THE RELATIONSHIP BETWEEN PRINCIPAL BURNOUT, GENDER, SCHOOL SIZE, SCHOOL LEVEL, AND HOPE: A MULTIPLE REGRESSION ANALYSIS

by

Christine Cummings Anderson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

This predictive, correlational, quantitative research study investigated gender, school size, school level, and hope as continuous predictor variables affecting principal burnout in Georgia. Burnout is a severe problem that has consequences beyond the primary person experiencing the phenomenon. Although considerable research has studied burnout in teachers and healthcare workers, less attention has been paid to burnout specific to school principals. There remain unanswered questions about predictor variables and how these variables can be used to design effective burnout prevention methods. This study used a stratified random sample of 1,399 principals with publicly accessible email contact information in Georgia. Principals in Georgia were surveyed using demographic questions about how their occupational demands and feelings of hope related to the three dimensions of burnout—emotional exhaustion, depersonalization, and personal accomplishment—using the Maslach Burnout Inventory-Educators Survey and the Adult Hope Scale. Data were collected using the Qualtrics platform and analyzed using the IBM Statistical Package for the Social Sciences (SPSS). Multiple regression was used to examine the correlation between the variables. Although the data showed statistical significance for all three dimensions of burnout, the data provided convincing evidence showing a stronger association between gender, hope, and the dimensions of emotional exhaustion and personal accomplishment. It was recommended that future research be conducted using a mixed-methods approach to further understand what causes higher levels of hope and the role of gender as a predictor variable.

Keywords: burnout, depersonalization, emotional exhaustion, hope, job demands, Maslach Burnout Inventory-Educators Survey, personal accomplishment

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Dedication

I dedicate the completion of this journey and final manuscript to my husband, Chris, and children, Christopher and Hunter. Thank you for being by my side. Thank you for providing encouragement, support, and guidance throughout this journey. Thank you for your unconditional belief and understanding of the sacrifices that this journey's success necessitated. You have inspired me and shown me the impact that determination and perseverance can have on reaching a goal. I have always believed that you can accomplish anything you set your mind to with perseverance, faith, determination, and the unconditional support of those around you. You are my blessings! I love you!

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List of Abbreviations

Depersonalization (DP)

Emotional Exhaustion (EE)

Job Demands-Resources (JD-R)

Maslach Burnout Inventory (MBI)

Maslach Burnout Inventory-Educators Survey (MBI-ES)

Personal Accomplishment (PA)

CHAPTER ONE: INTRODUCTION

Overview

This quantitative, predictive correlational research study aimed to determine if factors, such as gender, school size, school level, and hope, predict principal burnout. Emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA) are all factors that determine burnout. Persistent and prolonged stressful situations bring about a state of physical, emotional, and mental exhaustion termed burnout. The findings of this study helped determine the effect of hope as a predictor variable of burnout. The moderating roles of gender, school size, and school level were examined, building upon previous literature. Chapter One provides a background for principal leadership, turnover, and burnout. The background includes an overview of the theoretical framework for this study. Furthermore, the problem statement examines the scope of the recent literature on principal burnout, followed by the study's purpose, need, and significance. Finally, the research questions are introduced, and key terms with definitions are provided.

Background

Job-related stress, a form of mental distress, is often called burnout (Beausaert et al., 2016; DeMatthews et al., 2021; Maslach et al., 2001). Although there has been a steady increase in job demands for years, the recent COVID-19 global pandemic altered work, bringing about new and increasing job demands and stress, intensifying the risk of burnout (Abramson, 2022; Beausaurat et al., 2021; Pollock, 2020). Historically, one of the top reasons cited for principal turnover is burnout (Freudenberger, 1975; Shkurina, 2018). According to a recent RAND Corporation survey, 85% of principals experience occupational stress, while 48% grapple with burnout (Ruggirello, 2022). With burnout and stress at all-time highs, the potential for employees

to be less productive, be sick more often, quit their jobs, or retire early is concerning (Abramson, 2022). Moreover, the lack of candidates wanting school leadership positions has schools facing a leadership hardship (Horwood et al., 2021). Consequently, the shortage of principals has been termed an international crisis exacerbated by the recent COVID-19 pandemic (Horwood et al., 2021; Tran et al., 2018). The background section of Chapter One includes an overview of the theoretical framework for this study, an historical overview, and the impact of the study on society-at -large.

Historical Overview

The last few years have seen an increased interest in studying burnout. In the spring of 2020, schools and school districts across the nation experienced unprecedented changes at a moment's notice due to the COVID-19 pandemic, which shut down the nation and school organizations as we knew them (García & Weiss, 2020). The COVID-19 pandemic has shown us that the world around us is unpredictable. As a result, the conditions included new priorities and educational work patterns (Purnomo et al., 2021). In Pollock's (2020) study of school leader work, educators were labeled as the "other first responders." Persistent and prolonged stressful situations bring about physical, emotional, and mental exhaustion, which has been termed burnout. The COVID-19 global pandemic led to a renewed interest in the burnout of teachers and principals.

Although the notion of principal burnout underlying this study is ongoing, teacher burnout has overshadowed widespread principal burnout. Considerable research has been conducted on the burnout of teachers and healthcare workers; less attention has been paid to burnout specific to school principals (Arvidsson et al., 2021; Yildirim & Sait Dinc, 2019). Like

teachers, the pressure on school leaders is demanding and relentless (Collie, 2021; Harris & Jones, 2020).

Burnout is alarming because consequences are far-reaching beyond the primary person experiencing the phenomenon. Beyond the impact on the school leader, the educational impact and implications may negatively affect both teachers and students (Arvidsson et al., 2021). Maslach and Leiter (2017) reported that burnout came to the forefront of attention and research beginning in the 1970s. During the early years, burnout research focused on the lived experiences of people working in the human services field. The primary offering was to describe the phenomenon. This early research was grounded in the idea that burnout was about the relationship between work and individuals in a workplace context.

Although the term burnout was first used and one time only in an article by H. B. Bradley in 1969, in 1974, American psychologist, Herbert Freudenberger, formally defined burnout to be the result of mental and physical exhaustion due to chronic job-related stress (Bakker et al., 2014; Dorman, 2003; Edú-Valsania et al., 2022; Schaufeli et al., 2009). Maslach extended the definition to include a gradual development among social services and care workers (Edú-Valsania et al., 2022). In the 1980s, the focus of burnout research shifted to utilizing a more quantitative approach (Maslach & Leiter, 2017). The Maslach Burnout Inventory (MBI), developed in 1981, was the most widely used assessment tool to survey larger populations (Maslach & Jackson, 1981; Maslach & Leiter, 2017). By the 1990s, the study of the burnout phenomenon grew in new directions to include education (Maslach & Leiter, 2017).

Now more than ever, burnout has become a critical issue for educators and school districts (Demerouti et al., 2002; Maslach & Leiter, 2017; Maslach & Schaufeli, 1989). Over the years, several researchers have recognized the importance of understanding burnout and sought

to understand its implications. In a cross-sectional, descriptive, correlational design study, Nowacka et al. (2018) raised the issue of occupational burnout as a further research priority exploring the unique influence of different sociodemographic factors on burnout.

Ample evidence has suggested a connection between burnout and work-related stress; however, as a work-related phenomenon, it is essential to recognize that the research has highlighted how burnout differs from similar phenomena, such as job dissatisfaction and depression. West et al. (2012) contended that burnout is not always present in the parallel phenomenon of job dissatisfaction and depression. Several researchers have recognized the importance of research on job demands, burnout, and social support. Within this area of investigation, several studies were reviewed. Beausaert et al. (2016) pointed out how burnout research since the 1970s has been focused on the cause and effect of burnout and stress. Beausaert et al. confirmed that the higher demands and more responsibility placed on principals have the potential to impact their well-being negatively. Drawing upon this research, the researchers suggested that research on the results and burnout of teachers is not the same and cannot be used as applied understanding to principals primarily because the demands for time and attention in leadership carry more consequences if an error in judgment is made. They also noted that very few studies have used the job demands-resources (JD-R) model within an educational context. Beausaert et al.'s (2016) research further confirmed the need to study principal burnout, as there is a gap in the research.

DeMatthews et al. (2021) sought to provide two evidence-based recommendations to address principal burnout. In DeMatthews et al.’s study, one recommendation was focused on the district and school-level supports, while the second was focused on what principals can do

themselves. The research on principal well-being further highlighted how each principal and teacher need differentiated support.

Society-at-Large

As noted in the research, a renewed interest in understanding factors that impact school leadership, burnout, and turnover has become evident (DeMatthews et al., 2021, Sutton, 2021). Society-at-large is not aware of the ongoing, increasing level of job demands that principals face daily. Because principals are a stop-gap for all problems in a school, the range of problems that require daily resolution may include educational, organizational, and personal issues. Before a concern reaches the principal, other administrative leaders in the school have often attempted to address the problems. Therefore, the problem is significant enough not to have warranted a simple resolution. This problem escalation also increases emotion; therefore, principals must be skilled in diplomatic problem resolution (Tobin, 2014).

Research has suggested that increased job demands have significantly impacted the job-related stress of school-level leaders (Wang et al., 2018). If school-level leaders struggle with increased job demands, students' experiences may be negatively impacted. DeMatthews et al. (2021) contended that COVID-19 intensified job-related stress and burnout of principals, which limited their effectiveness and led to turnover. Specifically, during COVID-19, individuals had constant worry about getting sick and taking sickness back to their families. When job-related stress increases, turnover rates for school-level leaders may also increase, impacting the retention and recruitment of principals (Wang et al., 2018); understanding the types of support needed by principals will help district leadership understand the effects of burnout and better support principals (Daniëls et al., 2019).

According to the American Psychological Association (APA) 2021 Work and Well-being survey, burnout has been quickly becoming a public health crisis, as three in five employees are experiencing heightened work-related stress (Abramson, 2022). Additionally, Abramson (2022) highlighted that people in caretaking professions, such as healthcare workers and teachers, are more prone to burnout. The Georgia K–12 Teacher and Leader Workforce Status Report by Pelfry and Flamini (2020) analyzed the educational workforce's current state by analyzing retirement patterns. According to this report, during the 2019–2020 school year, 10% of teacher/leader/staff members were eligible for retirement. Furthermore, a recent national survey by the National Education Association declared that more than 55% of educators surveyed are ready to leave the profession. Educators indicated that they are ready to leave the profession, which will cause a concern of a mass exodus in a professional field that has already seen fewer available applicants and is short-staffed (Jotkoff, 2022).

According to Maslach et al. (2001), research studies have focused on enhancing a person’s coping skills; however, National Association of Elementary School Principals (NAESP) has suggested that no support has followed the increase and changes in the occupational roles of principals (Ruggirello, 2022). High principal turnover rates ultimately impact a school’s stability and improvement efforts. Burnout contributes to principal turnover; therefore, understanding principals’ burnout, retention, and retirement rates is essential. More studies are needed to address principal well-being and how school districts can help prevent burnout of these essential leadership employees (Beausaert et al., 2016). By examining leader burnout, increased job demands, and potential relationships between burnout, gender, school size, school level, and hope of current school-level principals, predictor variables were identified in the current study.

Findings contributed to school systems by allowing for more direct policy, regulation, and action recommendations to be made at the district level to prevent and mitigate principal burnout.

Theoretical Background

The problem of job-related stress and burnout of school-level principals has been grounded in the JD-R model. This model was considered as the foundation for the current study to explore how burnout of school-level leadership can be predicted by gender, school size, school level, hope, and increased job demands. This theoretical background review identified the basis for the study.

The theory of JD-R originated in 2006 by Bakker and Demerouti (2007) and was used to study teacher burnout and attrition. Based on prior job stress models by Karasek (1979) and Siegrist (1996), Bakker and Demerouti sought to develop a theory that incorporated working conditions, positive and negative indicators, and the characteristics of both prior job stress and effort-reward imbalance models. Bakker and Demerouti asserted that the JD-R model effectively examined a correlation between job demands and job resources. Furthermore, according to Bakker and Demerouti (2007), the JD-R theory was founded on the idea that individuals may experience high strain levels due to being unable to recover from psychological or physiological job stress.

The advantages of the current JD-R model include the flexibility and inclusion of variables specific to relevant situations, including internal resources and job context (Sokal et al., 2020). Theoretical assumptions of the JD-R model claim that job stress will be less by balancing positive resource support and job demands (Bakker & Demerouti, 2007). The JD-R theory provides a generalized framework to help explain or predict relationships between variables, enabling the researcher to understand principal burnout better. Additionally, district and school

leaders may benefit from a more comprehensive understanding of the job demands and resources that impact principal well-being and burnout, coupled with practical strategies to provide principals with differentiated tools based on demographic factors and need to offset burnout.

DeMatthews et al. (2021) stated that high principal turnover rates limit the principal's impact. Many studies have focused on the impact of workloads, long hours, stress, and organizational and control factors. These findings have suggested a need to understand and foresee what predictors may increase principal burnout to approach burnout from prevention versus intervention strategies. Failure to understand the predictors of burnout could ultimately affect school-level principals' performance and turnover rate.

Problem Statement

Principals are not immune to burnout, according to the Wallace Foundation (Ruggirello, 2022). DeMatthews (2021) reported that principal turnover was a concern even before the pandemic, with about 20% of principals leaving their jobs yearly. Furthermore, a RAND Corporation survey conducted in January 2022 reported that 85% of principals experience frequent job stress. Additionally, findings from Will (2022) revealed that 48% of principals report being burned out, and one-third say they will leave their current job within the next year. Therefore, school districts must understand principal burnout predictors to recruit, retain, and prevent turnover. Bianchi et al.'s (2021) research asserted that non-work-related factors can no longer be ignored and that effective intervention has been limited. Bianchi et al. highlighted the need to investigate the link between non-occupational burnout factors further. West (2018) called for research exploring outside factors' role, including school size and level. DeMatthews et al. (2021) sought to provide two evidence-based recommendations to address principal burnout. One recommendation was focused on the district and school-level supports, while the second

was focused on what principals can do themselves (DeMatthews et al., 2021). Although research has addressed principal burnout, the problem of principal burnout has not been resolved. The literature has not fully addressed the prediction of burnout (Diotaiuti et al., 2020; Yildirim & Sait Dinc, 2019). The problem was that a gap exists in understanding which demographic variables are predictors of burnout. Additionally, the literature has failed to address the correlation between gender, school size, school level, and hope as predictors of principal burnout. Therefore, this study explored whether gender, school size, school level, and hope predict the three dimensions of burnout—EE, DP, and PA—of Georgia school principals.

Purpose Statement

This quantitative, predictive, correlational study aimed to determine if gender, school size, school level, and hope are predictors of principal burnout. The dimensions of burnout—EE, DP, and PA—are factors that were used to determine burnout in school principals within the state of Georgia. According to the World Health Organization (WHO) and Maslach (1986), burnout is an occupational workplace phenomenon resulting from unsuccessfully managed workplace stress characterized by EE, DP, and PA.

The criterion variable in this study was burnout, defined conceptually as an occupational workplace phenomenon resulting from unsuccessfully managed workplace stress (Maslach, 1986; WHO). This variable was measured operationally by the subscale scores on the three dimensions of burnout on MBI-ES. The predictor variables in this study included gender, school size, school level, and hope.

Conceptually, each demographic variable in the study was defined to be understood as follows. Gender was defined as a person's self-representation as male or female (Mazure, 2021). School size was defined as the total number of pupils enrolled regardless of grade

(Koussihouèdé, 2020). Within the study, school size had three attributes 1–500 students (small), 501–1,199 students (medium), and 1,200 or more students (large). The third predictor variable, school level, was defined as grade clusters, including elementary (K–5), middle (6–8), and high school (9–12; Georgia School Reports, 2019).

To determine the relationship between the demographic predictor variables and burnout, each demographic variable was measured operationally by assigning quantitative values in place of text values (Trochim et al., 2016). Study participants were asked to indicate their gender, school size, and school level on the survey instrument's demographic portion, similar to studies by West (2018) and Tillery (2012). Finally, the predictor variable of hope was conceptually defined in the literature as a person's feeling that they can make progress toward an objective (Snyder, 2002). In this study, it was measured operationally and quantitatively using the Adult Hope Scale (AHS; Snyder et al., 1991).

Maslach (1986) defined EE as when an employee feels overwhelmed and overextended by the work. Depersonalization was responding to situations without feeling toward others or negative feelings related to one's work. Personal accomplishment was defined as one's feelings of efficacy, success, and competence with the work (Maslach, 1986). Although it did not provide definitive proof that one variable caused another, this study sought to understand the relationship between the predictive and criterion variables. The three dimensions of principal burnout were used to define and measure the criterion variable burnout.

A burnout profile was indicated by more negative scores on the self-reported responses of the MBI-ES dimensions of EE, DP, and PA. The predictor variables were defined as gender (male or female), school size (up to 500, 501–1,199, and 1,200 or more), school level

(elementary, middle, and secondary), and hope (feeling that a person can make progress toward an objective).

The study resulted from a call to further consider demographic variables as predictors of burnout for principals (DeMatthews et al., 2019, 2021; West, 2018). The population for this study was drawn from a convenience sample of principals throughout Georgia. The participants in this study included principals identified as public elementary (K–5), middle (6–8), or high (9–12) school principals during the 2023–2024 school year.

Significance of the Study

The notion of principal burnout underlying this study was a broad one. Burnout is a severe problem that has consequences beyond the primary person experiencing the phenomenon. Research by Arvidsson et al. (2016), DeMatthews et al. (2021) and West (2018) contended that considerable research has been conducted on burnout of teachers and healthcare workers, with less attention paid to burnout specific to school principals. Therefore, there remain unanswered questions about predictor variables and how these variables can be used to design effective burnout prevention methods for principals.

One of the central claims of this study was that EE, DP, and PA by school principals are experienced at different levels based on gender, school size, school level, and hope. Wang et al.'s (2018) job satisfaction research reported mixed results when demographic variables, such as gender, age, and work experience, were considered. With the lack of understanding of how these physical factors affect burnout, principals could seek to leave the professions or seek other educational employment. This study strove to determine whether female principals, principals of larger schools, or secondary principals have higher levels of burnout: EE, DP, and PA.

The principal's role was broad, characterized by overwhelming responsibilities and increasing job demands. Although research has defined a correlation between stress and burnout, there has still been limited knowledge and understanding about the impacts of age and gender on burnout (Marchand et al., 2018). Burnout is harmful to the employee and has the potential of secondary effects impacting the quality of others and those the employee serves (McCormack et al., 2018). Recognizing the predictor variables coupled with the job demands and resources may help to alleviate burnout (McCormack et al., 2018).

