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Factors Affecting the Professional Autonomy of Public School Principals in the United States: A Quantitative Study

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FACTORS AFFECTING THE PROFESSIONAL AUTONOMY OF PUBLIC

SCHOOL PRINCIPALS IN THE UNITED STATES:

A QUANTITATIVE STUDY

by

Steven Ross Williams

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ABSTRACT

FACTORS AFFECTING THE PROFESSIONAL AUTONOMY OF PUBLIC
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Steven Ross Williams

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Under the Supervision of Professor Elise Frattura and Professor Razia Azen

The purpose of this study was to evaluate work domains within the principalship to determine whether principals have greater perceived autonomy in some work domains versus others. In addition, this study identified the usefulness of several demographic factors as predictors for perceived autonomy in both curricular and budgetary decisions. To conduct these analyses, data from the 2015-16 National Center for Educational Statistics was used to complete a repeated measures t-test to compare the work domains the literature suggested principals have the most autonomy in as compared to the domains the literature suggested are areas of shared responsibility with district office. These data were then used to evaluate the demographic variable's value as predictors through a series of logistic regressions with both perceived autonomy in curriculum and school budget as outcome variables. Community type and region were found to be significant predictors for both curriculum and the school budget. Gender proved to be a significant predictor within the school budget and race was significant within curricular decision-making. Future research should continue to examine data from the NCES

and other pertinent data sets to analyze the perceived professional autonomy of principals, who

are the central decision-makers in the public school setting.

To my wife:

Without your support, patience, and love

This life would be missing my favorite colors.

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greatest support and the safest harbor as you each find a purpose to dedicate yourselves to.

Chapter One: Introduction

Over the course of a given school day, principals encounter tremendous challenges. The myriad of responsibilities is considerable; principals are charged with instructional leadership, financial management, human resource concerns, and serve as a highly visible liaison between the school district and the broader community (Peterson, 1986; Robbins & Alvy, 2004), as documented through the recent identification of the 21 responsibilities of effective principals (Marzano, McNulty & Waters, 2005). Within the work to identify these responsibilities, Marzano et al. (2005) found that principals are involved in functions as diverse as optimization, resource allocation, culture building, relationships, evaluation, and being highly cognizant of one's work situation. The work is substantial; principals are called upon to fulfill many functions within a given school day.

The principalship has further complications. There is an emerging consensus that principal expectations continue to grow and that the expectations may not be realistic (Copland, 200l; Cooley & Shen, 2003; Highsmith & Rallis, 1986). Perhaps the most challenging aspect of the principalship is the balancing of priorities that frequent an administrator's work. Within the literature, on the principalship there is considerable concern for the two competing obligations that principals must attend to: managerial tasks and instructional leadership (Highsmith & Rallis, 1986; Hallinger, 2005). Finally, there are also national complications linked to the process for administrative licensure, particularly as processes often vary from state to state (Adams & Copeland, 2007; Vogel & Weiler, 2014), which may create challenges for administrators looking to practice outside of their licensing state.

Drawing from the literature, one can readily see the challenges principals face and the complicated context in which they work, especially as the expectations of principals are

substantial. To that end, principals work in an era with a heightened focus on the growing education debt that exists due to the disparate treatment of racial groups in our educational system (Ladson-Billings, 2006) and greater calls for accountability in student outcomes (US Department of Education, n.d.), all despite an accountability gap, wherein principals are not often fully empowered to make decisions to improve their schools (Adamowski & Petrilli, 2007). Furthermore, research has indicated that shared leadership, wherein teacher leadership is embraced, is critical to the success of the instructional success of a school (Wilhelm, 2013). Interestingly, shared leadership has great similarities to Robert Greenleaf's theory of servant-leadership, found in many business organizations today, wherein leaders place great emphasis on service as a pillar of their leadership (Sendjaya & Sarros, 2002). In education, shared leadership intersects positively with the research regarding teachers' satisfaction with their job, as teachers have been shown to value transformational leadership (Bogler, 2001; Eyal & Roth, 2011), which may be cause for principals to evolve as leaders to improve their professional outcomes as well as those for the schools they lead. As one can readily observe, principals work within a complicated context, wherein numerous demands are central to a principal's work. In this dissertation, the work responsibilities of principals provide a starting point and context for the broader discussion of principal autonomy. Research regarding the autonomy of principals allows for greater insight into the relative perceived autonomy within numerous work domains, which can then be extended to examine of how years of experience, gender, and race impact a principal's autonomy.

For this dissertation, principal autonomy will be examined in the United States using the 2015-16 National Teacher Principal Survey (NTPS). The NTPS is administered by the National Center for Educational Statistics (NCES) to provide descriptive information regarding school

and district topics like climate, professional development, hiring, and retention (NCES, n.d.c.), as authorized by the Education Sciences Reform Act of 2002 (OMB A, 2015). While the NCES surveys are described topically rather than in terms of specific questions, principal autonomy in terms of curriculum, hiring, and evaluation of teachers were included in the 1987-88 iteration of the School and Staff Survey (NCES, 1987), and the 2015-16 NTPS includes generally accepted work domains for the principalship (O*NET, 2016). Use of this data to support continued, original research has proven to be common, as the data set has been used to support research on topics related to principals' hiring practices, (Baker & Cooper, 2005; Donaldson, 2013) and numerous other leadership topics (Beesley & Clark, 2015; Grissom, 2015; Urick & Bowers, 2014).

In terms of this research effort, following the 2011-12 administration of the Schools and Staff Survey, the NCES formulated the NTPS as its replacement to continue collecting data on schools and school systems (NCES, n.d.c.). My work will center on data provided on perceptions of principal autonomy found in the Principal Questionnaire from the 2015-16 administration of the NTPS, which will be released in late 2017. As a result, my research will be the most up to date analysis of principal autonomy based on the NTPS data, generalizable to the United States, for the 2015-16 school year. Finally, this research effort, occurring at the beginning of the ESSA Act, will provide a useful opportunity to explore principal autonomy at the start of a new legislative era.

Moving into the discussion of the topics to be studied in this research, I will start with principal autonomy within work domains commonly attributed to the principalship. In this dissertation, principal autonomy and how it may be affected by demographic variables is of central interest. As such, perceived principal autonomy will serve as the dependent variable in

this research effort. In the following section, I will also provide an overview of the literature

regarding the predictor variables, which will include age, years of experience, gender, and race.

Additionally, this dissertation regards the professional autonomy of principals; the autonomy of

principals in their personal lives will not be examined. This dissertation is focused entirely on

the autonomy of principals as it relates to tasks commonly related to the principalship.

Background Regarding Autonomy and the Demographic Factors of Principals

The principalship is an involved, complicated position in which multiple responsibilities

are balanced daily (Robbins & Alvy, 2004; Wolcott, 2003; Whitaker, 2003). Foremost of these

challenges is the divide between the management responsibilities (Rallis & Highsmith, 1986;

Robbins & Alvy, 2004; Sergiovanni, 1991) and the call for principals to be instructional leaders

(Finkel 2012; Hallinger, 2005; Wilhelm 2013). As these two responsibilities call for very

different skill sets, the expectations for principals are considerable. Additionally, a principal's

work is filled with tasks, often fragmented and brief (Peterson, 1986), which one can reasonably

assume are of varying levels of interest to the principal in question, based upon their training and

personal interests.

Within contemporary research, there has been a continued focus on autonomy, as

described within self-determination theory, as a theory of motivation, and as a major component

of psychological health (Deci & Ryan, 2000), which is highly pertinent to research on principal

autonomy. The importance of autonomy, in the context of self-determination theory, has been

shown to be an essential psychological need (Ryan & Deci, 2000), which has considerable

importance in the workplace (Baard, Ryan & Deci, 2004; Deci, Connell & Ryan 1989; Gagné &

Deci, 2005). Self-determination theory holds that motivation operates on a range that swings

between a total lack of motivation to intrinsic motivation; in the middle of that spectrum lies

extrinsic motivation, which also operates on a spectrum (Gagné & Deci, 2005; Ryan & Deci, 2000). People choose many behaviors for an instrumental purpose, which can be structured around introjected compliance or through internalized acceptance (Deci, Eghrari, Patrick & Leon, 1994). Accordingly, internalized acceptance is the positive end, whereby people freely accept responsibilities and readily meet their obligations (Deci, et al, 1994). In terms of research specific to the principalship, having an encouraging superintendent that supports autonomy is positively linked with job satisfaction and loyalty to the school district (Chang, Leach & Andermann, 2015).

Aside from the research conducted by Chang, Leach, and Anderman (2015), there is additional empirical evidence of a link between age/years of experience and autonomy (Haynes & Licata, 1995; Van den Broeck, Ferris, Chang & Rosen, 2016). Veteran principals, particularly those with a strong curriculum background, have a statistically significant propensity towards creative insubordination (Haynes & Licata, 1995), where creative insubordination was defined as meeting building needs by playfully adapting district directives to meet justifiable ends. Most interestingly, these sorts of actions occurred without sanction from central office, indicating that veteran principals may engage in creative insubordination with impunity.

Additional research tends to complement these findings; through a meta-analysis regarding self-determination theory, researchers demonstrated that years of experience and age were statistically significant predictors of autonomy (Van den Broeck, Ferris, Chang & Rosen, 2016). In addition, through interviews of young administrators, Peters found that youth and a related lack of experience can create challenges for principals (Peters, 2012). While the individual impacts of age, gender, and race were challenging to parse out in the research endeavor, the interviewees, who happened to be under forty, female, and African American cited

age and experience as significant challenges, particularly when working with adults (Peters, 2012).

Finally, in terms of how the principalship intersects with race and gender, people of color and females have faced significant barriers in their pursuit of career advancement (Bell, 1992; Méndez-Morse, et al., 2015) particularly at the secondary level (Rivers-Wrushen & Sherman, 2008). This has often been attributed to the lack of administrative sponsors (Allen, Jacobson & Lomotey, 1995; Enomoto, Gardiner & Grogan, 2000; Méndez-Morse, 2004) and the systemic inequities of white privilege (Ladson-Billings, 2006; Wildman & Davis, 1995; Wise, 2008).

Given the barriers to entering educational administration for women and aspiring leaders of color, one certainly wonders about the challenges these administrators face to include whether they have the same perceived ability to influence decisions as white males. In this research effort, the demographic factors of administrators are explored to provide a context for administrative work and provide points of consideration when evaluating the level of professional autonomy principals feel they have considering their gender and race.

Problem Statement

The role of the principal has been widely regarded as a complex position, with intense demands (Copland, 2001; Dufour & Marzano, 2011; Finkel, 2012; Highsmith & Rallis, 1986; Hallinger, 2005; Wilhelm, 2013). In the daily work of a principal, there is considerable need to make decisions on potentially wide-ranging topics. Given that the need for autonomy for psychological wellbeing has strong research support (Baard, Ryan & Deci, 2004; Deci & Ryan, 2000), and there is research to support autonomy as universal need (Milyavskaya & Ryan, 2010; Church et al, 2012) applying an understanding of autonomy to positions where decision-making is a major component of the work is critical. A principal's work is associated with school

governance, which requires them to be a decision-maker within numerous areas; as such, having the professional autonomy to address their responsibilities is essential. In this endeavor, I will use the recently released 2015-16 NTPS data to better understand the following questions: how much professional autonomy are principals afforded in tasks commonly associated with the principalship? How do career and demographic factors impact the autonomy of principals?

To address these questions, the selection of a philosophical framework becomes necessary. For this research endeavor, I am inclined to a framework that has synergies with quantitative research that has a deep respect for the tentative nature of scientific research. To this end, I plan to use post-positivism, commonly attributed to Karl Popper, to guide my analysis. This dissertation embraces tenets taken from *Conjectures and Refutations*, written by Karl Popper, wherein research is tentative, and fully open to questioning, and operates as a modest contribution to earlier work (1962). From a post-positivist perspective, it is also clear that it is possible to know when something is false; however, claiming to know objective truth is not possible (Popper, 1962). I propose my work as an addition to the literature regarding principals and their professional autonomy.

Researcher's Background

To identify and thereby acknowledge my background and potential biases, as they exist relative to principal autonomy, I will share about my background. As a current building principal, understanding the principalship is personally and professionally significant to me. However, I am committed to acknowledging my biases as I conduct this research. My objective in this section is to establish my positionality regarding principal autonomy and to frankly acknowledge complete objectivity is an elusive if not impossible goal.

My road to leadership, let alone an academic interest in the facets of leadership, was not something I had considered or pursued early in my career as an educator. I wanted to teach European History and I knew that throughout my time in high school. Shortly after high school, I joined the Army to honor my family's history and to pay for college. I knew where the GI Bill would be spent; I was going to become a high school social studies teacher. While I did accomplish this goal after graduating from UW-Oshkosh in 2005 I was quickly back in school to earn a Master's degree in Training and Development and later, administrative certifications to be a principal or director of instruction.

My interest in leadership first emerged during my experiences in the National Guard. After I transitioned out of the Army I was regularly promoted. Arriving at my new National Guard unit, I transitioned from Private First Class to Specialist, and then on to Corporal. From there I made it to Sergeant and ended my time in the service as a Staff Sergeant. The period of advancement took me from a non-supervisory rank to a position where soldiers were assigned to me and I was accountable for their work and overall behavior. This rapid advancement happened in five years, which is a remarkably short time and almost assuredly faster than what was good for me. I was, however, qualified for these transitions and held a specialty that was relatively rare at the time, which facilitated my quick advancement.

Coming into my professional career as an educator, the formative experiences from my time in the service led me to consider a career in educational administration. After earning my master's degree and administrative credentials I decided to pursue an administrative position just after the implementation of Act 10, otherwise known as the Wisconsin Budget Repair Bill. In the 2011 legislation, public sector unions were no longer allowed to collectively bargain insurance, retirement, salary increases beyond the rate of inflation, the workday, or time off

(Greenhouse, 2014; Semuels, 2016). In a new reality, union fees could no longer be collected as a part of one's employment (Wood, 2016; Semuels, 2016). Perhaps most significantly were the human resources realities of Act 10. Administrators could now remove teachers who were not performing adequately in the classroom and make staffing decisions with less regard to seniority (Greenhouse, 2014; Umhoefer, 2016). This was a unique time to become an educational leader and contributed to my interest in administrative autonomy.

Having attained an assistant principalship in 2011 and a full principalship in 2014, my career and professional interests are firmly set on leadership topics and how to help administrators be effective in their roles albeit in a complicated legislative context. As a future superintendent, this research endeavor is important as supporting building administrators is a critically important responsibility. Additionally, understanding the context of the principalship, the importance of autonomy, and the realities principals face based on their individual backgrounds will increase my ability to support and understand the principals that I will lead and supervise.

Finally, it is important to note that my background is that of a white, male, suburban principal, coming from a blue-collar background. In my past, I have been socialized to believe that hard work, persistence and full commitment will reward me with opportunity, a level of professional success, and financial security for my family. I recognize commitments of this sort do not reward female leaders and leaders of color in a similar fashion. Through advanced coursework at the University of Wisconsin Milwaukee and through personal experience, I am aware that the advantages I enjoy are not freely granted to educators of color and female educators. In this effort, I will draw attention to areas of systemic privilege through an examination of the professional autonomy of principals.

Rationale for Study

There are several reasons for this study to be conducted. First, researchers have new information to examine principal autonomy with the release of the 2015-16 NTPS results. Secondly, with the advent of the Every Student Succeeds Act (ESSA), in which college and career readiness based on higher standards and continued accountability remain the priority, (US Department of Education, n.d.), principals will increasingly be called upon to make decisions to support the new law. This research will provide an opportunity to understand principal autonomy by creating a baseline for the professional autonomy of principals at the start of ESSA.

Additionally, to be an administrator is to be a decision-maker in numerous areas (Peterson, 1986; Robbins & Alvy, 2004; Marzano, McNulty & Waters, 2005). Especially as autonomy is described as a universal need (Milyavskaya & Ryan, 2010; Church et al, 2012), which is required for psychological wellbeing (Baard, Ryan & Deci, 2004; Deci & Ryan, 2000), research on principal autonomy is critical as there is significant evidence to suggest that principals have a vital role within the school setting (Dufour & Mattos, 2013; Finkel, 2012; Waters, Marzano & McNulty, 2004), which impacts the instructional success of students (Leithwood & Seashore-Louis, 2011; Waters, Marzano & McNulty, 2004). As principals have a unique role in building the leadership capacity of teachers to improve instruction through processes like professional learning communities (DuFour & Mattos, 2013; Wilhelm 2013), their impact on student and staff learning is considerable. This dissertation will expand the research regarding autonomy, a critical psychological need, of a key group of decision-makers within a school district who have a considerable impact on the learning outcomes of students.

Research Questions

This research effort is an attempt to better understand the factors that impact principal autonomy using the most current, nationally generalizable data. As a result, there are several research questions that can be asked: how much autonomy do US principals perceive they have in their schools as it relates to their professional responsibilities? How much autonomy do principals have in district-level decisions as compared to building level decisions? Are years of administrative experience linked to greater principal autonomy? Do male administrators have more perceived autonomy than female administrators? Do white administrators have more perceived autonomy than other racial categories? And finally, is the effect of gender on professional autonomy different across racial categories? To date, there has been little to no research on these topics, which this dissertation will begin to address. The following hypotheses are presented to guide the research and inform the analysis of perceived principal autonomy, particularly as it relates to multilevel decision making and a principal's demographic factors:

Hypothesis One: Principals perceive greater autonomy in building-level decisions (hiring, staff evaluations, disciplinary policy, and the school budget) than in district-level decisions (professional development, performance standards, and curriculum).

For Hypothesis One, the combined mean of principal autonomy for hiring, staff evaluations, disciplinary policy and the school budget (traditionally considered building level responsibilities) will be compared against the combined mean for professional development, performance standards, and curriculum establishment (shared areas of responsibility between district office and the school leadership). This grouping will effectively reduce seven work domains into two broad work categories; it should also be noted that all areas of perceived autonomy on the survey are rated on the same scale and by the same group. As such, the use of a

repeated measures t-test to evaluate the differences between the two combined means is appropriate. With this approach, we will evaluate whether principals have significantly different (e.g. higher) perceived autonomy for building level than for district-level decisions.

Following the repeated measures t-test, a series of logistic regressions will be conducted to model perceived autonomy within curriculum and the school budget. The specific wording is shared below:

Hypothesis Two (or Four): After age, community type, and the US region are controlled for, years of administrative experience is a significant predictor of decision-making autonomy for the establishment of curriculum (or school budget).

Hypothesis Three (or Five): After age, community type, the US region a principal works within, and years of administrative experience are controlled for, gender and race also impact autonomy in establishing curriculum (or school budget).

I hypothesize that:

- Female administrators will have lower odds of high autonomy (i.e. endorsing Moderate/Major Influence rather than No/Minor Influence) than male administrators.

- Non-white administrators will have lower odds of high autonomy than white administrators.

- The differences in autonomy between white male and female administrators will be smaller than the differences between males and females of other racial categories.

Using the exact same procedures outlined in Hypotheses Two and Three, the perceived autonomy of principals as it relates to the school budget will also be examined, which establish

Hypotheses Four and Five. For Hypotheses Two through Five, the analysis will focus on the perceived autonomy of principals for curriculum establishment and in how the school budget is spent. As well over 90% of principals report overwhelming autonomy in hiring, discipline, teacher evaluations, setting performance standards, and determining in-service content (NCES, 2012), there is little variability to analyze further. In terms of the school budget and curriculum, however, 10% of principals feel they have little to no perceived autonomy (NCES, 2012), which could have a large impact on principals coming from small racial subgroups.

As curriculum establishment and the school budget are distinct work domains, Hypothesis 2-5 will be evaluated using a parallel set of logistic regressions. Both regressions will start by controlling for age, community type, and US region to determine whether years of experience is a significant predictor for principal autonomy in both curriculum establishment and for the school budget. The additional variables of race and gender will be added to create a subsequent model for each work domain to evaluate if they are significant predictors of principal autonomy individually. The final model will introduce an interaction term to evaluate the combined impact of gender and race on perceived principal autonomy in both curricular and budgetary matters.

