual	69529.226	132	526.73		
	Total	72523.827	138			
4	Regression	3924.759	8	490.595	.930	.494
	Residual	68599.068	130	527.686		
	Total	72523.827	138			
5	Regression	7055.327	10	705.533	1.379	.197
	Residual	65468.500	128	511.473		
	Total	72523.827	138			
6	Regression	7077.918	12	589.827	1.136	.338
	Residual	65445.909	126	519.412		
	Total	72523.827	138			
7	Regression	7459.461	14	532.819	1.015	.442
	Residual	65064.367	124	524.713		
	Total	72523.827	138			
8	Regression	8156.103	16	509.756	.966	.489
	Residual	64367.724	122	527.604		
	Total	72523.827	138			
9	Regression	8174.359	17	480.845	.904	.571
	Residual	64349.469	121	531.814		
	Total	72523.827	138			

Table 17

Mean Job Satisfaction Scores for the JSS for Each Predictor Variable

Predictor Variable	*M*	*SD*	95% Confidence Interval	
			Lower	Upper
Gender				
Male	129.33	54.01	76.00	184.00
Female	131.22	22.30	86.00	193.00
No answer	127.00		127.00	127.00
School Setting				
Public	131.61	22.75	76.00	193.00
Private	92.00		92.00	92.00
Other	107.00		107.00	107.00
Employment Status				
Part-time	139.70	15.67	107.00	163.00
Full-time	130.49	23.31	76.00	193.00
Race/Ethnicity				
Black/African	141.00	62.23	97.00	185.00
American	131.45	22.81	76.00	193.00
Caucasian	122.00		122.00	122.00
American	123.00	26.87	104.00	142.00
Indian/Alaska	127.30	22.53	105.00	165.00
Native	126.00	31.11	104.00	148.00
Asian/Pacific				
Islander				
Hispanic				
Other				
Highest Degree				
Master's	131.84	20.70	91.00	191.00
(M.A/M.S)	131.16	22.48	86.00	193.00
Specialist (Ed.S.)	128.00	35.81	76.00	185.00
Doctorate				
(Ph.D./Ed.D.)				
Marital Status				
Married	131.09	21.26	76.00	185.00
Single	129.03	24.95	86.00	193.00
Divorced	140.08	30.02	93.00	191.00
Other	126.40	15.92	107.00	150.00

National Certification				
Yes	133.44	23.10	89.00	193.00
No	129.65	22.82	76.00	191.00
NASP Membership				
Yes	132.57	21.30	89.00	193.00
No	129.44	24.80	76.00	191.00
Membership in State Association	130.41	21.65	86.00	193.00
Yes	132.15	24.70	76.00	191.00
No				
Number of Children				
0	128.32	22.07	86.00	193.00
1	125.09	24.76	92.00	184.00
2	134.56	20.20	91.00	191.00
3	137.15	29.82	76.00	185.00
4	153.00		153.00	153.00
5 or more	142.50	24.92	121.00	177.00
Number of Schools				
Whole district	125.33	5.77	122.00	132.00
Varies	165.00		165.00	165.00
1 school	140.41	22.27	101.00	193.00
2 – 3 schools	125.39	22.64	76.00	185.00
4 – 5 schools	136.17	25.14	92.00	177.00
6 or more schools	132.17	17.14	109.00	167.00
Other	150.50	10.60	143.00	158.00
Community Setting				
Urban	127.71	18.50	92.00	167.00
Rural	138.68	22.82	102.00	193.00
Suburban	129.80	24.96	76.00	185.00
Contract Terms				
180 – 189 days	131.33	24.10	89.00	193.00
190 – 199 days	134.24	21.25	93.00	184.00
200 – 209 days	126.32	23.33	76.00	165.00
210 – 219 days	127.43	27.57	101.00	165.00
220 – 229 days	133.30	24.26	104.00	171.00
230 – 239 days	104.00		104.00	104.00
240 – 249 days				
250 – 259 days				
260 or more days	133.40	19.45	116.00	163.00

Age Range				
Under 25	134.67	10.50	124.00	145.00
26 – 35 years	128.77	23.10	86.00	193.00
36 – 45 years	133.10	22.64	76.00	191.00
46 – 55 years	129.68	25.46	92.00	185.00
56 – 65 years	132.00	21.13	109.00	177.00
Over 65	150.00		150.00	150.00
Years of Experience				
Less than 1 year	133.07	18.72	86.00	170.00
1 – 5 years	130.94	24.30	92.00	193.00
6 – 10 years	129.63	25.36	89.00	191.00
11 – 15 years	130.24	23.45	91.00	185.00
16 – 20 years	133.95	24.18	76.00	184.00
21 – 25 years	122.50	20.67	101.00	158.00
26 – 30 years	138.44	19.77	109.00	177.00
More than 30 years	134.00	22.63	118.00	150.00
Salary Range				
$25,000 - $35,000	128.00		128.00	128.00
$35,000 - $45,000	130.38	18.95	107.00	163.00
$45,000 - $55, 000	129.22	23.64	86.00	193.00
$55,000 - $65,000	129.29	26.82	89.00	191.00
$65,000 - $75,000	131.60	21.46	101.00	173.00
More than $75,000	133.73	22.93	76.00	185.00

Summary

Chapter Four presents the descriptive data collected for this current study and describes the procedures used to address the two hypotheses. In this study, job satisfaction was measured by total score on the JSS. Burnout was measured by the total score on the OLBI. Total scores on the JSS and OLBI represent the criterion variables. There were 17 predictor variables gender, school setting, employment status, race/ethnicity, highest degree earned, marital status, NCSP credential, NASP membership, membership in state professional associations, number of

children, number of schools served, community setting, contract terms, age, years of experience, salary range, and number of students served.

The first of two hierarchical regression analyses were computed using JSS total score criterion variable. In the second hierarchical regression analyses computed, OLBI total score represented the criterion variable. Neither hierarchical regression analysis yielded clinically significant results; therefore, both null hypotheses were accepted. Demographic and job-related factors cannot predict job satisfaction or burnout.

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five provides a discussion of the study results presented in Chapter Four. Discussion is presented for each of the two hypotheses in light of the related literature and theoretical framework that guides this study. Chapter Five also presents implications of the study results, the limitations of the study, and recommendations for future research.

Discussion

The purpose of this quantitative, correlational study was to examine the relationship between demographic and job-related factors on job satisfaction and burnout among school psychologists. By understanding job factors that decrease job satisfaction and lead to burnout, school districts and entities that employ school psychologists can develop best practices to support their staff and to utilize a service delivery model that is beneficial to school psychologists as well as to all stakeholders. School psychologists can use results of this study to self-advocate and work with their employers to develop best practices that can benefit the school psychologist, the profession, the school, and the family. School psychology training programs can use the results of this study to design program curriculum to prepare future school psychologists for stressors and demands that decrease job satisfaction and lead to burnout.

Job satisfaction was defined as the degree to which people like their jobs (Spector, 1997). The total score of the Job Satisfaction Survey (JSS) was used to measure the level of job satisfaction among school psychologists. Burnout is a psychological syndrome that involves prolonged response to stressors in the workplace (Maslach, 2001, p. 189). The total score of the Oldenburg Burnout Inventory (OLBI) was used to measure burnout among school psychologists.

For the present study, the two criterion variables are JSS total score and OLBI total score.

JSS total score represents job satisfaction and OLBI total score represents burnout. Multiple demographic and job-related factors represent the predictor variables. The 17 predictor variables are gender, school setting, employment status, race/ethnicity, highest degree earned, marital status, NCSP credential, NASP membership, membership in state professional associations, number of children, number of schools served, community setting, contract terms, age, years of experience, salary range, and number of students served.

Null Hypothesis One

The first null hypothesis stated that there is no relationship between demographic and job-related factors and job satisfaction among school psychologists. The first null hypothesis was accepted. Of the 17 variables entered into the hierarchical regression, none of the variables were shown to predict job satisfaction.

A review of literature shows that, overall, school psychologists have historically reported high levels of job satisfaction. Studies largely agree that 85 – 90% of school psychologists report feeling satisfied in their position (Schilling, Randolph, & Boan-Lenzo, 2018; Worrel et al., 2006). In contrast, results of this study yielded a mean total score of 131.15 and a standard deviation of 22.92 on the JSS (Table 6). According to scoring procedures of the JSS, overall job satisfaction has a mean of 136.5 and a standard deviation of 12.1 (Spector, 1997). Results of this study show that overall, school psychologists report levels of job satisfaction that falls slightly below the mean.

Previous research has not consistently determined factors that relate to burnout among school psychologists.

Theories of job satisfaction suggest that the stability of job satisfaction is more related to one's personality than organizational or demographic factors (Judge et al., 2002; Staw et al.,

1986). Personality factors relating to job satisfaction could not be addressed using the data collected for this study. Spector's (1997) theory of job satisfaction suggests that demographic factors, such as age and gender have a curvilinear relationship on job satisfaction; though that relationship may not be detectable when the sample contains a large number of women. In this present study, 97.1% of participants are women, which is higher than women reflected in the total population of school psychologists yielding 76.1% women (Curtis et al., 2012). Due to the high response rate of women school psychologists to this study, the curvilinear relationship between age and job satisfaction cannot be detected.

Null Hypothesis Two

The second null hypothesis states that there is no relationship between demographic and job-related factors and job satisfaction among school psychologists. The second null hypothesis was accepted. Of the 17 variables entered into the hierarchical regression, none of the variables were shown to significantly predict burnout.

High numbers of school psychologists report experiencing burnout, with some studies showing more than 90% of school psychologists reporting experiencing some symptoms of burnout during their career (Huberty & Huebner, 1988; Huebner, 1992; Huebner & Mills, 1994; Mills & Huebner, 1998; Sandoval, 1993; Schilling et al., 2018). A review of literature regarding burnout among school psychologists shows that studies have not been able to consistently demonstrate demographic and job-related factors that lead to burnout (Alvarez, 1999; Brewer & Clippard, 2002; Engphaiboon, 2012; Schilling et al., 2018; Swider & Zimmerman, 2010). Because the OLBI interpretation procedures do not contain qualitative descriptors for score ranges, score comparisons must be made using available descriptive statistics for this study. Possible scores range from 16 to 64 (Demerouti et al., 2010). Results of this study yielded a

mean score of 39.95 on the OLBI, with a standard deviation of 6.48. The range of scores of the OLBI was between 25 and 58. The most frequently earned score on the OLBI was 41, with 15 of the 139 respondents earning that score. Though participants in this study did not report high levels of burnout, all participants reported experiencing at minimal levels of burnout.

Theories of burnout suggest that the main causes of burnout related to organizational factors, personality factors, and demographic characteristics (Brewer & Clippard, 2002). The questionnaire used in the current study included questions regarding organizational factors and demographic characteristics; however, personality factors were not addressed. Personality factors of neuroticism and conscientiousness showed statistically significant predictability of burnout, but those findings could not be replicated in future research (Armon et al., 2012; Swider & Zimmerman, 2010). Personality factors relating to burnout could not be determined using the data collected for this study.

Implications

The purpose of this quantitative, correlational study was to examine the relationship between demographic and job-related factors on job satisfaction and burnout among school psychologists. In this study, demographic and job-related factors represent the predictor variables and job satisfaction and burnout represent the criterion variables. Demographics and job-related factors include gender, age, race, level of education, credentials, contract, salary, number of students served, and job responsibilities. Because of the high rates of attrition among school psychologists, understanding the relationships between role expectations, burnout, and job satisfaction is important to maintaining school psychologist and recruiting new students to enter training programs.

Schilling et al. (2018) recommended that school psychology training programs, in addition to their NASP-accreditation requirements and focus on best practices, include regular discussions regarding the day-to-day responsibilities of a school psychologists in the surrounding areas to help graduate students to gain a realistic understanding of the expectations of practicing school psychologists. Researchers also recommended that school districts and other entities that employ school psychologists encourage a climate of consultation, collaboration, and direct service provision rather than the traditional model of school psychology that emphasizes assessment and eligibility.

Consistent with the results of recent research, results of this study support the recommendation for school psychology training programs to provide opportunities for graduate students to opportunities to fully understand the daily role of school psychologists. NASP accreditation requires graduate students to participate in field-based supervise practica experiences and a year-long internship of 1200 hours within a school setting (NASP, 2010b; Skalski et al., 2015). Despite frequent opportunities for field-based supervised experiences, school psychology training programs can only provide the opportunities available to them within their geographic location. Implications of these results show that the role of a school psychologist varies greatly between regions, states, districts, schools, and even individual school psychologists. Increased practica experience, in itself, cannot adequately prepare school psychology graduate students a full understanding of the role of a school psychologist.

For a school psychology training program to be able to provide enriching practica experiences that allow graduate students to fully understand the role of a school psychologist would require the field of school psychology to develop some consistency across states, districts, and schools.

Further, previous research shows that, of all variables investigated across multiple studies, number of school served and number of students served have had the greatest predictability on burnout among school psychologists (Schilling et al., 2018). If school districts are interested in minimizing the risk of burnout for their school psychologist, following the NASP recommendation ratio of school psychologists-to-students of 1:500-700 (Brock, 2014).

Limitations

The limitations to the internal and external validity of this study became evident during data collection. Feedback from respondents indicated that the range of the multiple-choice responses was too narrow to incorporate an adequate description of their unique situation. The data from one question of the demographic questionnaire was omitted when several respondents commented that the list of job responsibilities omitted many common school psychologist responsibilities, such as case management and secretarial duties.

Additionally, on the same question of the demographic questionnaire in which respondents were asked to rank a list of job responsibilities, wording was ambiguous regarding the frequency of academic assessment. Throughout the context of this dissertation, the terms "behavioral assessment" and "academic assessment" are used to differentiate between two very different assessments completed by school psychologists that require different assessment procedures and competency of practice. Colloquially, school psychologists use the term "academic assessment" to differentiate between assessments of academic achievement and "cognitive" or "intelligence assessments," referring to IQ testing. Within the context of this dissertation, written largely for individuals outside of the profession, "academic assessment" is meant to include the comprehensive evaluation that would typically include a variety of cognitive, achievement, and information processing assessments. Because the questionnaire did

not provide the same context as viewed through the lens of a practicing school psychologists, the internal validity of that portion of the questionnaire was compromised; therefore, the question was omitted.

Recommendations for Future Research

The first recommendation for future research includes the need to fully understand the wide range of roles that school psychologists perform on a daily basis in different states and districts across the U.S. The purpose of this study aimed to contribute to the body of literature regarding school psychologists' job duties; however, a review of previous literature was unable to generate a list of job duties that was broad enough to incorporate the variety of roles that school psychologists report routinely performing. Research participants indicated that they could not adequately rank their time spent in daily activities because the list did not contain specific duties that encumber signification portions of time. Participants indicated that clerical duties, student case management, in-service trainings, and administrative responsibilities are duties that may consume their time, but are not necessarily considered part of a school psychologist's typical job description. Qualitative phenomenological research investigating the specific job responsibilities of school psychologists across the U.S. may be beneficial in gaining a more comprehensive understanding of the daily role of school psychologists.

Additionally, further research should investigate the relationship and burnout among school psychologists amid changing role expectations, ethical responsibilities, and laws, policies, and guidelines. Previous studies show that, historically, school psychologists report high levels of job satisfaction despite experiencing symptoms of burnout (Huebner, 1992; Mackonienė & Norvilė, 2012; Schilling et al., 2018; Worrell et al., 2006). Some changes for the profession may potentially increase job satisfaction as many school districts attempt to improve the school

psychologist-to-student ratio to more closely reflect the recommendation of NASP. Other changes may have unanticipated affects on job satisfaction as shifts in educational paradigms shift with legal and cultural views of disabilities, mental health, and education (National Association of School Psychologists, 2017c).

Continued research is also recommended to more accurately predict job satisfaction and burnout among school psychologists. Previous research has investigated many factors that contribute to job satisfaction and burnout, such as personality, supervision experiences, provision of school psychology services, self-efficacy, coping strategies, self-care, and ethics (Boccio et al., 2016; Bolnik & Brock, 2005; Mackonienė & Norvilė, 2012; & Proctor and Steadman, 2003). As additional variables are investigated as contributing factors to job satisfaction and burnout, advocates for the profession of school psychology can understand the barriers to maintaining professionals in the field and recruiting students into school psychology programs.