Expanding the direction of burnout research to shed light on predictors of burnout can make a significant breakthrough in the understanding of preventing high burnout levels in school-level leaders. Maslach et al. (2001) indicated that up to 2001, the research had revealed age as the demographic variable that was consistently related to burnout, citing that young employees experience a higher burnout rate. Maslach et al. (2001) affirmed a long history of trying to explain behavior as a person's interaction with their environment. As a result of the mixed reviews indicated in previous research, more studies are needed to support the school and district-level leaders in understanding how to mitigate burnout. The results of this study contributed to the cumulative body of research and knowledge about school leader burnout and predictor variables. This body of research contributed to understanding whether a correlation between predictor variables and a high burnout profile can provide insight into further understanding the correlation between gender, school size, school level, and hope in understanding job demands and resources support of the JD-R theory.

Contrary to the expectation of understanding how to deal with burnout, Maslach et al. (2001) claimed that changing the setting or the individual is not a practical approach to mitigate employee burnout. Therefore, this research study aimed to look back to look forward.

DeMatthews et al. (2019) asserted that mental health needs have been overlooked in leadership programs, indicating a need for further study and planning. Therefore, it was critical to understand what has been studied and what still needs to be examined to achieve practical solutions for prevention.

Research Questions

RQ1: How accurately can emotional exhaustion, as one dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ2: How accurately can depersonalization, as a second dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ3: How accurately can personal accomplishment, as a third dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Definitions

1. *Burnout* – Burnout is an occupational workplace phenomenon resulting from unsuccessfully managed workplace stress (Maslach, 1986; WHO).
2. *Depersonalization* (DP) – Depersonalization is responding to situations without feeling toward others (Maslach, 1986).
3. *Emotional Exhaustion* (EE) – Emotional exhaustion is an employee feeling overwhelmed and overextended by their work (Maslach, 1986).
4. *Gender* – Gender is a person's self-representation as male or female (Mazure, 2021).

5. *Hope* – Hope is a person's feeling that they have the capacity to make progress toward an objective (Snyder, 2002). Furthermore, it is "a cognitive set that is based on a reciprocally derived sense of successful (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals)" (Snyder et al., 1991, p. 571).
6. *Personal Accomplishment* (PA) – Personal accomplishment is one's feeling of success and competence with work (Maslach, 1986).
7. *School Level* – School level is elementary (K–5), middle (6–8), and high school (9–12; Georgia School Reports, 2019).
8. *School Size* – School size is the total number of pupils enrolled regardless of grade (Koussihouèdé, 2020). For the purpose of this study, school size was defined as up to 800 students and more than 800 students.

CHAPTER TWO: LITERATURE REVIEW

Overview

The literature review aimed to present the essential elements of burnout, explore factors influencing and indicating burnout in principals, determine how burnout influences turnover, and review the relationship between gender, school size, school level, and hope as predictors of principal burnout. Chapter Two opens with a theoretical framework. This study was grounded in Bakker and Demerouti's (2007) job demands-resources (JD-R) theory, which favors working conditions as a determinant of burnout. Additionally, the hope theory was used to determine the mental state of principals based on motivation and work conditions. The problem addressed in this study was the lack of literature on the correlation between gender, school level, school size, and hope as predictors of principal burnout in Georgia. The study was grounded in theories relevant to burnout, followed by a thorough review and synthesis of related literature on the role and impact of the principal, burnout, and turnover. This chapter ended with a summary of the literature findings.

Theoretical Framework

The problem of job-related stress and burnout of school-level principals was grounded in the JD-R theory. The JD-R theory by Bakker and Demerouti (2007) was the chosen theory that framed this quantitative, predictive, correlational research study. The JD-R theory was a framework for identifying mutual qualities of burnout and engagement (Bakker et al., 2014). There was a gap in understanding which demographic variables and thought pathways are predictors of burnout. Understanding current research on burnout and predictors provided a framework that gave context for preventing and treating burnout. The study was substantiated by the roots of previous research, indicating a need to explore how burnout can be predicted from a

linear combination of principal gender, school size, school level, and hope. In this theoretical framework, the JD-R theory was discussed and considered as the foundation for determining to what extent a relationship exists between gender, school size, school level, and hope on principal burnout.

Development of Job Demands-Resources Model

Bakker and Demerouti (2007) and Schaufeli and Taris (2014) provided the best developmental history source for the JD-R theory model. Conflicting model publishing dates were noted in research for the early JD-R model of burnout. Schaufeli and Taris exerted that the first JD-R model was published in 2001. However, other research has indicated that the theory of JD-R originated in 2006 by Bakker and Demerouti (2007). Furthermore, as noted in the research, the first published model of JD-R was by Demerouti et al. (2002), in an endeavor to understand the precursors of burnout (Schaufeli & Taris, 2014).

The first JD-R model focused on burnout as the primary variable (Taris & Schaufeli, 2015) and built upon existing stress models. Karasek (1979) and Siegrist (1996) created job stress models as the foundation for future research. Bakker and Demerouti (2007) sought to develop a theory that incorporated working conditions, positive and negative indicators, and the characteristics of both prior job stress and effort-reward imbalance models. The model drew upon possible causes of burnout using the Maslach Burnout Inventory (MBI) test structural model for understanding burnout (Schaufeli & Taris, 2014).

The JD-R model of burnout was initially used to study teacher burnout and the potential for turnover (Bakker & Demerouti, 2007; Bottani et al., 2019; Skaalvik, 2020). The premise behind the JD-R theory asserted that everyday stressors may overwhelm employees, impacting employee performance and leading to turnover (Bakker & Demerouti; Bloch, 2021). Bakker and

Demerouti (2007) contended that, although theoretical progress has been limited, many research studies have shown the significant impact of job characteristics on employee well-being.

According to Bakker et al. (2004), the JD-R model defined work characteristics into job demands and resources categories. Within this theory, job demands were understood to be physical, psychological, social, or organizational workload tasks that require sustained energy and effort (Bakker & Demerouti, 2017; Collie et al., 2020; Demerouti et al., 2001). Likewise, job resources were referred to as aspects that assist in achieving the desired goals, reducing or buffering job demands, helping employees deal with job demands, and nurturing personal development and accomplishment (Bakker et al., 2005, 2016; Bakker & Demerouti, 2018; Collie et al., 2020). Furthermore, according to Collie et al. (2020), job demands were correlated with high costs, and job resources resulted in experiences of increased engagement and well-being for employees. In the school setting, Beausaert et al. (2016) described job demands as work overload, school climate, policies, personal relationships, and student behavior. Additionally, job resources within the school setting included leadership decision-making ability, appreciation, recognition, and skill ability (Beausaert et al., 2016).

The early JD-R model put forth the assumptions that long-term excessive occupational demands lead to exhaustion, and a lack of resources impedes employees from meeting job demands and work goals, leading to employee disengagement (Schaufeli & Taris, 2014). Maslach and Leiter (2016) shed light on how high job demands coupled with low or lack of support resources predict employee burnout. Schaufeli and Taris' critical review of JD-R cited numerous research studies supporting the premise that high job demands and low resources affect employee cynicism, asserting that 60% of interactions between job demands and resources were significant (Schaufeli & Taris). Furthermore, within the early JD-R model, Schaufeli and

Taris (2014) highlighted the role of job resources in mitigating the harmful effects of job demands.

Theory Validation

Several studies have provided evidence and validated the JD-R dual pathway to employee well-being as a specific model for predicting employee burnout (Bakker et al., 2003; Hakanen et al., 2006). Using the JD-R model, Bakker et al. (2003) examined the relationship between job characteristics, burnout, and performance. The current study validated job demands as the precursor for burnout's emotional exhaustion (EE) and personal accomplishment (PA) dimensions. Hakanen et al. (2006) found links between job demands, burnout, and well-being, and job resources and dedication.

Skaalvik (2020) suggested that a heavy workload of job demands and positive, supportive relationship resources may be shared across occupations. Bakker and Demerouti (2007) claimed that the JD-R model effectively examined a correlation between job demands and job resources. Schaufeli (2017) proclaimed the JD-R model as an empirically straightforward model that identified relationships between job demands, resources, well-being, and outcomes.

Strengths and Weaknesses

The experimentation aspect of the JD-R model can be described as both a strength and a weakness. Rather than being a model with defined variables, all sorts of variables can be included, lending itself to being flexibly used in many different contexts (Schaufeli & Taris, 2014). Consequently, the flexibility of this model comes at the cost of limited generalizability (Schaufeli & Taris, 2014).

Unlike the proceeding models of demand-control and effort-reward, the strengths of the current model included the flexibility and inclusion of variables specific to relevant situations,

including internal resources and job context (Bakker & Demerouti, 2007; Sokal et al., 2020). Bakker and Demerouti (2017) asserted that the physiological and psychological stresses that employees come up against each day may leave employees feeling overwhelmed and unable to meet their job responsibilities effectively. Schaufeli and Taris (2014) added that the need for additional frameworks to assert why specific demands and resources interact with each other was another weakness of this model. Therefore, this model was descriptive, not explanatory, between class variables (Schaufeli & Taris, 2014).

The addition of personal resources has been integrated into the JD-R model. Within the JD-R model, personal resources were considered to be a person's resiliency and control (Schaufeli & Taris, 2014). It was implied that these specific resources may buffer the negative impact of job demands acting as a third variable, reducing burnout and increasing engagement, according to Schaufeli & Taris (2014). Theoretical assumptions of the JD-R model established that job stress would be less by balancing positive resource support and job demands.

The JD-R framework identified qualities of burnout and engagement (Bakker et al., 2014). Physical, psychological, social, and organizational aspects of jobs can be categorized as job demands or resources. Job demands require physical and psychological skills, including cognitive and emotional effort (Bakker & Demerouti, 2007). Job resources support goal achievement, reduce job demands, and involve personal growth (Bakker & Demerouti, 2007). Variables explored include employee well-being related to job strain, burnout, and work engagement.

Practical Implications

In Pollock's (2020) study of school leader work, educators were labeled as the "other first responders" when the role and pace of the work increased. During the COVID-19 pandemic,

principals', teachers', and educators' roles across the board had changed (Collie, 2021; Marshall et al., 2020; Pollock, 2020). Additionally, like teachers, the pressure on school leaders is demanding and relentless (Collie, 2021; Harris & Jones, 2020). One may wonder if leadership quality increases when leaders are under stress, understanding that an unprecedented crisis, such as the COVID-19 global pandemic, increased the job demands of school-level leaders, postulating the opposite that Sokal et al. (2020) noted within their research review.

Schaufeli (2017) stressed the importance of assessing job demand factors to improve work conditions. Schaufeli (2017) and Schaufeli and Taris (2014) affirmed that the JD-R model described how job characteristics, leadership, employee well-being, and outcomes are associated. However, Schaufeli and Taris (2014) noted that the JD-R model did not provide a reason behind the kind of job and personal characteristics leading to motivation and outcomes. Bakker and Demerouti (2007) maintained that the JD-R model extended the prior demand-control and effort-reward models and provided specificity based on occupational context. The most important practical contribution was the flexibility of this broad framework for examining the variables that affect employees' health and well-being (Schaufeli & Taris, 2014).

Based on the central assumption that job strain develops when demands are high, and resources are limited or low, Bakker and Demerouti (2007) affirmed using the JD-R model as a tool for human resource management within various occupational settings. This model could be used to understand and assess perceptions and burnout and improve principals' quality of leadership, employee well-being, and performance (Schaufeli, 2017; Sokal et al., 2020).

According to Bakker and Demerouti (2007), the JD-R theory was founded on the idea that individuals may experience high levels of job strain due to being unable to recover from psychological and physiological job stress. There has been a lack of research exploring

principals' perceptions of job demands and resources (Skaalvik, 2020). The research has suggested that principals experience a high time-pressure work overload. The evidence has suggested that time pressure predicts burnout (Skaalvik, 2020). Therefore, school districts and leaders may benefit from a more comprehensive understanding of job demands and resources impacting employee well-being coupled with strategies for equipping school-level leaders with the right tools to combat occupational burnout.

Even though the JD-R model had been modified in recent years, the core foundational framework of the JD-R theory remained centered on the understanding that job demands can predict burnout, and job resources impact burnout (Lesener et al., 2019). Job resources can also predict work engagement (Lesener et al.). Moreover, JD-R is an excellent model used in many organizations to assess and understand job characteristics that impact employee well-being (Lesener et al., 2019).

Schaufeli and Taris (2014) concluded that longitudinal evidence supported the impact of job demands and resources over time on burnout and work engagement. The role of higher job demands has been reported as potentially leading to burnout (Maslach & Leiter, 2016). Principals are under tremendous stress. High levels of continued stress can lead to burnout (Beausaert et al., 2016; DeMatthews et al., 2021; Friedman, 2002). It was important to note that existing research using the JD-R framework has predominantly focused on teacher burnout but failed to extensively explore how occupational work stress is related to increasing the likelihood of burnout in principals. This study's theoretical framework was built upon JD-R burnout theory research. Thus, the history, development, and characteristics of burnout and JD-R were examined and presented.

This quantitative, predictive, correlational research study aimed to determine if gender, school size, school level, and hope predict a higher burnout profile in school principals. The JD-R model has been recognized as one of the leading job stress models among researchers because it did not restrict itself to specific job demands or resources, making its applicability more flexible than other models (Schaufeli & Taris, 2014). In examining this theory, the development of the model over time was reviewed, empirical research was examined and discussed, the strengths and weaknesses of the model were analyzed, and practical application for this study was considered. The flexibility and adaptability of this model were crucial elements of the researcher's investigative model when determining a theoretical framework for this study. Furthermore, the JD-R theory was a perfect fit for this study because the findings of this study aided in determining the effect of predictor variables of burnout. This study was critical because it added to the knowledge base for understanding principal burnout. In addition, the study added theories for understanding predictors of burnout as a precursor to principal turnover.

Related Literature

The literature review section provides an in-depth synthesis and understanding of what is currently known about principal burnout and predictor variables. A search across Google Scholar and Liberty University's Library Education Research Database was conducted. Scholarly publications, peer-reviewed articles, dissertations, and books were used to analyze historical and current research. Ninety-six articles and publications were integrated into the construction of this literature review. Much of the literature reviewed and utilized was published between 2017–2023. Chapter Two summarizes what has been examined and how this study can fill the identified gaps.

School Level Leadership

Scholars often conceptualize leadership as a balancing act between job resources and job demands (Tummers & Bakker, 2021). Leadership transforms values and visions into actions and reality (Smith & Riley, 2012). Walter et al. (1980) contended that leaders who are task-oriented and concerned with the social-emotional needs of others are perceived to be more effective. Greenleaf (1977) argued that inspiration alone does not make a better leader. Individual initiative is the underpinning of a leader stepping out to lead the way for others. Additionally, listening and understanding are additional critical elements of servant leaders. Furthermore, Greenleaf asserted that it is easy to lead perfect people; therefore, a servant leader must be willing to accept people for who they are and have empathy for what they do. Trust in followers, the foresight to know what is ahead, and ethical behavior were additional characteristics noted by Greenleaf (1977) in servant leaders.

Using a qualitative mixed-methods case study research design, Metz et al. (2019) sought to explore the transformational leadership traits of principals. The researchers sought to understand how building-level leaders (principals) understand their peers' perceptions of transformational leadership. Two different instruments were used. The Leadership Practices Inventory by Kouzes and Posner, developed in 2013, was used for the quantitative phase. The Leadership Interview Instrument, developed by Metz et al., was used in the qualitative phase. Data analysis from the quantitative phase was used to develop the Leadership Interview Instrument used in the qualitative data-gathering phase. The quantitative results collected from the school leadership participants during phase one highlighted a variance in transformational leadership perceptions and understanding. Questions were scored from high to low in each pillar category: model the way, inspire a shared vision, challenge the process, enable others to

act, and encourage the heart. From the qualitative data analysis, three primary findings were noted. These findings indicated: (a) Principals believe they are transformational leaders; (b) Change is at the core of the transformational leadership understanding; and (c) Intangible human elements of leadership are fundamental to perceptions. Limitations of the study included the phenomenon of the study, the case study design parameters, and the geographic locations used as limiting factors. Therefore, generalization caution was shared (Metz et al., 2019).

Krasnoff (2015) featured five critical responsibilities of strong building-level instructional leaders. Krasnoff highlighted the five key responsibilities, as indicated by Ruggirello (2022), as: establishing a high-expectations vision, fostering a safe and orderly climate and environment, building leadership capacity in others, improving instruction, and effectively managing people. Krasnoff's (2015) review of current research confirmed that a high-quality learning environment must be established and led by a deeply adept instructional leader to create and sustain a high level of student learning. Like Greenleaf's (1977) assertion that inspiration alone does not make an effective leader, if principals are expected to be instructional leaders, Krasnoff (2015) called to attention the need for training, evaluation, and feedback for the continuous improvement of principals.

Numerous studies have identified the connection between leadership and JD-R theory. Due to a lack of a structured overview of the literature, Tummers and Bakker (2021) conducted a systemic review analysis of how leadership and JD-R theory can be connected. In their review of research, Tummers and Bakker strove to identify ways leadership influences job demands and resources, moderates the connection, and broadens the perspective of leaders on how to improve the organizational environment. They researchers stressed how the JD-R theory explained the role and impact of the organizational environment on the well-being and

performance of the employees. Additionally, Tummers and Bakker (2021) identified a need to study leadership and JD-R further to improve the field.

Principal Role and Impact

It is no longer enough for principals to be managers; today's principals are to act as instructional leaders within their schools and school system (Ruggirello, 2022). The role of the principal has shifted from the traditional managerial leadership style to ensure the responsibility of student learning, teacher effectiveness, and school safety as the building-level instructional leader. Friedman (1995a) asserted that a principal's role is more extensive and complex than a teacher's role. Likewise, Denecker (2019) reported internal research citing that the principal's job is one of the toughest in America, calling it a job too big for one person. Research has affirmed that the principal's influence on student achievement is second only to the teacher's influence (Agasisti et al., 2019; Grissom et al., 2021a, 2021b; Krasnoff, 2015). Furthermore, a principal's impact also reaches students' social and emotional needs (DeMatthews et al., 2022).

Hancock et al. (2019) highlighted current literature confirming a link between the principal and school climate and student achievement. DeMatthews et al. (2021) stressed the critical importance of the principal in improving organizational conditions that foster a high quality of teaching and learning for all students. An effective principal is necessary for school improvement through principal actions that inform and manage resource support, allocations, and priorities (DeMatthews et al., 2021).

Previous research has largely overlooked the issue of principal burnout. DeMatthews et al. (2021) called to attention the selflessness and self-care for others, coupled with the school environment's high demands and organizational needs, which are principal behaviors that contribute to the stress, burnout, and turnover of principals. Since the increasing rates of

principal turnover have been documented in the literature, it seemed essential to explore them (DeMatthews et al., 2021).

Principal Turnover

Understanding principal turnover starts with identifying the most basic definition used in existing research. Principal turnover has been commonly understood as when a principal does not return to the same school the following year (Rangel, 2018). A limitation of this simple definition was that the definition lacks information about the reason behind the turnover. For this study, turnover related to burnout and principal characteristics of gender, school size, school level, and hope as predictors of principal burnout were studied. The approach to understanding principal turnover for this study was noted in the research questions. Rangel's (2018) review of principal turnover literature was guided by how principal turnover has been defined, its causes, and the consequences of turnover. Rangel (2018) concluded that a clear understanding of principal turnover remains weak due to the different ways turnover has been measured, the lack of studies on essential determinants, the lack of consistency in the findings, and the lack of studies on the consequences.