As a rationale for the interaction term, researchers have found that whites have advantages based on patterns of systemic privilege (Sensoy & DiAngelo, 2009; Hooks, 2015; Theoharis & Haddix, 2011; Wildman & Davis, 1995) and that males are often advantaged by their gender (Adkison, 1981; Adams & Hambright, 2004; Latu, Mast, Lammers & Bombari, 2013; Scott & Brown, 2006). As such it is hypothesized that white males are dually advantaged by race and gender, however, white women presumably experience privilege through their race. Going further, males of color are expected to experience advantages because of their

membership in the advantaged gender category, however, women of color are not hypothesized to experience a racial or gender advantage.

Consequently, it is expected that white males and white females, belonging to at least one advantaged category, will have the least gender difference in professional autonomy as compared to males and females of other racial categories. The interaction term for gender and race will help to evaluate these hypotheses. The logistic regressions will provide insight into perceived curricular and budgetary autonomy, which are of considerable importance to the principalship and nicely illuminate the divide between the instructional and managerial responsibilities that principals encounter every day.

Limits of Past Research

There is one study that has similarities to this analysis. In a 2004 dissertation, SASS 1993-94 data was used to study variables related to principal autonomy at a national level (Flamer, 2005). In this effort, a national dataset from the National Center for Educational Statistics was used to evaluate the relationship between principal autonomy, the dependent variable, and the predictor/independent variables of race, age, gender, school location, and educational attainment. In that study the data were analyzed using analysis of variance, cross tabulations, descriptive statistics, chi-square, and Pearson product-moment correlation coefficients (Flamer, 2005). Group differences in terms of independent variables were evaluated by Tukey's Honestly Significant Difference test. Several significant findings from her work included (2005):

1. Female leaders have greater autonomy than male leaders.

2. Asian/Pacific Islanders reported greater autonomy than other racial groups.

3. White principals have more autonomy than black principals.

4. Principals with salaries higher than $49,000 had greater autonomy than those with lower salaries.

5. Principals between 30-39 years of age had more autonomy than other groups.

6. A Master's degree was associated with autonomy but so for doctoral or bachelor degrees.

7. Principals in large to mid or large size communities or within an urban-fringe area had more autonomy than other areas.

My study will share some similarities to Flamer's 2005 study; however, the substantial differences are described in the following paragraphs. In this dissertation, I will examine principal autonomy using a series of logistic regression models to find which demographic factors are linked to principal autonomy in a statistically significant manner. In addition, I will compare the autonomy of principals in building and district level work domains through a repeated measures t-test, with the contextual understanding that some responsibilities are shared between schools and district office.

I will create a series of models whereby predictor variables will be analyzed together to evaluate demographic variables as potentially significant predictors for perceived autonomy as it pertains to curriculum establishment and how the school budget is spent. In Flamer's research project, she had tested each of the predictor variables, including age, gender, race, educational achievement, school location, and salary individually, which did not allow for consideration of their significance when other predictors were held constant. My research will offer the advantage of successive models to describe the relationship between perceived principal autonomy and demographic predictor variables as well as an interaction term to evaluate the combined interaction of race and gender on professional autonomy. Additionally, my work will

evaluate specific areas of autonomy (those where sufficient variance in the dependent variable allows for further analysis) such as perceived autonomy in how the school budget is spent and curriculum established. In contrast, Flamer used ANOVA's to determine if the differences between group means were significant over the combined areas of decision-making.

Theoretical Perspective

For this effort, I will be using a post-positivist perspective. The research endeavor will be conducted quantitatively through the analysis of survey data, which lends itself to this approach. Foundationally, post-positivism questions the ability to find absolute truth; however, as a deterministic perspective, the goal is to understand the world through observation and the causes that affect outcomes (Creswell, 2014). In this way, post-positivism is very much focused on a scientific approach; however, the researcher is not aloof from the study and a researcher's biases and perspectives are also taken into consideration (Clark, 1998). I will be mindful of how my biases and background as a suburban white male impact how I conceptualize the research process. Additionally, that my background includes military service and a rich appreciation for hierarchy will be of special note considering this study's focus on autonomy.

Definitions

Several key words and concepts will regularly be discussed in this dissertation. Below, the reader will find specific definitions relevant to this study:

Autonomy: a component of self-determination theory, autonomy is defined as the ability to make choices that are fulfilling intrinsically, or for an instrumental purpose due to either introjected or integrated regulation (Deci & Gagné, 2005). Principal autonomy will be examined via work domains pertinent to the professional work domains of the principalship.

Principal/Administrator: These two titles will be used interchangeably for the purposes of this study.

Superintendent / District Administrator: These two titles will be used interchangeably for the purposes of this study.

Summary

In this study, I will delineate the levels of autonomy that US principals experience in their work and the ability of principals to influence decisions. Additional examinations will explore the effects of race and gender on autonomy and the ability of principals to influence decision making.

In Chapter 2, I will review the literature regarding autonomy, principal responsibilities, and the effects of age, years of experience, gender and race on autonomy. I will also provide a discussion regarding community type and regional considerations as they relate to principal autonomy. The literature review will help to describe factors that inhibit and encourage autonomy and address how the research proposed in this study fits into the larger framework of existing literature.

Chapter 3 will describe the methodology this study will utilize as well as the selected population. The statistical methods used to determine the significance of the findings will be outlined as well as the theoretical context of the study. In this section, the specific instruments and data set will also be described, with a special focus on the selected variables.

Chapter 4 focuses on the results of the analyses of the data. The results will include descriptive statistics and an evaluation of the hypotheses proposed in chapter one.

In Chapter 5, the findings will be discussed to include the implications of the results, the conclusions that may be drawn, as well as further research that would extend understanding of

principal autonomy and the ability to influence decisions. The limitations of the research results

will also be reviewed.

Chapter Two: Review of the Literature

Principals have increasingly found themselves in a complicated position, relied upon to make sound decisions in multiple areas throughout any given school day. At the same time, the scrutiny and pressure have never been greater. Some researchers have called for national tests to ensure principal efforts are aligned with administrative standards, (Holloway, 2002), while others believe superintendents need to reconsider the hiring of principals to be mindful of principal best practices (Rammer, 2007). While the efforts to improve principal hiring, and align administrative practice with standards are well-intentioned, the principalship remains a complicated domain. To succeed in administration shared decision making is essential for administrators to effectively lead their schools (Wilhelm, 2013; DuFour & Marzano, 2011), often through professional learning community (PLC) structures (DuFour & Mattos (2013). While the work of PLC's is often the lens through which many view the principalship, instructional leadership remains one, albeit important, facet of a principal's work as both a manager and instructional leader.

Within the impressive array of responsibilities facing principals, there are managerial and operational tasks that require attention each day (Sergiovanni, 1990; Marzano, Waters, & Mcnulty, 2005). Surprises and interruptions are a common part of a principal's work, which are not easily trained for or anticipated (Peterson, 1986; Robbins & Alvy 2004), which is also reflected in the well-known twenty-one responsibilities of successful administrators (Marzano, Waters, & Mcnulty, 2005). The emotional composure required of principals is also considerable, given their role as a school leader. Administrators have been described as a filter through which the atmosphere of a school is impacted (Whitaker, 2003). The impact of a principal on teacher job satisfaction is also of note. There is evidence that satisfaction in a teacher's work is

significantly related to transformational leadership and participatory oriented principals in a positive way, whereas transactional leadership held a negative correlation to teacher job satisfaction (Bogler, 2001; Eyal & Roth, 2010). Clearly, principals have a critical impact on the schools they are assigned to in terms of instruction, culture, and operations.

Complicating the discussion of the principalship further, school administrators come from many backgrounds and areas of expertise. To support the transition to an administrative post, many states have a credentialing process in which aspirants are expected to complete additional coursework, pass a test, and have some classroom experience (Vogel & Weiler, 2014). Additionally, on the national level, the licensing for principals is not always in alignment with accepted standards like those coming from the Educational Leadership Consortium Counsel (ELCC) (Vogel & Weiler, 2014) or generally similar to each other (Adams & Copland, 2007). The challenges accompanying the transition from the classroom to administration often include a lack of extended practical leadership experiences (Kent, 1986), which can be extra challenging for those transitioning to the principalship from non-traditional paths (Robbins & Alvy, 2004).

Missed in these preliminary administrative experiences is the chance to develop and refine a leadership perspective. Research has shown that administrators may not have the strongest ability to make decisions that consistently follow a specific philosophical perspective (Dempster, Carter, Freakley & Perry, 2004) or have specific training in research or statistics to avoid common errors in judgment (Davis, 2005). In Dempster, et al, they conducted a series of interviews with 26 principals to discuss ethical decision-making, from which a survey was developed. The survey was then distributed to Queensland, Australia principals. In the survey, principals were asked about how far they tended to agree with statements arranged around either moral relativism, moral absolutism, or an ethic of care (2004). Based on the findings, they found

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the surveyed principals lacked knowledge of ethical theories and there were sometimes

contradictions in their ethical reasoning. Davis discussed common errors in cognition, drawn

from the literature on public and private leadership. In his article, Davis outlines how principals

sometimes fall prey to hindsight bias, wherein outcomes appear obvious in retrospect,

overconfidence, and having unrealistic expectations for the future. Principals may also have

trouble changing their opinions and can be susceptible to making decisions without taking the

time to gather relevant, quality information (Davis, 2005). With these concerns, one is

reasonably left to wonder about the academic-preparatory experiences of would-be

administrators and how prepared principals are as they transition to their first administrative post.

These are especially pointed areas of concern as many face abrupt transitions from the classroom

to administration (Kent, 1986).

Complicating the role further, how principals view their role and construct their identity

as a school leader is a multi-dimensional task that will vary between school administrators.

Research suggests (Crow, Day & Møller) that principals construct their roles through an ongoing

cognitive narrative that is evaluated and reviewed continuously (2016). Pertinent to the work of

identity, are the ever-present emotional, cultural, historical, and political dimensions that guide

the formation and revision of a principal's identity as they move through their careers (Crow,

Day & Møller, 2016). This dissertation focuses on principal perceptions of professional

autonomy; the constructed identity of a leader is expected to impact the perceptions that

principals have regarding their work.

In this literature review, I will review the variables under consideration and how the

literature suggests they might be predictive of perceived principal autonomy. The dependent

variable for this research endeavor is the perceived autonomy of principals within several work

domains, (budget, discipline, staff evaluations, hiring, benchmarks, professional development, and curriculum). The predictor variables of age, years of administrative experience, gender, race, community type, and geographical region will also be examined in this section. As a result of the review, the stage will be set to evaluate the levels of principal autonomy in several work domains, which directly relates to my first hypothesis. Additionally, the review of the literature regarding the predictor variables will provide a background for their analysis and predictive significance on principal autonomy, which relates Hypotheses 2-5.

Theoretical Frameworks

For this research study, I will align two theoretical frameworks to explore and describe principal autonomy. As this work will center around a quantitative analysis of a survey, I will utilize a post-positivist framework to guide the exploration of principal autonomy. Additionally, I will use self-determination theory as a broader context to describe the processes within autonomy.

My post-positivist approach will center on the precepts of Karl Popper, who is often considered to be a key figure within the philosophical perspective (Crotty, 1998). In his well-known text, *Conjectures and Refutations*, Karl Popper lays out several philosophical perspectives to guide scientific work. Relevant for this analysis, is his notion that there is no absolute place where one can seek knowledge; everything known can be questioned (Popper, 1963). Additionally, he goes on to state that tradition is often the basis of one's knowledge and that without tradition there could not be knowledge, however, traditional knowledge can still be revised based on new information. Finally, Popper also states that most new understandings generally exist as modifications of earlier perspectives (1963). Given these precepts, the research presented for this dissertation is humble, ready for modification, amendment, and

accepts the possibility of future irrelevance, should new research prove my findings inadequate or irrelevant.

To provide context for autonomy, self-determination theory states there are three psychological needs, to include "competence, relatedness, and autonomy" (Deci & Ryan, 2000). Additionally, it has been suggested that self-determination theory has great value in understanding workplace motivation (Gagné & Deci, 2005). In Gagné and Deci, after outlining self-determination, they develop a path for continued research around self-determination in the workplace around a series of propositions. These propositions illuminate workplace characteristics that would improve worker satisfaction to include a non-controlling work environment and factors that would lead to the internalization of extrinsically motivated responsibilities (2005). My focus will be on autonomy, which includes intrinsic motivation and integrated regulation. Particularly as autonomy is considered a necessity for mental wellbeing, the value of this research endeavor is made clear, particularly for roles like the principalship that require regular decision-making.

This work will extend understandings of principals and the personal factors that may impact their autonomy using a post-positivist framework. In this research endeavor, I will specifically examine United States principals, and I will develop models to determine the factors that have a significant predictive impact on autonomy within work domains commonly associated to the principalship. In addition, this work will provide information that extends past the 2005 Flamer dissertation, which was briefly outlined in Chapter One. In this research effort, the use of self-determination theory to understand autonomy is heavily emphasized, and post-positivism will provide the overall research framework. These theories were not emphasized in Flamer's research. Additionally, in her work, she evaluated autonomy as a single entity, whereas

I will be examining autonomy within specific work domains. In keeping with the tentative nature of scientific research, the results of this analysis, while more expansive than those completed in the past, will be another starting point for future researchers.

Finally, within this research study, I will delineate established and generally agreed upon principal responsibilities using relevant research regarding tasks related to the principalship. However, this treatment will not be a lengthy, intricate treatment of each work domain. Each work domain could legitimately be an entire dissertation in and of themselves and while interesting, it is well outside the scope of this research endeavor.

Autonomy

Having worked through the introduction to the literature review and the theoretical considerations, we move to a discussion of autonomy, which serves as the dependent variable for this endeavor. To provide an operational context, autonomy is a complicated variable, which has been analyzed through instruments like the Problems at Work (PAW) assessment, wherein vignettes are provided, with associated potential actions, to determine how autonomy supportive managers are using a seven-point scale (Baard, Deci & Ryan, 2004; Deci, Connell & Ryan, 1989). Additionally, The Work Climate Questionnaire (WCQ) has been used to assess autonomy (Gagné, 2003), which has also been adapted to evaluate the supportiveness of superintendents using rated statements (Chang, Leach & Anderman, 2015). It should be noted the WCQ is based on a seven-point scale like the PAW. In other efforts, autonomy has been evaluated amidst other factors related to need satisfaction using a seven-point scale (Milyavskaya & Koestner, 2011) and has been similarly tested using a five-point scale (Church et al, 2012). Presumably, the emphasis on seven-point scales is to measure a hypothetically continuous variable in a way that allows for a considerable range in participant responses.

Having established how autonomy has been quantified in prior research, in this section we will discuss the general research surrounding autonomy and then move into studies that focus on autonomy and the principalship. As noted earlier, the focus of this research is on professional autonomy, not the autonomy of administrators in all life domains. Consequently, this dissertation is necessarily incomplete; the focus of this effort relates exclusively to the professional autonomy of principals. Following this section, principal responsibilities will be delineated, which will begin the discussion regarding areas where principals would generally be assumed to have a level of autonomy.

Within the research regarding self-determination theory (SDT), autonomy is considered an essential and universal need (Deci & Ryan, 2000; Milyavskaya & Koestner, 2010; Church, et al, 2012), which has been explored empirically in numerous studies (Deci, Eghrari, Patrick & Leone, 1994; Deci, Connell & Ryan 1989; Baard, Deci & Ryan, 2004; Gagné & Deci, 2005). Furthermore, autonomy research has been extended to consider the social behaviors of people with an autonomy orientation (Gagné, 2003), which one could posit are particularly important for those holding leadership positions. From these studies, one can see the research base around autonomy has considerable range, extending over several decades in which autonomy has both a topic of interest in itself and as a starting point for extended topics. From this point, the research regarding autonomy will be reviewed with an increasing focus on the principalship as the review of literature progresses.

In terms of the universalization of autonomy as a fundamental need, Church et all used samples of college students from the US, Australia, Mexico, Venezuela, Philippines, Malaysia, China, and Japan for their study (2012). In terms of their instruments, they used measures to assess autonomy, relatedness, and competence, along with the "big five" personality traits of

openness, conscientiousness, extroversion, agreeableness, and neuroticism. Additional

instruments assessed cultural constructs and both hedonic and eudaimonic well-being where the

former is related to emotional pleasure and the latter focuses on personal development and

finding meaning in life. Findings revealed that cultures with tight expectations tended to have

lower scores in regard to the satisfaction of the autonomy need. Additionally, Church et al found

that relatedness, autonomy, and competence were not individually predictive of well-being,

however, "one or two, but not all three SDT needs to contribute independent prediction of well-

being (Church et al, 2012). However, the results from Church et all did show the need

satisfaction was predictive of general wellbeing to the same extent in each of the cultures under

consideration.

The findings in support of the universality self-determination theory from Church et all

are similar to earlier research that looked at need satisfaction within multiple life domains

(Milyavskaya & Koestner, 2010). In their research, an online survey was administered to over

two hundred people through a Facebook posting and given a gift card to Amazon as a gift for

participation. The people who completed the survey were asked about their need satisfaction,

motivation, and well-being within several life domains. The results indicated that autonomous

motivation was related to need satisfaction to a statistically significant degree in all life domains

tested. Additionally, the researchers found that motivation partially mediates the connection

between need satisfaction and well-being (Milyavskaya & Koestner, 2010).

Within self-determination theory, motivation is viewed as a continuum between

amotivation, a complete lack of motivation, and intrinsic motivation; motivation is also described

as being autonomous or controlled (Ryan & Deci, 2000; Deci & Gagné, 2005) as described in

Figure 2.1. Within the self-determination theory, extrinsic motivation occupies a central space,

which is also a continuum. On the one side is external regulation, where one attends to extrinsically motivating topics based on rewards and punishments and the other, wherein an obligation is internalized and while extrinsically oriented, is freely accepted through integrated regulation. Particularly in terms of externally regulated motivation, it is interesting to note that pursuing goals based on external rewards has been linked to burnout and cynicism in the workplace (Roche & Haar, 2013). In their work, oriented around self-determination theory, Roch and Haar surveyed leaders in New Zealand with the hypotheses that extrinsic goals like wealth, image and fame were linked with cynicism and burnout, while intrinsic motivators lead to less cynicism and significantly less weariness on an emotion level (2013). In their analysis of the data, it was found that individuals who were more intrinsically motivated were statistically less likely to suffer burnout or cynicism. The researchers concluded by suggesting that organizations focus more on intrinsically motivating concerns like relationship building and wellness could help employees avoid overly extrinsic orientations to their work (Roche & Haar, 2013).

Figure 2. 1 The Self Determination Continuum Showing Types of Motivation With Their Regulatory Styles, Loci of Causality, and Corresponding Processes

Behavior	Nonself-Determined					Self Determined
Perceived Locus of Causality	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal
Relevant Regulatory Processes	Nonintentional, Nonvaluing, Incompetence, Lack of Control	Compliance, External Rewards and Punishments	Self-Control, Ego-Involvement, Internal Rewards and Punishments	Personal Importance, Conscious Valuing	Congruence, Awareness, Synthesis with Self	Interest, Enjoyment, Inherent Satisfaction

(Reproduced from Deci & Ryan, 2000)

While similar in nature to intrinsic motivation, integrated regulation operates by slightly different processes (Deci & Gagné, 2005). For items that are not intrinsically interesting research has found that recognizing the person's feelings, giving a rationale for the task that resonates with the person, and a non-controlling attitude helps one develop an integrated perspective on a non-intrinsically motivating task (Deci, Eghrari, Patrick & Leone, 1994). Additionally, it is also noted that intrinsically interesting tasks are those tasks that one enjoys in and of themselves; intrinsically motivated efforts are individual (Deci & Ryan, 2000). As a result, it remains important to understand the differences between tasks that are carried out through integrated regulation versus intrinsic motivation as the former requires facilitation (Deci, Eghrari, Patrick & Leone, 1994) and the latter benefits from support (Deci & Gagné, 2005).

Considerable research has been conducted using self-determination theory to explore autonomy within a work context (Baard, Deci, & Ryan, 2004; Deci, Connell & Ryan, 1989; Gagné & Deci, 2005; Howard, Gagné, Morin &Van den Broeck, 2016). In a large research effort, nearly a thousand employees, over an eighteen-month period, were surveyed regarding their manager's orientation toward controlling or supporting the self-determination of their employees (Deci, Connell & Ryan, 1989). The employees were also surveyed to assess their work satisfaction. The surveys were administered three times in three locations; the first administration established a baseline for managers and the satisfaction of employees. Training was given in the first location to help managers support the self-determination of their employees after the first survey and before the second survey. The training was then provided to the second and third location; the training in these locations occurred between the second and third administration of the survey. Two additional sites were included in the study, which operated as

a control group in that these locations did not experience the training intervention to support employee self-determination.