Summary

Chapter Five presented the answers to the two research questions and a discussion of the results. Two hierarchical regression analyses were completed. The first hierarchical regression analysis determined that there are no demographic or job-related variables predicted job satisfaction. The second hierarchical regression analysis revealed that there are no demographic or job-related variables predicted burnout. An additional correlational analysis was completed showing a strong inverse relationship between job satisfaction and burnout. Chapter Five also presented the implications of these research findings as well as suggestions for future research.

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APPENDICES

Appendix A

Permission from *School Psychologists' Facebook Group*

August 26, 2018

Emily Bersaglia
Administrator
Said No School Psychologist Ever

Dear Emily:

As a doctoral candidate in the School of Education at Liberty University, I am conducting dissertation research as part of the requirements for an Ed.D. in Educational Leadership. The title of my research project is *A Correlational Study of the Demographic and Job Factors Related to Job Satisfaction and Burnout among School Psychologists* and I am interested in answering the questions: "Which demographic and job factors are most related to job satisfaction among school psychologists?" and "Which demographic and job factors are most related to burnout among school psychologists?"

I am writing to request your permission to recruit research participants from your closed Facebook group, Said No School Psychologist Ever. *Participants will be asked to click on the link provided to complete the research questionnaire. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.*

Thank you for considering my request. If you choose to grant permission, please respond by email to cdonahue1@liberty.edu.

Sincerely,

Carla Donahue, M.A., Ed.S.
Candidate for the degree of Ed.D. in Educational Leadership

Appendix B

Demographic Questionnaire

1. Do you currently work as a school psychologist? a.) yes b.) no
2. Do you work full-time or part-time as a school psychologist? a.) full-time b.) part-time
3. Gender a.) male b.) female
4. Age _____
5. Race/Ethnicity: a.) Black/African American, b.) Caucasian, c.) American Indian/Alaska Native, d.) Asian/Pacific Islander, e.) Hispanic, f.) Other
6. Years of experience _____
7. Marital Status a.) Married b.) Single c.) Divorced e.) Other
8. Number of children _____
9. Age of children _____
10. Number of schools served _____
11. Total population served (total of students in all schools served) _____
12. Are you a NASP member? a.) yes b.) no
13. Are you a member of your state professional school psychologist's association? _____
14. Are you NCSP? a.) yes b.) no
15. Salary range a.) <$25,000, b.) $25,000-$35,000, c.)$35,000-$45,000, d.)$45,000-$55,000, e.)$55,000-$65,000, f.)$65,000-$75,000, g.)>$75,000
16. Highest Degree Earned (in school psychology): a.) master's degree (M.A.), b.) specialist degree (Ed.S.), c.) doctorate in school psychology (Ph.D.)

17. Primary Employment Setting: a.) public schools, b.) private schools, c.) faith-based schools, d.) university, e.) independent practice, f.) hospital/medical, g.) state department of education, h.) other
18. In which state do you practice? _____
19. Employment setting: a.) rural, b.) urban, c.) suburban
20. Contract terms: a.) 180-189 days, b.) 190-199 days, c.) 200-209 days, d.) 210-219 days, e.) 220-229 days, f.) 230-239 days, g.) 240-249 days, h.) 250-259 days i.) 260+ days
21. Please rank the following job responsibilities in order of time spent (1 = most time spent, 11 = least time spent)
    a. Academic assessment
    b. Behavior assessment
    c. Consultation
    d. Report writing
    e. Individual counseling
    f. Group counseling
    g. Special education meetings
    h. General education meetings
    i. Behavioral intervention
    j. Academic intervention
    k. School duties (lunch duty, drop-off/pick up, recess duty, teacher coverage, etc)

Appendix C

Oldenburg Burnout Inventory (OLBI)

Dr. Arnold Bakker (2011), an author of the OLBI, gives permission for use of the OLBI, at no cost, for noncommercial research purposes. OLBI items may be found at:

http://www.arnoldbakker.com/news.php?id=58

Appendix D

Job Satisfaction Survey (JSS)

All questions of the JSS are presented by the author within the following book:

Spector, P E. (1997). Job satisfaction: Application, assessment, causes, and consequences. Thousand Oaks, CA: Sage.

Appendix E

Recruitment Letter

As a doctoral candidate in the School of Education at Liberty University, I am conducting dissertation research as part of the requirements for an Ed.D. in Educational Leadership. The title of my research project is *A Correlational Study of the Demographic and Job Factors Related to Job Satisfaction and Burnout among School Psychologists* and I am interested in answering the questions: "Which demographic and job factors are most related to job satisfaction among school psychologists?" and "Which demographic and job factors are most related to burnout among school psychologists?"

If you are currently employed as a school psychologist, either part-time or full-time, and are willing to answer a variety of questions regarding age, gender, job duties, salary, contract length, marital status, and job satisfaction, you will be asked to complete the 73-item questionnaire, consisting of 21 demographic and job-related questions and 52 job satisfaction and burnout questions. Your participation is completely anonymous and no questions are asked that require you to give confidential or identifying information. Completion of the questionnaire in it's entirety is expected to take only 15-20 minutes. If you would like to enter a raffle drawing to receive a $50 Amazon e-gift card, you will be asked to provide you email address for entry. The winner of the raffle drawing will be notified via the email address provided.

To participate click on the link provided in order to consent to the study and begin the questionnaire. All informed consent information is included upon access of the questionnaire via the link provided. As all data is anonymous, your signature is not required. You may indicate your consent to participate in the study by clicking "I agree" on the consent page. You will then be directed to the questionnaire. Your participation is strictly voluntary and you may discontinue at any time prior to submitting your responses.

If you choose to participate, you may also choose to enter into a raffle drawing to receive a $50 Amazon e-gift card. Winners will be notified via email upon termination of the data collection period, which is tentatively November 2018.

Sincerely,

Carla Donahue, M.A., Ed.S.
Candidate for the degree of Ed.D. in Educational Leadership

Appendix F

INFORMED CONSENT

A correlational study of the demographic and job factors related to job satisfaction and burnout among school psychologists

Carla Donahue

Liberty University

School of Education

You are invited to participate in a research study examining how demographic and job factors relate to job satisfaction and burnout among school psychologists. For this study, participants are recruited from a closed Facebook group that allows only members who are practicing or retired school psychologists. If you are a currently practicing school psychologist, employed either full-time or part-time, you are invited to participate in this study. Please read this form and ask any questions you may have before agreeing to be in the study.

Carla Donahue, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to examine the relationship between demographic and job-related factors on job satisfaction and burnout among school psychologists. Demographics and job-related factors include: gender, age, race, level of education, credentials, contract length, salary, number of students served, and job responsibilities. I am interested in answering the questions: "Which demographic and job factors are most related to job satisfaction among school psychologists?" and "Which demographic and job factors are most related to burnout among school psychologists?"

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Complete the 73-item questionnaire, consisting of 21 demographic and job-related questions and 52 job satisfaction and burnout questions. No questions are asked that require you to give confidential or identifying information. Completion of the questionnaire in it's entirety is expected to take only 15-20 minutes.
2. If you would like to enter a raffle drawing to receive a $50 Amazon e-gift card, you will be asked to provide you email address for entry. The winner of the raffle drawing will be notified via the email address provided.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Though you should not expect to receive a direct benefit from taking part in this study, this study benefits society as it is important to understand factors that relate to job satisfaction and burnout among school psychologists in order to retain professionals in the field and to recruit and retain students in school psychology training programs.

Compensation: Participants will not be compensated for participating in this study, though participants may choose to enter into a raffle drawing for a $50 Amazon e-gift card by providing an email address. Email addresses will be requested for entry purposes, however they will be pulled and separated from your responses by SurveyMonkey to maintain anonymity.

Confidentiality: All participant responses are anonymous. No identifying information is requested. The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Data collected for this study will be maintained on a password-protected computer. No hard-copy data is expected; however, hard-copy will be maintained in a locked filing cabinet. All records will be retained for three years in compliance with federal law. Electronic data will be deleted and hard-copy data will be shredded after three years.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Carla Donahue You may ask any questions you have now. If you have questions later, **you are encouraged** to contact Carla Donahue at cdonahue1@liberty.edu. You may also contact the researcher's faculty chair, [Dr. Rebecca Lunde, at rmfitch@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ I agree to participate in this study

Appendix G

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

November 29, 2018

Carla Donahue IRB Exemption 3579.112918: A Correlational Study of the Demographic and Job Factors Related to Job Satisfaction and Burnout among School Psychologists