Principals play a crucial role in school improvement, yet high turnover rates threaten improvement efforts. Principal turnover raises national concerns about leadership stability and student performance (Yan, 2020). DeMatthews et al. (2022) and Bartanen et al. (2019) asserted that principal turnover rates are higher than teacher turnover rates, citing the National Center for Education Statistics (NCES). Goldring and Taie (2018) stated that the national turnover rate for principals is approximately 18%. The NCES contended that 22.6% of 2011–2012 principals left the following school year, with 7% moving to a different school, 11.5% leaving for other careers, and 4.1% noted as other reasons (Grissom & Bartanen, 2019).

Denecker (2019) claimed that finding, recruiting, and retaining school principals is a problem that school systems face worldwide. Furthermore, principal turnover and school performance stability have become national concerns (Bartanen et al., 2019; Yan, 2020). DeMatthews et al. (2022) asserted that despite a growing focus on principal turnover, little is known about why principals voluntarily leave. Organizations must understand why principals voluntarily leave to effectively inform and foster retention policies (DeMatthews et al., 2022).

Principal turnover lies at the heart of the discussion on principal burnout. Principals' role in leading school improvement causes principal turnover concerns (Rangel, 2018). Losing a principal can significantly impact the school's culture, climate, and organizational structures (Edwards et al., 2018). Turnover may disrupt progress and significantly impact the success of a school (Bartanen et al., 2019; Bloch, 2021; Rangel, 2018). Even before the recent COVID-19 pandemic, researchers like Yan (2020) acknowledged findings from the NCES confirming an increase in principal turnover rates across the country.

Like the research noted previously, DeMatthews et al. (2021) contended that principals are essential to school improvement, yet retention of principals has become a nationwide challenge. The underlying argument was that although numerous factors contribute to principal turnover, burnout has been a contributing factor that has been researched far less. Yan (2020) sought to examine how working conditions for school principals influence the probability of principal turnover. Yan's (2020) research focused on the literature on principal turnover by reviewing job benefits, workload, student behavior, and principal influences.

Retention and retirement data could be used to begin discussions on what is needed to retain and sustain school-level leaders. The 2020 Georgia K–12 Teacher and Leader Workforce Report published in December 2020 analyzed retention and retirement patterns for K–12 teachers

and leaders during the 2019–2020 school year (Pelfry & Flamini, 2020). Of the 9,960 school leaders identified in the 2019–2020 report, 41% had between 21–30 years of experience in education, yet 40% had fewer than 5 years of leadership experience. The entire leader workforce data indicated that 57% would be eligible to retire within 10 years. A closer look at the data may help stakeholders plan for needs based on patterns (Pelfry & Flamini, 2020).

Bartanen et al. (2019) used 2001–2007 longitudinal data from Missouri and Tennessee school districts to determine the effect of principal turnover on school performance. Asserting that principal turnover rates are higher for principals than teachers, Bartanen et al. sought to understand the causes and consequences of turnover. Citing Goldring and Taie's (2018) statistics, the national principal turnover rate is 18% annually. However, Bartanen et al. maintained that research has not reliably determined the effects of principal turnover. Bartanen et al.'s (2019) study indicated that principal turnover negatively impacts school performance.

Wang et al. (2018) supported the claim that a lack of job satisfaction contributes to a decline in work performance, making turnover more likely. In this study, survey data was collected and used from 1,423 principals in Ontario, Canada. Data were analyzed using multiple regression, enabling the researchers to predict relationships between the dependent variable of principal job satisfaction and multiple predictor variables. Motivating factors and maintenance factor variables were defined. The results did not yield a correlation between gender, age, education, and experience. Additionally, 78% of the principals reported job satisfaction despite increasing job demands. However, using Herzberg's two-factor theory, results showed that when work demands intensify, job satisfaction is impacted to the extent that school performance is also affected (Wang et al., 2018).

Hancock et al. (2019) called empirical research to identify burnout-related workload and time pressures. Hancock et al.'s (2019) qualitative study sought to identify significant causes of principals' stress. Their convenience sampling of principals included 19 principals in the southeast region of the United States and 24 principals in Stuttgart, Germany and indicated that principals feel tremendous stress and responsibility for students. Additionally, the study revealed that time is the barrier to mitigating the stress caused by more job demands and less resource support. Understanding the causes of burnout in the recruitment and retention of principals should be addressed (Hancock et al., 2019).

Marchand et al. (2018) explored the contribution that age and gender may have on employee burnout, citing limited knowledge about the extent of workers' characteristics. Using the MBI general survey, burnout was measured in a random sample of 63 Canadian private sector workplaces, with a 41% response rate and a sample size of 2,073 workers from 2009–2012. The data analysis found a positive correlation between EE and total burnout until age 30 years. Additionally, until age 55 years, a negative correlation was concluded before a positive association was seen again after 55 years. The researchers concluded that the relationship between age and burnout was strongly impacted by gender. Limitations of this study included the narrow scope of occupations considered for this study, which may have caused bias as different burnout patterns may be noted in different work industries. Marchand et al. (2018) contributed to the current study in that there seemed to be a compelling reason to argue that there is a correlation between gender and burnout.

Factors Leading to Principal Turnover

Findings in current research have shown that principals face many universal occupational stressors daily (Mahfouz, 2018; Mahfouz & Richardson, 2021; Wang et al., 2018). A central

finding from Mahfouz's (2018) study highlighted the pressure principals experience for being responsible for any conflict, misunderstanding, or error within their building. The pressure and accountability to and for the community can be emotionally exhausting (Mahfouz, 2018; Mahfouz & Richardson, 2021). Moreover, the importance of emotions and how they can be indicators of stress was highlighted by Mahfouz (2018).

Russell et al. (2020) claimed that burnout is the most common reason educators leave the profession, citing burnout as a modern epidemic and global concern among educators. Burnout can result from the depletion of mental and physical energy from chronic experiences of excessive workloads (Russell et al.). Ross' (2022) research supported the JD-R framework, asserting that principals indicate a reason for leaving resulting from being faced with workplace challenges and competing demands between staff and supervisors. Similarly, Russell et al. (2020) and Mahfouz (2018) maintained that a lack of work-life balance, lack of self-care, and a feeling of helplessness are causes of burnout, a significant factor in affecting the turnover of educators. The 2017 Gallup, Inc. (2017) survey showed that principals are more likely to experience stress and burnout earlier in their careers. Overwhelmed and emotionally exhausted principals who fail to prioritize their well-being often experience negative impacts on their performance (Mahfouz & Richardson, 2021). Additionally, a path to principal burnout may be tied to emotionally invested principals working in organizations that align accountability with success (Mahfouz & Richardson, 2021).

Contrary to the studies by Marchand et al. (2018) and Hancock (2018), Rangel's (2018) review of the literature on principal turnover concluded that school performance, accountability policies, and professional development are the primary causal factors most strongly related to principal turnover. Mahfouz's (2018) findings revealed that stress among principals is an

epidemic that needed to be further understood and addressed. Turnover of principals is a complex issue, informing the inconclusive research that seeks to understand why principals leave their positions (Mahfouz & Richardson, 2021). Mahfouz and Richardson's findings showed that 91% of principals left their positions due to job demands. The JD-R model not only assessed how and why burnout arises but additionally helped explain the effects of work demands, support or lack thereof, and the relationship to burnout (Bakker and Demerouti, 2007).

Occupational Work Stress

There was a crucial need to expand current understanding and knowledge about the occupational factors of principals' work that impact workplace well-being (Collie et al., 2019). Principals are seen as the person responsible for the mental health of others. Sullivan (2022) revealed recent RAND survey results indicating that 85% of principals experience job-related stress, 48% deal with burnout, and 28% have symptoms of depression. The same survey revealed that educators experience job-related stress at twice the rate of general working adults (Sullivan, 2022).

Many researchers have described occupational work stress, otherwise known as job stress, as a phenomenon when there is an inability to cope with workplace demands (Akanji, 2013). Occupational stress has been defined as "the harmful physical and emotional responses that occur when job requirements do not match or exceed a worker's capabilities, resources or needs," according to the National Institute for Occupational Safety and Health and the International Labour Office (Landsbergis et al., 2017, p. 1). High levels of chronic stress in principals can lead to burnout, health issues, increased turnover, and student performance concerns (Klocko & Wells, 2015).

Although burnout and job stress seem similar, a distinctive difference noted by Schaufeli and Buunk (1996) was that negative attitudes and behaviors are not synonymous with job stress. Occupational stress is present in all work environments (Wang et al., 2018); however, occupational stress and burnout are not synonymous. Under stress, one struggles to cope with occupational responsibilities (Robinson, 2020). However, burnout is characterized by exhaustion and disillusionment about being able to meet job responsibilities successfully (Robinson, 2020). Schaufeli and Buunk (1996) further delineated that burnout is a type of job stress that is chronic and multifaceted and results in negative attitudes and behaviors of those affected.

Hope

Pleeging et al. (2021) contended that a person's perception of the future can influence how they feel in the present. Furthermore, assuming that there is a correlation between hope and happiness, perseverance, success, health, capability, and social support, the more hopeful a person is, the higher their happiness level (Nayeri et al., 2020; Pleeging et al., 2021). While social cognitive theory was rooted in how a person experiences the world around them, hope theory may be a subset to explore as a foundational theoretical framework closely connected to well-being and burnout. Dixson et al. (2017) asserted that hope and self-efficacy are experienced under different circumstances, further defining the circumstances in phases. Citing Snyder (2002), Dixson et al. maintained that self-efficacy is about whether a person can accomplish a task, and hope is about whether a person will accomplish a goal. Correlations between hope theory and educational constructs of general well-being, life satisfaction, success in competition, anxiety, and depression were noteworthy (Dixson et al., 2017).

In the 1980s, C. R. Snyder (2000) began to study how people think, proposing early on that hope was the opposite of excusing behavior. Additionally, Snyder's early research asserted

that hope was a person's motive to attach oneself to positive outcomes, further defining hope as "the sum of perceived capabilities to produce routes to desired goals, along with the perceived motivation to use those routes" (p. 8). By 1991, the definition had evolved to "a cognitive set that is based on a reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)," as defined by Harris et al. (1991, p. 571) as cited in Snyder (2000).

Snyder (2000) asserted that successful and hopeful thought pathways are routes to reach desired goals. Therefore, hope results from self-agency paired with pathways. Moreover, hope results from a person's willpower and perception of the capability to reach the desired goal and the mental ability to see a path to reach the desired goal (Snyder, 2000). Pleeging et al. (2021) cited Snyder as contending that "hopeful people are those who are persistent and creative in pursuing their goals" (p. 1020). It has been suggested that hope may prevent, mitigate, and help people recover from burnout (Ross et al., 2020). The loss of hope, coupled with a lack of resource support and high expectations, can potentially lead to burnout (Ross et al., 2020). Therefore, exploring hope's power and role in tackling the feelings that lead to burnout was essential.

The correlation between hope and JD-R provided a framework for understanding how to apply the JD-R theory to this study. Hope is multidimensional, consisting of goals, pathways, agency, and barriers (Snyder, 2000). Snyder (2000) asserted that barrier reactions vary based on hope levels. Snyder (2000) also cited that goal-related outcomes parallel hope theory in that the outcome expectancy of Bandura's self-efficacy theory was similar to the thought pathways of hope theory. Furthermore, he contended that both theories share definitional elements (Snyder, 2000). Measuring hope can be essential in predicting outcomes (Snyder, 1995).

Snyder developed several tools for measuring hope. Of his three well-known measures, the Adult Hope Scale (AHS) was the most relevant to the predictive correlational study. Snyder (2000) stressed the importance of studying hope in the workplace due to the significant amount of time spent at work. Considering how hope influences burnout dimensions, such as EE, was essential. By understanding a person's mental perception and job demands, a school's system can change the burnout of school principals and leadership instability by understanding the role of hope.

Burnout

Burnout has become a central point of research in the field of education. The current literature abounded with examples of burnout in the healthcare field and with teachers in the field of education. The phenomenon of burnout has been extensively studied. Schaufeli et al. (2009) estimated that more than 6,000 publications have been focused on burnout. The central theoretical premise behind burnout was that when employees cannot manage their occupational pressures, they develop physical and psychological issues that manifest in burnout.

The study of burnout is not new. According to Shaheen and Mahmood (2020), the present-day meaning and understanding of the burnout phenomenon took a long time. During the 1970s, the burnout phenomenon first came to the forefront, as identified in published articles about the difficulties that healthcare and human service workers were experiencing in their work (Leiter & Maslach, 2016). In the beginning, burnout was used as an informal term to describe the effects of drug use (Schaufeli, 2017). Herbert Freudenberger (1975), an American psychologist, first used job burnout to describe observations of volunteers exhibiting exhaustion and feelings of ineffectiveness (Schaufeli, 2017). This early research by Freudenberger (1975) identified

compassion, thoughtfulness, and kindness as predictors of higher susceptibility to burnout (Hancock, 2018).

Until a social psychologist named Christina Maslach began studying burnout, most research was focused on qualitative experiences (Heinemann & Heinemann, 2017). Maslach's research centered on understanding how workers managed emotions and work demands (Maslach & Schaufeli, 1993; Schaufeli, 2017). Maslach's (2003) burnout theory identified burnout as the end state of long-term stress, represented by three dimensions. Maslach's research revealed that workers felt emotionally exhausted, developed negative mindsets, and experienced crises in work-related responsibilities (Schaufeli). It was then that Maslach's work led to practitioners referring to workers displaying these symptoms as experiencing a condition of burnout (Maslach & Schaufeli, 1993; Schaufeli, 2017). Schaufeli and Buunk (1996) asserted that the most-used definition of burnout was developed by Maslach and Jackson, describing burnout as a work-related syndrome of EE, DP, and PA (Schaufeli & Buunk, 1996).

Burnout was initially understood as experiencing exhaustion due to excessive workplace demands on energy, strength, and resources, as defined by Freudenberger (1975). Then, Maslach et al. (2016) described burnout as a psychological syndrome of EE, DP, and reduced PA among people working with professionals in the human resources fields due to chronic stressors (Demerouti et al., 2001). Next, the World Health Organization (WHO; 2019) classified burnout as a multidimensional occupational phenomenon resulting from chronic workplace stress that has not been successfully addressed.

To better understand the mental status of different populations, Maslach's work focused on developing an easy-to-use self-reporting measurement tool for burnout (Heinemann & Heinemann, 2017; Schaufeli, 2017). Today, burnout is actively researched and commonly

defined as a psychological occupational workplace phenomenon of exhaustion, cynicism, and professional inefficacy resulting from unsuccessfully managed workplace stress (Bakker & Costa, 2014; Edú-Valsania et al., 2022; Maslach, 1986; Maslach & Leiter, 2017; WHO, 2019; Yildirim & Sait Dinc, 2019).

According to the Maslach Burnout Toolkit for Educators (Mind Garden, 2022), burnout's first dimension is EE, which is feeling exhausted from work. More specifically, EE is a feeling of being overworked, exhausted, or having chronic fatigue, resulting from the demands of work (Demerouti et al., 2001; Makikangas et al., 2021). The second dimension, DP or cynicism, is defined as lacking feeling, experiencing detachment, or having a negative response toward those with whom the person works (Demerouti et al.; Makikangas et al.). Lastly, the third dimension, PA, is a feeling of success and competence. Reduced PA or professional efficacy refers to the self-perception that one is no longer effective in meeting the duties and responsibilities of their job (Demerouti et al., 2001; Makikangas et al.). Schaufeli and Buunk (1996) asserted that burned-out workers perceive that they are unsuccessful in reaching their professional goals, therefore, bringing about feelings of poor professional self-esteem. In 2019, the WHO included burnout as an occupational phenomenon in the 11th edition of the International Classification of Diseases (ICD-11; Makikangas et al., 2021).

Maslach and Scahufeli (2017) noted that early research on burnout focused on correlational studies of occupational variables, such as satisfaction, stress, expectations, relationships, and positions. However, no complete study has existed between burnout and biographical or personal variables. Schaufeli and Buunk’s (1996) synthesis of the history of burnout concluded that burnout results from discrepancies between an employee’s occupational expectations, ideals, and reality. Likewise, Cherniss’ (1980) research further confirmed work

overload as a root cause of occupational burnout. Maslach and Schaufeli (1993) asserted that the early studies indicated a stronger correlation between burnout and occupational variables than biographical or personal variables.

Maslach's early research on burnout led to the development of the most commonly used instrument for measuring burnout, the Maslach Burnout Inventory (MBI; Friedman, 1995a). The MBI is a survey designed to measure occupational burnout by assessing an individual's experience of burnout based on Maslach et al.'s (1996) most commonly used and accepted definition of burnout (Makikangas et al., 2021). By this definition, burnout is commonly understood to be multi-dimensional. The MBI survey, published in 1981, uses factor analysis to assess the three dimensions of burnout, identified by Maslach and Jackson as EE, DP, and PA. The flexibility of this instrument has made it easy to adapt for a wide range of occupations.

Burnout in Principals

The concept of burnout among health service professionals is not new. Although Friedman (1995a) studied the concept and components of principal burnout in 1995, the current literature lacks an updated focus on principal burnout (DeMatthews et al., 2021; Persson et al., 2021). Burnout and stress that principals may face in their everyday work can be considered occupational hazards impacting personal and professional well-being (DeMatthews et al., 2021). Moreover, burnout has been validated as a factor in principal turnover (Federici & Skaalvik, 2012; Yan, 2020). Understanding what causes high work stress among school principals will be crucial to identify occupational work stressors.

In 1995, Friedman (1995a) sought to identify unique components of burnout specific to school principals. Using the facet theory approach in his study, the findings asserted that principal burnout can be reported using two dimensions with four essential elements. Friedman

suggested that burned-out principals experience exhaustion, self-dissatisfaction, aloofness, and depreciation. Furthermore, Friedman (1995b) asserted that exhaustion and self-dissatisfaction are the core elements of principal burnout.

Harms et al. (2017) reviewed how leadership styles and stress interact, finding that follower stress has been generally ignored. Harms et al. (2017) conducted a meta-analytic literature review on leadership and stress. Their meta-analytic review looked at the role leader stress has as a precursor to leadership behavior and subordinate stress. They found a universal understanding that stress and leadership are connected. Harms et al. (2017) further confirmed that leader stressors influence leadership behaviors. Consequently, Denecker (2019) stated that high-to-moderate levels of occupational stress have been the primary focus of past research.