Results of this research effort revealed several items of note. First, over the course of the three survey administrations, amongst which the managers received training to support greater self-determination in their employees, manager orientations in support of self-determination were increasingly positively correlated with variables related to their subordinates, to include trust, pay, work atmosphere, feedback, etc. (Deci, Connell & Ryan, 1989). Additionally, workers found their general satisfaction was linked to an increasing number of variables linked to a positive workplace, which again included items like trust, pay, work atmosphere, feedback, etc. That being said, a major caveat noted in the study was that a worker's pay and other benefits have to secure in order for a manager's support of a non-controlling work disposition to be fully appreciated.

In addition to the above study, a related research effort in which two organizations were examined through the lens of self-determination theory (Baard, Deci, & Ryan, 2004). An initial pilot study was used to predict the satisfaction of needs by evaluating the subject's autonomous causality orientation and how autonomy is perceived to be supported using four questionnaires. While the sample size for the pilot was only 59 participants, the results showed that intrinsic need satisfaction was significantly and positively correlated to needs associated with autonomy, competence, relatedness, and a worker's performance evaluation.

Following the pilot, another work setting was analyzed within the same research effort, which enjoyed a much larger sample size of 698 employees. As a number of the employees were on the job for only a short time, the number of employees suitable for the study was 627, of which 528 responded, providing a respectable 84% response rate. Similar to the pilot, the

participants were asked about their performance evaluation, in which they had to describe their performance review, using a 1-3 scale, wherein a 1 is the lowest rating and 3 is the highest.

With the greatly expanded sample size, the correlations between each of the variables were all significant, which included measures for autonomy, competence, relatedness, the performance evaluation, intrinsic need satisfaction, and adjustment. The single insignificant correlation was between autonomous causality orientation and adjustment, which was operationalized as a measure of anxiety and somatization. In a subsequent path analysis, perceived autonomy support and an autonomous causality orientation were attributed to the intrinsic need satisfaction, which in turn were positively and significantly related to the performance evaluation and adjustment. Another test was run to see if the relationship between the performance evaluation and intrinsic need satisfaction operated bidirectionally, which it did. In such a case, however, the regression result in the path analysis was only significant when the path from need satisfaction led to the performance evaluation, leading the researchers to accept the significant directionality, which was also supported by the literature (Baard, Deci, & Ryan, 2004).

Continuing to round out the discussion of autonomy in the workplace, a study completed with Canadian and Belgian samples revealed that government workers had a statistically significant likelihood of being amotivated (Howard, et al, 2016), which is of concern in this study as principals are government employees. The Canadian sample of 723 participants was drawn from the technology, manufacturing, and governmental sectors. The 299 Belgian participants, as well as those from Canada, were selected based on geographic closeness and personal contacts. The participants were surveyed to gather information in regard to their motivation profile and the Canadian sample was asked additional questions to determine what

industry they worked in, while the Belgians were not. While the industry specifying questions

were not asked, the Belgian sample revealed that a-motivated employees had the least job

satisfaction, while "highly motivated" and "moderately autonomous" employees had the most

(Howard et al, 2016).

In addition to the studies above, self-determination theory and autonomy has been

explored in recent scholarship regarding principals (Chang, Leach, & Anderman, 2015; Eyal &

Roth, 2010) and how principals sometimes make creatively insubordinate decisions (Haynes &

Licata, 1995). In the first of these efforts, a series of surveys were sent out via email to recruit

and encourage recipients to fill out a survey, which included demographic selections questions

related to autonomy support, organizational commitment, and job satisfaction (Chang, Leach, &

Anderman, 2015). Initially the survey went out to one large Midwestern state, however, the

following survey administration went out to sixteen additional states. The results for this inquiry

found that principals who believed their superintendents were supportive of their autonomy were

a significant predictor for their affective commitment to the school district and their job

satisfaction. Additionally, those with more years of experience as a principal reported greater

job satisfaction but an interaction term for perceived autonomy support and years of experience

showed that principals with less experience in a school district appreciated autonomy support

more (Chang, Leach, & Anderman, 2015). Tangentially related, it has also been noted that

support is also helpful in reducing stress in principals (Beausaert, Froehlich, Devos & Riley,

2016). As such, support for principals appears important, in terms of both autonomy and to help

principals reduce/manage their stress.

The discussion of autonomy and job satisfaction, as it relates to the

principal/superintendent relationship (Chang, Leach, & Anderman, 2015), also has considerable

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relevance between principals and their teachers (Eyal & Roth, 2010). In another research endeavor, it was found that transformational leadership was significantly and negatively related to teacher burnout, whereas transactional leadership was positively related to burnout (Eyal & Roth, 2010). In both leadership styles, a partially mediating variable existed between the leadership style and teacher burnout. Transformational leadership was partially mediated by autonomous motivation, whereas transactional leadership was partially mediated by controlled motivations.

In each of the above studies, autonomy supportive leaders have tended to yield job satisfaction, which has been true whether in an office machine company (Deci, Connell & Ryan, 1989), banking corporations (Baard, Deci & Ryan, 2004), for principals (Chang, Leach & Anderman, 2015), and for teachers (Eyal & Roth, 2010). Given the impressive range expressed in these research efforts, autonomy supportive employers and managers yield greater job satisfaction than those who are controlling in their leadership styles. Interestingly, however, there is research to suggest that some principals may be willing to engage in what some call "creative insubordination," which brings an interesting angle to the discussion of principal autonomy (Haynes & Licata, 1995).

In Haynes and Licata, they found that principals are sometimes willing to significantly adapt what central office has mandated or requested to fulfill contextual realities of their schools and faculty (1995). The goal in this work is to ensure the needs of students and staff are met, sometimes despite the direction of central office. In other words, principals, through their considerable discretionary authority, are able to bend district mandates and do so without a negative consequence. Principals who were found to be most comfortable with creative insubordination tended to be those with greater experience as an administrator were considered

instructional leaders, and typically did not equate the trappings of degrees and other experiences of principal preparation as professional competence. Interestingly, this work also revealed that younger administrators may not be those to bring innovation as they tend to implement policy as directed (Haynes & Licata, 1995), presumably as they lack the experience to operate independently with confidence.

Of special note within the discussion of principal autonomy is the dissertation completed by Adelaide Flamer (2005). She used the 1993-94 School and Staffing Survey to study principal demographics and their effect on autonomy. At that time, the survey differed from the one under consideration from 2015-16 (Appendix) in that principals were asked about their level of autonomy using a five-point scale, where responses varied from 0, none to 5, a great deal. None of the other survey responses are defined in the survey (1-4). As a result, should principals choose three as their response, one could feasibly interpret the selection to mean neutrality, or as a moderate response to the question of autonomy in the given work domain. As one can see from the Appendix, a respondent in 2015-16 had to make a decision from options that were clearly defined on the survey, which greatly lessens the ambiguity of the instrument.

Flamer's findings suggested that female principals and Asian and Pacific Islander had more autonomy than males and other races, respectively (2005). Additionally, she found that principals aged between 30-39 had the most autonomy. In terms of location, Flamer found a significant relationship between principal autonomy for administrators in mid to large cities and those on the outskirts of urban areas (2005). In her work, she tested each predictor variable separately against the dependent variable of principal autonomy using analysis of variance and the Tukey Honestly Significance Difference test. Additional chi-square tests were used in a similar manner; predictor variables were tested individually against principal autonomy.

In the current research endeavor, I look to extend Flamer's research by leveraging the increased specificity of the most current survey to provide clearer understandings regarding principal autonomy. Additionally, this research will be up to date using the recently released data from the NCES, which will provide fresh information to researchers and those interested in administrative autonomy. To start my analysis, I will run a repeated measures t-test to identify the differences between perceived autonomy in school and district-based decisions. I will also attempt to understand how demographic predictor variables impact principal autonomy when others are held constant. Consequently, using a series of regression models will provide a more complete understanding of how demographic factors impact the autonomy of school administrators when analyzed together.

Following this discussion of autonomy, particularly those related to the principalship, I will now focus attention on the duties of principals. In the next section, I will delineate the areas in which principals have decision making authority and review areas where principals may share authority with central office personnel.

Principal Responsibilities

In this section, principal responsibilities are under consideration, with two goals in mind. First, principal duties will be delineated, particularly those related to the dependent variables of the principal work domains. Secondly, this review will provide the basis for Hypothesis One, wherein principals have considerable decision-making authority on school level matters but share some professional responsibilities with other principals and district office.

A considerable part of a principal's work has been described as involving instructional leadership (Finkel, 2012; Marzano, Waters & McNulty; 2005) often through the use of professional learning communities (DuFour & Eaker, 1998; DuFour & Mattos, 2013; Wilhelm,

2013). Others have noted the strong requirement for principals to serve as managers too (Alvy &

Robbins, 2004; Cooley & Shen, 2003; Copland, 2001; Rallis & Highsmith, 1986). The role of

the principal and their ability to influence numerous types of decisions within a school context is

considerable in most school operations (Ni, Yan & Pounder, 2018). To this end, principals have

a great deal of responsibility in diverse areas, which the literature tends to divide between

instructional leadership tasks and managerial tasks.

In an intimate look at the principalship, an ethnography from 1973, described the life of a

school administrator (Wolcott), which offers relevant points of consideration for the current

research endeavor. In his study of one elementary administrator, who was given the pseudonym

Ed Bell for the purposes of the study, Wolcott had the opportunity to fill a perceived gap in the

professional literature on principals. At the time of the book's publication, the perception was

that most scholarship was focused on what principals ought to do, rather than the reality their

work. To that end, his research outlined the cycle of the school year and how his principal

approached planning for the upcoming school year. Also, the scheduled and unscheduled

obligations of the principalship were observed, to include PTA meetings, faculty meetings, and

impromptu meetings with parents (Wolcott, 1973). Additionally, the work goes on to describe

the administrator's challenges with central office, to include those that impacted a principal's

autonomy, which were sometimes referred to as "whipping boys." The first of these was the

need for principals to get written permission from central office to leave the school district to

handle school-related issues. Secondly, those administrators who helped with summer school

found there was a three-day overlap between the start of summer school and the end of their

regular contract, which ended up with double payments. The question was how the principals

would compensate the district for this overage, which inevitably frustrated the affected administrators (Wolcott, 1973).

Considerable attention was also given to the socialization of principals and their role as socializers within the school building (Wolcott, 1973). A few examples of the socialization process included principal evaluations through central office and the utility of a principal's peers for advice and support. Sponsorships of GASer's (Getting Attention of Supervisors), described as those who were looking for opportunities to move up in the school setting, was also observed. The discussion on this point showed that those looking to move up had to do so carefully to not be perceived as over-ambitious or impatient. Additionally, there was the informal, yet expected requirement of waiting one's turn for a leadership opportunity (Wolcott, 1973). Interestingly, the experiences in graduate programs were also analyzed. It was generally found that administrative training was largely inadequate in terms of preparing new administrators, though some of Ed Bell's colleagues and even himself considered the pursuit of a doctoral degree. In terms of the role of principals as socializers in their schools, their evaluation responsibilities gave them considerable power in terms of general expectations for both their new teachers and their veteran staff (Wolcott, 1973). While the evaluation process was identified as the primary and most powerful socializing tool for the principal in his study, Wolcott also notes that his principal tended to make judgments about his new teachers informally and often without fully knowing classroom performance (1973), which almost assuredly impacted the school environment.

In other research, the work of principals has been described as a "roar of complexity, in which principals face considerable pressure to meet diverse needs (Peterson, 2000), which has been verified by earlier research (Wolcott, 1973). In Peterson, it is noted that principals are often called upon to manage diverse needs in a fragmentary way; principals do not often get a chance

to work for extended periods on one task. More contemporary research, however, has

challenged the notion of a principal's work being fragmented, especially as principals spend an

extended amount of time on tasks related to instructional leadership (Sebastian, Camburn &

Spillane, 2018). Interestingly, the fragmentary nature of a principal's work and the incredible

pace of the work is mirrored in numerous settings and industries, which is often linked to the

proximity of a leader to the operational core, which is described as the "essential outputs" of an

organization (Jackson & Peterson, 2004). Further challenges are encountered, specifically in

terms of navigating a school's "hidden history," and understand the multiple perspectives

inherent within a school system. Perhaps the greatest of these challenges, at least in regard to

instruction, is guiding a staff through new initiatives while understanding the initiatives that

came before, and their staff's individual conceptions of their work (Peterson, 2000). To

somewhat mitigate these challenges, it is suggested that principals focus on building a staff's

professional capital to enhance student outcomes and become more adept within the change

process on both a personal and professional level (Fullan, 2014). Fullan also goes on to suggests

that instructional leadership should focus on the principal's work with staff, which will then

advance student learning (2014).

In terms of the specific job requirements, principals have a considerable number of

responsibilities, which O*NET, sponsored by the US Department of Labor, does a thorough job

of outlining. Listed below, the O*NET entry for Education Administrators, Elementary and

Secondary School includes the following tasks (2016), which closely align with the work

domains in the 2015-16 NTPS Principal Questionnaire:

- Teacher evaluation
- Curriculum development

- Performance standards and goals development

- Assessing student progress

- Hiring staff members

- Leading professional development

- Maintaining the school budget

- Student discipline

Interestingly, the O*NET entry also includes additional job titles for the principal role, to include the superintendent and special education director, among others (2016), leading one to understand there may be tasks for which there is considerable shared responsibility. However, while principals certainly have a considerable role within instruction and curriculum, principals are not the only authority on these matters; principals in these areas may be wise to expect diminished autonomy for several key reasons. Specifically, a Director of Curriculum and Instruction (DCI), or a similarly situated district office administrator (either by job description or official title) often has system-wide responsibilities in regard to curriculum and instruction. That being said, the role of the DCI has been described as relatively new in scholarship from the 1950's (Doll, Shafer, Christie & Salsbury, 1958) to the extent that a common job description was not fully in place (Doll, et al, 1958; Hass, 1960), which led to research efforts to identify the key functions of the DCI (Doll, et al, 1958; Rutrough, 1970; Mickelson, Appel & Prusso, 1969).

The initial research into the DCI position showed several key functions to include curriculum improvement, in-service professional development, coordinating the curriculum system-wide, and serving as the expert on curricular matters to district stakeholders (Doll, et al, 1958; Hass, 1960; Rutrough, 1970; Mickelson, Appel & Prusso, 1969). Given this historical perspective, one can readily imagine the interactions between a principal who works within the

school each day and the DCI. As the most positive outcome, a common commitment to instructional matters as an area of shared decision-making authority could emerge, however, conflict could emerge. Indeed, the early literature on the DCI position indicate that those holding the position must accept that teachers and principals play the most direct role in the student's school experience (Doll, et al, 1958) and that most DCI's "worked most circumspectly with the principals and believed this relationship to be an omnipresent source of difficulty" (Mickelson, Appel & Prusso, 1969).

Contemporary research indicates that curriculum and instruction concerns continue to be an area of shared responsibility between district office and the school setting (Donsky & Witherow, 2015; Loucks-Horsley, Stiles, Mundry, Love and Hewson, 2010; Micheaux, 2016). To this end, district priorities and the building context are taken into consideration in terms of professional development and improvement practices (Donsky & Witherow, 2015; Firestone, Mangin, Martinez & Polovsky, 2005; Micheaux, 2016). However, there are others that claim the district level may be the primary lever that moves professional development and teacher practice forward (Firestone, Mangin, Martinez & Polovsky, 2005; Liethwood, 2010). Other experts would suggest that superintendent themselves are instructional leaders (Eller & Carlson, 2009), which must be highly selective when considering initiatives to maximize outcomes (Fullan, 2010). Consequently, principals should not necessarily expect to be the final word on curriculum and improvement, particularly if there are multiple middle schools or high schools within a district. Principals in these situations will likely have to work together, with the DCI, on curricular, goal setting, and professional development concerns. Additionally, contemporary perspectives would remind principals that to overly focus on instructional leadership will take away from a principal's goal of growing and developing their staff (Fullan, 2014).

Not to be overlooked in light of the technical job requirements, experts in the field suggest principals also have a role in the culture of a school district (Deal & Peterson, 1990). In their work, Deal and Peterson identified five roles that principals fulfill, including being a symbol, potter, poet, actor, and healer (1990). Describing these roles further, principals are powerful symbols within the school setting. The decisions they make, the priorities they set, and the meetings they attend are carefully observed by those in the school community. As a potter, principals shape the school culture through common values, observing the success of those in the school community, and being mindful of the rituals and ceremonies of the school. Within the role of poet, principals are called upon to be thoughtful communicators, whereas in being an actor, principals manage the dramas of their school setting. Finally, in the healer role, principals are involved with managing the stress of the school year and working through challenges (Deal & Peterson, 1990).

Age and Experience Considerations and the Principalship

In the current research endeavor, the focal relationship is between years of experience and autonomy. Specifically, it is hypothesized that more experienced administrators enjoy greater autonomy in their practice. Additionally, years of experience is also expected to be positively related to autonomy, which has been in the case in several studies that will be explored below (Haynes & Licata, 1995; Van den Broeck, Ferris, Chang & Rosen, 2016). One will note the literature discussed in this section does not focus on age and years of experience as their primary area of concern, however, they are included as important variables for consideration. Finally, the articles in this section have relevance in several areas of this literature review. I will restrict the discussion to age and years of experience and discuss other elements of the research in the relevant sections.

The age of administrators is reflected in the research as a notable difference between male and female administrators as the latter tends to be older, having taught more years than males (Eckman, 2004; Erickson, 1985). In Eckman, she studied high school administrators in Minnesota, Illinois, and Wisconsin to understand the relationship between gender, role conflict, job satisfaction, and role commitment using three surveys from 1999-2000. In this work, she found that males also tended to get their first administrative position at a younger age than females, a difference that was found to be statistically significant. Further discussion of this article is relevant, however, the broader discussion of Eckman's research will continue later in the literature review, where I discuss gender. In Erickson, coming out of a two-year study in Montana regarding female administrators, she created a "typical female school administrator" profile to describe her findings (1985). In this profile, a contrast with males is described, in which females will tend to have more teaching experience and curriculum work (Erickson, 1985). The article goes into a further discussion of the female principalship, which will be discussed in further detail in the section regarding gender.

Years of experience and age are also discussed in light of decision-making processes (Miller, Fagley & Casella, 2009) and as providing challenges to young administrators (Peters, 2012). In a research project regarding how problems are framed and risky decision making, years of experience emerged as a variable of consideration, however, gender is the primary variable of concern in the study. To conduct the research, a list of all middle and junior high school principals was downloaded from the New York education website (Miller, Fagley & Casella, 2009). Out of the 600 that were selected to participate, ultimately 71 principals completed the surveys and were included in the study. The principals were mailed six scenarios that required a decision to be selected. Additional measures to gather information about

decision-making style and demographics of the participants were also included in the mailing. While the gender considerations will be discussed later in this literature review, the most salient point for this section is that years of experience did not affect decision making in a statistically significant manner; principals with greater years of experience made similar decisions with those with fewer years of experience (Miller, Fagley & Casella, 2009).

In another study, two female African American principals where interviewed for a qualitative research endeavor (Peters, 2012). In Peters, the focus of the study related to leading change in a small school, with relatively little support from central office in terms of material resources or mentoring (2012). Both principals, who served one after the other in the same school, were first-year principals, under forty years of age and held doctorates. As a significant finding, both leaders felt their relatively young age created challenges for them as they were not veteran leaders as well as their being female. Peters goes on state that in her research it was not always easy to tease out the interactions between age, gender, and race in terms of their impact on the principal's experiences leading the school (Peters, 2012). An interesting intersection with another research project, in which mobility of school administrators was studied, indicates that both principals who are young and those that are older are less likely to accept a new position or transfer to another school (Gates, Ringel, Santibańez, Guarino, Ghosh-Dastidar & Brown 2006). Based on Peters' research (2012) perhaps the challenging context for the two principals she studied were factors that compelled the two administrators to leave their school after one year, despite the trends identified in Gates, et all research.