Dear Carla Donahue,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

The Graduate School

Liberty University | Training Champions for Christ since 1971

Appendix H

Linear Relationship of Predictor Variables

Bivariate Regression Scatterplots for JSS Total Score

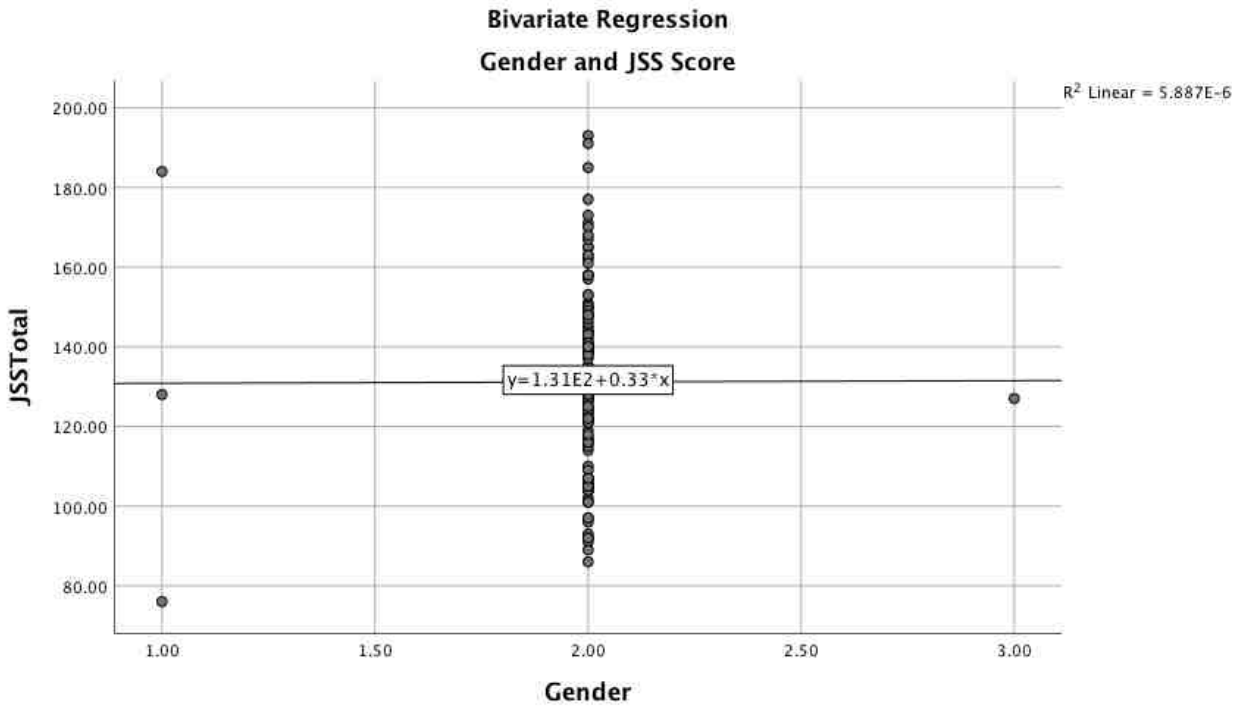

Figure 9 Bivariate Regression Plot of JSS Total and Gender

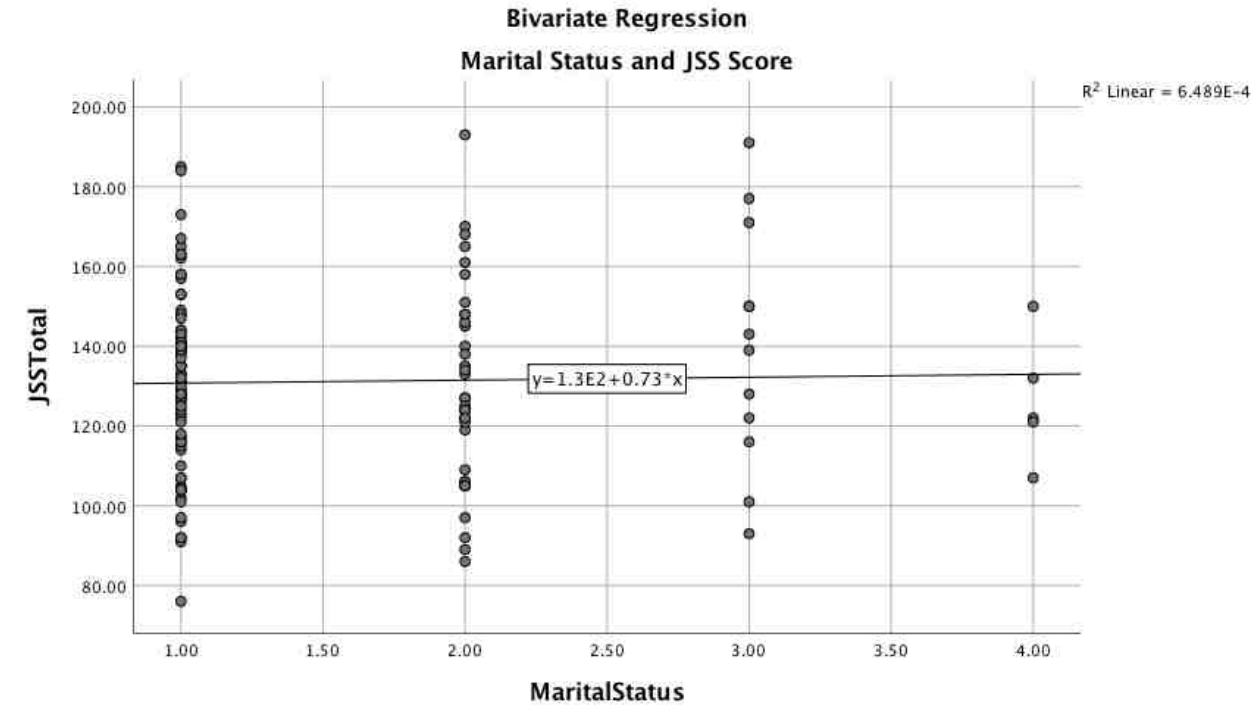

Figure 10 Bivariate Regression Plot of JSS Total and Marital Status

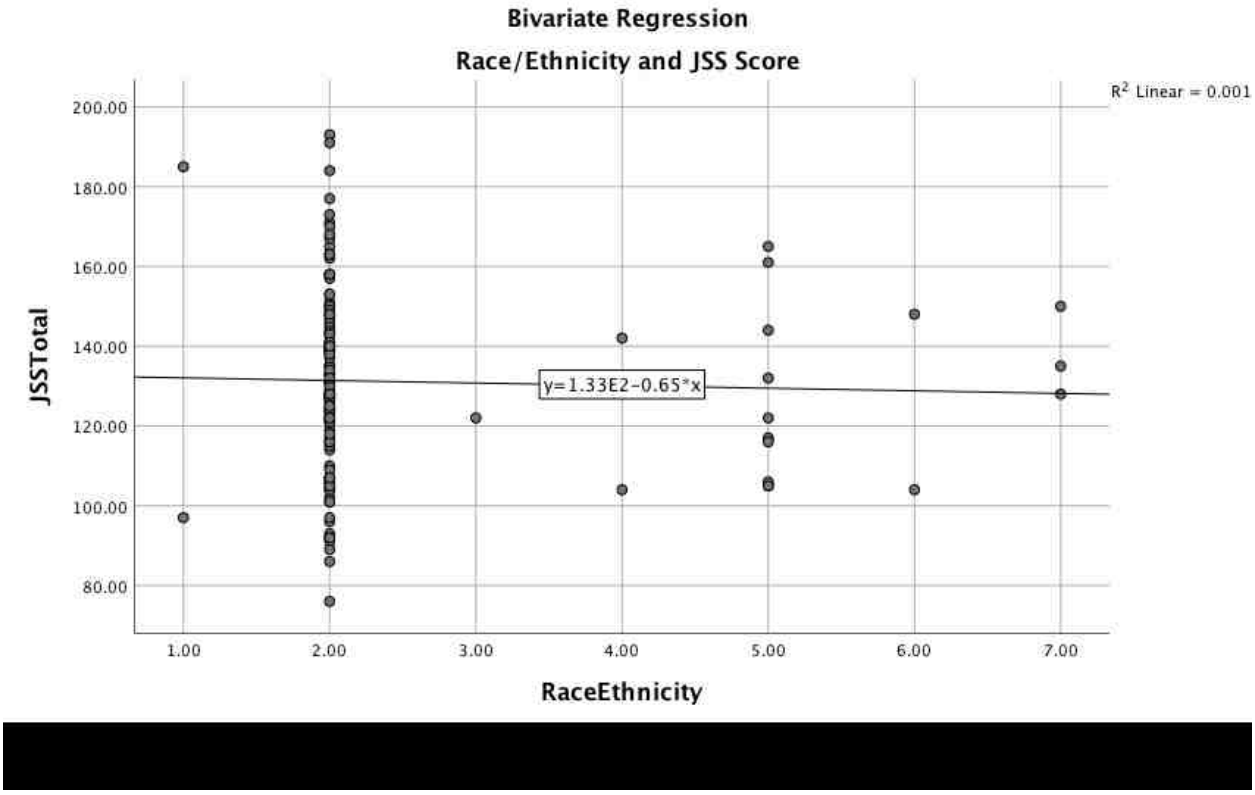

Figure 11 Bivariate Regression Plot of JSS Total and Race/Ethnicity

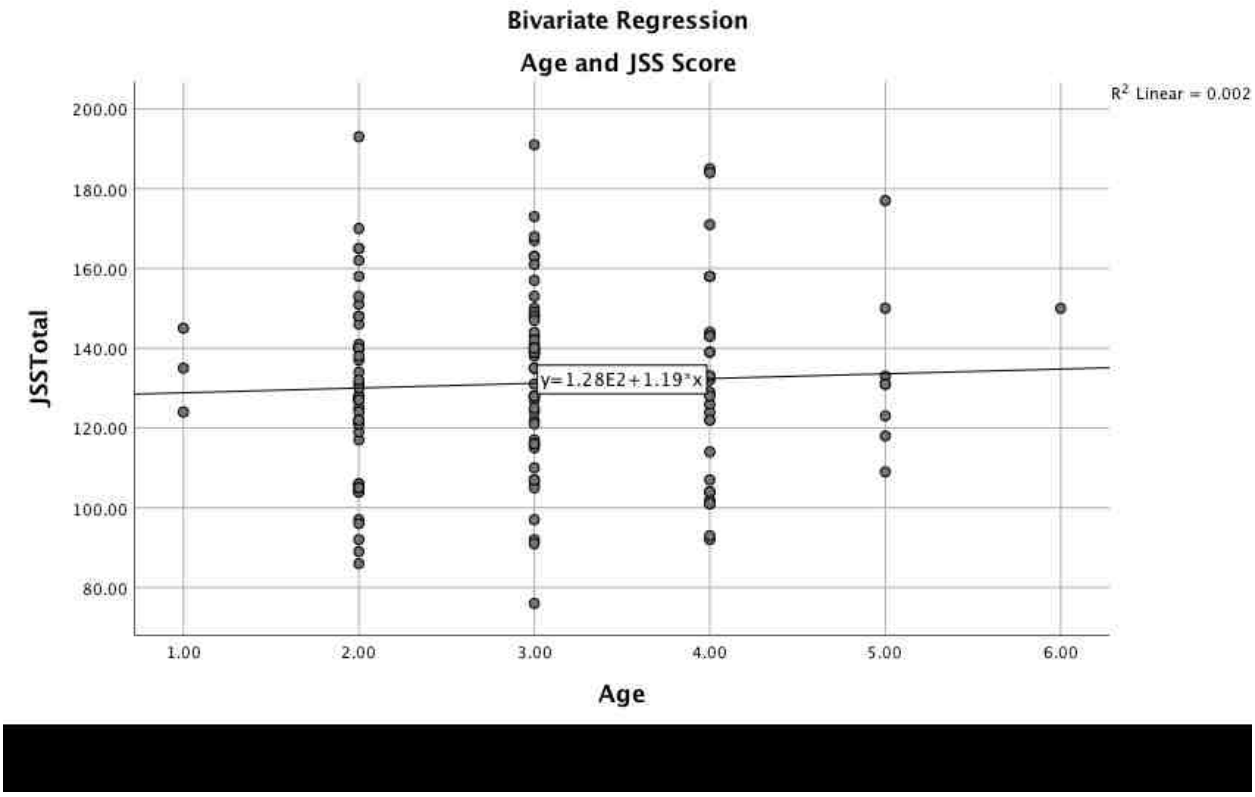

Figure 12 Bivariate Regression Plot of JSS Total and Age

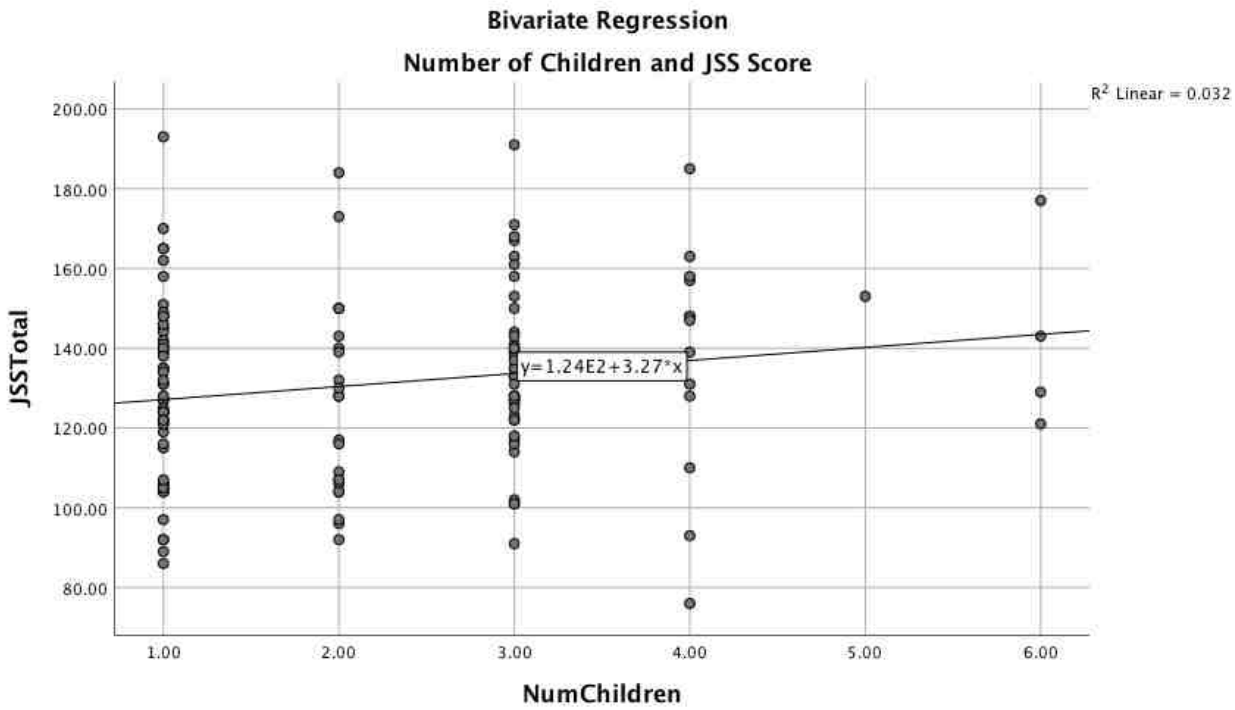

Figure 13 Bivariate Regression Plot of JSS Total and Number of Children

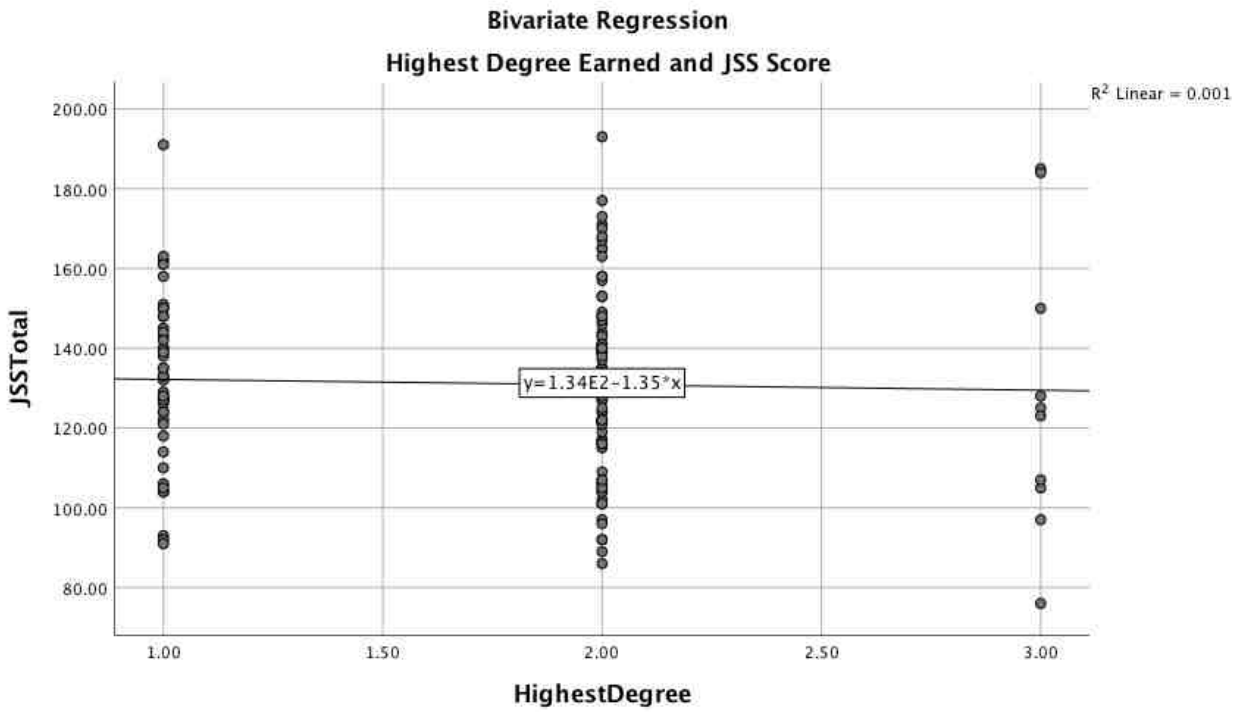

Figure 14 Bivariate Regression Plot of JSS Total and Highest Degree Earned