Studies by Whitaker (1992) and Flynn (2000) used the MBI to assess the impact of occupational stress on principal well-being. Although principals may perceive a high level of PA, principals suffer from high levels of EE and DP (Denecker, 2019). Denecker's (2019) brief review of international literature on principal occupational stress found that principalship is a highly demanding and stressful role. Consequently, DeMatthews et al. (2021) found that few district-initiated efforts to reduce principal burnout could impact burnout among principals. These findings are concerning for principal well-being and turnover. The fallout from principal burnout could impact principal recruitment, hiring, and retention for years to come (Ruggirello, 2022). With a greater focus on understanding principal burnout, districts can improve principal well-being, positively impacting principal retention.

Indicators of Principal Burnout

The mental health needs of principals are often overlooked (DeMatthews et al., 2018). Given the recent global pandemic, understanding principal burnout and self-care is crucial

(DeMatthews et al., 2021). Burnout is often considered an occupational hazard that negatively impacts a principal's personal and professional well-being (DeMatthews et al., 2021). Principal burnout can lead to increased rates of principal turnover. Therefore, understanding the factors contributing to burnout and turnover is essential for addressing the organizational conditions related to burnout.

DeMatthews et al. (2019) maintained that principal burnout can be related to individual and district-level factors, such as school size, parent engagement, leadership role, mentor, and support. Additionally, prior research has affirmed that organizational conditions may impact job-related stress (Leiter & Maslach, 2004). In 2004, Leiter and Maslach (2004) identified the six factors related to burnout: workload, control, reward, community, fairness, and values. Similarly, Yildrim and Sait Dinc's (2019) study revealed that Flemish principals with a higher workload, ambiguous role, and higher role conflict are more likely to develop burnout symptoms. In a decade of research, Wells and Klocko (2018) noted an imbalance between principal job demands and resources.

Impact of Principal Burnout

Burnout negatively affects the education profession (Mind Garden, 2022). Specifically, principal burnout affects everything within the school and the school experience (West, 2018). Furthermore, current research has indicated that high levels of burnout facing public school principals complicates the critical shortage of quality candidates for principal positions (De Jong et al., 2017). Furthermore, the quality of service and care for students is lessened when educators experience burnout (McCormack et al., 2018; Shaheen & Mahmood, 2020).

Possible consequences of burnout may be EE, DP, and loss of hope. As far back as 1975, Freudenberger (1975) claimed that principals experiencing burnout may demonstrate poor job

performance, a high rate of absenteeism, and potential turnover. Bakker and Costa (2014) contended that chronic burnout has a determinantal impact on the daily functioning of employees.

Due to the differentiation in duties and responsibilities, burnout research regarding teachers has not been easily generalized to principals (Beausaert et al., 2016). The role of the principal is much more comprehensive, and principals are faced with more challenges (Bloch, 2021; Friedman, 1995a, 1995b). Bloch's (2021) study showed that high stress levels could lead to principal turnover; therefore, the stress in this leadership role must be addressed to stabilize the profession. DeMatthews et al. (2019) and Combs et al. (2009) also identified burnout as contributing to principal turnover. Without changes in the work setting, burnout will remain a prevalent concern. Further research is needed to investigate demographic differences' role in predicting and developing burnout (Hancock, 2018).

Factors Influencing Burnout in Principals

In 2014, Bakker and Costa (2014) studied employees' role in developing burnout. Burned-out employees are predisposed to show impaired job performance. Bakker and Costa claimed that once an employee experiences burnout, they often continue to experience burnout. The prevalent factors within the research categorized influential factors of burnout to include situational and individual (Bakker & Costa, 2014).

Insufficient research on how job demands, resources, and personal characteristics affect burnout was the underlying purpose of a literature review related to the burnout of psychologists conducted by McCormack et al. (2018). Their literature review identified workload and environment as the most common causes of burnout. The researchers conducted a systemic review of 29 papers and concluded that workload and time pressure repeatedly appeared

throughout the research as contributing to burnout. The review identified the MBI-Human Service Survey as used in one-third of the studies. The MBI instrument was used most in another third of the studies. The literature review further identified age, experience, and gender as the most commonly found personal characteristics studied, with age being the most consistently studied. The review noted that an increase in age resulted in decreased burnout within the studies reviewed. However, mixed results were reported when studying the role that gender plays in burnout. The lack of supportive resources had the most significant impact on the cause of burnout (McCormack et al., 2018). Addressing burnout in the education profession can help increase employee well-being and the quality of the educational experience (Mind Garden, 2022*).* Further research is needed to investigate the role of demographic differences and the role that demographic differences play in predicting and developing burnout (Hancock, 2018).

Yildirim and Sait Dinc (2019) claimed that there was a lack of research on principal burnout. DeMatthews et al. (2021) claimed that burnout contributes to principal turnover. The increase in principal turnover due to burnout in the Flanders region of Belgium identified a need for researchers to study how to decrease or prevent the likelihood of burnout (Yildirim & Sait Dinc). As a result, these researchers sought to understand the factors influencing principal burnout and their predictive value (Yildirim & Sait Dinc, 2019). Their study focused on the relationships between personal factors, antecedents, and burnout.

Yildirim and Sait Dinc's (2019) study was concerned with determining factors that affect principal burnout. A three-page questionnaire consisting of 21 questions about burnout symptoms, role ambiguity, and demographic questions was used. The MBI was used to measure burnout symptoms. Principal role ambiguity was measured using Schaufeli and Van Dierendonck’s scale, and Friedman’s Burnout Scale for Principals was adapted to collect

demographic data. For this study, 560 of 650 surveys were collected among the Flanders region's principal population, resulting in an 83% response rate. Of the 547 usable surveys from full-time principals, 228 were male, and 317 were female. The average age of study participants was 49.9 years, totaling 397 elementary and 150 secondary principals. All measures used a 5-point Likert scale (Yildirim & Sait Dinc, 2019).

The available evidence from Yildirim and Sait Dinc's (2019) study suggested a positive correlation between age and gender for physical burnout symptoms. In contrast, the evidence suggested no positive relationship between the demographic variables of marital status, leisure time, and burnout. The data gathered further supported the literature identifying females as experiencing higher levels of burnout due to after-work responsibilities. This research was vital to the current study because it began to fill the gap in the lack of literature examining principal burnout. Furthermore, the study identified the need to better understand demographic variables and burnout. A primary limitation of their study was that it was conducted outside of the United States, potentially limiting the generalizability to other educational systems (Yildirim & Sait Dinc, 2019).

Guglielmi et al. (2012) conducted a quantitative study that considered the role of job demands, resources, personal resources, and personal demands as predictors of work engagement and burnout. Although this study was completed more than 5 years ago, this study was chosen as supporting research because the JD-R model theoretical framework was used, and the study sought to advance understanding of job demands and resources on well-being. It was hypothesized that workaholism constituted a personal demand that positively impacts job demands while, in turn, positively impacts burnout. This study was part of a more extensive study. A sampling of 224 school principals with varying genders, ages, and service experiences

participated. Multiple rating scale instruments were used to gather data regarding personal resources, job resources, personal demands, and job demands. This study added to the research that workaholism and burnout are related to mitigating job demands (Guglielmi et al., 2012).

Most studies of factors influencing principal burnout have focused on work demands. There has been scant research exploring demographic characteristics of gender, school size, and school level as contributing factors. Perez-Luno et al.'s (2022) recent research sought to explore the burnout of educational professionals in Spain. Within this study, the researchers sought to explore determinants of burnout, understand the impact and origins of work demands compared to family demands, and identify moderators, individual differences, and control variables that can explain the effects and origins of psychological stress. Since relatively little has been understood about the relationship between the identified predictor variables in this research study, the review's focus for the Perez-Luno study was the findings exploring gender and school-level variables. The researchers found that women suffered higher burnout levels than men. The study further identified that the lack of support and control combined with family demands significantly contributes to women's higher level of burnout. This study contradicted Purvanova and Muro's (2010) research, asserting inconsistencies in burnout based on gender differences (Perez-Luno et al., 2022).

Principal Well-being

There is limited research examining and identifying critical stressors and coping strategies for principals (Mahfouz, 2018; West, 2018), as most studies have focused on teachers (Perez-Luno et al., 2022). Mental health has been often overlooked (DeMatthews et al., 2021). Devos et al. (2007) sought to determine which individual, organizational, and external factors contribute to the well-being of principals. Their study included a mixed-methods approach with a

sample of 56 primary school principals in Flemish Primary schools. Questionnaires and interviews were used for data collection (Devos et al., 2007).

In Devos et al.'s (2007) study, teachers in the schools of 56 principals were surveyed. The researchers found that the principals' well-being varied, concerning different individual factors of self-efficacy, achievement, orientation, and household situation. Organizational factors included goal orientation, the school board, the central government's role, principal influence, and well-being. A key finding reported that people experience positive well-being in an environment that fosters goal attainment. The findings did not support that principal well-being is higher in healthy climates. This can be explained according to the attraction-selection-attrition theory, in which people choose work environments that fit their personal values. Although the small sample size was a limiting factor within this study, strengths indicated by the researchers included how well-being is treated as a multidimensional construct (Devos et al., 2007).

Similarly, Burke and Dempsey (2021) studied Ireland's well-being of post-primary leaders (principals). In their study, the well-being of principals and the impact of COVID-19 was measured a year after the pandemic began using an online survey given in January/February 2020 and a second survey given halfway through the 2020–2021 school year. The second survey included additional questions specific to leading post-COVID-19. The impact of the pandemic depended on the attitude towards the government; time and well-being was measured, as well as the time spent on physical activity, participants' profession, and connectivity with a COVID-19-positive person (Burke & Dempsey, 2021).

Burke and Dempsey's (2021) findings indicated that principals' main activities to ensure their well-being included physical activity, support from families and friends, a positive outlook, support from a professional network, and distributed leadership. It was interesting to note that

eight out of 10 principals reported doing their best work during COVID. Furthermore, the finding of this research report highlighted challenges of receiving communication from the Department of Education, maintaining a work-life balance, leading teaching and learning, experiencing inadequate infrastructure, and maintaining relationships for school-level leaders (Burke & Dempsey, 2021).

Job-related stress, a form of mental distress, is often called burnout (DeMatthews et al., 2021). DeMatthews et al. sought to provide two evidence-based recommendations for addressing principal burnout. One recommendation was focused on the district and school-level supports, while the second was focused on what principals can do themselves. The research on principal well-being further highlighted how principals and teachers need different support. Understanding the different types of support each of them needs will help better understand the effects of large-scale events, such as the COVID-19 pandemic and its impact on leader behaviors (Daniëls et al., 2019). The well-being of principals has often been the last group of school staff to be studied and understood (Mahfouz & Richardson, 2021). With high principal turnover rates, there is a need to better understand if there are factors that can predict higher levels of burnout in principals.

Strategies to Address Principal Burnout

Burnout and stress are normal occurrences employees face (DeMatthews et al., 2021). Given the increased job demands, many principals will experience forms of occupational stress that may contribute to burnout and turnover; therefore, a focus on burnout and well-being is timely (DeMatthews et al., 2021). Where some factors contributing to principal burnout have been examined, there has been limited guidance on how to reduce burnout (DeMatthews et al., 2021). The studies reviewed in this chapter have documented a connection between the role, job demands, burnout, and turnover of principals. Bloch's (2021) findings confirmed the prevalence

of stress and the need to address workplace stress to stabilize the principal's profession. Therefore, more research is needed to understand better the causes of principal turnover (Bartanen et al., 2019) and how to help principals destress (Bloch, 2021). Based on previous research and theoretical analysis, potential job demands and resources for principal functioning were first identified. The current study extended prior research by filling in the gap of understanding how gender, school size, school level, and hope may be considered predictors for principal burnout.

Summary

This study aimed to determine if gender, school size, school level, and hope would be recognized as continuous predictor variables affecting burnout in principals within Georgia. Burnout is a severe problem that has consequences beyond the primary person experiencing the phenomenon. Although considerable research has studied burnout in teachers and healthcare workers, less attention has been paid to burnout specific to school principals. Burnout contributes to principal turnover internationally. Articles reviewed throughout this chapter demonstrated the need to rectify the principal burnout problem. There remain unanswered questions about predictor variables and how these variables can be used to design effective burnout prevention methods. The burnout potential of principals in Georgia was surveyed on how their occupational demands and feelings of hope are related to EE, DP, and PA using the MBI-ES.

Although principals experienced burnout before the COVID-19 pandemic, increased job demands due to the COVID-19 pandemic have significantly impacted the job-related stress of school-level leaders. The JD-R resource theory, developed by Bakker and Demerouti (2007), examined how resources mitigate increased job demands' harmful effects (Bakker & Demerouti, 2007). The JD-R theory suggested that when job demands and resources are not aligned, an

educator’s well-being is negatively impacted (Demerouti & Bakker, 2011). Predicting and preventing burnout is necessary to retain principals and sustain favorable working and learning conditions within a school. The JD-R theory helped guide this research on predictor variables of burnout in principals.

Although principal effectiveness, well-being, and school success are affected by burnout, there has been limited research to identify critical factors that influence and predict burnout in school principals (West, 2018). The historical and current research review provided a perspective on job-related demands, stress, and ways to mitigate the negative impact on principals. This literature review has laid the foundation for how district-level leaders can support school-level leaders' well-being. Examining characteristics of burnout, predictors, and well-being impacted by job demands and supportive resources can determine the leadership needs of current school-level principals. The need to strengthen principals' readiness to lead and support followers has been reinforced by how school principals led during the recent COVID crisis. The literature clearly showed a need to understand the precipitating factors of principal burnout. This study helped system-level leaders better understand why principals burn out and potential demographic predictors.

CHAPTER THREE: METHODS

Overview

This quantitative, predictive, correlational study aimed to determine if a significant statistical relationship exists between emotional exhaustion (EE), depersonalization (DP), and the personal accomplishment (PA) dimensions of burnout using gender, school size, school level, and hope variables. This study used a stratified random sample of principals in Georgia. Chapter Three begins by introducing the study's design, including complete definitions of all variables. This chapter identifies the study's design, including limitations and complete definitions of all variables, followed by the rationale for why this design was appropriate for the study. The research questions and null hypothesis are identified in this chapter. The participants, setting, instrumentation, procedures, and data analysis plans are presented.

Design

This study used a quantitative, predictive, correlational design to determine if a statistically significant relationship existed between principal burnout (as defined by its three dimensions—EE, DP, and PA) and the predictor variables gender, school size, school level, and hope. The rationale behind the chosen research design was specific to the identified characteristics of planning a prediction study identified by Gall et al. (2007). The study met the requirements of a predictive, correlational research design with a multivariate focus (Lochmiller & Lester, 2017). Topic-specific, peer-reviewed research also supported the design of the current study. The most recent and germane would be the following four investigations. Whiteoak et al. (2023) studied the leadership challenge of increasing productivity in the workplace without increasing burnout risk, whereas Friedman (2002) investigated burnout among school principals, specifically focusing on the typical work-related stressors they face. The study was used to

determine the significance of these stressors in predicting burnout levels in school principals. Combs et al. (2007) used multiple regression to analyze job demands, job resources, and the quality of relationships on burnout with a sample of elementary principals. In more recent literature, Karakose et al. (2022) critically assessed multilevel research models of principal burnout within the additional job stressor of COVID-19.

The types of variables being measured in the study included predictors and criterion. The criterion variables for this study were the three dimensions of burnout: EE, DP, and PA. The criterion variable in this study was burnout, defined conceptually as an occupational workplace phenomenon resulting from unsuccessfully managed workplace stress (Maslach, 1986; World Health Organization [WHO], 2019). This variable was measured operationally by the subscale scores on the three dimensions of burnout on Maslach's Burnout Inventory-Educators Survey (MBI-ES). According to the Maslach Burnout Toolkit for Educators (Mind Garden, 2022), the dimension of EE was conceptually defined as feeling exhausted from work. The dimension of DP, or cynicism, was conceptually defined as lacking feeling, experiencing detachment, or having a negative response toward those with whom the person works (Demerouti et al., 2001; Makikangas et al., 2021). The dimension of PA was conceptually defined as a feeling of success and competence (Demerouti et al., 2001; Makikangas et al., 2021).

The predictor variables in this study included gender, school size, school level, and hope. Conceptually, gender was defined as a person's self-representation as male or female (Mazure, 2021), measured operationally by having participants indicate their gender on the demographic portion of the survey instrument. School size was defined as the total number of pupils enrolled regardless of grade (Koussihouèdé, 2020). For the purpose of this study, school size was defined as up to 800 students or more than 800 students, measured operationally by having participants

indicate their school size on the demographic portion of the survey instrument. The third predictor variable, school level, was defined as grade clusters, including elementary (K–5), middle (6–8), and high school (9–12; Georgia School Reports, 2019). Its operational measure had participants indicate their school size on the demographic portion of the survey instrument. Finally, hope was defined in the literature as a person's feeling that they have the capacity to make progress toward important goals with agency and pathways (Snyder, 2002). This study measured feelings of hope by the Adult Hope Scale (AHS; Snyder et al., 1991).

Research Questions

The study was based on the following research questions:

RQ1: How accurately can emotional exhaustion, as one dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ2: How accurately can depersonalization, as a second dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ3: How accurately can personal accomplishment, as a third dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Hypotheses

The null hypotheses for this study were:

$H_0$1: There is no significant predictive relationship between the criterion variable of emotional exhaustion and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

$H_0$2: There is no significant predictive relationship between the criterion variable of depersonalization and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

$H_0$3: There is no significant predictive relationship between the criterion variable of personal accomplishment and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

Participants and Setting

This section begins by describing the study population for the quantitative, correlational research study to determine if there is a significant statistical relationship between principal burnout, gender, school size, school level, and hope. The participation, sampling technique, and sample size are presented. This section of Chapter Three concludes with a description of the study setting.

Population

The population for this study was comprised of principals of the 2,306 Georgia public schools who support students and staff in kindergarten to grade 12. According to the Georgia Department of Education (2022), the total number of public-school students served for the 2021–2022 school year was 1,686,319. The population consisted of all public school principals in Georgia who serve K–12 students. As reported on the Georgia Department of Education (2022) website, there are 181 school districts, including 2,200 schools, serving 1.6 million students.

For this study, schools were identified as elementary serving grades K–5, middle schools serving grades 6–8, and high schools serving grades 9–12. Contact emails for public school principals in Georgia were acquired from the Georgia Department of Education public website access. Public school principals in Georgia were emailed an invitation and survey link for

participation. The online survey application of Qualtrics was utilized to collect their responses. The results of this study were only generalizable to the population described.

Participants

According to Gall et al. (2007), selecting homogenous research study participants is essential and can be measured on the specific variables being studied as predictors. For this study, a quantitative, correlational research design was conducted using a stratified random sample of public-school principals in Georgia to investigate and establish a relationship between gender, school size, school level, hope, and principal burnout. The participants for the study were drawn from a stratified random sample of principals located in public school districts throughout the state of Georgia during the fall semester of the 2023–2024 school year. The researcher selected participants from Georgia because the researcher resided within the identified state. The names and addresses of public school principals in Georgia was acquired from the Georgia Department of Education (2022) published school contact directory on the Georgia Department of Education website. There are over 2,200 public schools in Georgia. As of August 15, 2023, of the more than 2,200 public schools, 1,399 schools were listed with principals' email contact information included on the public database. All 1,399 were invited to participate in the study, providing the best opportunity for the necessary response, validity, and generalization. Each public school principal was emailed information about the study with an invitation to participate and link access to the study surveys.