In Gates et all, principal mobility in North Carolina and Illinois were studied using data from 1987-1988 through 2000-01 using a multinomial logit model. Particularly as principal turnover can threaten school stability, this research was developed to better understand the

demographic factors associated with principals transferring or leaving education. Additional findings from this study included that male principals between 55 and 65 are significantly more likely to leave education, presumably to retire, than women of the same age. Aside from age, many other variables were evaluated to determine their significance as predictors for principal mobility to include the type of college principals attended, race, community type, educational attainment, and county wealth (Gates, et al, 2006).

Transitioning to research on self-determination theory, a meta-analysis, in which 99 studies were analyzed, found that ratings of autonomy have a positive relationship between age and time in an organization (Van den Broeck, Ferris, Chang & Rosen, 2016). Going into the purpose and methodology of this research effort, Van den Broeck, et al reviewed the literature on SDT to understand the individual contribution of relatedness, competence, and autonomy on psychological need satisfaction. The researchers were also interested in whether an aggregate need satisfaction score (averaging measures of relatedness, autonomy, and competence into one score) is appropriate for research purposes, and whether the findings regarding need satisfaction varied when using different scales. This last question was raised in light of methodological concerns regarding the Basic Needs at Work scale attributed to Edward Deci and others. While this last question about measures was not conclusively answered, the researchers found psychological needs of relatedness, autonomy, and competence are indeed unique from each other and should not be averaged (Van den Broek, et al, 2016).

Regarding principal autonomy, three research articles include interesting discussions, of which two focus on age (Chang, Leach & Anderman, 2015; Haynes & Licata, 1995) and one considers the autonomy of experienced principals (Dillon, 2011). Providing a general overview of autonomy and schools, Dillon outlines how several large districts are pursuing autonomy and

asks whether autonomy should be given as a way to enhance already successful schools or as means to improve schools not performing as well (2011). In this regard, she also notes that principals of successful schools often have autonomy in a non-formal way, and quotes research from the Thomas B. Fordham Institute, which indicates experienced principals feel greater autonomy based on their relationship with the community and central office (Dillon, 2011).

While already reviewed in the section regarding principal autonomy, Haynes and Licata's research on creative insubordination largely support Dillon's perspective, in that autonomy is most commonly found within experienced administrators with numerous years of experience (Haynes & Licata, 1995). Being perceived as an instructional leader, with little regard for the official trappings of the principalship (degrees and certifications) were also significant predictors for creative insubordination (Haynes & Licata, 1995), which one could reasonably see as an extension of autonomy. The findings in Haynes and Licata, however, interestingly intersect with Chang, Leach and Anderman's research, wherein principals with fewer years in a school district are noted as being appreciative of autonomy supportive superintendents (2015), whereas Haynes and Licata's work indicates younger administrators "tend to cling to established policy and infrequently make policy adaptations to their own school environment (1995)." Years of experience and actual age are not the same; however, there is enough potential overlap to take notice of this discrepancy in the research. Operationally, if the effects of age and years of experience are hard to differentiate, years of experience alone will be used in this analysis.

Community Type and Geographic Considerations and the Principalship

While a formal hypothesis is not included in this research endeavor to discuss geographic considerations, this sort of contextual information is typically provided in each iteration of the

NCES principal survey and will be included in the general discussion of principal autonomy. I will briefly survey existing research that includes a discussion of community/regional concerns.

In a general sense, one would reasonably expect that urban principals would have less autonomy than administrators in other places. Indeed, in the preface of Deal and Peterson's work, *The Principal's Role in Shaping School Culture*, Assistant Secretary of Education Christopher T. Cross reported that autonomy is less prevalent in urban areas (1990). To support the autonomy of principals, particularly in urban settings, others have advocated for decentralization of decision making to further empower principals (Adamowski & Petrilli, 2007; Dillon, 2011). In her overview of recent autonomy oriented efforts, Dillon shares that New York City, New Orleans, Chicago and especially the District of Columbia Public Schools (DCPS) have made significant advancements to improve school autonomy (2011). In fact, while some would look to autonomy as a reward for academic performance, DCPS has a program wherein schools of varying performance levels are given greater autonomy, called the DC Collaborative for Change (DC3) (Dillon, 2011). The concluding question presented in this article is the extent to which autonomy should be granted to schools and in what areas, however, there is little debate that some decisions should be made by those working directly with students.

There are a few research articles that specifically examine greater autonomy in larger districts. (Ouchie, 2006; Steinberg, 2014). Interestingly, in Edmonton, Alberta one reform-minded superintendent had the goal to give greater decision-making authority to principals (Ouchie, 2006). What makes this research unique is that principal autonomy was the goal in and of itself, which is especially important as autonomy is critical to mental wellbeing (Baard, Ryan & Deci, 2004; Deci & Ryan, 2000). This effort helped to smooth the poor relationship between principals and central office and ultimately helped increase student learning (Ouchie, 2006).

After reviewing autonomy efforts in Seattle and Houston, Ouchie compared their academic outcomes against those of Los Angeles, New York, and Chicago. Unfortunately, varying academic tests made it somewhat difficult to compare students results among different school districts, however, the decentralized districts tended to do better academically than centralized districts. As an interesting final note, Ouchie observed:

"If a state dictates through categorical funds or detailed instructional rules what schools should do, or if a superintendent micromanages principals, they then have a conflict of interest, if they attempt to audit or hold the principal accountable. In effect, the superintendent (or the state education agency) is then auditing its own decisions."

While this impassioned call to autonomy is stirring, there are concerns about how autonomy efforts are implemented. In a recent look at school autonomy initiatives, researchers looked at Boston, Chicago, New York, and Oakland, using reports, conference papers, and journal articles from the 2000-2010 time period (Honig & Rainey, 2012). In this work, small performance improvements were noted in districts pursuing autonomy, with significant caveats (Honig & Rainey, 2012). In their comprehensive literature review Honig and Rainey found that districts may have a goal for greater school autonomy, however, many schools did not experience greater autonomy despite well-meaning central offices. They conclude the improvements in school performance may have come from the focus on improving teaching and learning, however, as a whole the autonomy initiatives were only partially implemented, limiting their success (2012). As their work concluded, suggestions for future research included developing the ability for central offices to support autonomy and to examine schools as they go through autonomy initiatives and their eventual outcomes (Honig & Rainey, 2012).

To discuss autonomy within a more specific context, another piece of research evaluated whether autonomy improved outcomes in Chicago in the elementary setting (Steinberg, 2014). In Steinberg, the findings showed that after two years of autonomy with regards to programming, academics, and operations, there was no gain in math or reading scores, however, reading proficiency did improve by the end of the second year. In the study, principals involved in the Autonomous Management and Performance Schools (AMPS) program tended to favor autonomy on the school budget and instruction, however, did not prefer to do so over professional development or the school calendar. Principals also preferred to leave the school schedule alone as well. Interestingly, the principals of more successful schools tended to use less of the autonomy they were granted versus principals in less successful schools. To complete this research, Steinberg used regression discontinuity equations, which allows for causation to be explored in regard to an intervention in a quasi-experimental fashion (2014). His article includes the final observation that a two-year autonomy initiative offers highly tentative conclusions, however, this research lightens the somewhat dour look that Honig and Rainey had in their survey of school autonomy, at least in regard to Chicago.

To round out the discussion of community type, there are a few additional considerations. Returning to the Chang, Leach and Anderman article, urbanicity is not necessarily a negative predictor of principal commitment to a district, once autonomy support of superintendents is introduced (2015). That said, being in an urban section of Chicago has been found to be a statistically significant predictor of principals changing schools (Gates, et al, 2006), which begs the question, what level of autonomy should urban principals have if being in an urban setting is predictive of leaving? The researchers also note that rural administrators are more likely to change positions (presumably to get promoted) than either suburban or urban principals in

Chicago. In North Carolina, however, "principals in urban schools had an increased likelihood of leaving the system and changing schools and decreased likelihood of transitioning to be a non-principal than those in rural schools, and principals in suburban schools were less likely to transition to a non-principal position" (Gates, et al., 2006). Again, it remains an important question: how much autonomy will a principal have if they have numerous transitions?

Finally, there are two remaining studies that illuminate the work of principals in urban settings (Méndez-Morse, et al., 2015; Peters, 2012). In terms of the work conducted by Méndez-Morse, et al, they conducted a national survey to learn more about the demographic factors of Latina/Latino principals, their individual career paths, and the schools they led. Collecting the names of these administrators was challenging, as their information requests met with varying levels of cooperation from state agencies. Once the contact information was collected, there were one thousand potential respondents from around the country, however, the eventual response rate for the survey was 36%. At this time, the survey was the largest Latino study of its type. A finding from this research revealed approximately two-thirds of Latina administrators serve in urban elementary settings and in lower income schools (Méndez-Morse, et al, 2015). This article is particularly rich in gender-related data, however, a lengthier treatment for this information will be given in the section regarding female leaders of color.

Finally, a much more personal set of insights regarding the urban principalship is revealed in Peters work, where she interviewed two principals who served one after another in a high needs high school (2012). Structured as an instrumental case study, Peters was looking to explore age, race and gender and the beginning and maintenance of school reform within an urban setting (2012). In this study, the first principal was given intensive training in preparation for opening the high school, which would be situated within the same building as two other high

schools. In her initial efforts, the goal had been to improve the culture of the school. She was

given scant administrative resources to support her work; she resigned after that school year.

Her successor faced similar problems, however, her situation was even more challenging as she

was appointed to the school near the start of the year despite her predecessor leaving with a six-

week notice, which had been provided in early July (Peters, 2012).

This specific successor also ran into considerable problems as she was currently working

at the district office where she was expected to maintain her efforts while simultaneously

preparing for her upcoming role as principal for the following year. She reported very little

autonomy in her work; she was simply expected to perform (Peters, 2012). Similarly, both the

former and latter principals reported very little support from the financially strapped district,

either in terms of funding or through mentoring.

On a concluding note, the research in this section is specific to the autonomy of urban

schools in highly populated states (Dillon, 2011; Honig & Rainey, 2012; Ouchie, 2006; Peters,

2012; Steinberg, 2014). Using US Census Data, one will note that California, Florida, and the

northeastern states are the most densely populated areas in the United States (2010). One could

reasonably presume that the most highly populated states/regions have the greatest challenges as

it relates to principal autonomy, which makes geographic considerations an interesting predictor

variable for this dissertation.

Gender Considerations and the Principalship

Directly related to hypotheses 2-5, leadership research regarding gender is a critical part

of this study. Introduced as an additional control, gender will be analyzed to determine its

significance as a predictor variable for principal autonomy. In this section's research, the focus is

often not on autonomy specifically; however, the implications for autonomy will be discussed.

According to the most recently published School and Staffing Survey (SASS) by the NCES, there were more women than men serving as principals in the 2011-12 school year (NCES, 2012). During that school year, 48.4% of school administrators were male and 51.6% were female. This is a marked difference from prior years. During the 1999-2000 school year, the SASS indicated a 56.2% male and 43.8% female split (NCES, 2000). The shift toward an increase in female school leaders is interesting as numerous researchers have historically noted that management tends to be described in terms of traditionally male traits that are developed throughout a male's socialization (Adkison, 1981; Chapman, 1975; Erikson, 1985). The professionalization of educational administration and the increased focus on organizational management was used to differentiate the perceived feminine, nurturing work of teachers and the more male-oriented work of administrators (Adkison, 1981).

Interestingly, however, there is early research to suggest men and women do not differ significantly in having an interpersonal- or a task-driven approach to leadership (Chapman, 1975; Eagly & Johnson, 1990). As noted in both articles, this was not expected, given the unique socialization processes and eventual outcomes for both boys and girls. While the expected results were not observed in terms of interpersonal versus task-oriented leadership, men have been found to be more autocratic in their approach to leadership whereas women trend towards democratic leadership (Eagly & Johnson, 1990).

This contrasts with recent research, wherein there are not only efforts to support women in their pursuit of leadership opportunities (Sandler, 2014) but there are also indications that women are uniquely suited to bring transformational leadership and cohesion building skills to their work settings (Evans, 2014). Interestingly, aspects of servant leadership, originally developed by Robert Greenleaf, to include "daily reflection, consensus building, healing

relationships" and finding one's worth and confidence in developing one's abilities were factors in which women differed with male leaders in a statistically significant manner (Fridell, Belcher & Messner, 2009).

Empirical research has been conducted to describe and better understand leadership considering gender-related considerations (Hoyt & Simon, 2011; Latu, Mast, Lammers & Bombari, 2013; Scott & Brown, 2006). To this end, there have been some interesting findings in the relationship between women's leadership behaviors and seeing images of successful female leaders (Latu, Mast, Lammers & Bombari, 2013). In this research female and male participants were asked to give a speech with pictures of a successful male politician and two pictures of successful female politicians. The length of the speech, which served as the dependent variable, remained the same for males regardless of which picture was shown, however, women spoke significantly more when a picture of a female was presented. Furthermore, the female speeches were considered of higher quality when accompanied by the picture of the woman politician ((Latu, Mast, Lammers & Bombari, 2013).

An earlier study revealed that a high-level role model does not always translate to greater confidence in other females (Hoyt & Simon, 2011). In this research, which comprised two studies, the participants (exclusively women) were exposed to pictures of high-level female leaders, male leaders, an equal sample of male and female pictures, or pictures of flowers. They were then given a leadership task, after which they were asked about their "perceived performance, perceived task difficulty, and feelings of inferiority" (Hoyt & Simon, 2011). Results showed participants who viewed the high-level females believed they did not do as well as those shown flowers and perceived greater feelings of inferiority. In their second study, Hoyt and Smith expanded their efforts to include mid-level females and a measure for leadership

aspirations. They found women tended to favor mid-level female leaders more so than high-level females or males and that high-level females significantly lowered their aspirations for leadership (Hoyt & Simon, 2011), which outlines the challenges women may face as they consider leadership opportunities.

Moreover, another study found that encoding traditionally male leadership attributes with females, and vice versa is harder to encode than examples that meet traditional understandings (Scott & Brown, 2006). When words like "relentless" or "approachable are displayed, they are more quickly attributed to males, however, communal words are more quickly attributed to females. To ascribe leadership tasks in an agentic (masculine) way regarding a female leader took significantly longer to encode than a communal behavior task. In their related study, Scott and Brown also found that research participants tended to describe themselves in agentic terms when they read about male managers versus female managers, when the number of communal responses was controlled. As a part of their conclusion, the researchers also went to say the results showed "that gender bias in leadership may emerge quite early on during information processing" (Scott & Brown, 2006), which offers a tentative, yet powerful statement about the results of male and female socialization. Directly pertinent to this dissertation, female leaders may find the gender bias against female leaders negatively impacts their perceived professional autonomy.

Several studies have examined the ascension of female leaders, in multiple contexts, to include the challenges and opportunities they face (Adams & Hambright, 2004; Evans, 2014; Sandler, 2014). In a recent research endeavor in France, women were found to be more inclined towards transformational leadership, team building, and traits like empathy and effective communication skills, which are highly appropriate in our increasingly globalized workplace

(Evans, 2014). The interviews are especially revealing as the results match the general Western

trend towards the inclusion of female leaders. In the United Kingdom, there has been an effort to

help women executives, so they are better able to represent their career aspirations and

performance to put them in the best place for advancement and recognition of their efforts

(Sandler, 2014). Women learn how to share their leadership philosophy, find mentors, and

become assertive without being aggressive. These efforts are in alignment with those that would

indicate female leaders need to develop and change to reach top positions (Sandberg, 2013). In

terms of the principalship, this is also true. In a survey research effort, women were found to be

reluctant to seek administrative posts due to negative personal experience with female

administrators, the political elements of the work, and the complaints of those in the school

community (Adams & Hambright, 2004). The researchers also state that establishing supports

for future administrators to explore the principalship would be helpful in remedying the shortage

of administrators.

There is considerable research that explores leadership style and gender (Burns & Martin,

2010; Eagly & Johnson, 1990; Fridell, Newcom Belcher & Messner, 2009; Wang, Chiang, Tsai,

Lin & Cheng; 2013) to include the advantages of an androgynous approach (Erikson, 1985;

Kark, Waismel-Manor, & Shamir, 2012). Early research has shown that women are more likely

to embrace participatory leadership styles (Eagly & Johnson, 1990) with recent scholarship

showing females have a greater propensity toward transformational leadership (Brandt &

Edinger, 2015) or at least favor attributes of transformational leadership (Martin, 2015). Female

leaders have also been shown to favor servant leadership (Fridell, Newcom Belcher & Messner,

2009) and pay a heavier price when they adopt a directive approach than men (Kark, Waismel-

Manor, & Shamir, 2012; Wang, et al., 2013). There were no gender differences relate to the

embrace of an invitational leadership style, which has been described as a self-actualizing perspective (Burns & Martin, 2010). Invitational leadership, however, was found to be significantly and positively related to school performance.

Androgynous behavior has shown to be positively linked to transformational leadership, as well an employee's identification with their leader (Kark, Waismel-Manor, & Shamir, 2012). This largely played to an advantage for women, as females were more likely to be identified as being androgynous according to Kark et al. Historically, however, the principalship was described in terms of masculine traits, though androgyny has been recognized as a path forward especially for female leaders (Erickson, 1985). However, women administrators do face potential challenges in their family lives as they balance professional and personal expectations (Eckman, 2004; Erickson, 1985).

In terms of student performance, there is largely no difference between having a female or male leader (Green, 2015; Nichols & Nichols, 2014), however, there are differences between male and female leaders (Eckman, 2004; Marvel, 2015; Miller, Fagley & Casella, 2009). In a recent study, New York City students did not do better when their principal was a male or female, however, it was noted that schools with female leaders in Brooklyn did not do as well as those led by male principals (Green, 2015). Green did point out, however, that when similar schools in the Bronx and Brooklyn were compared they perform similarly. Moving beyond performance alone, it was found that male and female principals in urban settings tended to do equally well, however, female leaders were rated significantly lower in terms of their leadership (Nichols & Nichols, 2014). As such, female leaders may find their leadership questioned more than their male counterparts, which could negatively impact their perceptions of professional autonomy.

Between male and female principals, drawing from a sample of Illinois, Minnesota, and Wisconsin, it has been noted that males tend to have fewer years in the classroom versus females among other differences (Eckman, 2004), which has been noted in earlier research as well (Erickson, 1985). Additionally, men and women tend to have comparable levels of job satisfaction, aspire to the superintendency equally, and both similarly experience greater role conflict the younger they are (Eckman, 2004). Interestingly, Ekman also found that male administrators were significantly more likely to be married and have kids at home. Gender differences also are significantly related to decision making; when provided decision-making scenarios men tend to be more willing to make more risky decision making, in which risk is defined as situations were outcomes are not easily known (Miller, Fagley, & Casella, 2009). Finally, a female principal has been significantly linked with female teachers working more overtime when compared to schools with male principals (Marvel, 2015). Male teacher overtime, however, did not have any differences regardless of the gender of the principal. This research endeavor was intensive, as its inquiry spanned two datasets: the 2003-04 and 2007-08 Schools and Staffing Survey. For this study, male teachers were only found to have gender congruence with their principal, in terms of overtime, during the 2003-04 school year when teacher, principal, and demographic controls were not held constant (Marvel, 2015).

Racial Considerations and the Principalship

Similar in terms of the consideration of gender, race is another crucial variable being evaluated for its significance as a predictor variable in this dissertation. The literature presented in this section will provide a backdrop for Hypotheses 2-5 in that white men tend to have the greatest professional autonomy. As in the previous section, the research in this section has implications for perceived autonomy, which will be discussed.

In terms of the racial composition of principals in the United States, the NCES reports that in 2011-12, 6.8% of principals were Hispanic, 80.3% were white, 10.1% were black, and 2.8% were coded as Other (2012b). This is somewhat similar to the statistics reported in 2003-04, where 4.8% were Hispanic, 84.1% were white, and 9.3% were black (2004). Additional groups were noted for the 2003-2004 school, which were American Indian / Alaska Native, non-Hispanic at 0.7%, Asian non-Hispanic where 0.7%, Native Hawaiian or Other Pacific Islander, non-Hispanic at 0.1%, Multiple races, non-Hispanic at 0.4% (NCES, 2004). The last groups, presumably like the "Other" category in the 2011-12 data, totaled 1.9% of US principals. Based on the above observations, one could reasonably conclude racial proportions in the US principal population are relatively consistent.