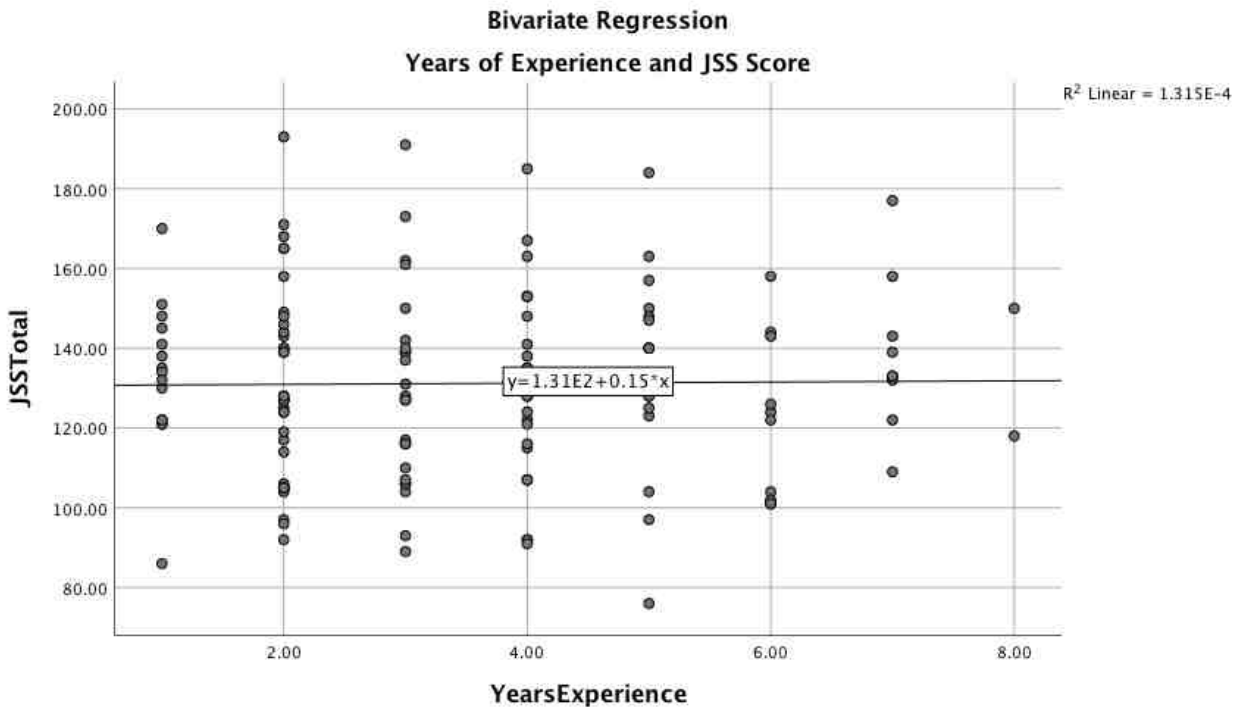

Figure 15 Bivariate Regression Plot of JSS Total and Years of Experience

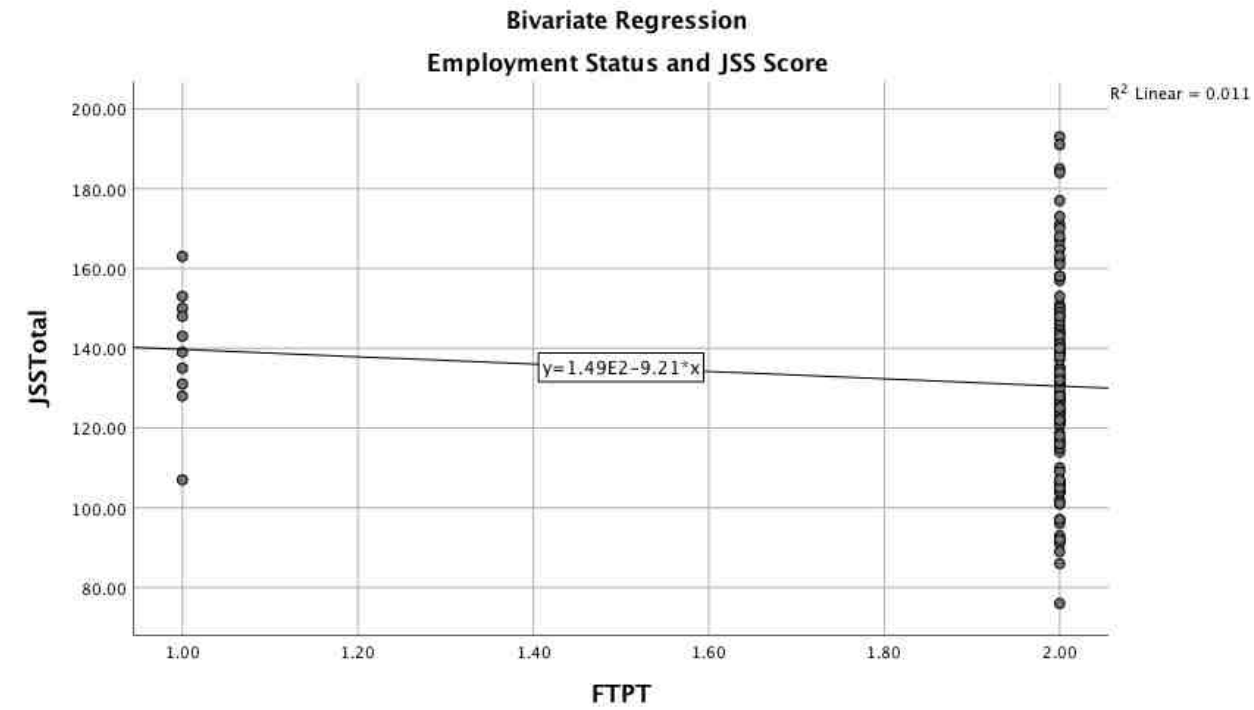

Figure 16 Bivariate Regression Plot of JSS Total and Employment Status

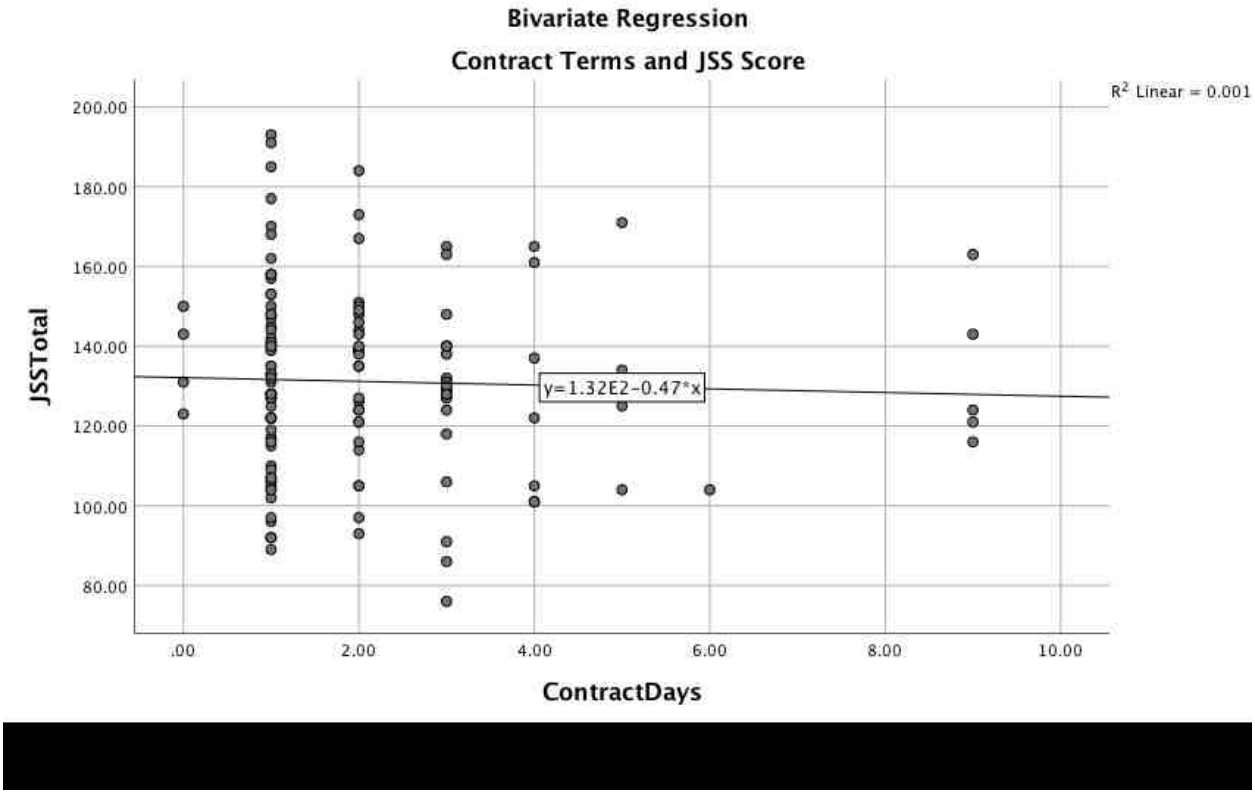

Figure 17 Bivariate Regression Plot of JSS Total and Contract Terms

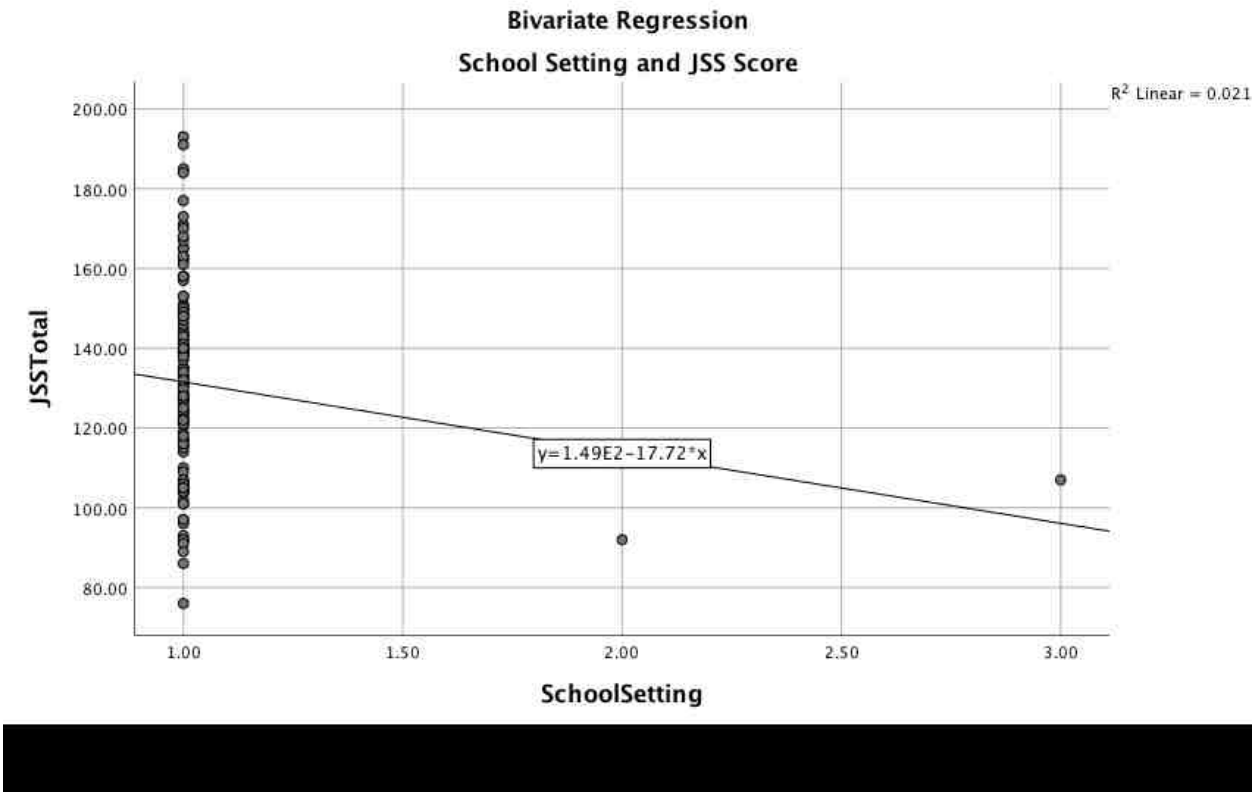

Figure 18 Bivariate Regression Plot of JSS Total and School Setting

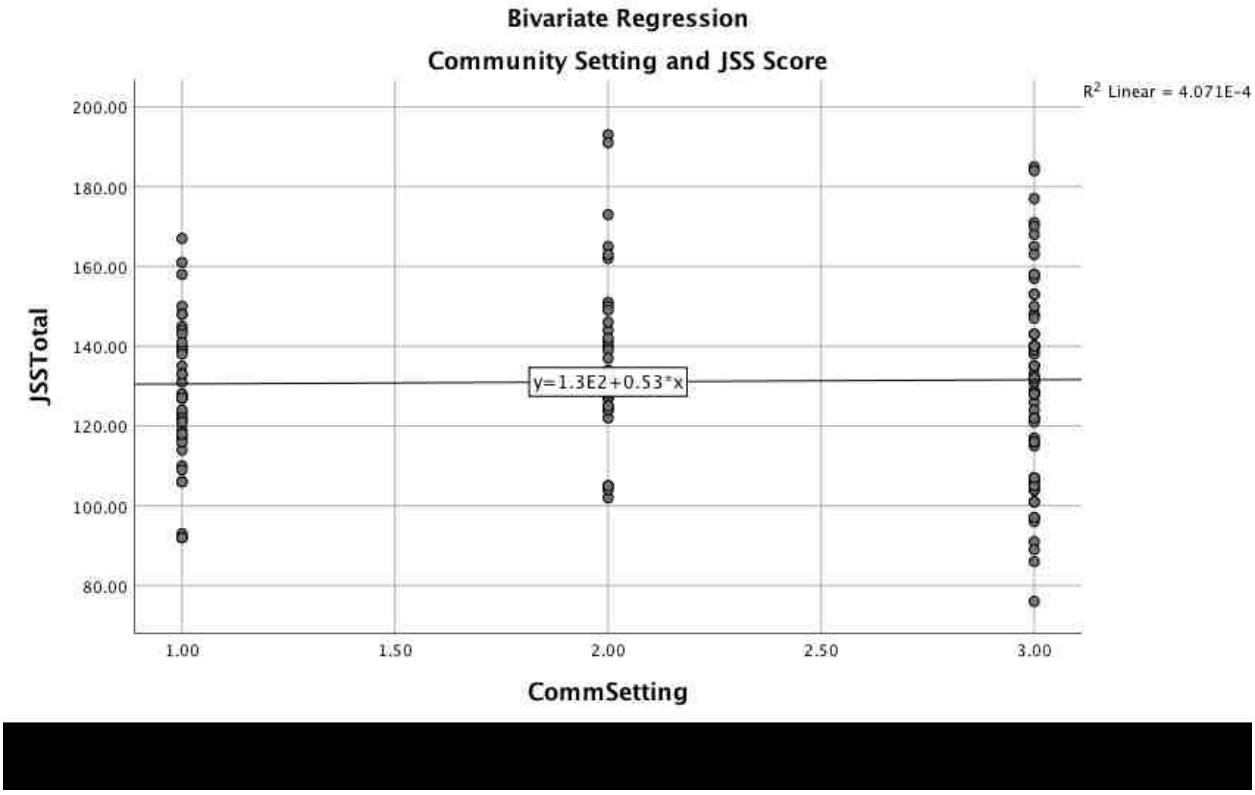

Figure 19 Bivariate Regression Plot of JSS Total and Community Setting

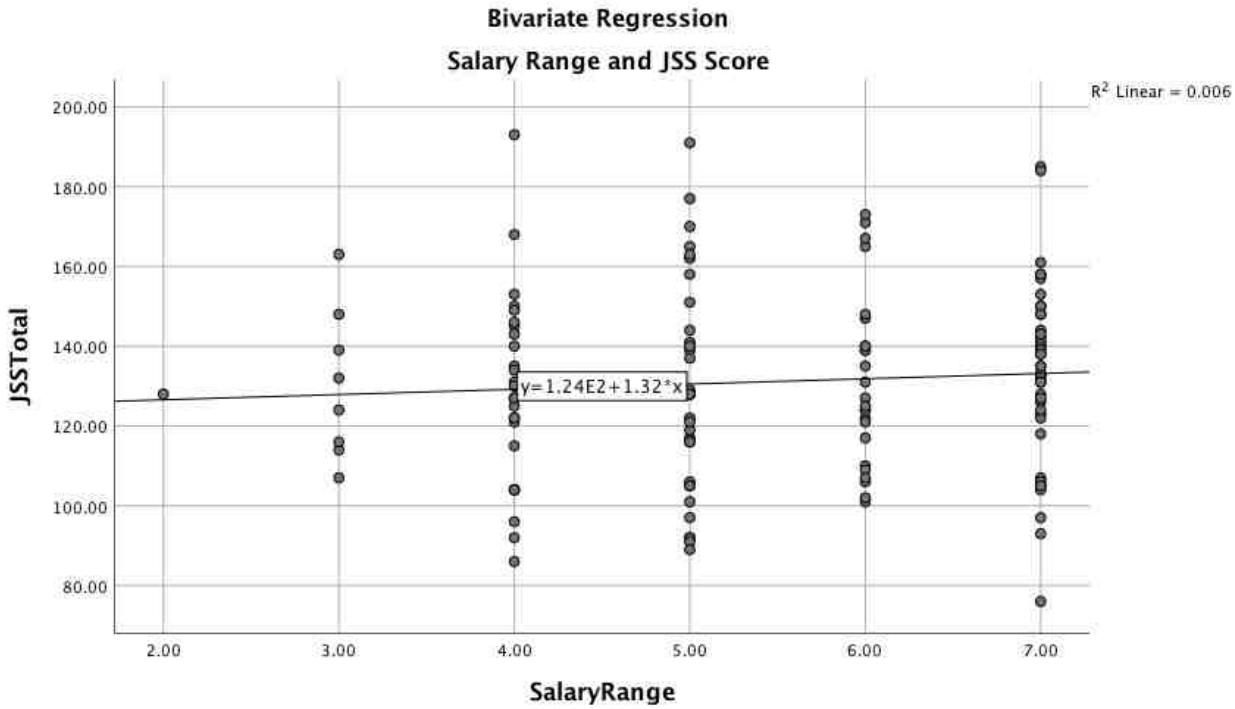

Figure 20 Bivariate Regression Plot of JSS Total and Salary Range

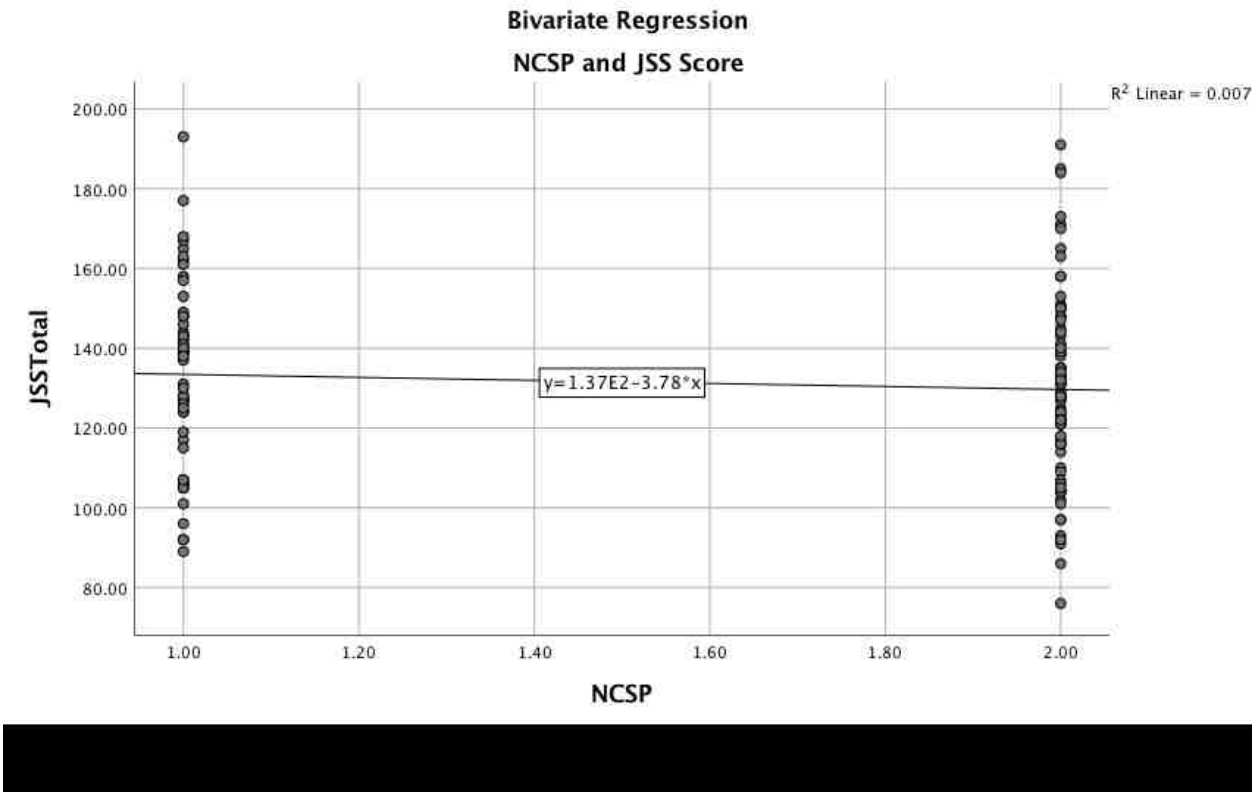

Figure 21 Bivariate Regression Plot of JSS Total and NCSP Credential

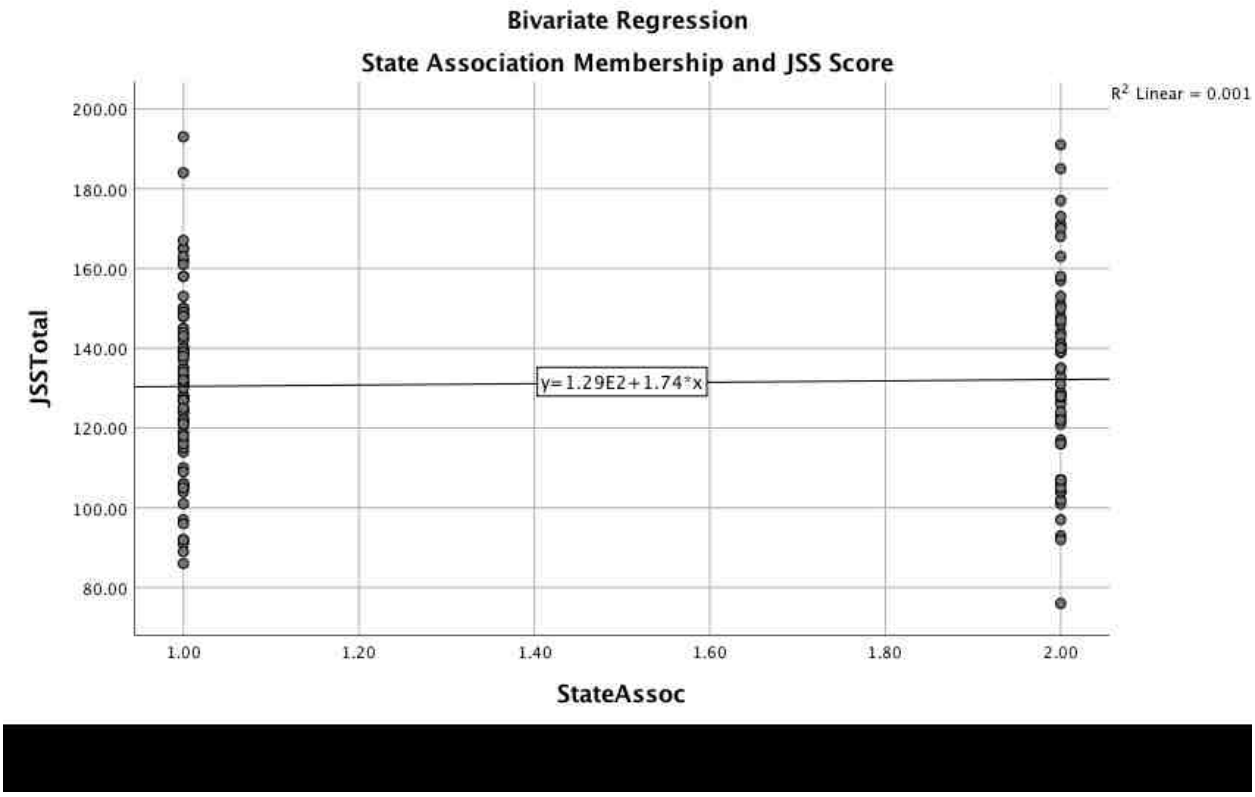

Figure 22 Bivariate Regression Plot of JSS Total and Membership in State Professional Association(s)