The population of interest from which the sample was chosen was a stratified random sample of principals in Georgia. This sample was appropriate as it allowed the researcher to generalize the results to the overall population (Gall et al., 2007). In this study, the researcher sought to include a minimum sample of 109 or more principal participants across Georgia,

which, according to Warner (2013), exceeded the minimum sample size where the larger value of $n > 50 + 8k$ or $n > 104+k$, where k was the number of predictor variables. The study included four predictor variables. According to Warner, the second calculation of $n > 104 + 4 = 108$ was the greater value, establishing the minimum sample size for the study as $n = 109$. The study included 156 principals accessing the online survey. However, only 111 principals completed all the questions of the survey. Therefore, the sample size was $n = 111$ for the study. Consequently, the study's sample size of $n = 111$ met the minimum required sample size according to Warner (2013).

For survey research, breaking groups into smaller subgroups is warranted (Gall et al., 2007). The inclusion criteria for the study included current public school principals in Georgia. The survey included a question to determine whether the participants were current principals. The potential participant's data was deleted if he or she did not meet the inclusion criteria for the study.

The study sample consisted of 111 principals, of which 47 (42.3%) were males, and 64 (57.7%) were females. Of the sample, 22 (19.8%) worked in small schools, 72 (64.9%) worked in medium schools, and 17 (15.3%) worked in large schools. Among the participants, 58 (52.3%) worked at the elementary school level, 26 (23.4%) worked at the middle school level, and 26 (23.4%) worked at the high school level. Of the 111 total principals in the 2023–2024 school year supporting K–12 public schools in Georgia, the overall participation rate was 8%.

Setting

The researcher was a principal in a public school system in Georgia. Therefore, the setting was the public school system in Georgia due to the convenience and accessibility of the

researcher. Since no identifiers were used in the form of the principal's name, school system, or school, pseudonyms were not needed for data identification protection when reporting findings.

Instrumentation

The study collected data using a self-reported online survey instrumentation design. The study survey consisted of three sections. Part one of the survey included demographic questions developed by the researcher. Sections two and three consisted of Likert-type items. Likert-style items are designed to measure a participant's level of agreement (Gall et al., 2007). The MBI-ES utilizes a 7-point Likert scale, and the AHS utilizes an 8-point Likert scale. The predictor variable of hope was measured using the AHS, and the criterion variable of burnout was measured using the MBI-ES. Data screening included a visual screening for missing or inaccurate entries. The online survey system identified any unchecked items.

Demographic Questionnaire

This study instrument included a questionnaire defining three demographic categories for the predictor variables (see Table 1). The categories included gender, school size, and school level. Category values were measured using a nominal scale to represent the predictor categories. The questionnaire included the following questions. Please indicate your gender using the following responses: 0 = female, 1 = male. Please indicate your school size using the following responses: 0 = 0–500 students, 1 = 501–1,199 students, 3 = 1,200+ students. Please indicate your school level using the following responses: 0 = elementary school, 1 = middle school, and 2 = high school. Multiple choice options were provided for answers.

Table 1

Demographic Questions Developed by the Researcher

Item Number	Demographic Question	Answer Choice
1	Please indicate whether you are a current principal using the following responses.	0 No 1 Yes
2	Please indicate your gender using the following responses.	0 Female 1 Male 2 Other
3	Please indicate your school size using the following responses.	0 1–500 Students 1 501–1,199 Students 2 1,200+ Students
4	Please indicate your school level using the following responses.	0 Elementary (K–5) 1 Middle (6–8) 2 High (9–12)

Maslach Burnout Inventory-Educators Survey

The purpose of the MBI-ES instrument was to assess and further understand what things are associated with the three dimensions of the burnout phenomenon outlined in the definition of burnout by the World Health Organization (Maslach & Leiter, 2021). The primary instrument identified for the study was the MBI-ES (Maslach & Leiter, 2017). The World Health Organization and the International Classification of Diseases, 11th Edition (ICD-11), outlined the definition of burnout measured by the MBI-ES. Over the years, burnout has been described as an occupational workplace phenomenon and job-related stress based on the relationship between work and the individual (Beausaert et al., 2016; Bianchi et al., 2021; DeMatthews et al., 2021; Maslach et al., 2001). As defined by the ICD-11 (World Health Organization, 2022):

> Burnout is a syndrome that results from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: (a) feelings of energy depletion or exhaustion; (b) increased mental distance from one's job or feelings of

> negativism or cynicism related to one's job; and (c) a sense of ineffectiveness and lack of accomplishment. Burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life.

The MBI was developed to measure and understand a person's burnout experience, the problem itself, and what is causing it (Maslach & Leiter, 2021).

Understanding the nature of burnout began with Freudenberger and Maslach. Through an interest in understanding how workers manage burnout, Maslach and colleagues developed an approach for assessing burnout as a multidimensional construct (Schaufeli et al., 2009). The MBI was developed through extensive, in-depth interviews (Schaufeli et al., 2009) and was initially created as a research instrument to measure and determine burnout rates among healthcare workers in healthcare settings (Maslach & Jackson, 1981). It was not until 10 years later that educators' need to assess burnout levels was essential, resulting in minor modifications to the original MBI and the MBI-ES being developed (Maslach, 1986). According to Schaufeli et al. (2009), by the end of the 1990s, the MBI was the dominant burnout assessment used in 93% of scholarly research studies.

Although this instrument has been in use for over 30 years, it is still viewed as the point of reference for burnout measurement and continues to be widely regarded as the exemplar for burnout assessment (Maslach et al., 2009; West et al., 2012; Williamson et al., 2018). It has been claimed that the MBI has been used in 88% of all burnout research (Mind Garden, 2022). Furthermore, Maslach (1986) presented the MBI-ES as a leading instrument for burnout assessment among educators.

The MBI-ES has been used in numerous peer-reviewed studies (Chang, 2013; Folk, 2015; Gold, 1984; Iwanicki & Schwab, 1981; Szigeti et al., 2017). Within these studies, the

reliability and validity of the MBI have been consistently established. Iwanicki and Schwab and Szigeti et al. (2017) studied the reliability and validity of the MBI when used with teachers. Iwanicki and Schwab were the first to use the MBI survey with a sample of only teachers; their study examined construct validity using principal factor analysis. Reliability was determined using Cronbach's alpha for each subscale. Results of the study noted that the exact dimensions measured in other helping professions were also evident in teacher burnout (Iwanicki & Schwab, 1981).

Szigeti et al. (2017) examined the construct validity of the Hungarian version of the MBI-ES using a convenience sample of teachers living in Budapest or participating in post-graduate studies there. The sample of teachers participating included a total of 211 teachers. In Szigeti et al.'s study, suitable internal consistency scores reported for the three dimensions measured by the MBI-ES were .86 for EE, .64 for DP, and .67 for PA. These scores fell within the reported ranges from previous studies noted by Szigeti et al. (2017).

In addition, studies by Chang (2013), Folk (2015), Gold (1984), and Iwanicki and Schwab (1981) were further examples of studies confirming the validity and reliability of the MBIs. Gold's (1984) study confirmed factorial validity consistent with the three subscales of the instrument, further confirming construct validity in identifying teachers who may be on the edge of experiencing burnout. Gold also cited the similarity in reliability coefficients noted in Iwanicki and Schwab's (1981) study. Cronbach's alpha uses a formula to calculate a correlation computing reliability coefficient (Morgan et al., 2012). Gold (1984) reported coefficient alphas of .90 and .89 for EE, .76 and .75 for DP, and .76 and .79 for PA within the Iwanicki and Schwab study. Gold's (1984) study matched six reliability estimates from the Iwanicki and Schwab (1981) study. Thus, ample evidence existed to confirm the reliability and validity of the

MBI-ES instrument.

According to Gall et al. (2007), the sufficiency of test quality for use in education is determined by two commonly used criteria: test validity and reliability. Validity is "the degree to which evidence and theory support the interpretation of test scores entailed by the proposed use of tests" (Gall et al., p. 195). The reliability of a test was defined by Gall et al. (2007) as "the degree to which measurement error is absent from the scores yielded by the test" (p. 200). Internal reliability is measured using Cronbach's alpha.

The MBI-ES is a self-report measure. Gall et al. (2007) described a self-report measure as an instrument that inferences can be made from using numerical scores by asking participants to reveal traits, thoughts, or feelings. Morgan et al. (2012) specified how validity is concerned with evidence supporting the use of a measurement instrument in a specific setting or population or for a specified purpose. Furthermore, Morgan et al. (2012) established that an instrument must produce reliable data before establishing validity. Due to its strength in validity and reliability, this instrument was chosen as the primary tool for data collection. Studies by Iwanicki and Schwab (1981), Gold (1984), and Folk (2015) were among the many studies that have used the MBI and support the validity and reliability of the instrument.

The MBI-ES includes 22 questions. The constructs measured by the MBI-ES consist of items that measure three subscales: EE, DP, and PA. According to the Maslach Burnout Toolkit for Educators (Mind Garden, 2022), EE was described as work exhaustion, DP was described as a lack of feeling toward those with whom the person works, and PA was described as a feeling of success and competence.

The measurement scales of the MBI-ES include each survey item rated on the frequency and intensity of feelings using a score ranging from low to high levels for each scale (Maslach,

1986). The EE subscale consisted of nine items, the DP subscale consisted of five items, and PA subscale consists of eight items. Each subscale had an overall rating. A 7- point Likert scale using 0–6 rating responses of never to every day is recorded. Responses included never, a few times a year or less, once a month, a few times a month, once a week, a few times a week, or every day (Mind Garden, 2022). The MBI-ES yields three subscale scores for each respondent (Maslach, 1986). The MBI-ES interpretation of scores varies based on subscale and provides a range from low to high levels of burnout. In addition, updates for scoring procedures can be used to generate five work experience profiles for respondents on a continuum from engagement to burnout (Maslach, 1986).

The quality of research hinges on the concepts of validity and reliability. For a test to be considered reliable, Gall et al. (2007) stated that test reliability is how dependable a test is in measuring and how test scores consistently measure what the test is intended to measure. Conversely, test validity is the extent to which the test measures what it aims to measure (Gall et al., 2007). The MBI-ES has proven validity and reliability over time.

The researcher obtained access, implementation, and scoring procedures once permission was granted (see Appendix A). The MBI-ES yielded three subscale scores for each respondent, ranging from low to high levels of burnout (Maslach, 1986). The MBI-ES interpretation of scores varied by subscale. Scores for EE could range from 0–27+, DP from 0–13+, and PA from 0–37+ (Hancock, 2018; West, 2018). High EE was reported with z = mean + (*SD**.05), high DP was reported with z = mean + (*SD**1.25), and high PA was reported with z = mean + (*SD**0.10).

The MBI gives three scores, one for each dimension measured and for each study participant (Maslach & Leiter, 2021). There is no single overall burnout score; however, each subscale has a total and average score (Mind Garden, 2022). To provide an overall score,

ignoring the significance of the dimension scores would be an injustice with implications on policy and practice (Mind Garden, 2022). Based on the multidimensional definition of burnout, reporting an overall burnout score would undermine the significance of the dimension sub-scores. The sub-scores provide a more in-depth understanding of the symptoms of burnout.

The MBI-ES was designed to measure workplace stress; therefore, it should be used with working adults in individual or group administration. Instrument access was provided within the invitation email sent to all public school principals with contact information in the database in the first 2 months of the Fall 2023 semester. Instrument access was granted using a digital link to a secure online survey format. The time to complete the survey was estimated at 15–20 minutes per respondent. Only the researcher had access to the collected data on a password-protected platform. The MBI-ES user's manual was used to score the instrument survey. Permission to include the instrument in this dissertation document is located in Appendix A. The researcher obtained written permission to use the MBI-ES on August 9, 2023.

Adult Hope Scale

Snyder's Adult Hope Scale (AHS) was used to assess and measure principals' predictor variable of hope. The AHS uses Snyder's cognitive model of agency and pathways and the constructs of hope theory to measure hope (Snyder et al., 1991). The AHS measures an individual's confidence and competence to reach their desired goal (Gallagher & Lopez, 2017). Gallagher and Lopez defined (2017) the presence of hope as when an individual has a high expectation for success paired with the motivation to pursue goals.

The AHS is a self-report questionnaire designed to measure an individual's level of hope based on Snyder's theory of hope (*Adult Hope Scale | Positive Psychology Center*, n.d.). The self-report survey measure consists of 12 questions utilizing an 8-point Likert scale. The survey

questions are divided to measure an individual's goal-directed behavior and plan to reach goals. The subscales are defined as agency and pathways. Questions 2, 9, 10, and 12 provide a measure for agency, and Questions 1, 4, 6, and 8 measure the pathways subscale. Four additional questions are considered fillers. The Likert-scale responses include 1-definitely false, 2-mostly false, 3-somewhat false, 4-slightly false, 5-slightly true, 6-somewhat true, 7-mostly true, and 8-definitely true. An examiner can use the subscale scores as measures of agency and pathways or combine the agency and pathways scores for an overall hope scale score (*Adult Hope Scale | Positive Psychology Center*, n.d.). See Appendix B for the instrument.

Cheavens et al. (2019) used observer ratings to further validate the AHS that Snyder developed in 1991. The instrument has been used in numerous studies (Cheavens et al.; Duncan & Hellman, 2020; Sucan, 2019). Cheavens et al. conducted two studies. Study one involved 162 undergraduate students attending a large midwestern university enrolled in a psychology course. Using Snyder's AHS, internal consistency scores were reported as total hope score alpha = .83, agency alpha score = .78, and the pathways alpha score = .73. Cheavens et al. contended that the internal consistency scores, as a part of this study, were good. As with study one, the consistency scores of hope score alpha = .82, pathways = .82, and agency = .72 in study two confirmed strong internal consistency (Cheavens et al., 2019).

Duncan and Hellman (2020) used an online survey to explore relationships between hope, stress, and burnout among medical students using Snyder's Adult Dispositional Hope Scale. Duncan and Hallman cited Snyder and fellow researchers' creation and validation of the utilized hope scale. Additionally, the Oldenburg Burnout Inventory was used to measure burnout. The sample participants consisted of 329 allopathic and osteopathic medical students from two midwestern states who completed the survey from a population of 1,101 students

invited to participate. Duncan and Hellman's study found a significant correlation between hope, stress, and burnout. For review relevant to this study, the Pearson correlation results presented the following: a significant positive relationship between stress and burnout, a significant negative relationship between hope and burnout, and a significant negative relationship between hope and stress. The study supported the premise that hope may mediate between stress and burnout, further asserting that stress reduces hope, and lower hope levels lead to higher levels of burnout (Duncan & Hellman, 2020).

In a study to determine the link between hope and perceived stress levels of teacher candidates, researcher Sucan (2019) used the AHS to assess hope levels among a sample of teacher candidates. When using the AHS to measure levels of hope in a sample of 382 teacher candidates participating in a KPSS (Personnel Selection Examination) preparation course in Kayseri, Cronbach's alpha reliability score for internal consistency was found to be .75 (Sucan, 2019).

The researcher obtained written permission to use the AHS on February 22, 2023, from the American Psychological Association. Appendix C documents the permission to include the instrument in this dissertation study.

Procedures

Institutional review board (IRB) approval was required before conducting the study to determine if the research study complied with institutional regulations, professional standards, and the protection of human subjects (Gall et al., 2007). The IRB approval was granted on August 14, 2023 (see Appendix D). The researcher purchased the rights to use the MBI-ES online on August 9, 2023 (see Appendix A). The list of contact information for principals in each school district in the state of Georgia is made available in the public database on the Georgia

Department of Education website. The researcher utilized the public database to acquire principals' names and email addresses. The AHS was acquired online for free.

All eligible participants in the population, with publicly accessible contact information, were sent an initial introductory email explaining the purpose and significance of the study. The introductory email included the invitation to participate, emphasizing confidentiality. The introductory email also included a statement regarding the time needed to participate, no risk or cost to participate, an optional incentive and information for participation. See Appendix E for the email and Appendix F for the study information sheet. Each participant was assigned a participant identification number.

Participants were initially provided with a 14-day window to complete the survey. The participation window was extended an additional 7 days to reach the minimum number of participants needed for a multiple regression study. Emails were sent electronically to each potential participant on day 1 of the participation window. Additional email reminders were sent on day 7, day 14, and day 20. See Appendix G for a copy of the reminder email. Following the close of the survey window on August 15, 2023, the data was extracted and entered into the SPSS system.

All information that could identify the participants was protected at all stages of data collection. Data was stored securely, and only the researcher had access to the survey data collected and analyzed. Password protection was used as a method to ensure that responses were only accessible to the researcher. Furthermore, all data collected was stored on the researcher's home computer, which was always password and security-protected. When not utilized, all printed data sources were kept in a locked file cabinet in the researcher's home office. The data will be retained for 7 years after the completion of this research study. The researcher will safely

shred and destroy all data using an appropriate shredding and document destruction service when appropriate to discard.

Data Analysis

Multiple Regression Assumptions

The researcher began assumption testing as required by regression analysis (Barthlow et al., n.d.; Warner, 2020). A statistic or graph does not test the first two assumptions; instead, they are methodologically determined: (a) the criterion variable of principal burnout was measured at the continuous level, and (b) the predictor variables of gender, school size, school level, and hope were measured at the continuous level. Assumptions three through eight were calculated statistically. The assumption of independent observations was assessed using the Durbin-Watson statistic. The Durbin-Watson statistic can range from 0–4, with the researcher looking for a value of approximately 2, which indicates no correlation between residuals. Linearity (between the dependent and independent variables collectively and between the dependent variable and each independent variable) was evaluated by viewing a scatterplot of the residuals against the predicted values. The researcher made a determination about linear relationships by using partial regression plots between each independent variable and the dependent variable. The fifth overall assumption, homoscedasticity of residuals (equal error variances), was tested by visually examining the unstandardized or standardized residuals' scatterplot against the predicted or standardized predicted values.

If homoscedasticity existed, the residuals (errors of prediction) would be equal across the standardized predicted (i.e., fitted) values. This meant that the plot points would exhibit no pattern and would be approximately constantly spread across the fitted values. The absence of multicollinearity was the sixth assumption. Correlation coefficients and variance inflation factor

(VIF) values were used to test for multicollinearity. None of the independent variables should have had correlations greater than 0.7, and VIF values should have bene lower than 10. The seventh assumption related to data screening: no significant outliers. The researcher used casewise diagnostics to highlight any data points for which the standardized residual exceeded three standard deviations. If outliers were identified, the researcher either transformed the outlier, winsorized it, applied a robust estimation method, or trimmed the outlier or outliers (Field, 2018). Finally, multiple regression assumed a normal distribution of residuals (errors). To test for normality, a P-P Plot or Q-Q plot was used. Normal distribution was evident if the points aligned to the line of fit (Barthlow et al., n.d.).