Aside from the percentages of administrators in each racial group, it is important to recognize that race was constructed in light of a white normative, which underpins and reinforces a system of white privilege in the United States. One can readily see white privilege's impact on US institutions and the advantages that are systematically conferred to those coming from a white cultural background and denied to peoples of color (Bell, 1992; Baumgartner & Johnson-Bailey, 2010; Lund, 2010; Sensoy and DiAngelo, 2009; Wildman & Davis, 1995; Wise, 2008). The impact of white privilege is substantial for this research, particularly in terms of the collegiate experiences needed to acquire an administrative license and pursue a career in educational administration. There are profoundly troubling realities about how admission processes disadvantage applicants of color, particularly as culturally biased assessments like the Graduate Record Exam often figure largely into admission determinations (Baumgartner & Johnson-Bailey, 2010). Using case studies of a woman of color and a white woman, the researchers found evidence that applicants of color were not invited to consider opportunities at

the college campus or be accepted on a social level. Additionally, the courses descriptions did

not include items like race or white privilege as topics that would be explored in class. The

retention efforts were also found to be lacking for applicants of color who often are first-

generation college students (Baumgartner & Johnson-Bailey, 2010). The observation regarding

systems of privilege is extended and is increasingly nuanced by writer Audre Lorde, feminist and

social activist, who noted women of color are not a homogenous group. She herself identified as

a "black lesbian, socialist, feminist," where she noted that each difference from the "mythical

norm" of male whiteness is considered evidence of inferiority (Lorde & Clarke, 2007). Given

these systems of privilege, the possibility exists that administrators of color will perceive lower

professional autonomy, especially with pre-service training that endorses a white normative.

On a structural level, white privilege is pervasive in adult education (Lund, 2010). In her

research, Carole Lund identified trends by which white students and teachers form a baseline for

academic expectations. White students are given a systemic advantage over students of color,

whose credentials are questioned, while theirs are not. Furthermore, white students can make

decisions without taking their race into consideration, can ignore criticisms given by those of

color, and white faculty is favored in tenure opportunities, professional judgment, and in terms of

hiring people like themselves (Lund, 2010).

Given the societal concerns regarding the institutional and systemic advantages given to

some and denied to others, there has been a push to better understand and confront the structures

that perpetuate privilege (Carr & Steele, 2009; Gooden & O'Doherty, 2015; Sensoy & DiAngelo,

2009; Hooks, 2015; Theoharis & Haddix, 2011; Wildman & Davis, 1995). Within the discussion

of privilege, there is a deeply troubling observation that our language categorizes and thereby

obscures systems of privilege that advantage some over others whether racially, by sexual

orientation, or by gender (Wildman & Davis, 1995). In empirical research, it has been noted that language has a very real impact; performance often falls for marginalized groups when a specific negative stereotype is presented while working on a stereotypically related task (Carr & Steele, 2009). Carr and Steele also indicate there is evidence that stereotyped groups, in this case, women, will show "inflexible perseverance" in solving problems, wherein they do not grant themselves room to consider their options when solving a related stereotyped problem. Often called stereotype threat, there is a corollary phenomenon in which non-marginalized groups experience stereotype lift. In this phenomenon, non-marginalized groups perform at higher levels than marginalized groups when negative stereotypes are introduced (Carr & Steele, 2009).

From a higher education perspective, Sensoy and DiAngelo created an "open letter" to their colleagues in academia (2009). They insist that ensuring equity by sharing power, encouraging diverse voices in discussions, confronting inequities as they emerge, and self-examination are all ways to respect colleagues and students (Sensoy & DiAngelo, 2009). As a practical extension of these deep inequities, Bell Hooks, noted feminist and social activist, has observed that black writers experience major challenges and especially if they focus on gender or race in their work (Hooks, 2015). Subsequent publications on unrelated topics are often disregarded. Hooks also observed that mainstream appreciation of black writers is easily saturated; she states the practices of the media virtually ensure only one black writer can be appreciated at a time (Hooks, 2015).

In terms of race and the principalship specifically, there has been concern about the working relationships between black and white administrators (Brooks & Jean-Marie, 2007). In their 2007 research publication, Brooks and Jean-Marie found there to be mistrust between black and white administrators and stated that white administrators held most of the central office

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positions. Additionally, it was also noted that discussions of race were avoided; there was a greater preference to discuss student backgrounds in terms of social class to avoid conflict. Black administrators were also concerned that white administrators were not as dedicated to students of color. Finally, it should be noted the interactions between the administrative groups were considered more transactional than transformational (Brooks & Jean-Marie, 2007). The lack of trust between black and white administrators in this research raises concerns for perceived professional autonomy, as autonomy would presumably be granted when trust exists between leaders at the building and district level. As whites occupied most positions in the district office, the perceived autonomy of black administrators could be compromised.

While this initial research offers a dour view of multi-racial interaction, subsequent research shows a more encouraging picture (Gooden & O'Doherty, 2015; Theoharis & Haddix, 2011); specifically, principles have emerged to help schools be more inclusive (McLesky & Waldron, 2015) and culturally responsive (Khalifa, Gooden & Davis, 2016). In a research project on building racial awareness in pre-service principals, twelve educators were given the opportunity to write racial autobiographies to increase their racial awareness (Gooden & O'Doherty, 2015). In their analysis, three trends emerged in the student's writing: racial isolation, family influence, and the uncomfortable feeling of being in a group made up primarily of those not your race. Other findings included the questioning of the dubious value of "colorblindness" and a growing awareness of institutional privilege that many students in the group experienced. The black participants reported an earlier awareness of racial privilege than their white peers. Interestingly, as the report concluded a compelling question was asked to guide future research: would the writing of the racial autobiography, as impactful as it was, influence future leadership practices as principals (Gooden & O'Doherty, 2015)?

As to inclusivity and culturally responsive leadership, several ideas have emerged. First, school leadership is increasingly being called on to create a culture of shared values around inclusivity, which is to be supported by student performance data and ongoing professional development (McLeskey & Waldron, 2015). Secondly, after an analysis of existing literature, researchers Khalifa, Gooden, and Davis identified five elements of culturally responsive leadership (2016). In this work, a leader must be critically self-aware of their values, supportive of a culturally responsive curriculum, teacher preparation, inclusivity, and student/parent engagement (Khalifa, Gooden & Davis, 2016).

In another qualitative research study, there is an indication that leaders who meet the demographic requirements to receive systemic privilege can be powerful guardians of equity (Theoharis & Haddix, 2011). In this research effort, the six principals were found to have made learning and talking about race a priority in their lives. Additionally, they made sure to race into data discussions regarding school discipline, special education, tracked educational programs to ensure equity remained at the forefront of their staff discussion. These administrators also forged relationships with their families of color, encouraged their participation in school events and made a point to know their student's names. The researchers also go on to state that understanding the inequities faced by their students was the first stage of taking apart institutional privilege in their schools (Theoharis & Haddix, 2011). While this advocacy is admirable, there can be costs for such work. White leaders who speak out about injustices, particularly those related to race may encounter challenges from those who prefer the status quo. In Juarez and Hayes' recent publication, they developed a composite story of people and groups who have pushed back on racial inequity and faced sanctions for doing so (2014). In their counter-narrative, they presented a picture of two educators who help train future teachers. One

is a white woman and the other a black man. As both share similar convictions regarding equity, both are increasingly disregarded and silenced for their advocacy. One comes to be regarded as a race traitor, while the other is termed a black supremacist, which further outlines the challenges of addressing social inequity (Juarez & Hayes, 2014).

Intersection of Race and Gender: Female Leaders of Color

Coming out of the discussions of leadership, gender, and race it is critical to consider the intersection of gender and race; the circumstances that surround female leaders of color. In terms of the research, there are considerable challenges for women leaders of color (Bell, 1992; Bell, Meyerson, Nkomo & Scully, 2003; Montoya, Hardy-Fanta & Garcia, 2000; Marbley, Wong, Santos-Hatchett, Pratt & Jaddo, 2011). In academia, women of color have found deep restrictions on their professional autonomy, outsider status, and a level of invisibility when it came to communication and informal opportunities for professional enrichment (Montoya, et al, 2011). In their work, Montoya et al suggest that women must integrate their gender, race, and other facets of themselves into their professional selves and view these aspects as resources on a personal and professional level.

Another challenge that women of color face is the interactions with white women (Bell, Meyerson, Nkomo & Scully, 2003) and the myths that surround black women (Bell, 1992). White women can access privilege, which is a powerful encouragement to not challenge the status quo, whereas this option is not open to women of color (Bell, et al, 2003). This has contributed to fractured relationships between women of different races and a lack of trust between racial groups, which Bell et all found as they attempted to understand tempered radicalism as a multi-racial research team. In this way, the research mirrored reality; just as women of different races face challenges working as a team, the same was true of the researchers

themselves. Interestingly, they found that exploring their own inter-dynamics as a group had to

be a part of their study regarding women's work to address inequity. The group had to come to

terms with the realities of women being uneasy allies when it came to women from other races

(Bell, et al, 2003). This work intersects with misconceptions of black women being aggressive

and controlling (Bell, 1992), whereas a white woman can remain silent, whether as an act of

compliance or passive resistance (Bell et al, 2003).

Black women, coming out of a tradition of slavery, have not "had the privilege of being

submissive, docile, or fragile. Rarely, if ever, have Black women been afforded the feminine

characteristics attributed to white women" (Bell, 1992). Writing in response to the Clarence

Thomas and Anita Hill controversy, Bell states there is a perception that hiring black women is

an excellent "two-fer," as she describes them, based on their gender and race and that advanced

degrees from prestigious institutions creates opportunity. Additionally, there is a perception that

well-educated black women do not need a gatekeeper to assist them despite how Thomas-Hill

incident played out; Bell points out the importance of "Black gatekeepers" even for the

exceptional (1992). Given these realities, black women may advance in specific areas due to

gender and racial considerations, however, equitable advancement remains inaccessible.

Concerns may also extend to perceived professional autonomy as well, where female leaders of

color do not feel equally empowered toward a sense of professional autonomy. Additionally,

black women face a unique challenge, in that race and racism, particularly in terms of its effects

on black men, provide powerful encouragement to keep quiet about incidents of sexism (Bell,

1992).

Within education, the ascent to leadership opportunities is also often troubled by a lack of

mentors (Allen, Jacobson & Lomotey; 1995; Enomoto, Gardiner & Grogan, 2000; Magdaleno,

2006; Méndez-Morse, 2004; Rodman, 1987). To become a principal, it has been noted

historically by Flora Ortiz (1987), an education professor at the University of California at

Riverside, that sponsorship is a major advantage for those seeking an administrative post and it

has not been as freely offered to administrative candidates of color and women (Rodman, 1987).

As such, male candidates for educational administration have a significant advantage in being

selected for an administrative post. Ortiz (1987) goes on to say people of color need better

educational opportunities to increase the numbers of Hispanics and blacks in educational

administration (Rodman, 1987). To that end, she also proposes mentoring should be a formal

process for growing leadership ability in women and peoples of color.

In many cases, a woman of color will experience limited forms of mentorship, however,

when they do, the assistance may often come from white males (Enomoto, et al, 2000), which

could affect an administrator's perception of professional autonomy as they begin their

administrative careers. With mentorship, a protégé will gain organizational political awareness,

access and develop networks and find diverse mentors to help them progress in their careers. In

some cases, women have found that moving into primarily white communities has led to career

advantages, however, at the cost of their family and community support systems (Enomoto, et al,

2000). In other research, particularly related to Latinas, leadership opportunities are hard to

attain, let alone find role models (Montoya, Hardy-Fanta & Garcia, 2000) and are supported by

mentorship systems outside of education (Mendez-Morse, 2004). In her work, Mendez-Morse

found that Latinas, lacking in formal mentorship structures, would construct mentor experiences

from family member interactions, particularly from their mothers and secondarily from the

fathers. Family members who went on to college were also considered mentors of a sort, even if

the woman did not have a lot of formal contact with them. Most of the women did report having

an assistant principalship and the mentorship that often comes from those experiences (Meńdez-Morse, 2004). This contrasts with efforts to provide mentors to Latino's through the California Association of Latino Superintendents and Administrators (CALSA) Mentoring Program (Magdaleno, 2006). In this effort, mentors and mentees agree to a yearlong mentorship to help the mentees gain from the experiences and perspectives of leaders in the field. Coming out of his dissertation Magdaleno found that Latino leadership in schools is particularly low, given how many Latino/Latina students attend California schools (2006). Started in 2004, this group is still in operation today (CALSA, 2017).

In a related study, the differences between mentorship and sponsorship were highlighted as the former provides general advice and support, whereas the latter has the power to open advancement possibilities (Allen, Jacobson & Lomotey, 1995). In this regard, the researchers found that university professors were the most important sponsors, however, building principals came second. Given the significant hurdles faced by women of color in pursuit of leadership opportunities, sponsorships are critical, however, there is concern that white men, who often hold these positions, do not frequently sponsor African American women (Allen, Jacobson & Lomotey, 1995). The researcher's criticism continues in relation to graduate programs who could do more to attract and support women of color as they pursue careers in educational administration.

In terms of women principals of color, there is research to suggest they face significant challenges based on their gender and race after they become administrators (Peters, 2012; Reed, 2012; Wrushen & Sherman, 2008; Meńdez-Morse, Murakami, Byrne-Jimenez & Hernandez, 2015). In a recent publication based on the National Latina/o Leadership Project, Latina principals were found to work largely in urban settings or with high poverty populations; in their

practice, they do face questions about their competency and confront female stereotypes in their work (Meńdez-Morse, et al, 2015). Interestingly, this research also revealed that Latina leaders often see themselves as female and in terms of their race, which is often referred to as Latinidad, wherein both gender and race are co-mingled. Being a Latina woman was considered by respondents to be an advantage when working with children, however, this was not the case regarding their work with adults. Of note, however, white women typically would describe themselves in terms of gender and not race, which could be related to whiteness not being a central part of the women's identity (Meńdez-Morse, et al, 2015).

White female principals, let alone female administrators of color, are not well represented in high school administration (Wrushen & Sherman, 2008). In their qualitative research effort, Wrushen and Sherman, based on the interviews of eight administrators coming from white, Asian, Hispanic, and black racial backgrounds, found that women have found ways to describe their leadership in ways that deemphasize power in favor of compassion and community servants. Additionally, the female leaders of color recognized how their gender and race complicated their efforts to gain administrative positions and be successful once the position was attained (Wrushen & Sherman, 2008). These findings are similar to those regarding African American female leaders, who often do not receive the same level of respect as male peers; it has been hypothesized that black women were disrespected by others in response to their number of professional accomplishments (Reed, 2012). This is compounded as youth as well as gender came into the picture as disadvantages to female leaders of color when working with their staff (Peters, 2012). Peters goes on to state the lack of mentoring was a major concern of female leaders of color who reported a preference for a female African American female mentor (2012).

Conclusion

In this review of the literature, the goal has been threefold: illuminate the complexity of the principalship, make the case that autonomy is essential, particularly for decision-makers, and share how age, years of experience, geographic context, gender, and race greatly impact the autonomy of principals and are therefore useful predictor variables for this dissertation. I began the literature review with a discussion of autonomy, as described within self-determination theory. I quickly sought to establish through the research that autonomy is an essential and universal need (Deci & Ryan, 2000; Milyavskaya & Koestner, 2010; Church, et al, 2012). To that end, research has shown autonomy is essential in numerous work settings, particularly in relation to job satisfaction (Baard, Deci & Ryan, 2004; Chang, Leach & Anderman, 2015; Deci, Connell & Ryan, 1989; Eyal & Roth, 2010). Additionally, another research project was described in which veteran, instructionally oriented principals were found to have a propensity for "creative insubordination" to support their students and school community (Haynes & Licata, 1995).

From the review of autonomy, I moved on to school governance, particularly as it relates to instructional leadership (DuFour & Mattos, 2013; DuFour & Marzano, 2011; Wilhelm, 2013) and moved into a discussion regarding the managerial components of the work as well (Alvy & Robbins, 2004; Cooley & Shen, 2003; Copland, 2001; Rallis & Highsmith, 1986). Finally, a brief discussion of the budgetary, disciplinary, and professional development related responsibilities was reviewed using O*NET, a website sponsored by the US Department of Labor (2016). The intent of this outline is to describe areas where principals generally have responsibilities to carry out, where presumably they would have a level of autonomy.

Additional variables were also explored, to include age, years of experience and geographical considerations. One will recall the empirical evidence of a link between age/years of experience on autonomy (Haynes & Licata, 1995; Van den Broeck, Ferris, Chang & Rosen, 2016). Veteran principals, particularly those with a strong curriculum background, have a statistically significant propensity towards creative insubordination (Haynes & Licata, 1995), which could certainly be viewed as a form of administrative autonomy. Further research tends to complement these findings; through a meta-analysis regarding self-determination theory, researchers demonstrated that years of experience and age were statistically significant predictors of autonomy (Van den Broeck, Ferris, Chang & Rosen, 2016). On the other side, research has also shown that age and a related lack of experience can create challenges for principals, particularly when working with adults (Peters, 2012). Finally, it was observed in this literature review that much of the research about autonomy relates to urban settings in densely populated states (Dillon, 2011; Honig & Rainey, 2012; Ouchie, 2006; Peters, 2012; Steinberg, 2014). Given the number of schools in highly populated areas, it would logically follow that principals may not have as much professional autonomy as other settings; principals in this situation would presumably have more, similarly situated, colleagues within their school districts and communities.

The review then continued to discuss gender in light of the principalship and how gender might impact a leader's perception of autonomy. Older research indicates women trend towards participatory leadership (Eagly & Johnson, 1990), with more recent evidence that women favor transformational leadership (Brandt & Edinger, 2015; Martin, 2015). There is also empirical research to indicate female principals embrace servant leadership more than males (Fridell, Newcom Belcher & Messner, 2009) and are less likely to be accepted when they use a directive

approach than men (Kark, Waismel-Manor, & Shamir, 2011; Wang, et al., 2013). Research also

shows no evidence that male principals are more effective than female principals when it comes

to student outcomes. (Green, 2015; Nichols & Nichols, 2014). That being said, research

suggests male leaders are more likely to be married and have children (Eckman, 2004), women

principals are linked with female employees working overtime, (Marvel, 2015) and that male

leaders tend to make riskier decisions than females (Miller, Fagley & Casella, 2009).

The research regarding race revealed that white privilege remains a fundamental issue

that has persisted within our country and its institutions whereby being white carries significant,

systemic advantages (Baumgartner & Johnson-Bailey, 2010; Lund, 2010; Sensoy and DiAngelo,

2009; Wildman & Davis, 1995), which indicates that race may well be a relevant predictor

variable for this dissertation. Thankfully, the concerns regarding institutional privilege have led

to continued desire to comprehend and dismantle systems that aid some groups over others

(Sensoy & DiAngelo, 2009; Wildman & Davis, 1995). While these are deeply concerning, there

is evidence to suggest that principal preparation programs are working to encourage greater

racial awareness in aspiring principals (Gooden & O'Doherty, 2015) and that white principals,

dedicated to socially just leadership practices can be powerful in addressing systems of racial

privilege (Theoharis & Haddix, 2011).

Finally, the review of the literature relative to female leaders of color found considerable

challenges in multiple settings for this group of leaders (Bell, 1992; Bell, Meyerson, Nkomo &

Scully, 2003; Montoya, Hardy-Fanta & Garcia, 2000; Marbley, Wong, Santos-Hatchett, Pratt &

Jaddo, 2011). Research has also shown that women leaders of color also face a lack of mentors,

which often help new leaders transition to formal positions of power (Allen, Jacobson &

Lomotey; 1995; Enomoto, Gardiner & Grogan, 2000; Magdaleno, 2006; Méndez-Morse, 2004).

Finally, reviewing that female principals of color also face negative stereotypes and prejudices due to their gender and race (Peters, 2012; Reed, 2012; Wrushen & Sherman, 2008; Meńdez-Morse, Murakami, Byrne-Jimenez & Hernandez, 2015), establish factors that could contribute to diminished perceptions of professional autonomy.

This dissertation will focus on the analysis of the perceived autonomy of principals, with special emphasis on work domains that primarily focus on building-level decisions versus those that are shared responsibilities with district office. Also, the upcoming analysis will include logistic regressions to analyze the perceived autonomy of principals in curriculum establishment and in spending the school budget. With the information revealed in the review of relevant literature, I have sought to show the multi-faceted work that principals face and establish the importance of autonomy, particularly for decision-makers like principals. Additionally, this review of the literature provides an understanding of the demographic variables under consideration, their likely utility as predictor variables, and to provides a backdrop for the research hypotheses to be analyzed.