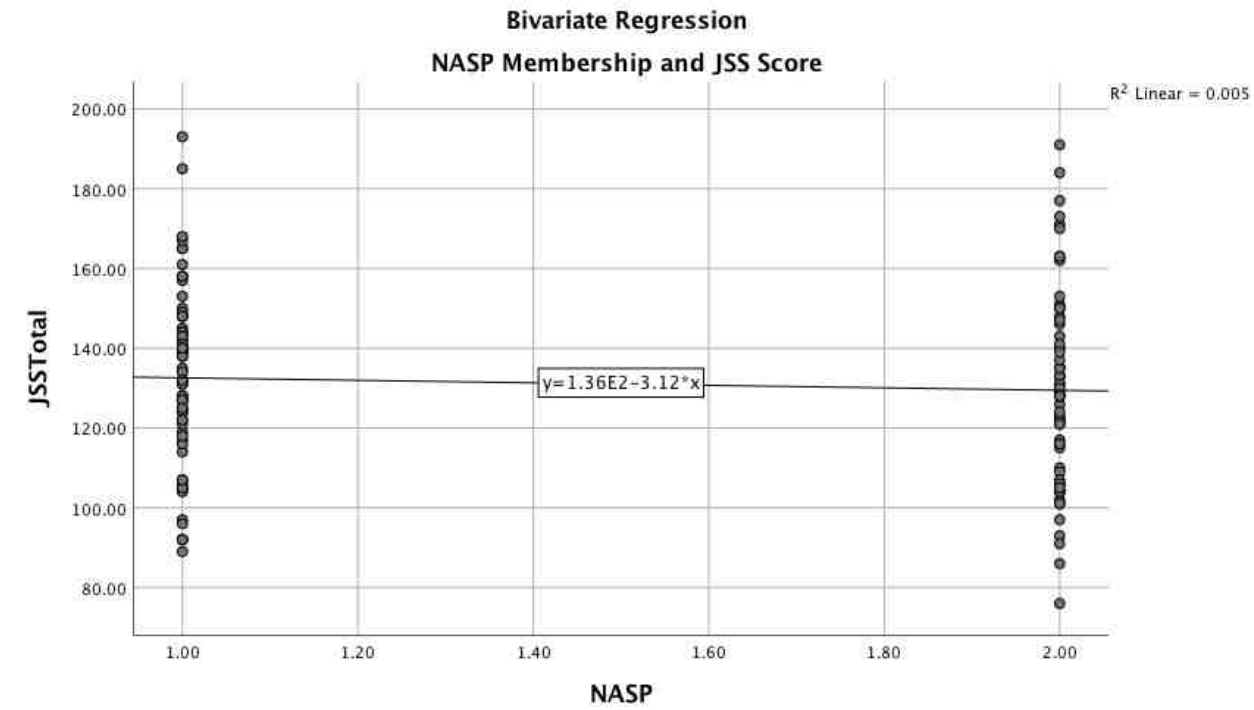

Figure 23 Bivariate Regression Plot of JSS Total and Membership to NASP

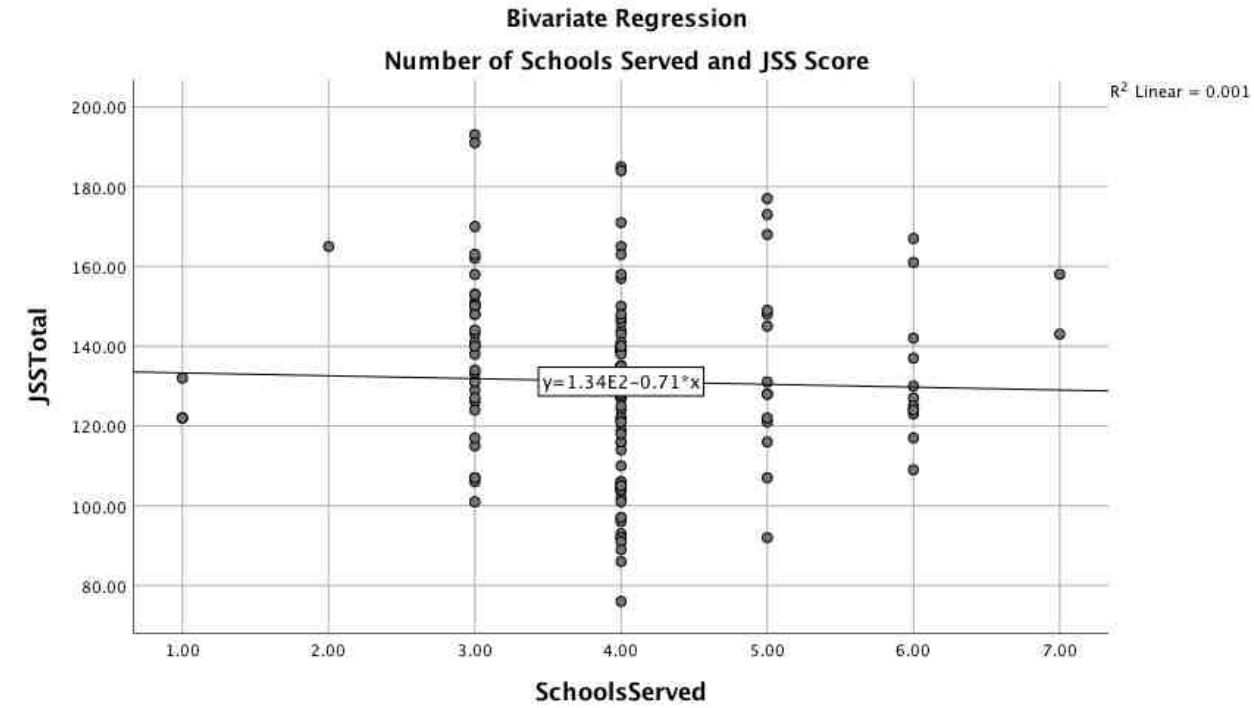

Figure 24 Bivariate Regression Plot of JSS Total and Number of Schools Served

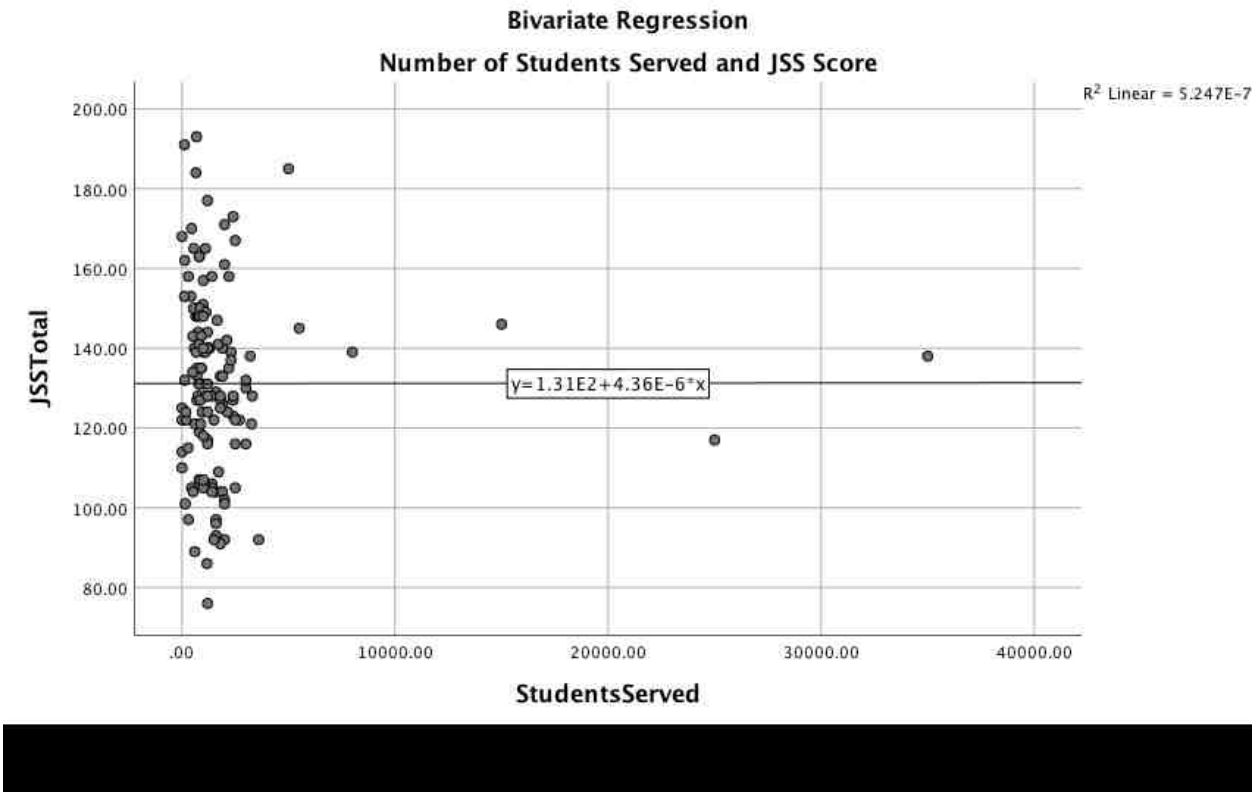

Figure 25 Bivariate Regression Plot of JSS Total and Number of Students Served

Appendix I

Bivariate Regression Scatterplots for OLBI Total Score

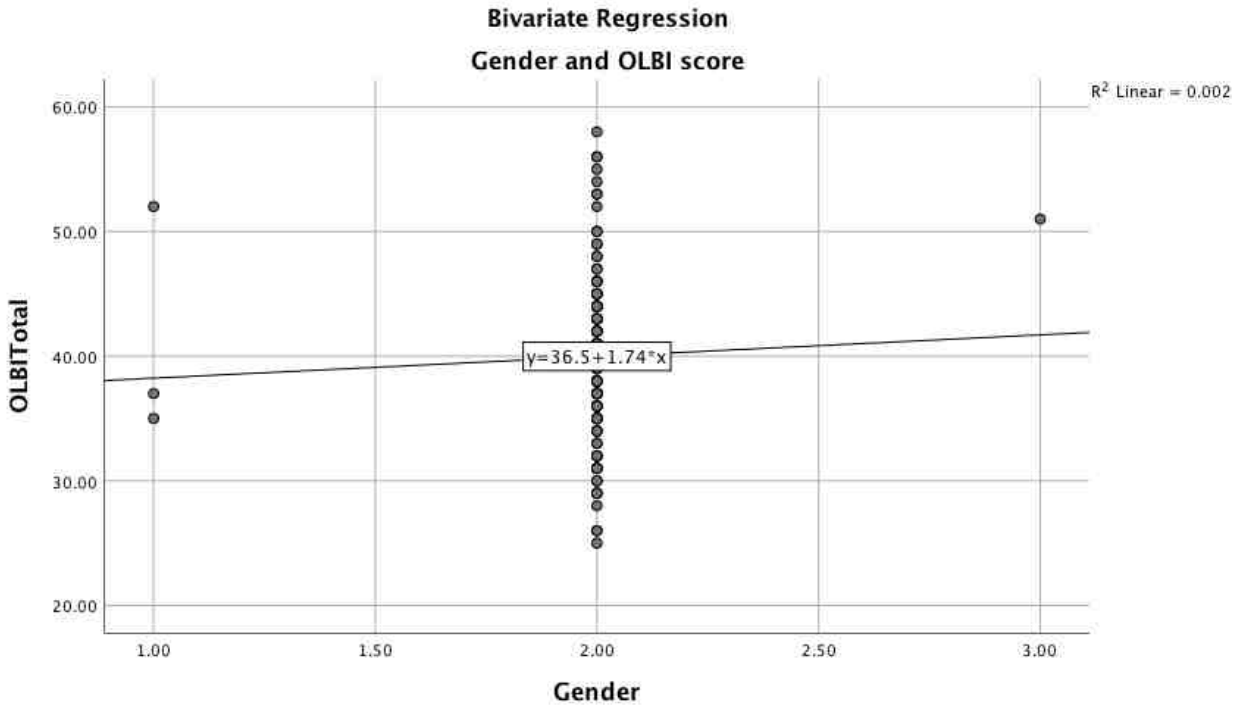

Figure 26 Bivariate Regression Plot of OLBI Total and Gender

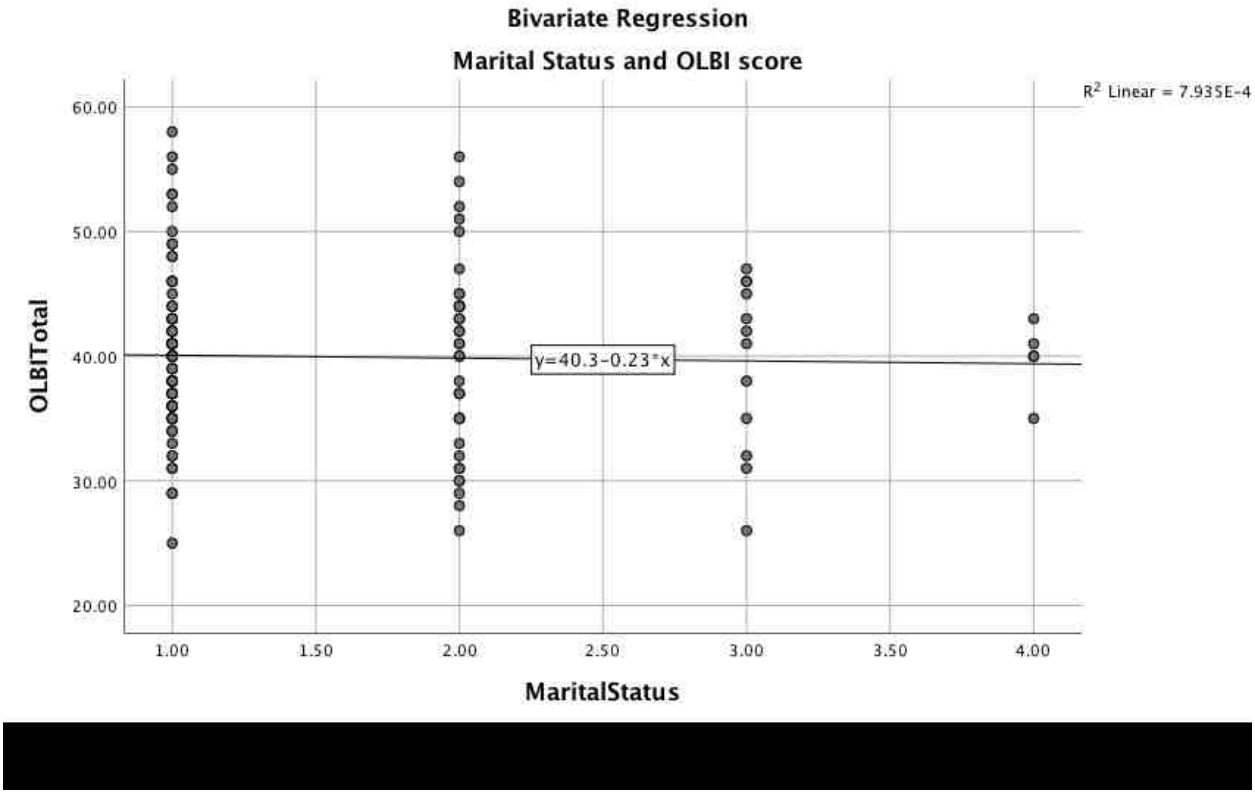