Multiple Regression Data Analysis

Multiple regression analysis produced three output tables. First, a model summary reported the model's explanatory power to fit the data with the coefficient of determination (R^2). Second, an ANOVA table showed if the explanatory power of R^2 was statistically significant. Finally, a table of coefficients signified which, if any, of the individual independent variables were statistically significant predictors of the outcome variable (Field, 2018; Laerd Statistics, n.d.; Warner, 2020). Cohen's f^2 was a measure of effect size used for multiple regression. Effect size measured for f^2 were 0.02, 0.15, and 0.35, indicating small, medium, and large, respectively.

CHAPTER FOUR: FINDINGS

Overview

The current study's quantitative, predictive, correlational design was used to determine if gender, school size, school level, and hope could predict principal burnout. The predictor variables used for the study were gender, school size, school level, and hope. The criterion variables used were the three dimensions of burnout: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA). A multiple linear regression was used to test each hypothesis. This chapter includes the research questions, null hypotheses, data screening, descriptive statistics, assumption testing, and results.

Research Questions

RQ1: How accurately can emotional exhaustion, as one dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ2: How accurately can depersonalization, as a second dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

RQ3: How accurately can personal accomplishment, as a third dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Null Hypotheses

The null hypotheses for this study were:

$H_0$1: There is no significant predictive relationship between the criterion variable of emotional exhaustion and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

$H_0$2: There is no significant predictive relationship between the criterion variable of depersonalization and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

$H_0$3: There is no significant predictive relationship between the criterion variable of personal accomplishment and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals.

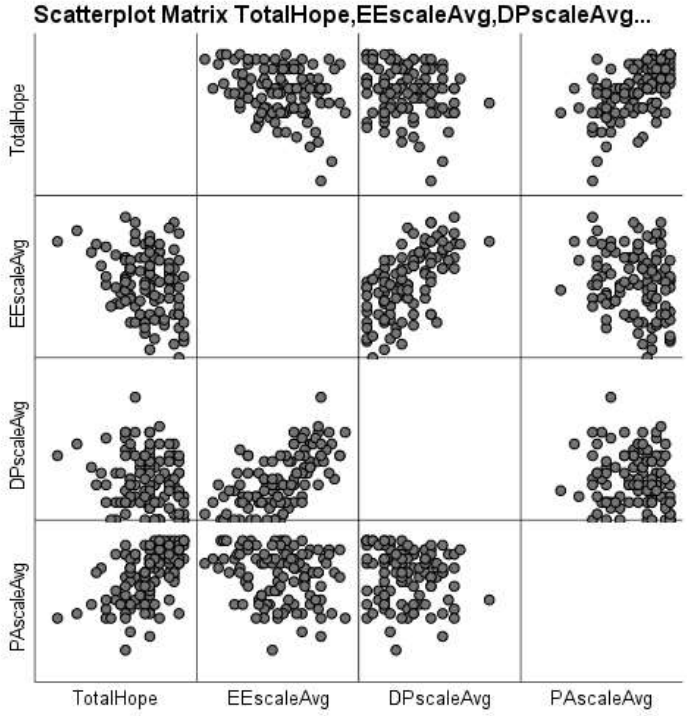
Data Screening

The study data was used to determine if there was a statistically significant predictive relationship between gender, school size, school level, hope, and principal burnout. The researcher sorted the data and scanned for inconsistencies in each variable. One hundred fifty-six potential participants accessed the survey. The survey data was screened for participants who reported no to being a current Georgia public school principal and for survey non-completion. Based on the requirements for participation, the final sample size total was 111 principals, which exceeded the required minimum of 109 participants for a .15 effect size with a statistical power of .85 at the .05 alpha level.

Additionally, data screenings were conducted for each predictor variable. Data was scanned for any inconsistencies. A matrix scatterplot was used to detect bivariate outliers between predictor and criterion variables. No bivariate outliers were identified. See Figure 1 for the matrix scatterplots.

Figure 1

Matrix Scatterplot



Descriptive Statistics

Descriptive statistics, including means and variances, were calculated for each dimension of burnout and the identified predictor variables. This study sent 1,399 study invitation emails to Georgia public school principals whose contact information was public through the Georgia Department of Education database. Survey data showed that 171 surveys were accessed, 156 were attempted, and 115 were completed in full. Four of the 115 completed surveys had to be removed because they were not current public school principals. A total of 111 fully completed surveys were utilized for this study. Statistics were based on cases with no missing values for any variable used. Of the sample, 52.3% were elementary principals, 23.4% were middle school principals, and 23.4% reported being current high school principals. Of the sample, 57.7% were female, and 42.3% were male. Of the principals reporting, 19.8% had a school size of 1–500

(small), 64.9% had a school size of 501–1,199 (medium), and 15.3% had a school size of 1,200 or more (large). See Table 2 for demographics.

Table 2

Percentages and Frequencies, Sample Demographics, and Study Variables

Demographic	Frequency	Percentage
Gender		
Male	47	42.3
Female	64	57.7
School Size		
1–500 students	22	19.8
501–1,199 students	72	64.9
1,200+ students	17	15.3
School Level		
Elementary (K–5)	58	52.3
Middle school (6–8)	26	23.4
High school (9–12)	26	23.4
Missing	1	0.9

Note. $n = 111$

Descriptive statistics, including the mean, median, frequency, and standard deviation, were reported for each variable. Data was collected from elementary, middle, and high school principals (n=111) in small, medium, and large schools. Data was collected for the three dimensions of burnout (EE, DP, and PA) using the Maslach Burnout Inventory-Educators Survey (MBI-ES). The mean score for EE was 3.11, with a standard deviation of 1.30. The mean score for DP reported was 1.38, with a standard error of .09. The mean score for PA was 4.92, with a standard error of .71. Hope was measured on the Adult Hope Scale (AHS). The researcher used the subscale scores (4–32) for agency and pathways for an overall hope scale score. The overall hope scale score ranged from 8–64. The mean hope score was 56.43, with a standard deviation of 5.05. See Tables 3 and 4 for means, standard deviations, and correlations between study variables.

Table 3

Means and Standard Deviations for Study Variables

Variable	*M*	*SD*	Min.	Max.
Total Hope Score	56.43	5.05	38	64
Emotional Exhaustion Scale	3.11	1.30	0	5.78
Depersonalization Scale	1.38	0.91	0	4.20
Personal Accomplishment Scale	4.92	0.71	2.88	5.88

Note. $n = 111$

Table 4

Results of Correlations Between Study Variables

Measures	1	2	3
1. Total Hope Score	-		
2. Emotional Exhaustion Scale	-.31**	-	
3. Depersonalization Scale	-.18	.62**	-
4. Personal Accomplishment Scale	.53**	-.22*	-.12

Note. $n = 111$

*$p<.05$, **$p<.01$ (two-tailed).

Assumptions Testing

Multiple regression required eight assumptions—two methodologically determined and six statistically assessed. The first two methodological assumptions were met in the current study by having one criterion variable measured at the continuous level and two or more predictor variables measured at the dichotomous or continuous level (Barthlow et al., n.d.; Lewis-Beck, 1980; Warner, 2013). The other six assumptions were analyzed by research question.

Research Question 1

How accurately can emotional exhaustion, as one dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Assumption of Independence of Observations

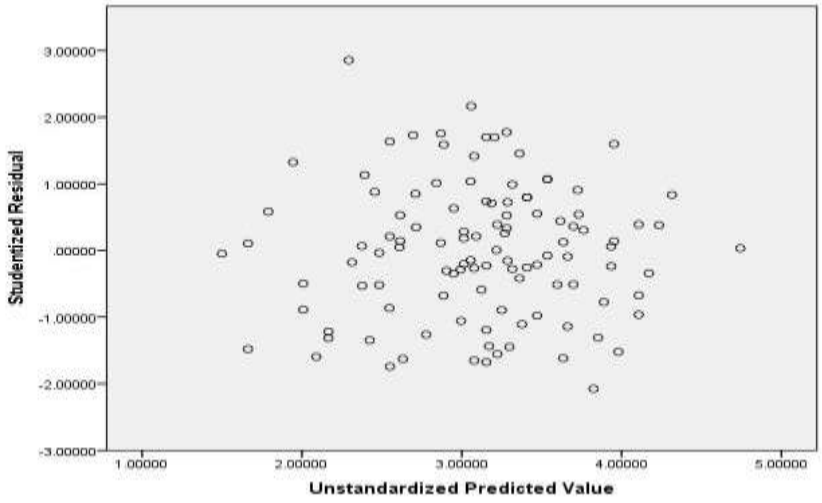
Residuals were independent, as assessed by a Durbin-Watson statistic. The Durbin-Watson statistic can range from 0–4, with a value of approximately 2 as the statistic indicating that there was no correlation between residuals. For this analysis, the value of the Durbin-Watson statistic, as noted in the model summary table, was 1.99.

Assumption of Linearity

Multiple regression required that the assumption of linearity be met. If residuals form a horizontal line using a scatterplot, the relationship between the criterion and predictor variables was likely linear. The assumption of linearity was tested using a scatterplot of the studentized residuals against the predicted values, as seen in Figure 2. A scatterplot shows whether a linear relationship exists between the dependent and independent variables collectively. An examination of this scatterplot showed that the residuals formed a horizontal band. Therefore, the relationship between the dependent and independent variables had met the assumption of linearity.

Figure 2

Scatterplot of Studentized Residual and Unstandardized Predicted Value for RQ1



Assumption of Homoscedasticity of Residuals

If the assumption of homoscedasticity of residuals was met, the prediction errors would be equal across the standardized predicted values, meaning that the variance was equal for all values of the criterion variable. The assumption of homoscedasticity was examined by reviewing Figure 2, where the residuals appeared randomly scattered. The assumption of homoscedasticity was met, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values.

Assumption of Bivariate Normal Distribution

Multiple regression required that the assumption of bivariate normal distribution be met. The assumption of bivariate normal distribution was examined using a matrix scatterplot. This data set had no extreme bivariate outliers; therefore, the assumption of bivariate normal distribution was met. Figure 1 provided the matrix scatterplot.

Assumption of the Absence of Multicollinearity

A VIF test was conducted to assess the assumption of the absence of multicollinearity. If a predictor variable (x) is highly correlated with another predictor variable (x), the variables are understood to provide the same information about the criterion variable. Therefore, if the VIF is too high (greater than 10), then multicollinearity is present. Acceptable values are between 1–5. The VIF statistics generated by the regression ranged from 1.06–2.36, all below a cutoff of 5 (see Table 5). This indicated no or little multicollinearity among the variables in the model.

Table 5

Collinearity Statistics RQ1

	Unstandardized Coefficients		Standardized Coefficients				
Model	*B*	*SE*	B	*t*	Sig.	Tolerance	VIF
(Constant)	*5.835*	1.388		4.204	<.001		
Female	.642	.239	.243	2.684	.008	.903	1.107
SchoolMed	.884	.296	.323	2.984	.004	.633	1.580
SchoolLg	.573	.480	.158	1.194	.235	.424	2.359
MiddleSch	.130	.262	.042	.459	.647	.888	1.126
HighSch	.167	.363	.054	.461	.646	.535	1.869
TotalHope	-.068	.023	-2.62	-2.966	.004	.945	1.058

Note. Dependent Variable: EE Scale Average.

Assumption of No Significant Outliers

Examining studentized deleted residuals found no values greater than ± 3 standard deviations. In addition, no casewise diagnostics table was generated, indicating no outliers for this regression model.

Assumption of Normal Distribution of Residuals (Errors)

A visual examination of Figure 3 found that the points were aligned along the diagonal line, indicating that the residuals were normal and the normality assumption was met. This assumption was met as the mean score for residuals was .00, indicating a normal distribution. The assumption of a normal distribution was further demonstrated using a P-P Plot graph of standardized residuals, which showed points that were not entirely on a straight line but close (see Table 6).

Figure 3

Normal P-P Plot of Regression Standardized Residual for RQ1

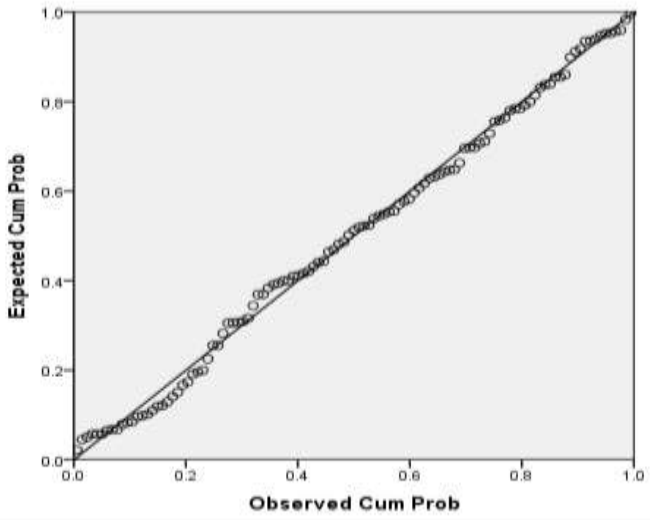


Table 6

Residuals Statistics RQ1

	Min.	Max.	*M*	*SD*
Predicted Value	1.4812	4.7758	3.0972	.62041
Residual	-2.37243	3.29616	.000	1.15487
Std Predicted Value	-2.605	2.706	.000	1.000
Std Residual	-1.998	2.766	.000	.973

Note. Dependent Variable: EE Scale Average.

All assumptions were met for RQ1, which focused on the burnout dimension of EE.

Research Question 2

How accurately can depersonalization, as a second dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Assumption of Independence of Observations

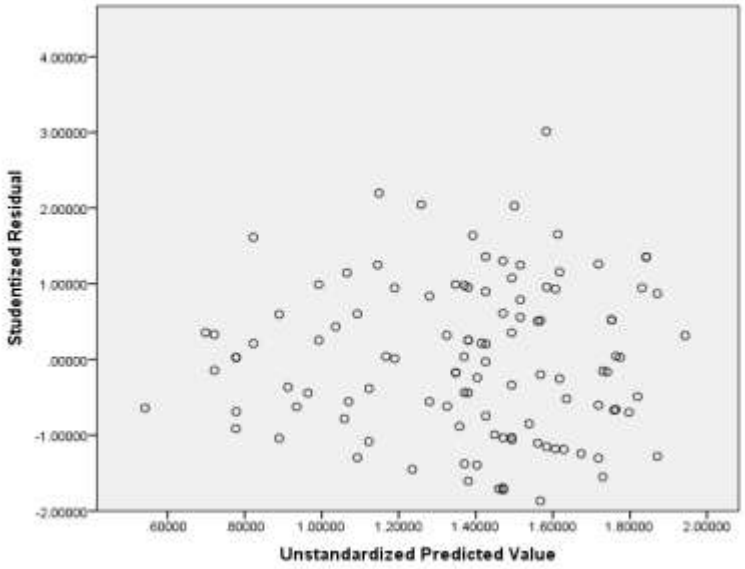
Residuals were independent, as assessed by a Durbin-Watson statistic. The Durbin-Watson statistic can range from 0–4, with a value of approximately 2 as the statistic indicating that there is no correlation between residuals. For this analysis, the value of the Durbin-Watson statistic was 1.87, which indicated that there was no correlation between residuals. Therefore, the assumption was met.

Assumption of Linearity

The assumption of linearity was tested using a scatterplot of the studentized residuals against the predicted values. A scatterplot shows whether a linear relationship exists between the dependent and independent variables collectively. An examination of the scatterplot (see Figure 4) showed that the residuals formed a horizontal band. Therefore, the relationship between the dependent and independent variables had met the assumption of linearity.

Figure 4

Scatterplot of Studentized Residual and Unstandardized Predicted Value for RQ2



Assumption of Homoscedasticity of Residuals

If the assumption of homoscedasticity of residuals was met, the prediction errors would be equal across the standardized predicted values, meaning that the variance was equal for all values of the criterion variable. The points on a scatterplot would exhibit no pattern and spread across the fitted values. The assumption of homoscedasticity was examined by reviewing Figure 4, where the residuals appeared randomly scattered. Homoscedasticity was assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values.

Assumption of Bivariate Normal Distribution

Multiple regression required that the assumption of bivariate normal distribution be met. The assumption of bivariate normal distribution was examined using a scatterplot. The assumption of bivariate normal distribution was met. Figure 1 provided the matrix scatterplot.

Assumption of the Absence of Multicollinearity

A VIF test was conducted to assess the assumption of the absence of multicollinearity. If a predictor variable (*x*) is highly correlated with another predictor variable (*x*), the variables are understood to provide the same information about the criterion variable. Therefore, if the VIF is too high (greater than 10), then multicollinearity is present. Acceptable values are between 1–5. The VIF statistics generated by the regression ranged from 1.06–2.36, all below a cutoff of 5 (see Table 7). This statistic indicated little or no multicollinearity among the variables in the model.

Table 7

Collinearity Statistics RQ2

	Unstandardized Coefficients		Standardized Coefficients				
Model	*B*	*SE*	B	*t*	Sig.	Tolerance	VIF
(Constant)	*1.983*	1.036		1.915	.058		
Female	.236	.178	.128	1.328	.187	.906	1.104
SchoolMed	.581	.220	.306	2.638	.010	.631	1.584
SchoolLg	.293	.356	.116	.824	.412	.424	2.359
MiddleSch	.214	.209	.100	1.023	.309	.887	1.128
HighSch	.266	.269	.124	.986	.327	.536	1.866
TotalHope	-.023	.017	-.125	-1.316	.191	.942	1.061

Note. Dependent Variable: DP Scale Average.

Assumption of No Significant Outliers

Examining studentized deleted residuals found one case with a residual greater than ± 3 standard deviations. However, no casewise diagnostics table was generated, indicating no severe outliers for this regression model.

Assumption of Normal Distribution of Residuals (Errors)

A visual examination of Figure 5 found that the points were aligned along the diagonal line, indicating that the residuals were normal, and the normality assumption was met. This assumption was met, as the mean score for residuals was .00 (see Table 8), indicating a normal distribution. The assumption of a normal distribution was further demonstrated using a P-P Plot graph of standardized residuals, which showed points that were not entirely on a straight line but close.