Chapter Three: Methodology

Survey and Related Dataset

As a result of the Educational Sciences Reform Act of 2002, the NCES was charged with collecting information regarding schools and educational staff (OMB A, 2015). The National Principal Teacher Survey, which will be used in this study, emerged from the SASS, which served as a means for the NCES to collect data on teachers and principals. Prior administrations of the SASS were completed in 1987-88, 1990-91, 1993-94, 1999-2000, 2003-04, 2007-08, and 2011-12 (OMB A, 2015). To inform the new survey, the 2014-15 NTPS Pilot led to changes in how the new iteration of the NCES data collection efforts was implemented on a procedural level (OMB A, 2015). In this new effort, the data collected is designed to be representative at a national level, use existing data sources to lessen the work related to take the survey, and to remain a useful, nationally representative source of education-related statistics (OMB A, 2015). Especially pertinent for this research endeavor, the NTPS puts a special focus on collecting data for school-level decision-making, which provides data to examine principals' perceptions of their professional autonomy.

There is considerable information that can be accessed regarding the 2015-16 administration of the NTPS. Two "supporting statements," released by the Office of Budget Management, provide information about the data collection process, sampling, weights, and expected response rates (OMB A, 2015; OMB B, 2015), which will form the basis of much of chapter three.

For this research analysis, I am fortunate to be conducting this work just as the NCES finalized its first iteration of the NTPS survey. Utilizing nationally representative data from the 2015-16 school year, this dissertation will evaluate the difference in perceived principal

autonomy between building and district level decisions. Additionally, this effort will be the first

to predict the perceived autonomy of principals based on race and gender using logistic

regression. The goal of this research is to understand how years of experience, race, and gender

may be related to perceived autonomy in decision-making within work domains commonly

attributed to the principalship.

Data Collection

Within the documentation provided to describe the 2015-16 NTPS, there is a timeline for

how data was collected and processed, which began in August 2015 with initial mailings.

Additional mailings for schools that did not respond were sent in September, December, and

February 2016 to maximize the participants in the study. Also starting in February, telephone

attempts were made to obtain surveys, after which field attempts were made as well. Data from

the surveys was captured starting in September 2015 and concluded in June of 2016; finally, the

data was processed from January 2016 through December 2016. Additionally, it should be noted

that data collection was modeled after the processes used in the 2014-15 NTPS Pilot Test and

earlier iterations of the SASS, (OMB B, 2015). Table 3.1 summarizes the steps for the

administration of the NCES surveys and the resulting processes whereby the data will be made

ready for applied research:

Table 3.1 Data Collection and Analysis

Activity	Date
Mail questionnaires/internet invitations to schools, request teacher lists	August, 2015
Mail second questionnaire package to non-responding schools	September, 2015
Mail third package to non-responding schools	December, 2015
Mail fourth package to non-responding schools	February, 2016
Telephone follow-up with schools to obtain teacher lists	September 2015 – October 2015
Clerical research operation to obtain teacher lists	October 2015 – November 2015

Mail Teacher Questionnaires as teacher samples are drawn	September 2015 – March 2016
Telephone follow-up to obtain school, principal, and teacher questionnaires	February 2016 – March 2016
Field follow-up to obtain teacher lists, school, principal, and teacher questionnaires	September 2015 – May 2016
Data capture of all questionnaires	September 2015 – June 2016
Data processing	January 2016 – December 2016
Analysis of the internet experiment	September 2015 – December 2016

From (OMB A, 2015)

From the information in Table 3.1, one will note the multiple attempts to get a response if the initial mailing did not yield a completed questionnaire and continued efforts to get the teacher lists from each surveyed school. Teacher questionnaires were then sent, after which further follow-up data collection efforts were completed (OMB A, 2015). Interestingly, an internet experiment was conducted using a different sample, to see if the convenience of an internet survey would increase response rates (OMB A, 2015).

Confidentiality

For this study, considerable effort was made to ensure confidentiality. The following was included in the OMB Supporting Statement A:

The NTPS data collection agent, the Census Bureau, shall comply with ED's IT security requirements as set forth in the Handbook for Information Assurance Security Policy; with related procedures and guidance, including the Federal Information Security Management Act (FISMA), Office of Management and Budget (OMB) Circulars, and the National Institute of Standards and Technology (NIST) standards and guidance; and with the Education Sciences Reform Act of 2002 (ESRA 2002; 20 U.S.C., § 9573). These requirements include the successful certification and accreditation of the system before it can be implemented.

Appropriate memoranda of understanding and interconnection security

agreements will be documented as part of the certification and accreditation

process.

From the initial contact with the participants in this survey through all of the

follow-up efforts, potential survey respondents will be informed that all of the

information they provide may only be used for statistical purposes and may not be

disclosed, or used, in identifiable form for any other purpose except as required

by law [Education Sciences Reform Act of 2002 (ESRA 2002; 20 U.S.C., § 9573)

(2015).

Herein, one can see a sincere effort to ensure that respondents are assured of the

confidentiality of their responses. Furthermore, one can also see the quantitative focus of this

research effort; the data collection is for statistical analysis that will not be personally identifiable

(OMB A, 2015).

The discussion of confidentiality also extends into the use of these data to conduct

original research (NCES, n.d.a.). To receive a data license and the relevant data, the researcher

must make a formal request, and complete an Institute of Education Sciences contract, affidavits

of non-disclosure, and a security plan. Applicants must identify a Senior Official (SO) who can

sign the license on behalf of the research institution. Additionally, a Systems Security Officer

(SSO) and Principal Project Officer (PPO) must be selected. The PPO is assigned to assist with

the daily operations with the data, whereas the SSO assists with data security (NCES, n.d.a.).

The SO cannot serve as the PPO, however, one person can serve as both the PPO and SSO. One

final consideration is that doctoral students may not apply for a license; however, they can be

authorized to use the data under their advisor's license (NCES, n.d.b.), which applies for this

research study. These requirements to ensure the security of the data will be carefully adhered to throughout the research process.

Population and Sample

The supporting documentation for the NTPS contains information regarding the sample and the overall population (OMB B, 2015). According to Supporting Statement Part B, the respondents for the 2015-16 NTPS included 96,405 public schools throughout the US and the District of Columbia that teach, at a minimum, one grade between first and twelfth (OMB B, 2015). To support NCES's efforts, "the NCES' 2013-14 Common Core of Data (CCD) will be used to construct the public school sampling frame" (OMB B, 2015). Relevant particularly to this study, there were a total of 8,300 principals surveyed in the 2015-16 NTPS, of which 7,000 were public school principals and 1,300 were from charter schools. The focus of this study was strictly regarding public, non-charter, school administrators. Base weighted response rates were expected to mirror that of the 2011-12 SASS or fall a little lower; for principals, this would mean 72.9% of those selected for participation, or lower, were expected to respond (OMB B,2015). In line with the prediction based on the 2011-12 SASS, the 2015-16 survey results had a response rate of 71.8%. As this study had less than an 85% response rate, the data set was analyzed to evaluate bias, as required by the NCES, which was found and largely addressed by weighting adjustments (Taie & Goldring, 2017). The base-weighted response rate was calculated "by dividing the weighted number of respondents who completed questionnaires by the weighted number of eligible sampled cases, using the initial base weight (the inverse of the probability of selection)" (Taie & Goldring, 2017).

In terms of sampling, principals were included as potential respondents when their school was selected (OMB B, 2015). Furthermore, the supporting statement indicates principals are

"weighted by the inverse of the probability of selection. The final weight contains adjustments for nonresponse and any other sampling or field considerations that arise after the sample has been drawn" (OMB B, 2015).

Data Management

Based on prior iterations of NCES surveys, there is reason to believe the 2015-16 NTPS survey will be cleaned and thereby readied for researchers. Evidence of this can be found in the timeline for the data collection and processing presented earlier in the chapter, as it specifically mentions data processing, which occurred in January 2016 through December 2016. Additionally, in the most recent iteration, the 2011-12 School Principal Survey underwent data cleaning. As identified in the explanatory booklet that came with the 2011-12 survey, missing data were imputed using logical or deductive methods (NCES, 2014). The questionnaire (and other instruments) have related questions which allow for reasonable guesses to be made to address the missing data. In addition, the data then went through a secondary stage, where hot deck imputation was used to make practical guesses about the missing data by looking at similar respondents to make the determination (NCES, 2014). For data that still could not be determined an algorithm was used to fill in the rest of the data. For the purposes of this study, the efforts completed following the original data collection will be considered as sufficient to account for and fill in the missing data.

Trustworthiness of Data Source

Methodologically, the data used in this dissertation was collected with considerable care and with a focus on how it may be used to provide information to numerous stakeholders (OMB A, 2015). Data coming from the National Center for Educational Statistics (NCES) is also a

source of secondary data that is often used by educational researchers and is often considered a major resource for nationally represented education statistics (OMB A, 2015).

Dependent Variable

In this analysis, I examined the results of question fourteen from the Principal Survey, which was treated as my dependent variable and is detailed below (and within the Appendix), to provide insights into the perceived autonomy of principals within several work domains. Question fourteen focuses on the perceived autonomy in major job responsibilities associated with the principalship. As such, the question is not necessarily comprehensive of all the professional tasks; for instance, principal responsibilities to the community are not inquired about in the question. One will remember from Chapter Two that each of question fourteen's work components are relevant domains of the principalship as described by O*NET (2016), which provides a reasonably complete picture of a principal's professional obligations. Interestingly, O*NET included related titles as being similar to the principalship, to include titles related to instruction, special education, and the superintendency (O*NET, 2016), which are often distinct roles held by numerous administrators in a district office. As such, some areas attributed to the principalship may be shared responsibilities between building leaders and central office administrators. Additionally, question fourteen directly relates to decision-making, which is one of the topics the NCES collects information about at a nationally representative level (OMB A, 2015). On this point, one will remember that principals, by their leadership role in the school setting, have a tremendous role in the day to day functioning of a school and would ideally be involved in the decision-making for each of the areas that question fourteen details. However, as described in Chapter Two, curriculum and professional development are areas of shared responsibility where principals would likely work with central office. Consequently, it is

expected that Question Fourteen's first three components related to curriculum establishment, setting performance standards, and determining in-service professional development, are not areas where principals would report unfettered perceived autonomy let alone actual, complete autonomy.

The analysis presented in this dissertation will focus on the combined differences between work domains of shared decision making and those where principals have a great deal of perceived professional autonomy. Below is the specific wording of the survey question followed by additional interpretation; the survey question in its original format is reproduced in the Appendix.

Description of Dependent Variable: Perceived Autonomy

This section provides more details on Question Fourteen from the Principal Survey, which will be used as the dependent variable in the analysis. The wording of the question is:

How much actual influence do you think you have as a principal on decisions concerning the following activities?

     a.   Setting performance standards for students of this school.

The research literature suggests that professional learning communities, which this component of the question relates to, are a vital process that principals and district leaders have a part in (Dufour & Marzano, 2011; Marzano, Waters & McNulty, 2005). Therefore, it would be logical to suggest this is a shared leadership responsibility between the schools and district office.

     b.   Establishing curriculum at this school.

Administrators are generally expected to create a "guaranteed viable, curriculum" (Marzano, 2003) and are involved with the establishment of curriculum (Marzano, Waters &

McNulty, 2005). A logical extension, particularly as directors of instruction are often included in district staffing, is that principals work with district administration to support curriculum establishment.

c. *Determining the content of in-service professional development programs for teachers of this school.*

As a part of the twenty-one responsibilities of effective principals, there is a general expectation that principals should provide "intellectual stimulation" and "resources" to develop their teachers (Marzano, Waters & McNulty, 2005). However, there is research to suggest that fewer, though highly meaningful efforts are a means for effective change (Fullan, 2010), which is often supported by professional development. Superintendents will have a part in this discussion as they are charged with limiting initiatives to a manageable number and communicating a district's priorities clearly (Dufour & Marzano, 2011).

d. *Evaluating teachers of this school.*

Teacher evaluation is a typical part of a principal's work and is somewhat tangentially discussed in terms of the twenty-one practices of effective principals as they are charged with "monitoring and evaluating" (Marzano, Waters & McNulty, 2005). Marzano et al. indicate this practice is about monitoring the practices of a school to examine its overall success. Other resources more fully outline the responsibility of administrators in terms of their evaluation responsibilities (Eller & Carlson, 2009; Robbins & Alvy, 2004).

e. *Hiring new full-time teachers of this school.*

Human resources are a major component of a principal's work (Robbins & Alvy, 2004; Sergiovanni, 1991; Whitaker, 2003). Principals are the lead administrator in their schools and

are in the most logical position, in most cases, to select team members based on the needs of their school context.

       f.   Setting discipline policy at this school.

Discipline is a topic in which principals have a major responsibility (Marzano, Waters & McNulty, 2005) to ensure a "safe and orderly environment" (Marzano, 2003). To this end, principals are wise to establish understandings with teachers regarding their skills as classroom managers to ensure student needs are met (Whitaker, 2003).

       g.   Deciding how your school budget will be spent.

There are significant incentives for a principal to work with their business manager as they work through the budgeting process (Robbins & Alvy, 2004), particularly when they are new to a district. Administrators at all levels have a responsibility to be mindful stewards of their resources (Ella & Carlson, 2009; Marzano, Waters & McNulty, 2005). Consequently, while principals will have a level of autonomy to meet their school's needs, it remains important for administrators to follow district guidelines and relevant state laws as they navigate their budgets.

Dependent Variable and Plan for Analysis

Each principal work domain selections were answered using the following responses: "No Influence, Minor Influence, Moderate Influence, Major Influence, and Not Applicable" (NCES, 2015), as shown in the Appendix. To better focus on what might be considered a traditional principalship, those marking "Not Applicable" for any part of the question were not included in the analysis. For the purposes of this analysis, the four choices of "No Influence, Minor Influence, Moderate Influence, Major Influence" will be condensed into two categories for analysis.

The reason for this decision is based on earlier iterations of the SASS, where principals reported considerable perceived autonomy in most work domains, with few responses in the No/Minor Influence categories (especially so for No Influence) and a comparatively large number of responses in the Moderate/Major categories (NCES, 2012). Given this trend, while five response options are available, including the Not Applicable option, most principals responded using three response categories: Minor, Moderate, and Major Influence. Particularly as a question with four response categories is not an ideal way to represent a potentially continuous variable, condensing response categories is a pragmatic decision with relatively little loss of data given response preferences that greatly favor high perceived ability to influence decisions. As such, using the two categories of (1) No Influence/Minor Influence and (2) Moderate Influence/Major Influence provides the basis for utilizing logistic regressions for the analysis.

For this study, only the work domains with 10% or more of responses indicating No/Minor influence on a given work domain were analyzed further. The reason for this decision is two-fold: 1) several work domains showed principals have extremely high autonomy; that is, there was insufficient variability in the responses to warrant further analysis; 2) the small number of principals reporting No/Minor Influence could still encompass a large portion of racial subgroups constituted of administrators of color. The responses for perceived curricular and budgetary decisions met the 10% threshold for further analysis. Curriculum showed 77.2% reporting Major/Moderate influence and 22.8% reporting No/Minor Influence. For budgetary decisions, 89.5% reported Major/Moderate influence and 10.5% reported No/Minor Influence.

Predictor Variables

Within the regression analyses of this dissertation, the goal was to determine whether the demographic factors of school principals are significantly related to perceived autonomy in curricular and budgetary decisions. Years of administrative experience, gender, and race are of primary interest, with the variables of principal age, community type, and US region serving as additional controls to create a context for the analysis. The specific wording of the survey questions relating to these variables is reported in the Appendix.

The first relationship under consideration in the logistic regression analysis is the relationship between years of administrative experience and the ability to influence decisions after controlling for US region, community type, and principal age, which relates to Hypothesis Two (perceived curricular autonomy) and Four (perceived budgetary autonomy). Of all the demographic variables being included in this dissertation, years of experience holds a unique place, in that one could reasonably expect more perceived autonomy for those with greater years of experience without immediate concerns about equity. Certainly, one can reasonably expect that with years of experience, administrators could be sensibly entrusted with greater autonomy, particularly if the years of experience were successful.

In the following models, gender and race are included to evaluate whether professional autonomy is perceived to be greater for males and whites than for females and administrators of color. In terms of gender, it has been documented that potential female leaders are sometimes reluctant to embrace school administration as a potential career (Adams & Hambright, 2004) and that leadership is often described in masculine terms (Erickson, 1985; Scott & Brown, 2006), which does not create a welcoming context for females considering the principalship. The concern regarding privilege is also valid for administrators of color, particularly as systemic

racial privilege is such a well-documented force within the US (Bell, 1992; Baumgartner & Johnson-Bailey, 2010; Lund, 2010; Sensoy and DiAngelo, 2009; Wildman & Davis, 1995; Wise, 2008). As such, Hypotheses Three (perceived curricular autonomy) and Five (perceived budgetary autonomy) were proposed and evaluated to determine whether gender and race are significant predictors of perceived principal autonomy.

In the final models, an interaction term was introduced to examine the combined effect of gender and race on perceived autonomy. Drawing from the research, one will often find that whites experience systemic advantages over other racial groups (Bell, 1992; Baumgartner & Johnson-Bailey, 2010; Lund, 2010; Sensoy and DiAngelo, 2009). Being a male also carries systemic advantages as it is well documented that women face challenges in terms of their acceptance as leaders in ways that men do not (Adams & Hambright, 2004; Kark, Waismel-Manor, & Shamir, 2011; Wang, et al., 2013). As a result, it is also justifiable to examine the interaction of gender and race on principals' perceived autonomy to extend the analysis.

Finally, it is possible that the effect of age and years of experience will be difficult to differentiate. Should collinearity be a concern between these two variables, the analysis will be clarified by using years of experience alone.

Statistical Analysis

A preliminary analysis of each variable under consideration was conducted to find their descriptive statistics and their overall distributions. From there, inferential analysis for each of the proposed hypotheses was conducted as described below. The results of these analyses yielded updated understandings related to the relative autonomy of principals in what are considered building level work-domains versus those responsibilities shared with district office.

Additionally, the perceived autonomy of principals in the US was evaluated through logistic regression models. The overall analysis plan is summarized in Table 3.4.

Hypotheses

Hypothesis One: Principals perceive greater autonomy in building-level decisions (hiring, staff evaluations, disciplinary policy, and the school budget) than in district-level decisions (professional development, performance standards, and curriculum).

For the first hypothesis, a repeated measures t-test was conducted. A statistically significant difference between the mean for building-level work domain decisions and the mean for decisions that involve district-level leadership was expected. As indicated in Chapter One, each work domain's level of perceived autonomy is rated on the same scale by the same respondents, making the repeated measures t-test an appropriate technique to evaluate the differences in perceived autonomy between building level and district decisions.

For the remaining hypotheses, logistic regressions were conducted to analyze perceived principal autonomy in curricular and budgetary decisions in a hierarchical fashion using the variables reported in Tables 3.2 and 3.3; dashed lines identify how the variables were blocked together for the analysis. Hypotheses Two and Three were intended to evaluate perceived principal autonomy as it relates to curriculum establishment, whereas Hypotheses Four and Five evaluate autonomy related to the school budget; these hypotheses and the related analyses are thus repeated using each domain as the dependent variable.

The outcome variable evaluated was the odds or probability of perceived autonomy (No Influence/Minor Influence vs. Moderate Influence/Major Influence) in both the establishment of curriculum and in how the school budget is spent. The outcome variables were calculated with logistic regression analyses that began with controlling for community type, region, and age, to

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create a context for the analysis of years of experience (Table 3.2). While geographical context was not of primary interest for this dissertation, its inclusion provides context for the analysis. For example, (recall from Chapter Two), principals from more heavily populated areas were presumed to have less perceived autonomy, which was an expected outcome in this dissertation. The predictor variables were examined in sequence as indicated below:

Hypothesis Two (or Four): After age, community type, and the US region are controlled for, years of administrative experience is a significant predictor of decision-making autonomy for the establishment of curriculum (or school budget).

Table 3.2 Analysis for Hypothesis Two and Four

Dependent Variable: Perceived Principal Autonomy (curriculum establishment and school budget)	Predictor Variables: - Age - Community Type - US Region ------------------- - Years of Experience

As to Hypothesis Two and Four, it is expected that years of experience will be a significant predictor as the literature from Chapter Two would suggest, after age, community type and US region has been controlled for. Age is controlled for within the first block of variables, as it presents a possible risk for multicollinearity when years of experience are also under consideration. Should the relative effects of age and years of experience be difficult to

differentiate as a result of multicollinearity, years of administrative experience will be used in the analysis (and age will not).