Figure 27 Bivariate Regression Plot of OLBI Total and Marital Status

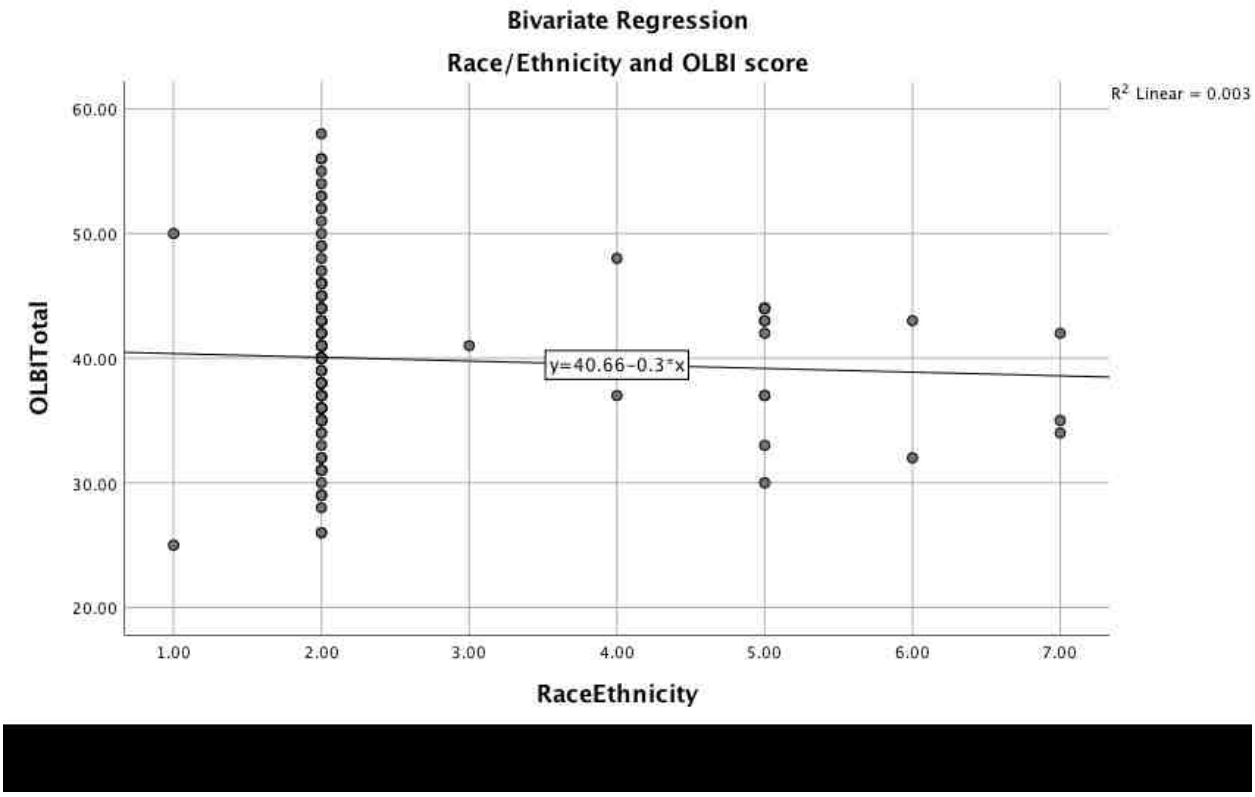

Figure 28 Bivariate Regression Plot of OLBI Total and Race/Ethnicity

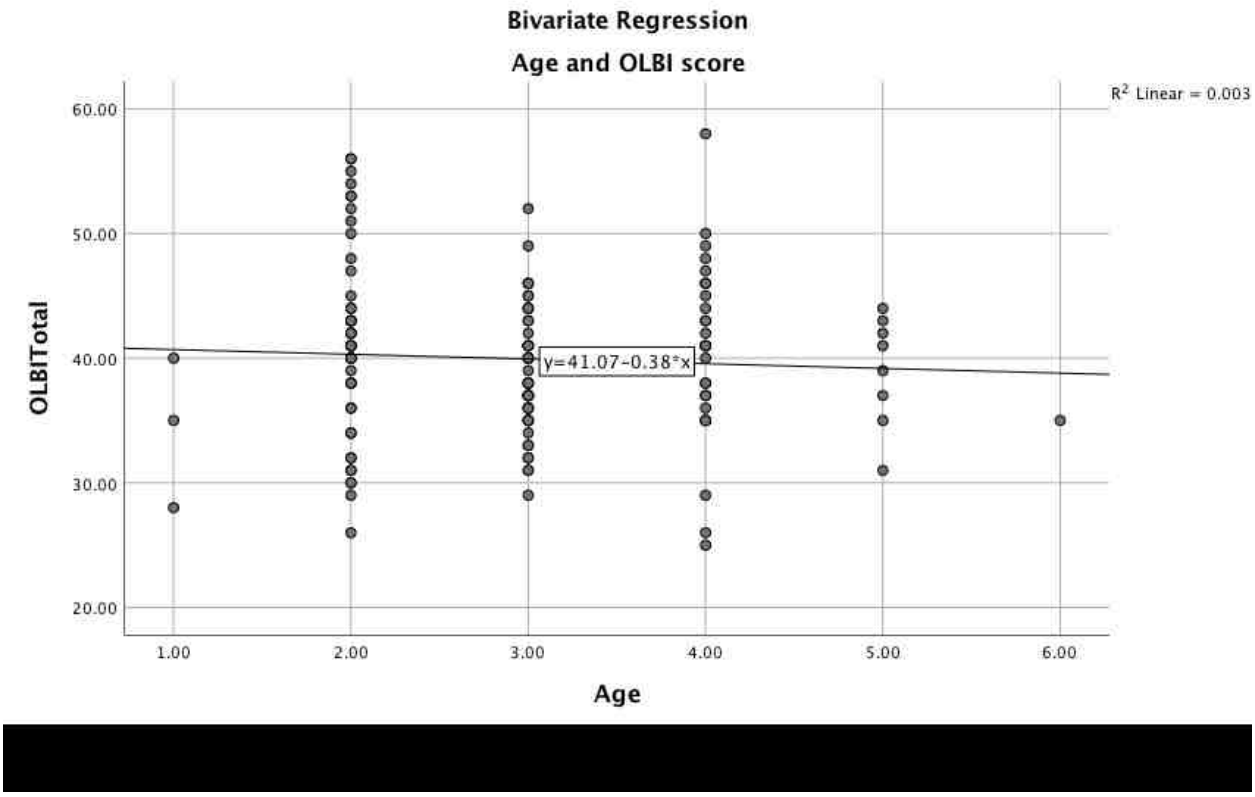

Figure 29 Bivariate Regression Plot of OLBI Total and Age

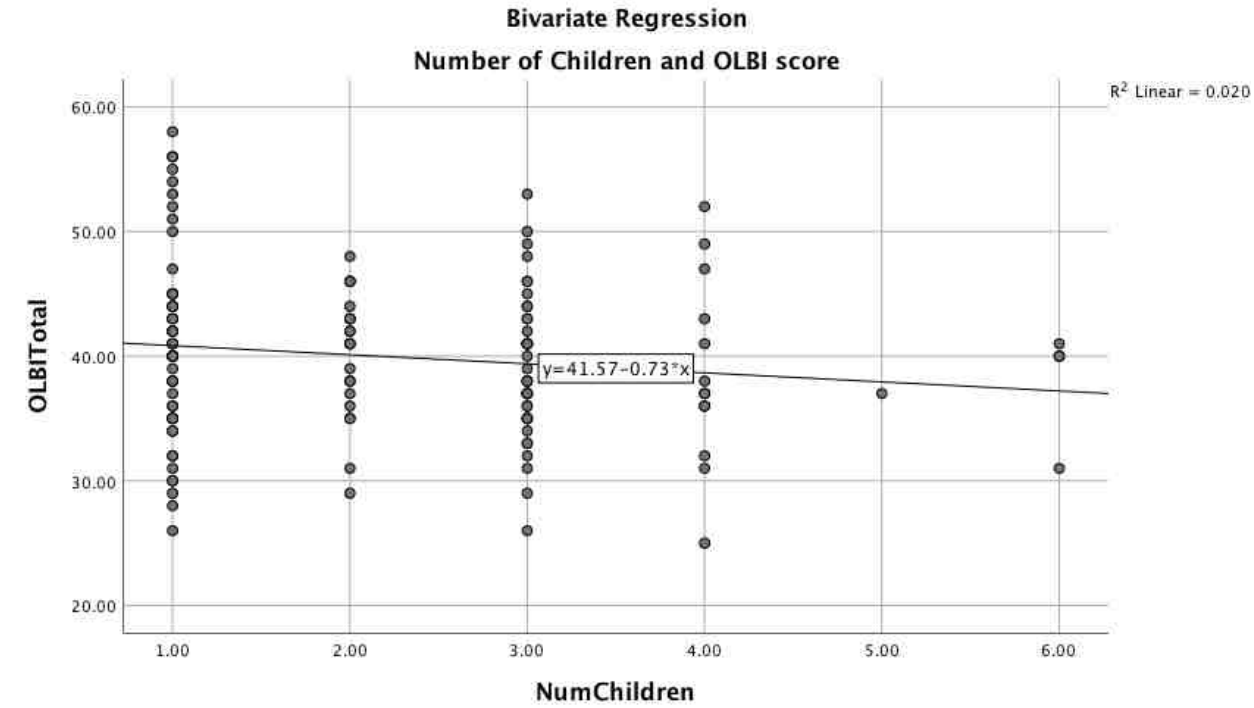

Figure 30 Bivariate Regression Plot of OLBI Total and Number of Children

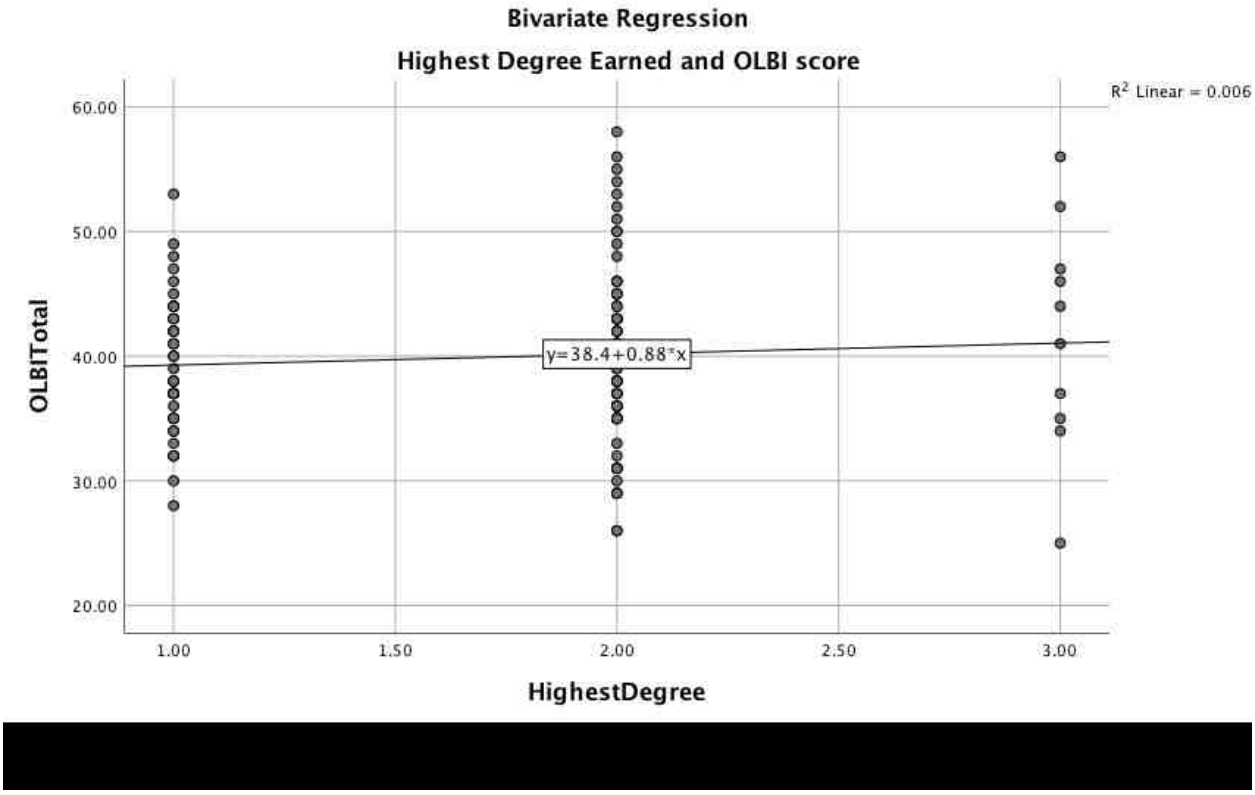

Figure 31 Bivariate Regression Plot of OLBI Total and Highest Degree Earned

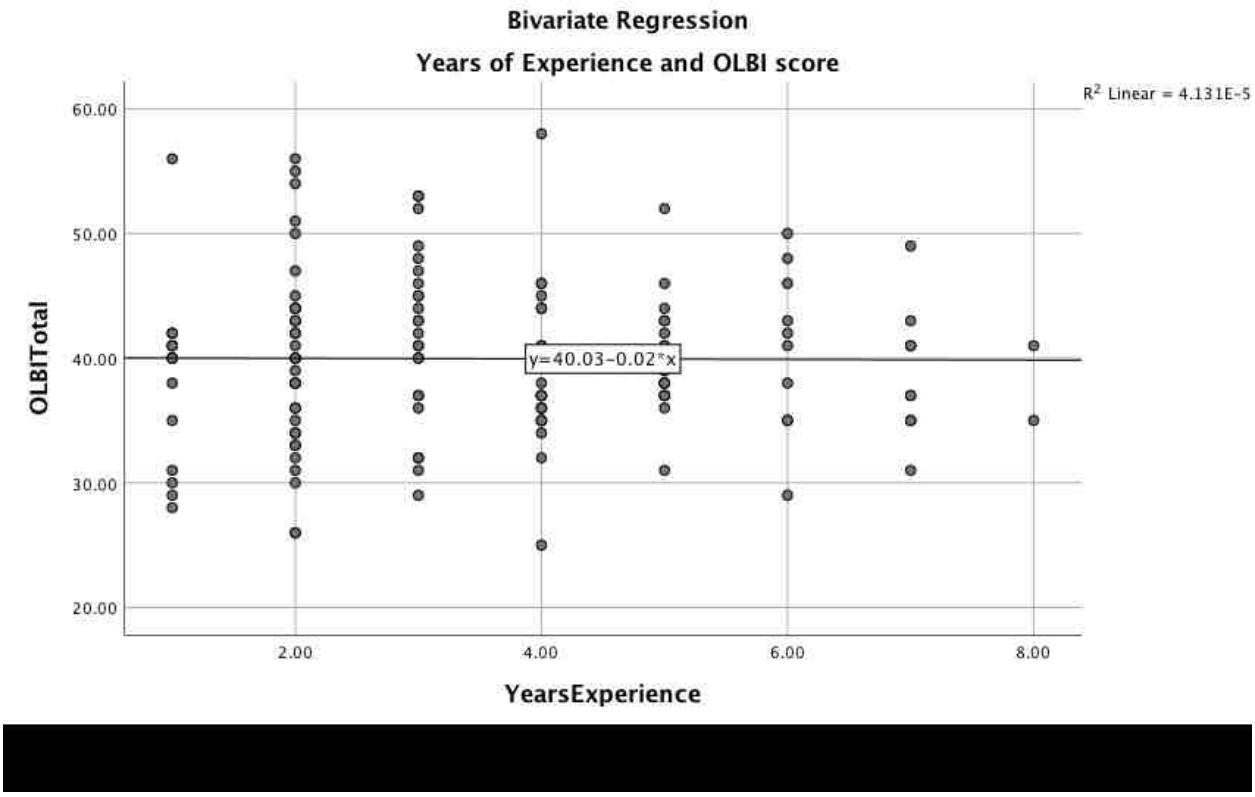

Figure 32 Bivariate Regression Plot of OLBI Total and Years of Experience