Figure 5

Normal P-P Plot of Regression Standardized Residual for RQ2

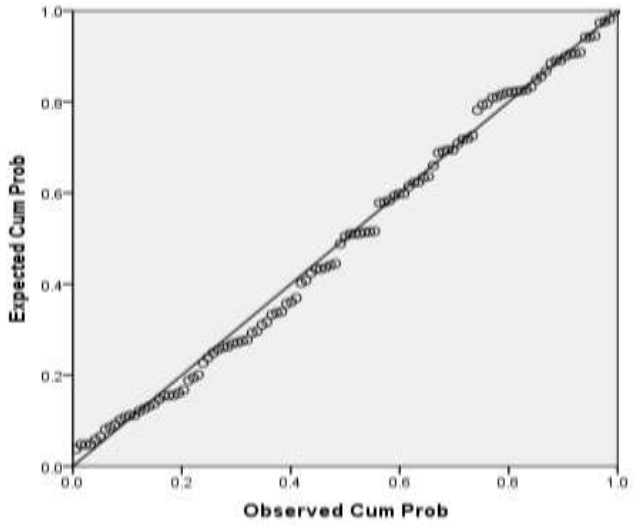


Table 8

Residuals Statistics RQ2

	Min.	Max.	*M*	*SD*
Predicted Value	.5415	1.9437	1.3820	.31442
Residual	-1.56800	2.61662	.000	.85562
Std Predicted Value	-2.673	1.787	.000	1.000
Std Residual	-1.782	2.974	.000	.972

Note. Dependent Variable: DP Scale Average.

All assumptions were met for RQ2, which focused on the burnout dimension of DP.

Research Question 3

How accurately can personal accomplishment, as a third dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?

Assumption of Independence of Observations

Residuals were independent, as assessed by a Durbin-Watson statistic. The Durbin-Watson statistic can range from 0–4, with a value of approximately 2 as the statistic indicating

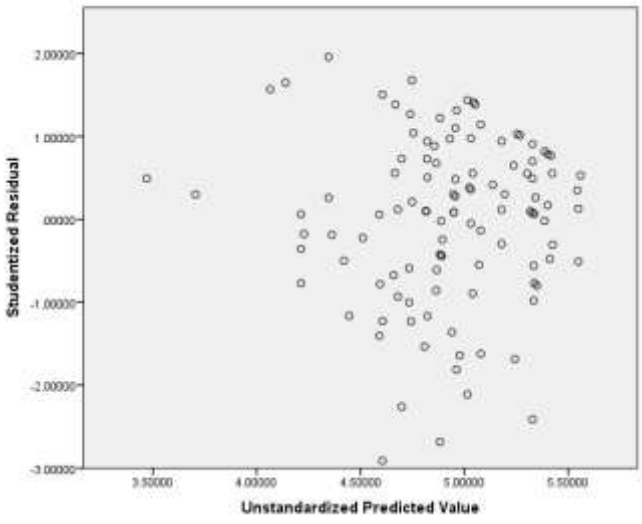
that there is no correlation between residuals. For this analysis, the value of the Durbin-Watson statistic was 2.14, which indicated that there was no correlation between residuals. Therefore, this assumption was met.

Assumption of Linearity

The assumption of linearity was tested using a scatterplot of the studentized residuals against the predicted values. A scatterplot shows whether a linear relationship exists between the dependent and independent variables collectively. An examination of the scatterplot showed that the residuals formed a horizontal band. An analysis was carried out on the data, and a visual inspection was done to identify any outliers. The data contained no outliers. Linearity was examined using the scatterplot in Figure 6. Therefore, the relationship between the dependent and independent variables had met the assumption of linearity.

Figure 6

Scatterplot of Studentized Residual and Unstandardized Predicted Value for RQ3



Assumption of Homoscedasticity of Residuals

If the assumption of homoscedasticity of residuals was met, the prediction errors would be equal across the standardized predicted values, meaning that the variance was equal for all

values of the criterion variable. The assumption of homoscedasticity was examined by reviewing Figure 6, where the residuals appeared randomly scattered. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values.

Assumption of Bivariate Normal Distribution

Multiple regression required that the assumption of bivariate normal distribution be met. The assumption of bivariate normal distribution was examined using a scatterplot. The assumption of bivariate normal distribution was met. Figure 1 provided the matrix scatterplot.

Assumption of the Absence of Multicollinearity

A VIF test was conducted to assess the assumption of the absence of multicollinearity. If a predictor variable (*x*) is highly correlated with another predictor variable (*x*), the variables are understood to provide the same information about the criterion variable. Therefore, if the VIF is too high (greater than 10), then multicollinearity is present. Acceptable values are between 1–5. The VIF statistics generated by the regression ranged from 1.06 – 2.36, all below a cutoff of 5 (see Table 9). This statistic indicated little or no multicollinearity among the variables in the model.

Table 9

Collinearity Statistics RQ3

	Unstandardized Coefficients		Standardized Coefficients				
Model	*B*	*SE*	B	*t*	Sig.	Tolerance	VIF
(Constant)	*.788*	.725		1.087	.028		
Female	-.157	.124	-.109	-1.266	.208	.906	1.104
SchoolMed	.016	.154	.011	.105	.916	.631	1.584
SchoolLg	-.159	.249	-.081	-.639	.524	.424	2.359
MiddleSch	.080	.147	.048	.546	.586	.887	1.128
HighSch	.113	.189	.067	.600	.550	.536	1.866
TotalHope	.074	.012	.526	6.204	<.001	.942	1.061

Note. Dependent Variable: PA Scale Average.

Assumption of No Significant Outliers

Examining studentized deleted residuals found one case with a residual greater than ± 3 standard deviations. However, no casewise diagnostics table was generated, indicating no severe outliers for this regression model.

Assumption of Normal Distribution of Residuals (Errors)

This assumption was met as the mean score for residuals was .000, indicating a normal distribution (see Table 10). The assumption of a normal distribution was further demonstrated using a P-P Plot graph of standardized residuals, which showed points that were not entirely on a straight line but close. A visual examination of Figure 7 found that the points were aligned along the diagonal line, indicating that the residuals were normal, and the normality assumption was met.

Table 10

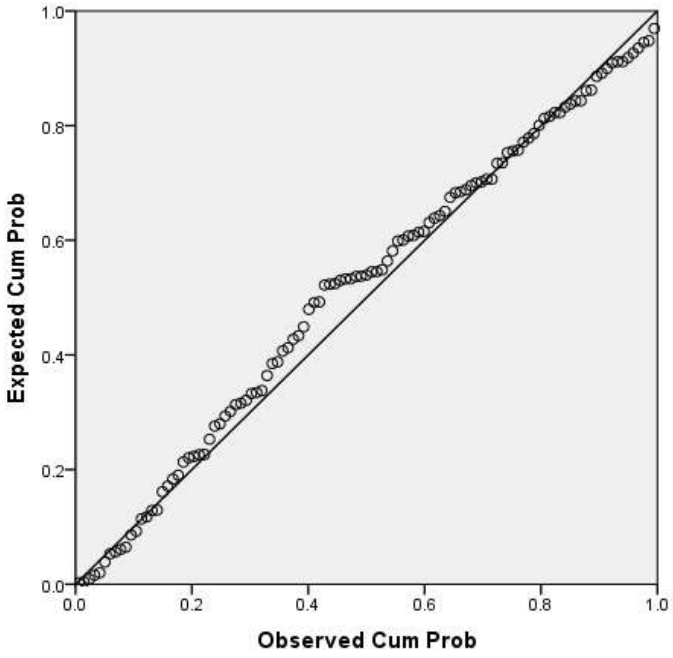
Residuals Statistics RQ3

	Min.	Max.	*M*	*SD*
Predicted Value	3.4707	5.5603	4.9223	.38764
Residual	-1.73111	1.15376	.000	.59880
Std Predicted Value	-3.745	1.646	.000	1.000
Std Residual	-2.811	1.874	.000	.972

Note. Dependent Variable: PA Scale Average.

Figure 7

Normal P-P Plot of Regression Standardized Residual for RQ3



All assumptions were met for RQ3, which focused on the burnout dimension of PA.

Results

A multiple regression analysis was conducted to determine if a relationship existed between the criterion variable—burnout—and the predictor variables of gender, school size, school level, and hope scores. The criterion variable, burnout, was operationalized and assessed

by its three subscales: EE, DP, and PA. Research questions organized each multiple regression analysis.

Data Analysis Research Question 1

A multiple regression was conducted to predict EE score from gender, school size, level of school, and total hope score. The individual predictors were examined, and it was found that gender, school size, and total hope score were statistically significant predictors of EE. Female principals tended to report higher EE, and principals at a medium-sized school reported higher EE than principals at a small school. As the total hope score increased, EE decreased. For RQ1, using the enter method, it was found that gender and school size explained a significant amount of the variance in the value of EE, where $F(6, 111) = 5.050$, $p < .001$, Adj. $R^2 = .224$ (see Table 11). The analysis results showed that the utility of the predictive model was significant for the EE dimension of burnout.

Table 11

Regression Model Results RQ1

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	42.72	6	7.121	5.050	.001
	Residual	148.044	105	1.410		
	Total	190.769	111			

Note. Dependent Variable: EE Scale Average.

[b]Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

The model's effect size was large, where $R = .473$. Furthermore, $R^2 = .224$, indicating that approximately 23% of the variance of the criterion variable was explained by the linear combination of predictor variables. See Table 12 for a summary of the model.

Table 12

Model Summary RQ1

Model	R^2	R	Adjusted R^2	*SEM*
1	.224	.473	.180	1.18741

Note. Dependent Variable: EE Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

Because the researcher rejected the null hypothesis, analysis of the coefficients was required. Based on the coefficients, it was found that gender was the best predictor of EE scores, where p = .001. Table 13 provides the coefficients.

Table 13

Coefficients RQ1

		Unstandardized Coefficients		Standardized Coefficients		
Model		*B*	*SE*	B	*t*	Sig.
1	(Constant)	*5.835*	1.388		4.204	<.001
	Female	.642	.239	.243	2.684	.008
	SchoolMed	.884	.296	.323	2.984	.004
	SchoolLg	.573	.480	.158	1.194	.235
	MiddleSch	.130	.262	.042	.459	.647
	HighSch	.167	.363	.054	.461	.646
	TotalHope	-.068	.023	-2.62	-2.966	.004

Note. Dependent Variable: EE Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

Data Analysis Research Question 2

A multiple regression was conducted to predict DP scores from gender, school size, school level, and total hope score. For RQ2, using the enter method, it was found that medium size schools explained a significant amount of the variance in the value of DP, where $F(6, 110) = 2.34$, p =0.037, Adj. R^2 = .119. The study results indicated that the overall model was statistically significant. The individual predictors were examined, and it was found that school size was the

only statistically significant predictor of DP. Principals at a medium-sized school reported higher DP than principals at a small-sized school. The analysis showed that the predictive model's utility was significant for the DP dimension of burnout.

For the second research question, results showed that the variables mattered more for EE than for DP. The adjusted R^2 was reported at .068 or 6.8%, indicating a slight variance between the criterion and predictor variables. The regression model was significant at .037, as noted by the ANOVA test (see Table 14). Principals at medium-sized schools (501–1,199) experienced DP at a greater rate (p =.010).

Table 14

Regression Model Results RQ2

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	10.875	6	1.812	2.341	.037
	Residual	80.529	104	.774		
	Total	91.404	110			

Note. Dependent Variable: DP Scale Average.

[b]Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

The model's effect size was large, where R = .345. Furthermore, R^2 = .119, indicating that approximately 12% of the variance of the criterion variable was explained by the linear combination of predictor variables. Table 15 provides a summary of the model.

Table 15

Model Summary RQ2

Model	R^2	R	Adjusted R^2	*SEM*
1	.119	.345	.068	.87996

Note. Dependent Variable: DP Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

Because the researcher rejected the null hypothesis, analysis of the coefficients was required. Based on the coefficients, it was found that medium-sized schools were the best predictor of DP scores, where $p = .010$. Table 16 provides the coefficients.

Table 16

Coefficients RQ2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	*SE*	B	*t*	Sig.
1	(Constant)	*1.983*	1.036		1.915	.058
	Female	.236	.178	.128	1.328	.187
	SchoolMed	.581	.220	.306	2.638	.010
	SchoolLg	.293	.356	.116	.824	.412
	MiddleSch	.214	.209	.100	1.023	.309
	HighSch	.266	.269	.124	.986	.327
	TotalHope	-.023	.017	-.125	-1.316	.191

Note. Dependent Variable: DP Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

Data Analysis Research Question 3

A multiple regression was conducted to predict PA scores from gender, school size, school level, and total hope score. For RQ3, using the enter method, it was found that total hope explained a significant amount of the variance in the value of EE, where $F(6, 110) = 7.26$, $p < .001$, Adj. $R^2 = .29$ (see Table 17). The analysis results showed that the utility of the predictive model was significant for the EE dimension of burnout. The data revealed that hope was the most statistically significant predictor variable. The individual predictors were examined, and the total hope score was the only statistically significant predictor of PA. As the total hope score increased, so did the PA score.

For RQ3, results indicated that gender did not matter concerning PA. Both male and female principals' levels of PA rose with a higher level of hope. The significance level for hope

was .000. The adjusted R^2 was reported at .295 or 29.5%, which was the most significant variance finding in the study. The ANOVA test reported a significance level of <.001 for the regression model.

Table 17

Regression Model Results RQ3

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	16.529	6	2.755	7.264	<.001
	Residual	39.422	104	.379		
	Total	55.970	110			

Note. Dependent Variable: PA Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

The model's effect size was large, where $R = .543$. Furthermore, $R^2 = .295$, indicating that approximately 30% of the variance of the criterion variable was explained by the linear combination of predictor variables. Table 18 provides a summary of the model.

Table 18

Model Summary RQ3

Model	R^2	R	Adjusted R^2	*SEM*
1	.295	.543	.255	.61583

Note. Dependent Variable: PA Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

Because the researcher rejected the null hypothesis, analysis of the coefficients was required. Based on the coefficients, it was found that hope was the best predictor of PA scores, where p <.001. Table 19 provides the coefficients.

Table 19

Coefficients RQ3

Model		Unstandardized Coefficients		Standardized Coefficients			
		B	*SE*	B	*t*	Sig.	VIF
1	(Constant)	*.788*	.725		1.087	.028	
	Female	-.157	.124	-.109	-1.266	.208	1.104
	SchoolMed	.016	.154	.011	.105	.916	1.584
	SchoolLg	-.159	.249	-.081	-.639	.524	2.359
	MiddleSch	.080	.147	.048	.546	.586	1.128
	HighSch	.113	.189	.067	.600	.550	1.866
	TotalHope	.074	.012	.526	6.204	<.001	1.061

Note. Dependent Variable: PA Scale Average. Predictors: (Constant), Total Hope, Female, Middle School, Medium Size, High School, Large Size.

The researcher's study results analysis showed that the utility of the predictive model was significant. Results showed a higher incidence of EE among female principals with low levels of hope. The adjusted R^2, also known as the coefficient of determination, explained the variance between the criterion and predictor variables. The higher the R^2, the better the model fit. This finding differed from Friedman's (2002) study, which asserted that gender and school size's effect size was relatively small. For this study, school size did not account for a statistically significant variance with the three dimensions of burnout.

CHAPTER FIVE: CONCLUSIONS

Overview

This chapter provides a summary of the current study, which includes conclusions intended to further the understanding of predictor variables of burnout through an analysis of the predictive relationship between gender, school size, school level, and hope. This final chapter also includes a review of the three dimensions of burnout: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA). This chapter includes a discussion and implications of the findings, limitations of the study, and recommendations for future research.

Discussion

This quantitative, predictive, correlational study was used to determine if gender, school size, school level, and hope could predict principal burnout. This study sought to prove that females of larger schools at the secondary level experience burnout at a greater level. Three research questions guided the focus and analysis of the results obtained in this quantitative study. The study provided evidence of a predictive, correlational relationship between four predictive variables (gender, school size, school level, and hope) and the criterion variable of burnout as defined by three subscales (EE, DP, and PA). The multiple linear regression model was used to evaluate the study data. Qualtrics was used to gather survey data, and the IBM Statistical Package for the Social Sciences (SPSS) was utilized for data analysis. The burnout subscales of EE, DP, and PA were used.

Research Question 1

The null hypothesis for RQ1 stated: "There is no significant predictive relationship between the criterion variable of emotional exhaustion and the linear combination of predictor

variables of gender, school size, school level, and hope for Georgia public school principals." The findings supported rejecting the null hypothesis in RQ1, which was: "How accurately can emotional exhaustion, as one dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?" The researcher conducted a multiple regression analysis, and the study's findings indicated a significant relationship between EE and the predictor variables of gender, school size, and hope. Using the enter method, it was found that gender and school size explained a significant amount of the variance in the value of EE: $F(6, 105) = 5.05$, $p < .001$, $R^2 = .22$, and R^2 adjusted = .18. The analysis results showed that the utility of the predictive model was significant for the EE dimension of burnout.

Most studies of variables influencing principal burnout have focused on work demands. There has been scant research exploring the demographic characteristics of gender, school size, and school level as contributing factors. Perez-Luno's et al. (2022) study was used as a reference point, as this study explored gender and school level as variables, similar to the current researcher’s study. Perez-Luno et al. (2022) found that women suffered higher burnout levels than men.

Like the Perez-Luno et al. (2022) study, the current researcher found that EE went down for female principals when their hopes went up. Female principals reported a higher level of EE. Additionally, principals in medium-sized schools (501–1,199) reported higher levels of EE. Perez-Luno et al. (2022) identified that lack of support and control combined with family demands significantly contributes to women's higher level of burnout. The literature review for this study identified gender as one of the most commonly studied predictor variables of burnout;

however, mixed results were reported when studying the role that gender plays in burnout (McCormack et al, 2018).

Additionally, Yildirim and Sait Dinc's (2019) study exploring factors that influence and predict burnout of principals found that burnout is influenced by gender. Furthermore, it asserted that females experience higher levels of burnout due to after-work responsibilities. The Perez-Luno et al. (2022) study and the findings from the current researcher's study contradicted Purvanova and Muro's (2010) research, asserting inconsistencies in burnout based on gender differences. The study data provided convincing evidence of a link between gender and the EE dimension of burnout. The general picture emerging from the analysis was that female principals have a higher occurrence of experiencing burnout.

Research Question 2

The null hypothesis for RQ2 stated: "There is no significant predictive relationship between the criterion variable of depersonalization and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals." The findings supported rejecting the null hypothesis in RQ2, which asked: "How accurately can depersonalization, as a second dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?" The researcher conducted a multiple regression analysis, and the findings indicated that principals from medium-sized schools (501–1,199) reported higher levels of DP. Using the enter method, it was found that medium-sized schools explained significant variance in the value of DP: $F(6, 104) = 2.341$, $p < .037$, $R^2 = .119$, and R^2 adjusted = .068. The analysis showed that the predictive model's utility was significant for the DP dimension of burnout.

Similar to the findings in the first research question, a statistically significant correlation was found between school size and DP. Contrary to the researcher's expectations, an interesting finding was that there was no statistically significant correlation between gender and DP. An interpretation of this finding might be that the larger the school, the larger the staff; therefore, fewer personal connections are made between the principal and the staff. As a result, it may be easier not to become emotionally attached to people and problems.