In the third (curriculum) and fifth (budget) hypothesis, the effect of gender and race on perceived autonomy is examined.

Hypothesis Three (or Five): After age, community type, the US region a principal works within, and years of administrative experience are controlled for, gender and race also impact autonomy in establishing curriculum (or school budget).

I hypothesize that:

- Female administrators will have lower odds of high autonomy (i.e. endorsing Moderate/Major Influence rather than No/Minor Influence) than male administrators.

- Non-white administrators will have lower odds of high autonomy than white administrators.

- The differences in autonomy between white male and female administrators will be smaller than the differences between males and females of other racial categories.

Table 3.3 Analysis for Hypotheses Three and Five

Dependent Variable: Perceived Principal Autonomy (curriculum establishment and school budget)	Predictor Variables: • Age • Community Type • US Region ------------------- • Years of Experience

	------------------
	• Gender (1 for male, 0 for female)
	• Race (White will be the reference category)

	• The gender*race interaction is introduced.

In Table 3.3 the logistic regression model is described as it relates to Hypotheses Three and Five, wherein gender and race are added, which build from Hypotheses Two and Four, respectively. Again, drawing from the literature described in Chapter Two, it is predicted that males and whites will have greater perceived professional autonomy and that whites will have significantly less of a gender autonomy gap than other racial subgroups. In the final model, the interaction between gender and race was added to evaluate whether whites have a smaller autonomy gap between genders as compared to the other racial subgroups, as listed in Hypothesis Three.

Figure 3.1 outlines the hypothesized interaction, where it is expected that, of the racial groups under consideration, whites will have the smallest autonomy gender gap. The trend line shows that males are expected to have lower odds of reporting little to no perceived autonomy as shown by the slightly lower line for males in Figure 3.1 (the difference in the gender gap between Hispanics and blacks is used exclusively to establish non-parallel gender lines to show the small gender gap between whites).

Figure 3. 1 Hypothesized Interaction of Gender and Race in Perceived Autonomy of Curriculum Establishment or How the School Budget Will be Spent
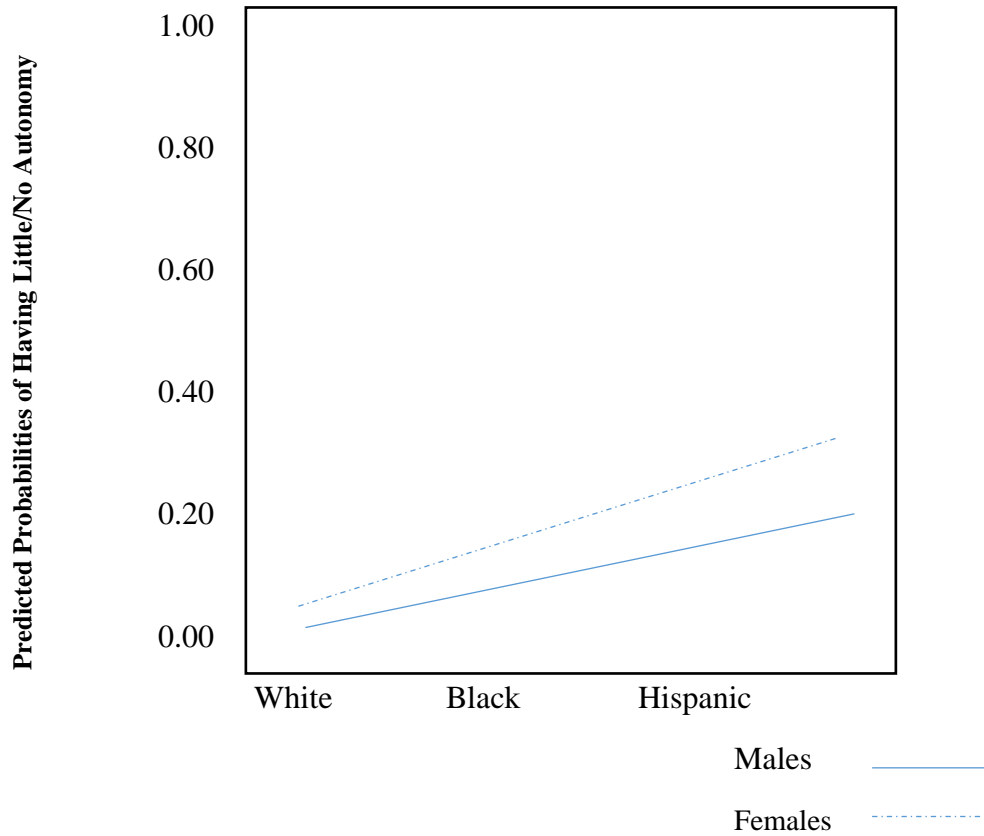
Table 3.4 Plan for Analysis

Dependent Variable	Predictor Variables	Statistical Tests
Preliminary Analysis: Collect descriptive statistics for each work domain listed in Question Fourteen (mean, standard	**Preliminary Analysis:** Collecting descriptive statistics on age, community type, US region, race, and gender (mean,	**Repeated Measures T-test:** The combined mean of the autonomy for setting performance standards, establishing curriculum, and determining in-service content (district level decisions) will be contrasted against the combined mean of teacher evaluation, hiring, disciplinary

deviations, percentages).	standard deviations, percentages).	policy, and the school budget (building level decisions).
		Logistic Regression: The survey responses for establishing curriculum and deciding how a school budget will be regressed separately to create two series of models for perceived principal autonomy. **Step One:** The survey responses will be first regressed against age, community type, and the US region a principal works to determine if years of administrative experience is a significant predictor of decision-making autonomy. **Step Two:** Gender and race will be added to both models to evaluate their impact on principal autonomy. **Step Three:** An interaction term between race and gender will be introduced to evaluate the hypothesized autonomy gap between genders across racial categories.

Conclusion

Utilizing the methodologies described above and as summarized in Table 3.4, the most recent data from the NCES will be used to examine the perceived autonomy of principals. Work domains related primarily to building level decision-making are expected to reveal significantly more perceived autonomy in comparison to work domains that are shared with district office. In addition, demographic variables (namely years of experience, gender, and race) were evaluated as predictors of perceived principal autonomy in the establishment of curriculum and in school spending.

Chapter Four: Data Analysis and Results

Chapter Four is organized around three sections: preliminary analysis wherein descriptive statistics of selected variables are provided, the results of the inferential analysis, and a summary of the results by research hypothesis. The variables will be explored in the order they are introduced in the logistic regression models for curricular and budgetary autonomy.

Preliminary Analysis

In the descriptive statistics, one will note that the sample size fluctuates between 4,830 and 4,840 respondents for the 2015-16 school year. In accordance with guidance from NCES, it is required that sample sizes be rounded to the nearest ten. As such, subgroup numbers will sometimes sum to either value. This will not be a problem for the inferential analyses as the calculation will be conducted with the actual number of respondents, though the reported sample size will be rounded in tables and in the narrative as the NCES requires. The sample size of 4,830 (the most commonly used sample size in this dissertation) is a slight reduction from the total number of respondents, which was slightly over 4,900. The reason for this reduction was due to the elimination of respondents who marked "Not Applicable" in any part of Question 14, as noted in Chapter Three. Those who marked "Not Applicable" once or more constituted approximately 1.5% of the total respondents.

Presented in Table 4.1 are the number of principals in the 2015-16 school year by region within the US, community type, gender, and race. As several hypotheses in this research examine gender, note that males held a slight majority of principal jobs (51.8% of positions). As to race, principals reported as coming primarily from a white background (80.15%), with those reporting as African Americans holding 9.7% of positions. Respondents who identified as Hispanics comprised 6% of positions, with the remainder identifying as Asian, Native American,

Hawaiian, or a combination of racial backgrounds, which are grouped together within the

category of Other (3.9%) for this dissertation. The category Other is used within several tables

and figures throughout Chapter Four to represent these groups.

Table 4. 1 Sample Size (N) and Percentages by Region, Community Type, Gender, and Race

Variable		N	Percentage
Region	Northwest	760	15.7%
	Midwest	1250	25.8%
	South	1850	38.2%
	West	980	20.2%
	Total	4840	100%
Community	City	1080	22.3%
	Suburb	1430	29.6%
	Town	870	18%
	Rural	1450	30%
	Total	4830	100%
Gender	Males	2470	51.1%
	Females	2360	48.9%
	Total	4830	100%
Race	White (Non-Hispanic)	3870	80.1%
	Black (Non-Hispanic)	470	9.7%
	Hispanic, White	300	6.2%
	Other	190	3.9%
	Total	4830	100%

In Table 4.2 the number and percentage of administrators are presented by the

combinations of race and gender. For this analysis the three largest racial categories were

analyzed; however, the smallest categories were aggregated into an additional category referred

to as Other. The most salient trend within this data is that, except for administrators who

identified as white, females held most of the principalships in each racial category.

Table 4. 2 Sample Size (N) and Percentages of Principals by Gender

	Male	Female
White (Non-Hispanic)	2060 (53.2%)	1810 (46.8%)
Black (Non-Hispanic)	180 (38.3%)	290 (61.7%)
Hispanic, White	130 (43.3%)	170 (56.7%)
Other	90 (47.4%)	100 (52.6%)

Table 4.3 summarizes the means and standard deviations for each of the autonomy domains. As mentioned previously, autonomy was measured on an ascending four-point scale with one representing no autonomy. A score of two (little autonomy), three (moderate autonomy) and four (major autonomy) represent increasing levels of autonomy. The results show that *teacher evaluation* was the work domain with the highest mean (3.95), indicating that virtually all principals reported major perceived autonomy in this domain. This was followed by *hiring teachers* (3.86). Principals reported the least professional autonomy in the *school budget* (3.48) and *setting curriculum* (3.12) domains.

Table 4.3 Autonomy Sample Sizes and Descriptive Statistics (N=4830)

	Mean	SD
Standards	3.57	0.74
Curriculum	3.12	0.85
Professional Development	3.62	0.60
Teacher Evaluation	3.95	0.26
Hiring Teachers	3.86	0.44
Discipline Policy	3.71	0.54
School Budget	3.48	0.70

Table 4.4 summarizes key demographic variables used in the analyses, including age and years of experience, as well as the perceived autonomy for curricular and budgetary work domains by age, years of experience, gender and race. Means and standard deviations for autonomy are reported by ten-year increments of age and years of experience to assist with summarizing the data. Finally, Table 4.4 shows the means and standard deviations for curriculum and budget by race and gender. As noted in Chapter Three, the other work domains received exceptionally high perceived autonomy ratings; as such there was little variability, making continued analysis untenable. Further details on this determination can be found in the Summary of Dependent Variable section of Chapter Three.

Table 4.4 Principal Demographic and Autonomy Statistics

	N	Mean	SD
Age	4830	47.39	8.37
Years of Experience	4830	6.62	6.03
Curriculum autonomy, by age			
30 and Younger	40	3.29	0.75
31-40	1030	3.16	0.84
41-50	2090	3.09	0.86
51-60	1350	3.13	0.85
61 and Older	330	3.13	0.87
Budget autonomy, by age			
30 and Younger	40	3.4	0.81
31-40	1030	3.43	0.73
41-50	2090	3.49	0.72
51-60	1350	3.5	0.68
61 and Older	330	3.49	0.72
Curriculum autonomy by Years of Experience			
0-10	3790	3.11	0.86
11-20	900	3.13	0.84
21-30	120	3.22	0.85
31-40	20	3.33	0.70

41-50	<10	4	0.00
Budget autonomy by Years of Experience			
0-10	3790	3.47	0.70
11-20	900	3.53	0.68
21-30	120	3.38	0.82
31-40	20	3.29	0.81
41-50	<10	3.5	0.70
Curriculum autonomy, by gender			
Male	2470	3.15	0.83
Female	2360	3.08	0.88
Budget autonomy, by gender			
Male	2470	3.43	0.74
Female	2360	3.54	0.67
Curriculum autonomy, by race			
White (Non-Hispanic)	3870	3.12	0.85
Black Non-Hispanic)	470	3.04	0.93
Hispanic, White	300	3.26	0.82
Other	190	3.16	0.85
Budget autonomy, by race			
White (Non-Hispanic)	3870	3.46	0.71
Black (Non-Hispanic)	470	3.51	0.71
Hispanic, White	300	3.61	0.60
Other	190	3.52	0.71

Inferential Analysis

In this section, the results of the analysis are presented. The presentation will begin with the results of the repeated measures t-test followed by the hierarchical regressions regarding curricular and budgetary autonomy of principals. Following this section, a summary of the tests will be provided per hypothesis.

Repeated Measures T-Test

The first hypothesis was with regards to perceived principal autonomy and how it varies among work domains. For this analysis, principal work domains were divided into two categories. The first category relates to work domains that constitute shared responsibilities between principals and district office, which includes establishing curriculum, setting performance standards, and setting professional development (the first three components of Question Fourteen). The second category relates to building-level matters that principals typically have great control over. These domains include teacher evaluation, hiring, setting discipline policy, and how the building budget was spent (the last four components of Question Fourteen).

A combined mean for both work categories was calculated so that each respondent had a mean value for both and the means across all respondents are displayed in Table 4.5. The shared work domains mean was 3.434 and the building work domains mean was 3.748; the difference between these two means 0.314.

Table 4.5 Descriptive Statistics for Combined Work Domains

	Mean	N	SD	Std. Error Mean
Shared Work Domains 1-3	3.434	4830	0.533	0.0077
Building Work Domains 4-7	3.748	4830	0.313	0.005
Difference Between domain groups	-0.314	4830	0.529	0.0076

Using a repeated measures t-test, it was determined that the difference (of 0.31) between the shared and building work domains was statistically significant (t (4830) = -41.23, p<0.001).

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Taking the analysis further, Cohen's d was calculated using d = |m₁-m₂|/SD (Howell, 2013), where m_1 is the mean of building work domains, m_2 is the mean of shared work domains, and SD is the standard deviation of the difference, (0.529). The result was d = 0.59, reflecting a high/moderate effect size. The mean perceived autonomy for building level work domains is significantly higher (both statistically and practically) than the mean perceived autonomy for shared areas of responsibility, which supports Hypothesis One.

Hierarchical Multiple Regression Results

This section summarizes the results of the multiple regression models used to examine the relationship between demographic variables and principal perceived autonomy in both curriculum and budgetary decisions. As discussed in Chapter Three, curriculum and budget perceived autonomy were each modeled (i.e., served as the outcome/dependent variable) separately using the same set of predictors. Both analyses started with a model that included US regions, community types, and the principal's age as predictors. Both region and community type were included as categorical predictor variables in both curricular and budgetary models; the tables report the overall significance of each as a predictor as well as the results for each dummy variable within. The second model added years of administrative experience as a predictor and the third model added race and gender as predictors. In the fourth model, the interaction between gender and race was added so comparisons between gender/race sub-groups could be made. White served as the reference category for race and male served as the reference category for gender.

In this dissertation, both perceived curricular/budgetary autonomy was a binary outcome variable with 1 representing major/moderate perceived autonomy and 0 representing little/no perceived autonomy. The reference category was the major/moderate category, which requires

the results presented in Tables 4.6 (curriculum) and 4.7 (school budget) to be interpreted as the odds of reporting little/no autonomy (relative to major/moderate autonomy). For simplicity, the little/no and major/moderate autonomy categories will be referred to as a "low" and "high" perceived autonomy, respectively.

Additionally, in the fourth model for both curriculum and budgetary autonomy, there was a difference between the results for the gender and for the female variables; this was not the case in the other models. For the gender variable, the Wald Chi-Square was computed with a Type III analysis, wherein the significance of each variable effect is evaluated with all the other variables in the model. The value for female specifically, however, represents the gender gap within the racial reference category (i.e. white).

There was a concern based on conceptual considerations that age and years of experience might be highly correlated, thereby making determinations regarding their individual effects on perceived principal autonomy difficult to discern. Using a Pearson correlation, age and years of experience were indeed significantly correlated ($r=0.54$, $p<0.001$), but not to the degree where multi-collinearity concerns required the removal of either age or years of experience from the models.

Table 4.6 Logistic Regression for the Perceived Curricular Autonomy of Principals (N=4830).

Variables	(Model 1) Wald X^2 *p-value*	B (SE)	OR	(Model 2) Wald X^2 *p-value*	B (SE)	OR	(Model 3) Wald X^2 *p-value*	B (SE)	OR	(Model 4) Wald X^2 *p-value*	B (SE)	OR
US Region	43.22 *<0.001*			42.56 *<0.001*			44.98 *<0.001*			44.42 *<0.001*		
West	15.84 *<0.001*	0.49 (0.12)	1.63	15.68 *<0.001*	0.49 (0.12)	1.63	18.62 *<0.001*	0.54 (0.12)	1.71	18.28 *<0.001*	0.53 (0.12)	1.71
South	39.94 *<0.001*	0.68 (0.11)	1.98	36.82 *<0.001*	0.68 (0.11)	1.98	37.80 *<0.001*	0.70 (0.11)	2.00	37.38 *<0.001*	0.69 (0.11)	2.00
Midwest	6.42 *0.011*	0.31 (0.12)	1.36	6.65 *0.01*	0.32 (0.12)	1.37	6.05 *0.014*	0.30 (0.12)	1.35	6.00 *0.014*	0.30 (0.12)	1.35
School Setting	103.15 *<0.001*			103.20 *<0.001*			105.99 *<0.001*			105.79 *<0.001*		
Rural	63.78 *<0.001*	-0.80 (0.10)	0.45	63.57 *<0.001*	-0.80 (0.10)	0.45	66.60 *<0.001*	-0.84 (0.10)	0.43	66.73 *<0.001*	-0.84 (0.10)	0.43
Town	26.65 *<0.001*	-0.57 (0.11)	0.56	26.73 *<0.001*	-0.57 (0.11)	0.56	29.05 *<0.001*	-0.61 (0.11)	0.55	28.99 *<0.001*	-0.61 (0.11)	0.55
Suburb	0.10 *0.76*	0.03 (0.09)	1.03	0.11 *0.74*	0.03 (0.09)	1.03	0.01 *0.91*	0.01 (0.09)	1.01	0.01 *0.93*	0.01 (0.09)	1.01
Principal Age	0.002 *0.97*	0.00 (0.00)	1.00	0.14 *0.710*	0.00 (0.01)	1.00	0.001 *0.982*	0.00 (0.01)	1.00	0.00 *0.988*	0.00 (0.01)	1.00
Years' Exp.				0.55 *0.460*	-0.01 (0.01)	1.00	0.41 *0.523*	-0.01 (0.01)	1.00	0.36 *0.548*	0.00 (0.01)	1.00
Gender							1.53 *0.216*			0.15 *0.698*		
Female							1.53 *0.216*	0.09 (0.07)	1.09	2.65 *0.103*	0.13 (0.08)	1.14
Race							16.23 *0.001*			15.41 *0.002*		

	Model 1			Model 2			Model 3			Model 4		
Black							0.47 *0.494*	-0.08 (0.12)	0.92	0.01 *0.930*	0.02 (0.18)	1.02
Hispanic							14.93 *<0.001*	-0.62 (0.16)	0.54	4.61 *0.032*	-0.52 (0.24)	0.60
Other							1.97 *0.161*	-0.26 (0.19)	0.77	0.07 *0.789*	-0.07 (0.26)	0.93
Gender* Race interact.										1.70 *0.638*		
LR Chi-Square	144.69 *0.001*			145.23 *0.001*			164.24 *0.001*			165.94 *0.001*		
Constant	-1.37 (0.23)			-1.43 (0.25)			-1.33 (0.25)			-1.34 (0.25)		

Male and white are the references for gender and race, respectively. For community type the reference category is city and the North East is the reference for US region. Standard errors are shown in parentheses. B represents the change in log odds and OR is the odds ratio for each variable. P values are in italics. Shaded results are those that directly pertain to the research hypotheses.

In Model 1, the intent was to include principal age, community type, and US region to establish whether these were significant predictors of perceived autonomy. Additionally, and more importantly, Model 1 established a baseline for examining whether years of experience was a significant predictor when all the variables from Model 1 were controlled for, which was the central focus of Hypothesis Two. For curricular autonomy, years of experience did not prove to be a significant predictor after controlling for the other variables in the model (Wald Chi-Square = 0.55, df = 1, p=0.46). As such, Hypothesis Two did not find support in this analysis.