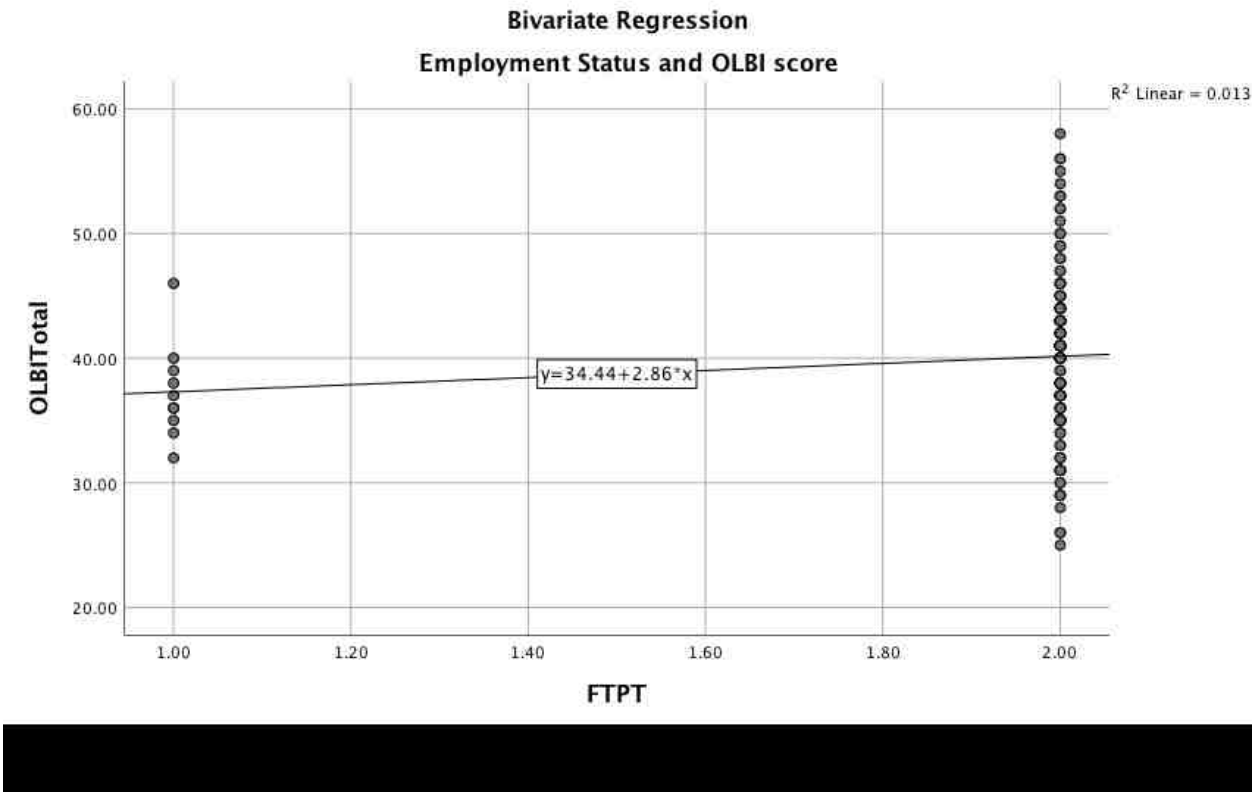

Figure 33 Bivariate Regression Plot of OLBI Total and Employment Status

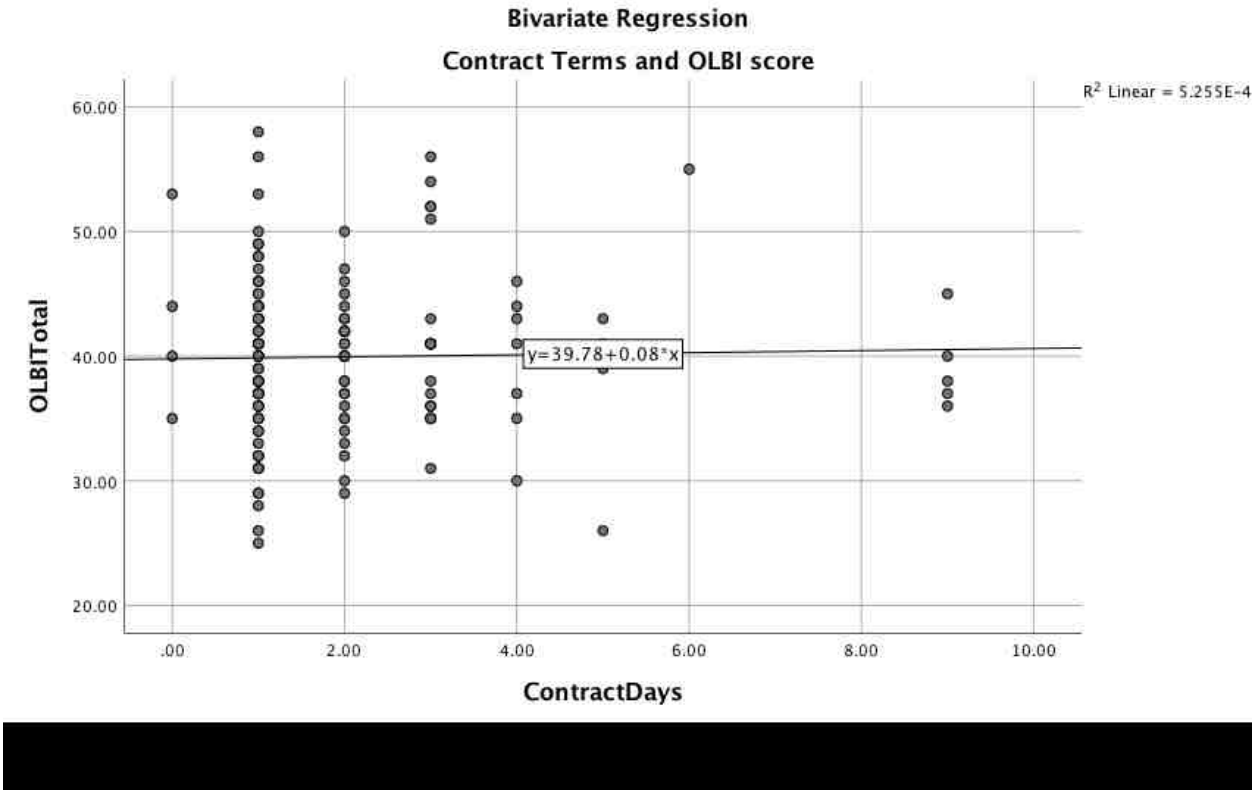

Figure 34 Bivariate Regression Plot of OLBI Total and Contract Terms

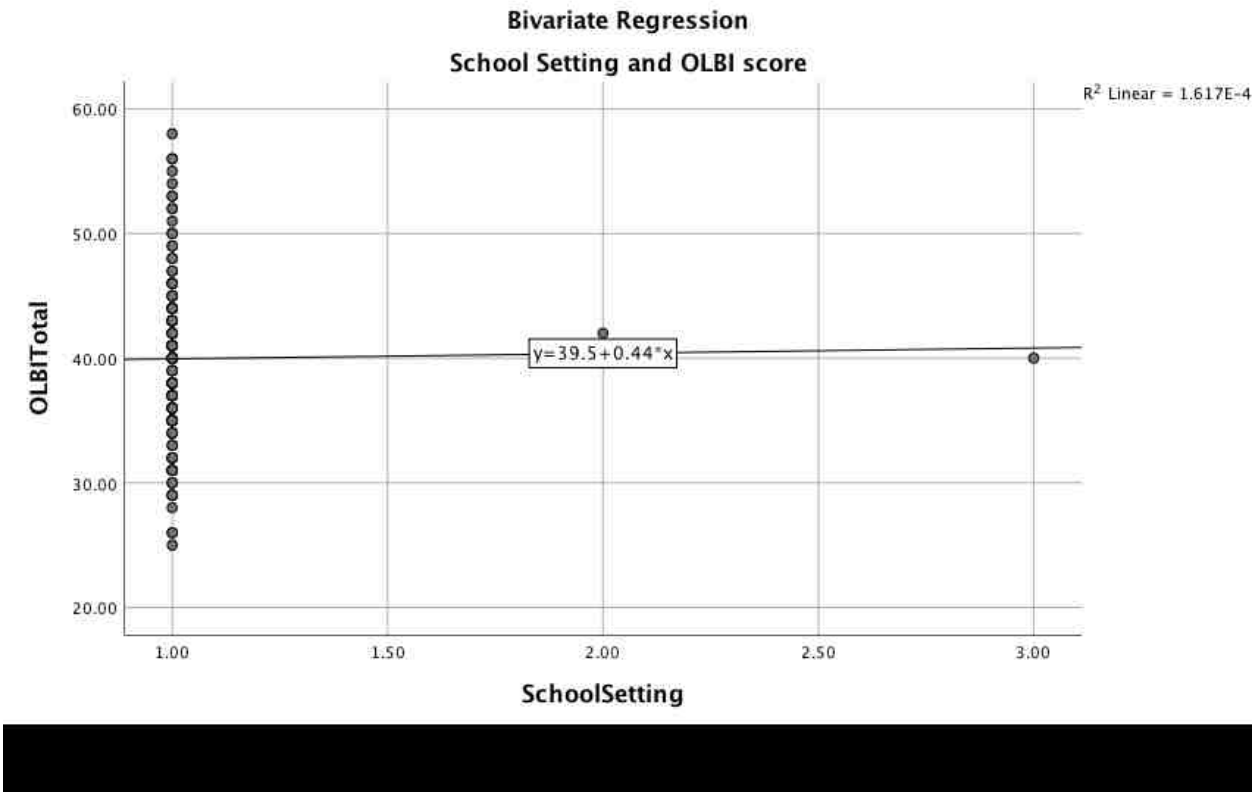

Figure 35 Bivariate Regression Plot of OLBI Total and School Setting

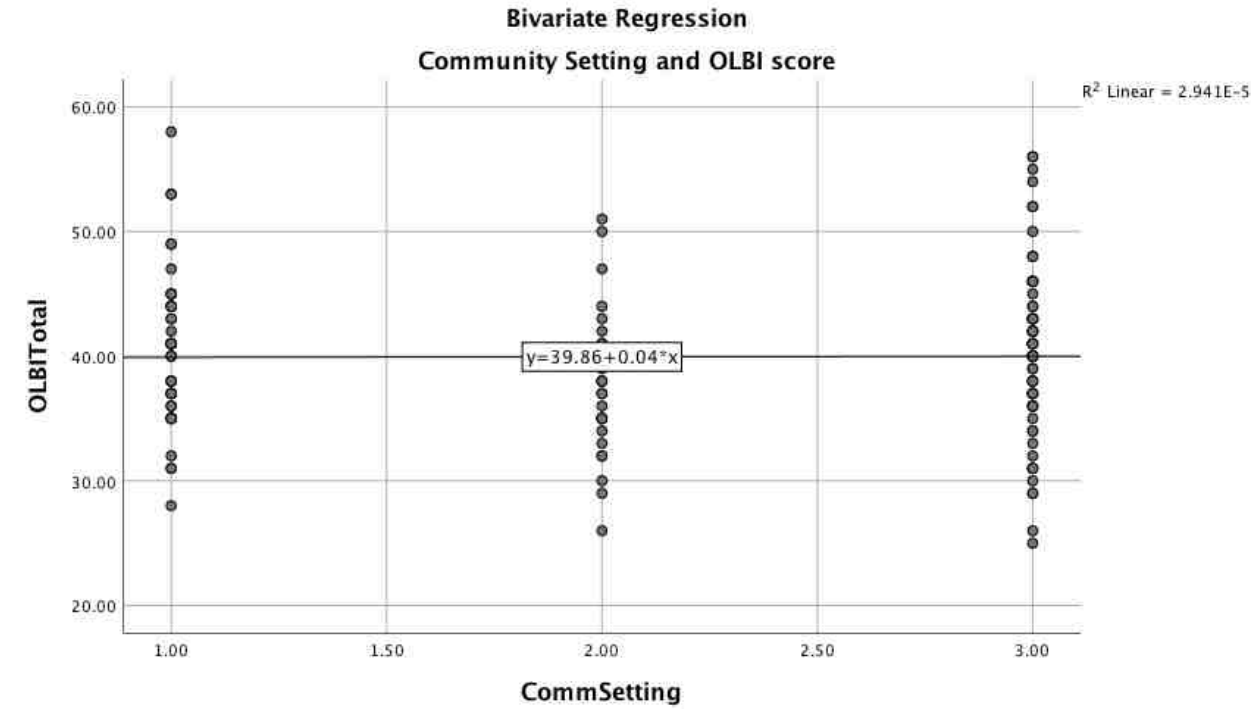

Figure 36 Bivariate Regression Plot of OLBI Total and Community Setting

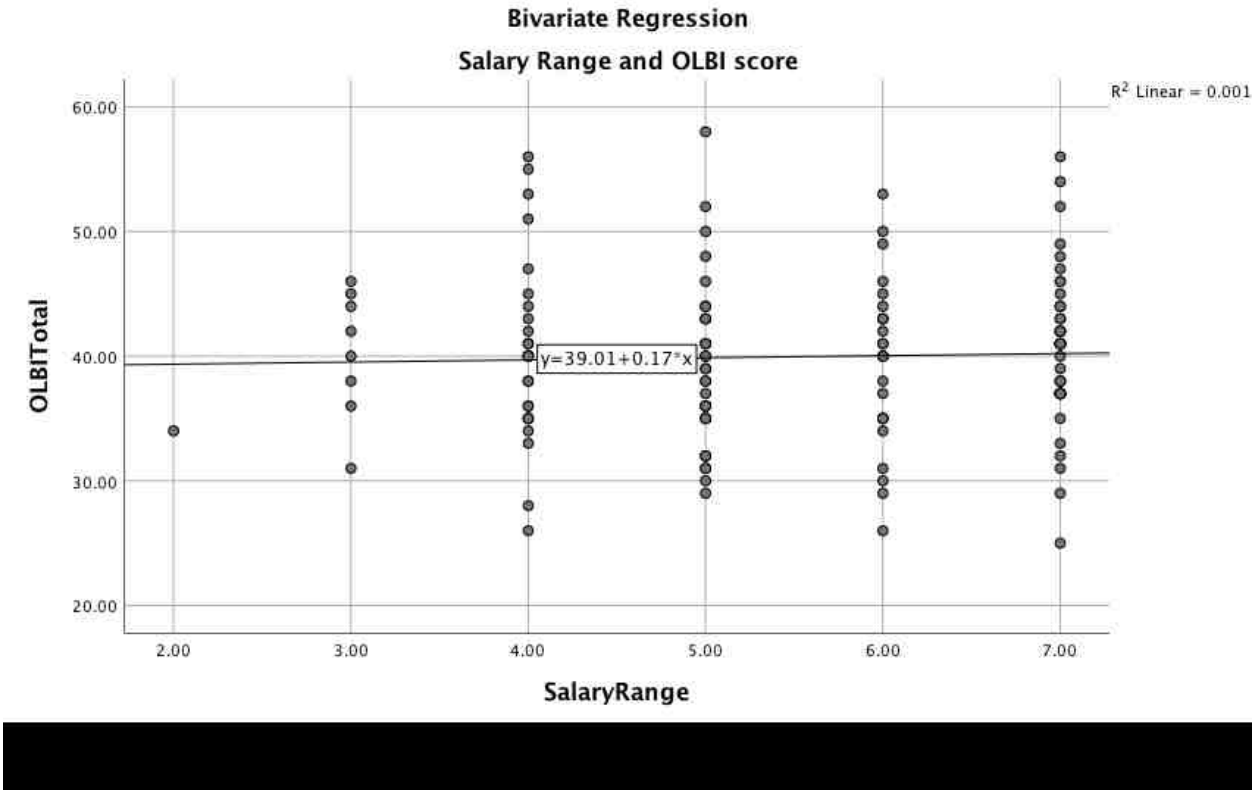

Figure 37 Bivariate Regression Plot of OLBI Total and Salary Range