Research Question 3

The null hypothesis for RQ3 stated: "There is no significant predictive relationship between the criterion variable of personal accomplishment and the linear combination of predictor variables of gender, school size, school level, and hope for Georgia public school principals." The findings supported rejecting the null hypothesis in RQ3, which asked: "How accurately can personal accomplishment, as a third dimension of burnout, be predicted from a linear combination of gender, school size, school level, and hope for Georgia public school principals?" The researcher conducted a multiple regression analysis, and the findings indicated the most considerable significance within the study: hope mattered the most when controlling for all other variables. The enter method found that total hope explained a significant amount of the variance in the value of PA: $F(6, 104) = 7.264$, $p < .001$, $R^2 = .295$, and R^2 adjusted = .255. The analysis showed that the predictive model's utility was significant for the PA dimension of burnout. Exhaustion and self-dissatisfaction were identified as the core dimensions of burnout (Friedman, 1995b). The current data was consistent with previous research showing that EE and PA were the dimensions most impacted. Schaufeli and Buunk (1996) asserted that burned-out workers perceive that they are unsuccessful in reaching their professional goals, therefore bringing about feelings of poor professional self-esteem. Schaufeli and Buunk's (1996) synthesis

of the history of burnout concluded that burnout results from discrepancies between an employee's occupational expectations, ideals, and reality.

The findings of this study confirmed that EE and PA were the dimensions impacted the most based on gender, school size, school level, and hope. When hope increased, a principal's feeling of PA became greater. The data revealed that hope was the most statistically significant predictor variable. From this finding, the researcher determined that belief mattered most. As in previous studies, this analysis's results confirmed that hope significantly impacts a principal's belief and goal attainment.

Theoretical Framework

The job demands-resources (JD-R) theory by Bakker and Demerouti (2007) was the chosen theory that framed the conducted quantitative, predictive, correlational research study. The JD-R theory was a framework for identifying mutual qualities of burnout and engagement (Bakker et al., 2014). The JD-R model of burnout was initially used to study teacher burnout and the potential for turnover (Bakker & Demerouti, 2007; Bottani et al., 2019; Skaalvik & Skaalvik, 2014). The premise behind the JD-R theory asserted that everyday stressors may overwhelm employees, impacting employee performance and leading to turnover (Bakker & Demerouti, 2007; Bloch, 2021). Schaufeli and Taris (2014) noted that the JD-R model did not provide a reason behind the kind of job and personal characteristics leading to motivation and outcomes.

This study's theoretical framework was built upon JD-R burnout theory research. The current research study examined and presented the history, development, and characteristics of burnout, job demands, and job resources. The JD-R theory was a perfect fit for this study because the findings of this study aided in determining the effect of predictor variables of burnout. This study was critical because it added to the knowledge base for understanding

principal burnout. In addition, the study added to the theories for understanding predictors of burnout as a precursor to principal turnover.

Maslach and Shaufeli's (2017) review of early research asserted that biographical or personal variables have a more negligible correlation to burnout than occupational variables. The alpha level for each statistical technique (Cronbach alpha) suggested that the internal consistency ranged from poor to excellent based on the dimension of burnout and hope variables. The dimension of EE had the highest Cronbach's alpha score of .906 (n = 9), with an internal consistency rating of excellent, while DP had the lowest Cronbach's alpha score, with a .577 (n=5). Overall, the survey measured what the researcher wanted to measure within this study. The results proved that biographical and personal variables correlate more strongly than initially hypothesized.

Burnout and stress are regular occurrences employees face (DeMatthews et al., 2021). Given the increased job demands, many principals will experience occupational stress that may contribute to burnout and turnover; therefore, focusing on burnout and well-being is timely (DeMatthews et al.). The literature has documented a connection between the role, job demands, burnout, and turnover of principals; however, according to DeMatthews et al. (2021), there has been limited guidance on how to reduce burnout. Furthermore, the well-being of principals has often been the last group of school staff to be studied and understood (Mahfouz & Richardson, 2021). Based on previous research and theoretical analysis, this study sought to extend prior research by filling in the gap of understanding how gender, school size, school level, and hope may be considered predictors for principal burnout.

Implications

Results suggested that some variables strongly correlate to burnout in principals. It was interesting to note that the survey window was from the third week in August through the first week in September. One would assume that principals would not be experiencing high levels of EE during that time of the school year. The implications of this study fell into three areas: an interesting finding that principals were experiencing high levels of burnout during the first few weeks of the school year, the discovery of gender being positively correlated with high levels of EE and burnout, and the findings that provided strong evidence that hope had the highest correlation in the mitigation of burnout.

The data provided convincing evidence that gender was a key predictor for the EE dimension of burnout. The study's findings revealed statistically significant results for females in middle-sized schools. Contrary to the study findings, in Friedman's (2002) research, school size did not have any significance on any of the three dimensions of burnout. Maslach's (1995) research empirically asserted that job-related and organizational factors correlate more strongly to burnout than personal factors. Furthermore, the current data showed hope having the most statistical significance for PA.

Taken together, the researcher of this current study asserted that variables, such as gender, school size, school level, and hope, cannot be ignored when seeking to predict and mitigate the burnout levels of principals. This study had significant educational implications by assisting leaders in supporting and keeping principals employed. To increase a principal's feeling of PA, one must first increase their level of hope. The study findings provided evidence of a strong association between hope and female principals; when hope increased, EE decreased.

This study could positively impact education through alignment with job demands and professional development tasks that increase hope. Another factor acknowledged in the study was the role of increased exhaustion of principals in middle-sized schools (501–1,199). One implication could be that when the number of students enrolled in a school increased, administrators increased to provide support. Therefore, middle-sized schools tended to have more students per administrator, putting a strain on the principals.

Research has asserted that burnout is a product of the environment in which people work and is not an individual problem (Maslach & Leiter, 2000). However, based on the researchers' findings from previous studies, the current researcher expected that burnout could be predicted. Additionally, it was predicted that female principals in larger schools would experience burnout at higher levels.

Workplace stress costs $190 billion annually in healthcare costs and productivity loss (Malesic, 2022). Although burnout may be impossible to extinguish completely, this study highlighted that principal burnout can be predicted. Moreso, the statistically significant results cannot go unaddressed by those supervising and supporting those in the principal role. We must take this opportunity to understand that effective responses to burnout research must include prediction and prevention. Key takeaways from this research included that burnout of principals can be experienced early on in a school year. Whitaker's (1996) research noted the lack of preparation programs fully training principals for the reality of the job in 1996. This remains a priority if systems want to decrease turnover. If the turnover prediction data was correct, principal preparation programs must adequately prepare principals for the reality of the role and the complexity and ongoing job demands they will face to recruit and retain school principals.

Furthermore, with the understanding that hope and a person's belief can assist in mitigating a principal's exhaustion and lack of PA feelings, systems must seek and implement ways to nurture hope within the job demands and resources for principals. The JD-R theory suggested that when job demands and resources are not aligned, an educator's well-being is negatively impacted (Demerouti & Bakker, 2011). Predicting and preventing burnout is necessary to retain principals and sustain favorable working and learning conditions within a school. The researcher's study added to the existing research on burnout in education by filling a gap in understanding principal burnout and predictor variables. The literature showed a need to study and understand the precipitating factors of principal burnout. Therefore, using the study findings can help school districts improve their focus on principal well-being to provide a more vital balance between job demands and effective resources and support.

Limitations

Many limitations related to the study design and administration were identified. According to the Wallace Foundation, principals are not immune to burnout (Ruggirello, 2022). DeMatthews (2021) reported that principal turnover was a concern even before the pandemic, with about 20% of principals leaving their jobs yearly. The first limitation of the study was the difficulty in obtaining participants. When notification was received, it was discovered that their school district told some principals not to complete the survey. This was puzzling because the entire study was anonymous, and the different districts would never have been identified.

Additionally, this could have compromised the study by limiting the number of email recipients who felt comfortable completing the survey. In theory, a future researcher may wish to obtain permission from all counties in Georgia to send out a survey, even if the contact information is listed on a public database; however, in the state of Georgia, this would have

required the researcher to contact 180 school districts and apply using their processes. The time factor would have made this a limitation that would have been very difficult to overcome.

The public email listserv presented limitations that had not been considered. Although the public listserv had school information for all Georgia public schools, many emails were not listed. Additionally, it was discovered when emails were sent out, several emails available had been disabled or were inaccurate. Given the overall population from which the researcher was inviting to participate, the participation rate was lower than what the researcher expected. Participant completion was a limitation of the research, as of the 156 participants who started the survey, only 111 (8%) completed it fully. This could have been solved by the willingness of the principals to complete the survey being solicited prior to sending out the survey. Another avenue could have been using social media to solicit the participation of Georgia principals.

Another limitation could have been the self-report design of the survey. This meant that each principal must self-report things like burnout and hope. These self-report measures could have been biased by their opinions and beliefs. Principals may have taken this study because they believe in burnout. Given the time of year and the short survey window, the findings should not be over-interpreted. The study findings suggested a greater need to explore the correlation between the predictor variables on a larger scale. The data set was limited to principals in Georgia who voluntarily chose to participate in the study survey; therefore, these findings were not generalizable beyond the state of Georgia.

Recommendations for Future Research

The body of research on burnout has been vast, but not as it relates to principals. Friedman (2002) stated that without adequate preparation for the principal's role, principals become frustrated, exhausted, and burned out trying to meet complex demands. Understanding

the factors contributing to burnout and turnover is essential for addressing the organizational conditions related to burnout. More work could be done to improve the outcomes of maintaining principals in the field of education. What was learned in this study could be amplified by future research to focus on building hope to mitigate principals' EE. The recommendations are as follows:

1. The study could be replicated using a larger sample size to enhance the findings. The current sample size was due to a survey window of 3 weeks. A longer survey window may also increase the participant sample size.
2. The study could be replicated to enhance the findings using multiple states or regions throughout the United States. The current sample was taken only from the state of Georgia.
3. The study could be replicated at different times within a year. It would be interesting to see how the time of the school year may impact results. Future studies will need to further the understanding of the correlation that the time of year has on responses and the level of burnout. A longitudinal study using the same participants over time may reveal stronger correlations between the criterion and dependent variables.
4. More studies that combine hope and burnout in a multiple regression analysis comparison could be used to add to the literature in this area. Future researchers may look beyond the predictive correlational study to more of a mixed-methods design to better understand how hope influences burnout.
5. Future studies must examine the circumstances under which a principal feels more hopeful, further exploring what causes a higher level of hope.

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Appendix A: MBI-ES Permission Letter

Permission Letter

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The license holder has permission to administer the complete instrument in their research, however, only three sample items from this instrument as specified below may be included in the research write-up, thesis, or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

MBI - Human Services Survey - MBI-HSS:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some recipients.

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Published by Mind Garden, Inc., www.mindgarden.com

MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

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Published by Mind Garden, Inc., www.mindgarden.com

MBI - Educators Survey - MBI-ES:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some students.

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Cont'd on next page

MBI - General Survey - MBI-GS:
I feel emotionally drained from my work.
In my opinion, I am good at my job.
I doubt the significance of my work.

MBI - General Survey for Students - MBI-GS (S):
I feel emotionally drained by my studies.
In my opinion, I am a good student.
I doubt the significance of my studies.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix B: Adult Hope Scale Instrument

The Trait Hope Scale

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

1. = Definitely False
2. = Mostly False
3. = Somewhat False
4. = Slightly False
5. = Slightly True
6. = Somewhat True
7. = Mostly True
8. = Definitely True

___ 1. I can think of many ways to get out of a jam.

___ 2. I energetically pursue my goals.

___ 3. I feel tired most of the time.

___ 4. There are lots of ways around any problem.

___ 5. I am easily downed in an argument.

___ 6. I can think of many ways to get the things in life that are important to me.

___ 7. I worry about my health.

___ 8. Even when others get discouraged, I know I can find a way to solve the problem.

___ 9. My past experiences have prepared me well for my future.

___10. I've been pretty successful in life.

___11. I usually find myself worrying about something.

___12. I meet the goals that I set for myself.

Note. When administering the scale, it is called The Future Scale. The agency subscale score is derived by summing items 2, 9, 10, and 12; the pathway subscale score is derived by adding items 1, 4, 6, and 8. The total Hope Scale score is derived by summing the four agency and the four pathway items.

Appendix C: AHS Permission Agreement

AMERICAN PSYCHOLOGICAL ASSOCIATION LICENSE
TERMS AND CONDITIONS
Mar 07, 2023

This Agreement between Christine Anderson ("You") and American Psychological Association ("American Psychological Association") consists of your license details and the terms and conditions provided by American Psychological Association and Copyright Clearance Center.

License Number	5494290972404
License date	Feb 22, 2023
Licensed Content Publisher	American Psychological Association
Licensed Content Publication	Journal of Personality and Social Psychology
Licensed Content Title	The will and the ways: Development and validation of an individual-differences measure of hope.
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In the following language(s)	Original language of publication
With incidental promotional use	no
The lifetime unit quantity of new product	0 to 499
Title	THE RELATIONSHIP BETWEEN PRINCIPAL BURNOUT, GENDER, SCHOOL SIZE, SCHOOL TYPE, AND HOPE: A MULTIPLE REGRESSION ANALYSIS
Institution name	Liberty University
Expected presentation date	Dec 2023
Order reference number	2023

Portions	Adult Hope Scale
Requestor Location	Christine Anderson 168 Old Hardy Farm Rd JACKSON, GA 30233 United States Attn: Christine Anderson
Total	0.00 USD

Appendix D: IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

August 14, 2023

Christine Anderson
Jeffrey Savage

Re: IRB Exemption - IRB-FY23-24-84 The Relationship Between Principal Burnout, Gender, School Size, School Level, and Hope: A Multiple Regression Study

Dear Christine Anderson, Jeffrey Savage,

The Liberty University Institutional Review Board (IRB) 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 the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

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

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

Appendix E: Participant Invitation Email

Dear Principal,

I need your help in making a difference in the educational system in the state of Georgia. Like you, I am a public school principal.

As a doctoral candidate in the School of Education at Liberty University, I am conducting research to better understand potential predictors of principal burnout. The purpose of my research is to determine if there is a relationship between gender, school size, school level, hope, and burnout of public school principals in Georgia. I am writing to invite you to participate in this anonymous study. Your participation will provide valuable knowledge to support school leader development education and better understand principal burnout.

Participants must be current kindergarten - twelfth-grade public school principals in the state of Georgia. If you are willing to participate, you will be asked to complete an anonymous online survey. The survey will take approximately 10-15 minutes of your time to complete. Participation will be completely anonymous, and no personal identifying information will be required or collected.

To participate please read the study information to participate document attached to this email. This document contains additional information about my research. Because participation is anonymous, you do not need to sign and return the consent document unless you prefer to do so. After reading the information to participate, click **here** to access and complete the survey. By accessing the link, you indicate that you have read the study information and would like to participate in the survey. The deadline for participation is September 3, 2023.

Upon completion of the study survey participants that wish to be entered into a drawing to receive one of four available $25 Amazon gift cards will be provided with another link to submit contact information. This contact information will in no way be linked to the survey data.

Thank you for taking a few moments out of your day to help further research centered around principal burnout and the relationship between predictor variables.

Sincerely,

Christine Anderson, Doctoral Candidate
Liberty University
School of Education

Appendix F: Study Information Sheet for Participants

Information Sheet

Title of the Project: The Relationship Between Principal Burnout, Gender, School Size, School Level and Hope: A Multiple Regression Analysis
Principal Investigator: Christine Anderson, Doctoral Candidate, School of Education, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a current kindergarten – twelfth-grade public school principal in the state of Georgia for the 23-24 school year. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

According to the World Health Organization and Maslach (1986), burnout is an occupational workplace phenomenon resulting from unsuccessfully managed workplace stress characterized by emotional exhaustion, depersonalization, and personal accomplishment. The purpose of this quantitative predictive (correlational) study aims to determine if gender, school size, school level, and hope are predictors of principal burnout. There is a gap in understanding which demographic variables are predictors of burnout. The literature fails to address the correlation between gen der, school size, school level, and hope as predictors of burnout. Emotional exhaustion, depersonalization, and personal accomplishment are all factors that will be used to determine burnout in school principals within the state of Georgia.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in an anonymous online survey that will take approximately 10-15 minutes to complete.

How could you or others benefit from this study?

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

Benefits to society include examining principal burnout, increased job demands, and potential relationships between burnout, gender, school size, school level, and hope of current public-school principals, predictor variables will be identified. Findings will contribute to school systems by allowing for more direct policy, regulation, and action recommendations to be made at the district level to prevent and mitigate principal burnout.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

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.

- Participant responses will be anonymous.
- Data will be stored on a password-locked computer with any printed copies being locked in a file cabinet. After three years, all electronic records will be deleted, and/or all hardcopy records will be shredded by a certified shredding agency.

How will you be compensated for being part of the study?

Participants will have the opportunity to submit their name and email into a drawing for one of four $25 Amazon gift cards. At the conclusion of the anonymous survey, participants will have the opportunity to win a gift card by submitting their name and email address using a separate link at the end of the survey for compensation purposes. To ensure anonymity a survey platform that can be programmed to pull participants' emails from the compensation field and provide them in a separate data form from the survey responses will be used. Email addresses will be requested for compensation purposes; however, contact information will be collected through a separate survey link to maintain your anonymity.

Is study participation voluntary?

Participation in this study is voluntary. Your decision on whether 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.

What should you do if you decide 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.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study Christine Anderson. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] You may also contact the researcher's faculty sponsor, Jeffrey Savage, Ed.D. Committee Chair, at [redacted].

Whom do you contact if you have questions about your rights as a research participant?

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 IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Appendix G: Participant Reminder Email

Dear Principal,

I need your help in making a difference in the educational system in the state of Georgia. Like you, I am a public school principal.

As a doctoral candidate in the School of Education at Liberty University, I am conducting research to better understand potential predictors of principal burnout. The purpose of my research is to determine if there is a relationship between gender, school size, school level, hope, and burnout of public school principals in Georgia. I am writing to invite you to participate in this anonymous study. Your participation will provide valuable knowledge to support school leader development education and better understand principal burnout.

Last week an email was sent to you inviting you to participate in this research study. This follow-up email is being sent to remind you of the opportunity to complete this anonymous survey if you have not already done so. The deadline for participation is September 3, 2023.

Participants must be current kindergarten - twelfth-grade public school principals in the state of Georgia. If you are willing to participate, you will be asked to complete an anonymous online survey. The survey will take approximately 10-15 minutes of your time to complete the online survey. Participation will be completely anonymous, and no personal identifying information will be required or collected.

To participate please read the study information to participate document attached to this email. This document contains additional information about my research. Because participation is anonymous, you do not need to sign and return the consent document unless you prefer to do so. After reading the consent to participate, click **here** to access and complete the survey. By accessing the link, you indicate that you have read the study information and would like to participate in the survey.

Upon completion of the study survey participants that wish to be entered into a drawing to receive one of four available $25 Amazon gift cards will be provided with another link to submit contact information. This contact information will in no way be linked to the survey data.

Thank you for taking a few moments out of your day to help further research centered around principal burnout and the relationship between predictor variables.

Sincerely,

Christine Anderson, Doctoral Candidate