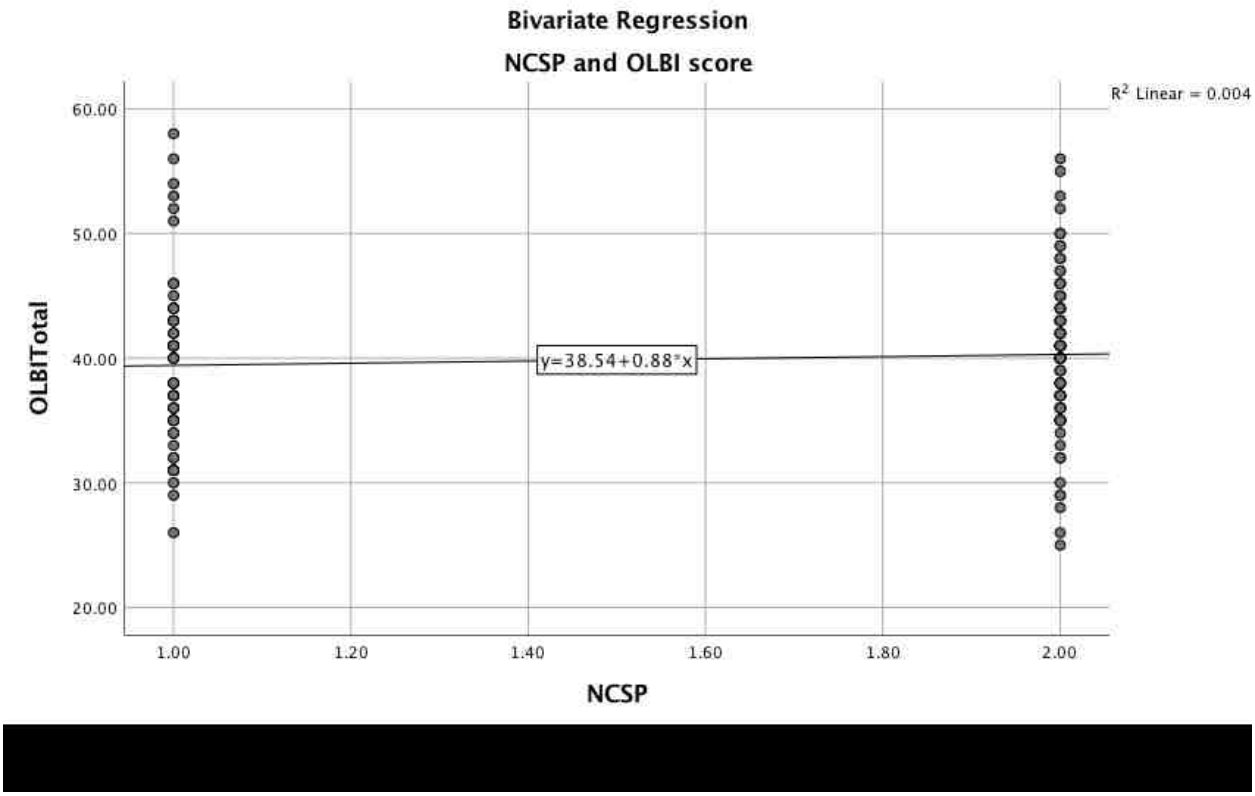

Figure 38 Bivariate Regression Plot of OLBI Total and NCSP Credential

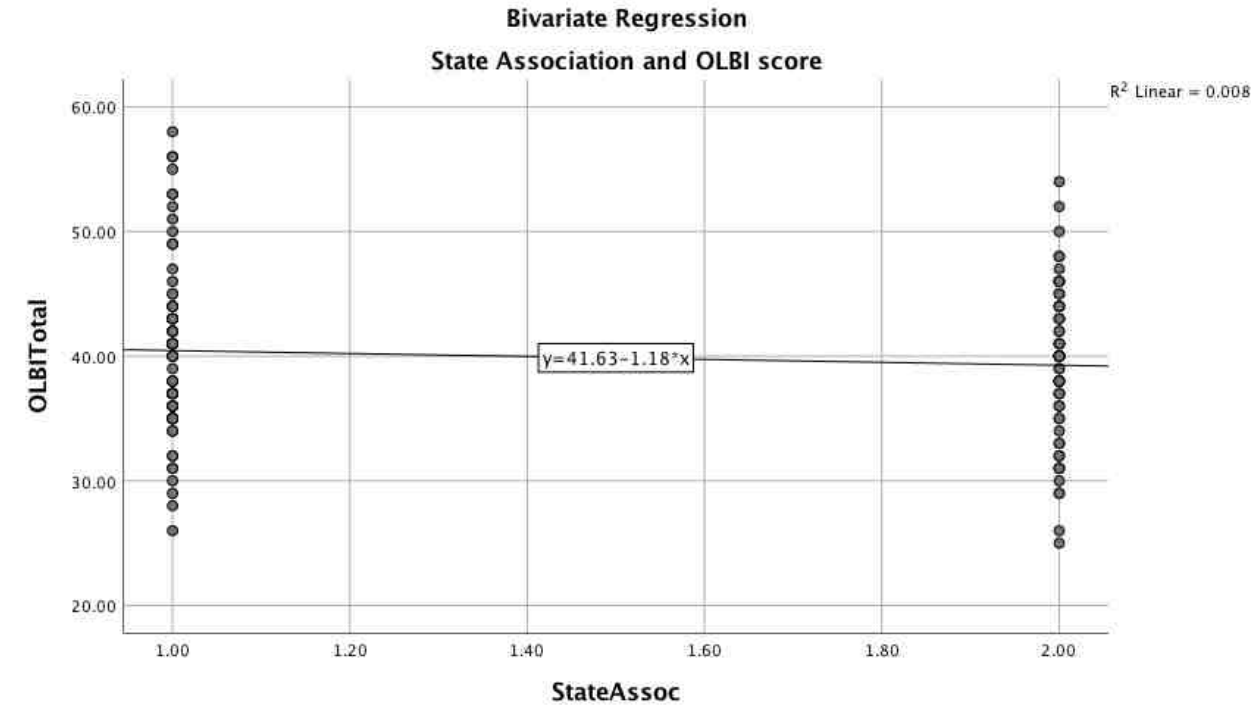

Figure 39 Bivariate Regression Plot of OLBI Total and Membership in State Professional Association(s)

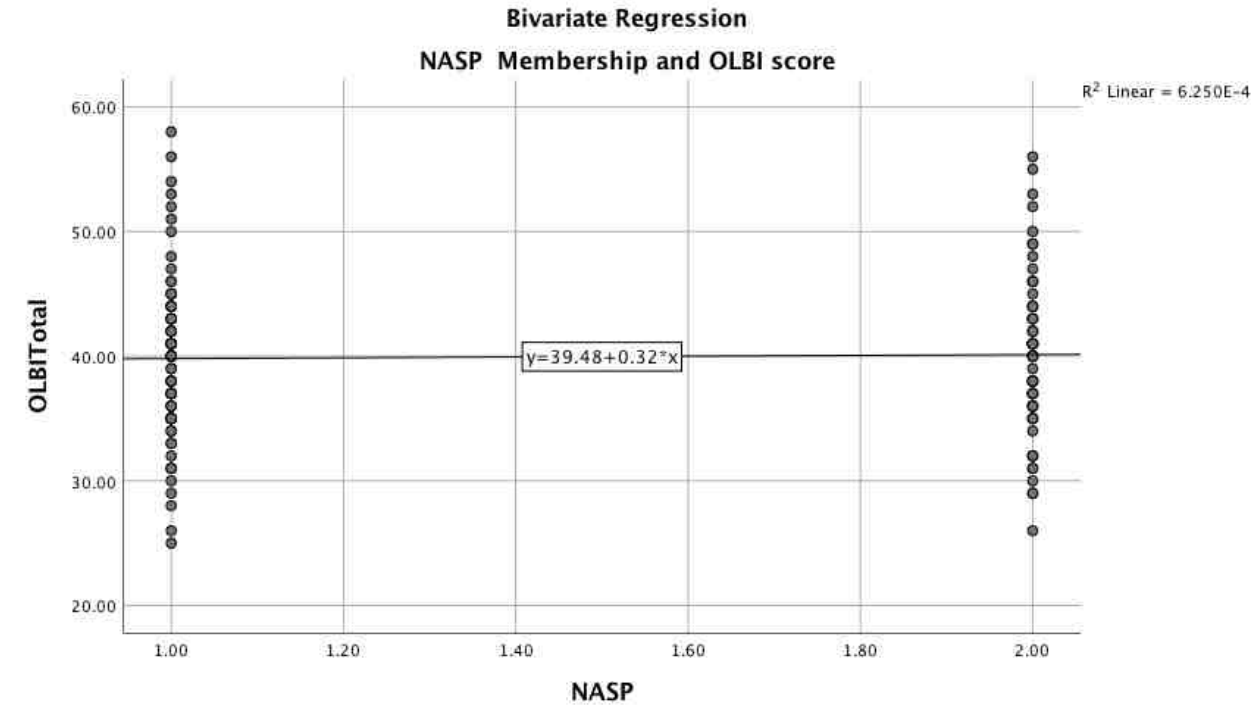

Figure 40 Bivariate Regression Plot of OLBI Total and NASP Membership

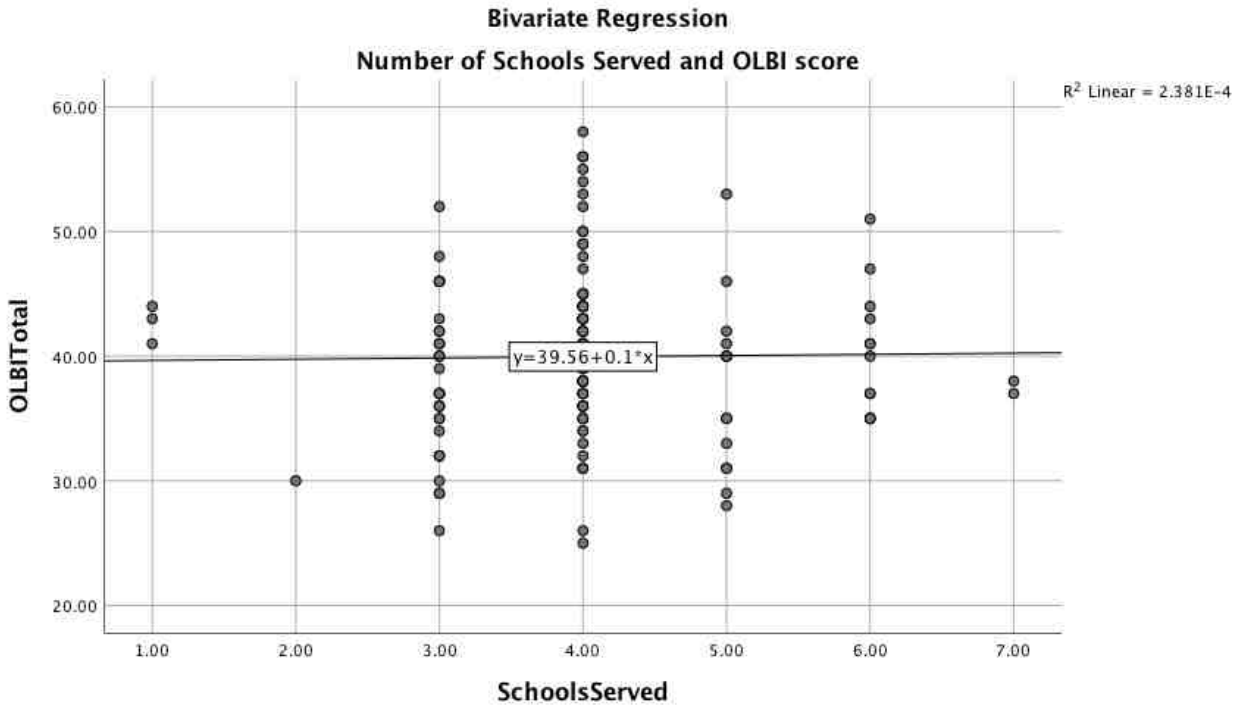

Figure 41 Bivariate Regression Plot of OLBI Total and Number of Schools Served

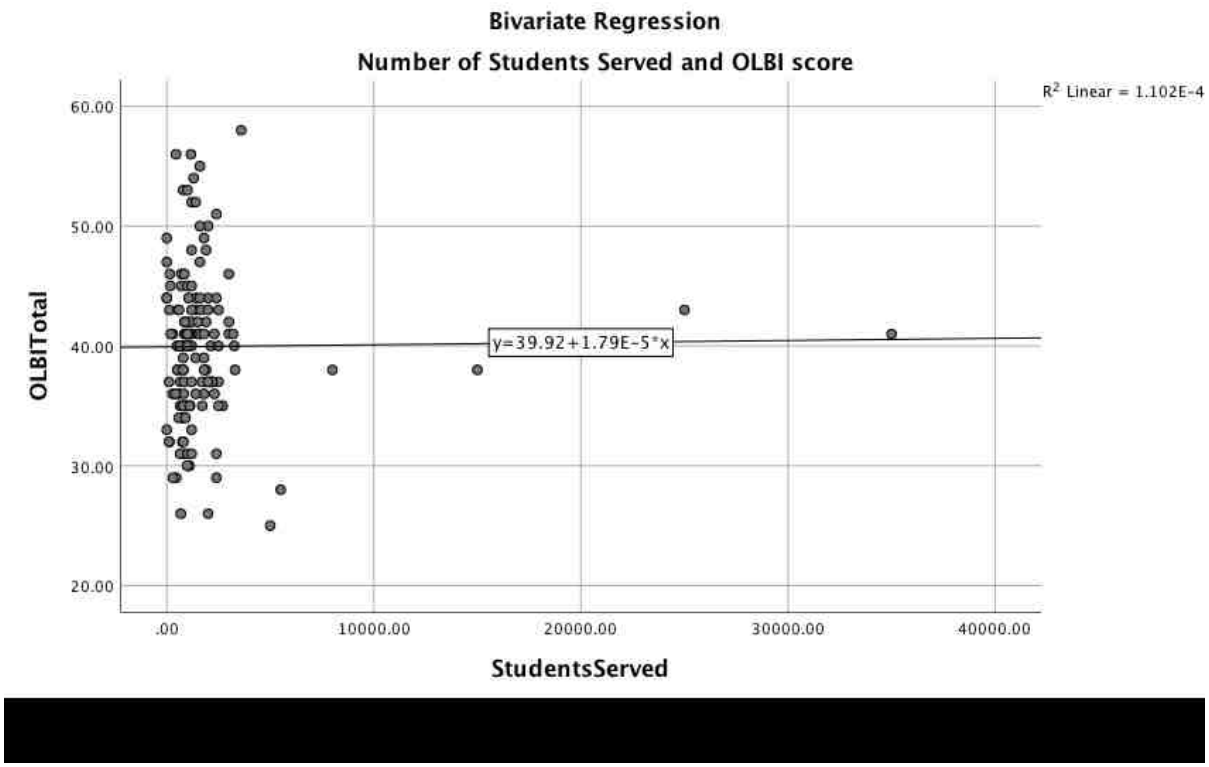

Figure 42 Bivariate Regression Plot of OLBI Total and Number of Students Served