From Model 1, both community type (Wald Chi-Square = 103.15, df = 3) and US region (Wald Chi-Square = 43.22, df = 3), proved to be significant predictors (p<0.001). Interestingly, relative to the Northeast, all other regions showed greater odds of reporting low perceived curricular autonomy than the Northeast. Specifically, principals from the West (Wald Chi-

Square = 15.84, df = 1, p<0.001), South (Wald Chi-Square = 39.94, df = 1, p<0.001), and Midwest (Wald Chi-Square = 6.42, df = 1, p=0.011) had higher odds of reporting low perceived curricular autonomy than those from the Northeast (with odds ratios of approximately 1.6, 2.0, and 1.4, respectively). For community type, rural areas as well as towns had lower odds of reporting low autonomy as compared to cities (p<0.001), with odds ratios of 0.45 (Wald Chi-Square = 63.78, df = 1, p<0.001) and 0.56 (Wald Chi-Square = 26.65, df = 1, p<0.001), respectively. Suburban principals were not significantly different than city principals with regards to curricular autonomy. Values reported for geographical considerations did not fluctuate greatly across all models.

In Model 3, the goal was to determine whether, after controlling for the previous predictors, racial groups or genders differed significantly in perceived curricular autonomy. It was expected that white administrators would report greater perceived autonomy than other racial groups and that males would report greater perceived autonomy than females. Race overall was found to be a significant predictor (Wald Chi-Square = 16.23, df = 3, p=0.001); more specifically, those identifying as Hispanic had lower odds (by a factor of 0.54) of reporting low curricular autonomy than those identifying as white when all other variables were held constant (Wald Chi-Square = 14.93, df = 1, p<0.001). This means that the odds of Hispanics reporting low (rather than high) perceived curricular autonomy are 54% the odds of whites, with all other variables held constant. This can also be interpreted to mean that whites have higher odds of low curricular autonomy as compared to Hispanics. The other racial groups did not significantly differ from the white group. From Model 3, males and females were found to be statistically equivalent in terms of curricular autonomy after controlling for all other variables in the model. Therefore, the predictions in Hypothesis Three (that whites and males would perceive greater

autonomy in curricular matters as compared to other racial categories and females respectively) were not fully supported.

As to Model 4, gender differences in autonomy were found to be statistically equivalent across races as the interaction term between gender and race was not statistically significant (Wald Chi-Square = 1.70, df = 3, p=0.638). The gender by race interaction is illustrated in Figure 4.1, where the predicted probability of reporting little/no curricular autonomy is used as the outcome y-axis. To construct the plot, the interaction model was used to calculate model-predicted probabilities of low perceived curricular autonomy for each survey respondent. As such, the results of the regression analysis are shown in Table 4.6, whereas the model-predicted results are seen in Figure 4.1.

Although not statistically significant, descriptively, the mean lines in the plot show that the greatest gender difference in perceived autonomy is for whites, with white males reporting a slightly higher probability of curricular autonomy than white females, and the smallest gender difference is between Latinos and Latinas. This conflicts with the last part of Hypothesis Three, wherein the gender gap between males and females was hypothesized to be the smallest between whites. Therefore, the final component of Hypothesis Three was not supported.

As to the distribution for Hispanics, as illustrated in Figure 4.1, the distribution for this group has a slight negative skew of -0.54 with a kurtosis of -1.04, which indicates a distribution with heavier tales (or a flatter distribution). This is different than the skew for whites, which was 0.34, however, the kurtosis was similar (-1.03).

Figure 4. 1 Interaction between Gender and Race in Perceived Curricular Autonomy
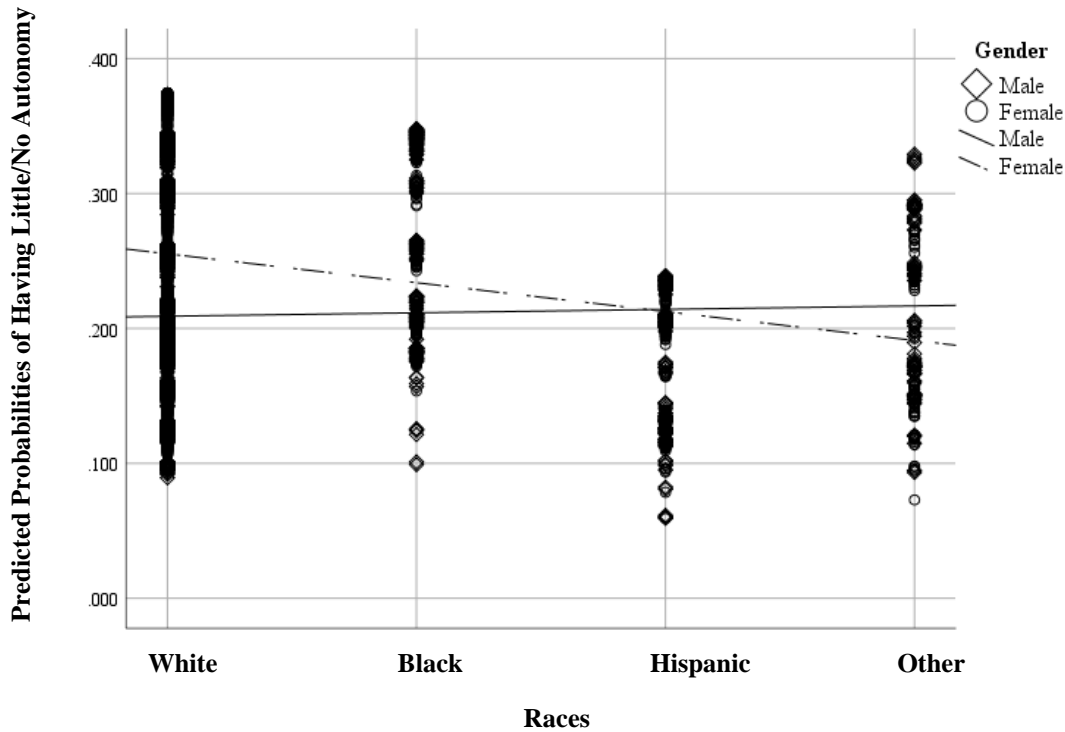
The logistic regression model results for predicting perceived budgetary autonomy are presented in Table 4.7. The process and format of these results are identical to those used in the analysis of curricular autonomy.

Table 4.7 Logistic Regression for the Perceived Budgetary Autonomy of Principals (N=4830).

	(Model 1)			(Model 2)			(Model 3)			(Model 4)		
	Wald X^2	B	OR	Wald X^2	B	OR	Wald X^2	B	OR	Wald X^2	B	OR
	p-value	(SE)		*p-value*	(SE)		*p-value*	(SE)		*p-value*	(SE)	
Variables												
US Region	105.37			102.37			96.79			96.09		
	<0.001			*<0.001*			*<0.001*			*<0.001*		
West	44.00	-1.86	0.29	43.81	-1.25	0.29	42.25	-1.25	0.29	42.11	1.25	0.29
	<0.001	(0.31)		*<0.001*	(0.19)		*<0.001*	(0.19)		*<0.001*	(0.19)	
South	33.90	-1.25	0.44	33.69	-0.82	0.44	32.36	-0.81	0.44	32.01	-0.81	0.45
	<0.001	(0.19)		*<0.001*	(0.14)		*<0.001*	(0.14)		*<0.001*	(0.14)	
Midwest	0.43	-0.82	1.09	0.37	0.08	1.09	0.35	0.08	1.08	0.34	0.08	1.08
	0.509	(0.14)		*0.544*	(0.13)		*0.555*	(0.13)		*0.558*	(0.13)	

	Model 1			Model 2			Model 3			Model 4		
School Setting	71.48 *<0.001*			71.25 *<0.001*			65.61 *<0.001*			65.59 *<0.001*		
Rural	34.32 *<0.001*	0.83 (0.14)	2.29	34.04 *<0.001*	0.83 (0.14)	2.28	30.79 *<0.001*	0.82 (0.15)	2.26	30.99 *<0.001*	0.82 (0.15)	2.28
Town	6.79 *0.009*	0.43 (0.16)	1.53	6.74 *0.009*	0.43 (0.16)	1.53	6.35 *0.012*	0.42 (0.17)	1.53	6.46 *0.011*	0.43 (0.17)	1.53
Suburb	0.93 *0.334*	-0.156 (0.16)	0.86	0.96 *0.33*	-0.16 (0.16)	0.86	0.84 *0.359*	-0.15 (0.16)	0.86	0.77 *0.379*	-0.14 (0.16)	0.87
Principal Age	0.55 *0.459*	-0.004 (0.01)	1.00	0.87 *0.351*	-0.01 (0.01)	0.99	0.24 *0.622*	-0.003 (0.01)	1.00	0.22 *0.640*	-0.003 (0.01)	1.00
Years' Exp.				0.33 *0.566*	0.01 (0.01)	1.01	0.05 *0.831*	0.002 (0.01)	1.00	0.03 *0.855*	0.002 (0.01)	1.00
Gender							6.72 *0.01*			0.44 *0.508*		
Female							6.72 *0.010*	-0.26 (0.10)	0.77	7.99 *0.005*	-0.31 (0.11)	0.73
Race							3.12 *0.347*			2.84 *0.417*		
Black							1.55 *0.212*	0.22 (0.18)	1.25	0.004 *0.950*	-0.02 (0.27)	0.98
Hispanic							0.63 *0.426*	-0.22 (0.27)	0.81	0.21 *0.648*	-0.17 (0.36)	0.85
Other							0.76 *0.382*	0.23 (0.26)	1.26	0.02 *0.880*	0.06 (0.37)	1.06
Gender*Race interact.										2.06 *0.56*		
LR Chi-Square	198.40 *<0.001*			198.73 *<0.001*			208.34 *<0.001*			210.43 *<0.001*		
Constant	-1.86 (0.31)			-1.79 (0.34)			-1.81 (0.34)			-1.80 (0.34)		

Male and white are the references for gender and race, respectively. For community type the reference category is city and the North East is the reference for US region. Standard errors are shown in parentheses. B represents the change in log odds and OR is the odds ratio for each variable. P values are in italics. Shaded results are those that directly pertain to the research hypotheses.

The aim in Model 1 for budgetary autonomy was to determine whether US region, community type, and age were significant predictors and create a baseline to evaluate if years of experience was a significant predictor (Model 2). In Model 2, years of experience was not found to be a significant predictor (Wald Chi-Square = 0.33, df = 1, p=0.566). As such, Hypothesis Four was not supported.

In the results for Model 1, displayed in Table 4.7, community type (Wald Chi-Square = 71.48, df = 3) and US region (Wald Chi-Square = 105.37, df = 3) were included in all models as categorical variables, and both were statistically significant predictors in all models (p<0.001); these values did not vary greatly across models. In this analysis, the West (Wald Chi-Square = 44.00, df = 1) and South (Wald Chi-Square = 33.90, df = 1) had lower odds of reporting diminished autonomy (p<0.001) as compared to the Northeast. Western principals' odds of reporting low budgetary autonomy were reduced by a factor of approximately 0.29 while the odds of Southern administrators were reduced by a factor 0.44 as compared to the Northeast. The difference between Midwestern principals and those of the Northeast was not significant. As to community type, rural principals had approximately 2.29 times higher odds of reporting less than maximal budgetary autonomy (Wald Chi-Square = 34.32, df = 1, p<0.001) while principals in towns had 53% higher odds of low autonomy as compared to cities (Wald Chi-Square = 6.79, df = 1, p = 0.009). Suburban principals were not significantly different from city principals in this regard.

In Model 3, gender was found to be a statistically significant predictor (Wald Chi-Square = 6.72, df = 1, p=0.01). Females were found to have lower odds of reporting low budgetary autonomy by a factor of 0.77 as compared to males when all other variables are held constant. As such, the odds of females reporting little to no autonomy in budgetary matters are 77% of the

odds for males. These results can also be interpreted as males have higher odds of low budgetary

autonomy as compared to females. This result does not support the prediction that females

perceive lower budgetary autonomy than males as proposed in Hypothesis Five.

Within the fourth model, the gender/race interaction term was not statistically significant,

so the gender gap within perceived budgetary autonomy was statistically equivalent across racial

groups. As seen in Figure 4.2, descriptively the odds of white females reporting low budgetary

autonomy was lower than that of white males. Similarly, the odds of low budgetary autonomy

were higher for male principals than for female principals in both the black and Hispanic groups.

These differences also do not support Hypothesis Five, wherein the gap between male and

female administrators was expected to be the smallest for the white racial group; rather the

difference between white male and female administrators is (descriptively) the largest gender gap

across races.

Figure 4. 2 Interaction between Gender and Race in Perceived Budgetary Autonomy
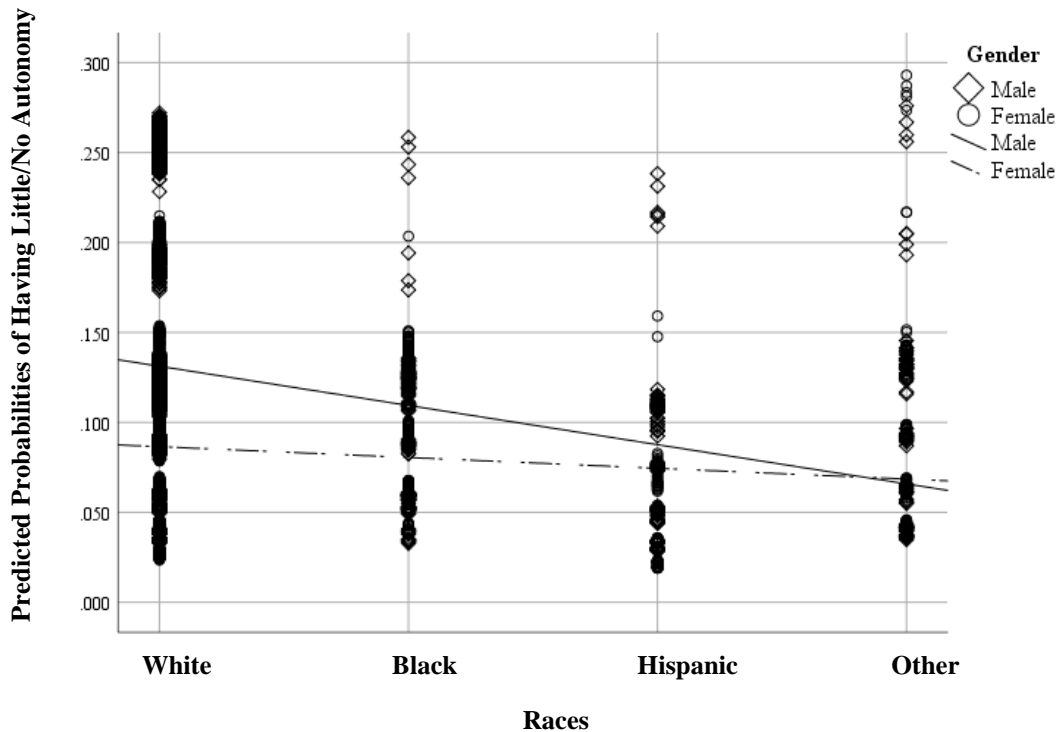
Having established the results, a summary is provided. Following the summary, Chapter Five will focus on how the results relate to the existing literature on principals and principal autonomy.

Summary of Findings as Related to Research Hypotheses

In this section, the results are summarized by research hypotheses to establish where the research hypotheses were supported. Significant results, even if unexpected, are also reviewed. Additionally, the significant results for perceived curricular and budgetary autonomy are summarized in Table 4.8. The first hypothesis reads as follows:

> Principals perceive greater autonomy in building-level decisions (hiring,
>
> staff evaluations, disciplinary policy, and the school budget) than in
>
> district-level decisions (professional development, performance standards,
>
> and curriculum).

All respondents with complete answers across all parts of the autonomy question were included in the analysis, with the exception of those respondents who included "Not Applicable" in one or more work domains. From the results of the repeated measures t-test, the combined mean of building-level decisions was indeed higher than district-level or shared areas of decision-making authority, to a statistically significant extent. As such, the research hypothesis was supported.

As to the second and fourth hypotheses, the goal was to determine if years of experience was a significant predictor of professional autonomy in budgetary and curricular decision-making after controlling for community type, region within the US, and principal age. This was done twice: once for curricular autonomy (Hypothesis Two) and once for budgetary autonomy (Hypothesis Four).

In both curriculum and budgetary decisions, years of experience was not a significant predictor of professional autonomy after controlling for the other demographic variables. Thus, Hypothesis Two and Four were not supported. Interestingly, the same is true for age as well; age was not a significant predictor in the regression models for either budget or curriculum when the other variables were controlled for. Collinearity between age and years of experience was examined with a Pearson correlation and the results showed the variables to be significantly correlated but not to the extent whereby one of the variables needed to be removed.

In Hypotheses Three and Five (significant results reported in Table 4.8), the question of race and gender were examined and their usefulness as predictors for the professional autonomy of principals in both curriculum and budgetary decision making after other variables in the model were controlled for. First, there was not a statistically significant difference between genders in predicting curricular autonomy. When it came to race, curricular autonomy was statistically equivalent between races, except for Hispanics, who reported significantly lower odds of having low curricular autonomy than whites. As to budget, women had significantly lower odds of diminished autonomy than men. Finally, the interaction terms in both perceived curriculum and budgetary autonomy models did not yield a significant result; the gender differences in perceived curricular and budgetary autonomy were statistically the same across races.

Table 4. 8 Significant Logistic Regression Results

Variables	Significant Curricular Findings
US Region (North East reference)	• Western principals had 60% higher odds of low curricular autonomy (Wald Chi-Square = 15.84, df = 1, p<0.001) • Southern principals were twice as likely to report higher odds of low curricular autonomy (Wald Chi-Square = 39.94, df = 1, p<0.001) • Midwestern principals had approximately 40% higher odds of low curricular autonomy (Wald Chi-Square = 6.42, df = 1, p=0.011).

Community (City reference)	• Rural area principals' odds of reporting low curricular autonomy were reduced by a factor of 0.45 (Wald Chi-Square = 63.78, df = 1, p<0.001). • Town located principals' odds of reporting low curricular autonomy were reduced by a factor of 0.56 (Wald Chi-Square = 26.65, df = 1, p<0.001).
Race and/or Gender (White and male reference)	• Those identifying as Hispanic had lower odds, by a factor of 0.54, of reporting low curricular autonomy than those identifying as white when all other variables were held constant (Wald Chi-Square = 14.93, df = 1, p<0.01).
Variables	**Significant Budgetary Findings**
US Region (North East reference)	• Western principal's odds of reporting low budgetary autonomy were reduced by a factor of approximately 0.29 (Wald Chi-Square = 44.00, df = 1, p<0.001). • The odds of Southern administrators reporting low budgetary autonomy were reduced by a factor of 0.44 (Wald Chi-Square = 33.90, df = 1, p<0.001).
Community (City reference)	• Rural principals had 2.29 times higher odds of reporting less than maximal budgetary autonomy (Wald Chi-Square = 34.32, df = 1, p<0.001) • Principals in towns had 53% higher odds to report less than maximal budgetary autonomy (Wald Chi-Square = 6.79, df = 1, p = 0.009).
Race and/or Gender (White and male reference)	• Females were found to have lower odds of reporting low budgetary autonomy by a factor of 0.77 as compared to males when all other variables are held constant (Wald Chi-Square = 6.72, df = 1, p=0.01).

Several interesting geographical/community type findings were noted in the logistic regressions for curricular and budgetary autonomy. While a formal hypothesis was not offered regarding autonomy and administrator location, US region, and community type were significant predictors for curricular and budgetary autonomy, which is noted in Tables 4.6 and 4.7, respectively. In summary of the significant findings, principals found the greatest odds of curricular autonomy in the Northeast as compared to Midwest, South, and Western regions.

Administrators were also found to have significantly greater curricular autonomy within rural areas and towns as compared to cities. As to significant findings regarding the school budget, the South and West reported higher odds of budgetary autonomy compared to the Northeast; however, cities reported greater odds of budgetary autonomy as compared to rural administrators and principals working in towns.

Having examined the results of the statistical analysis, the discussion will continue in Chapter Five to evaluate the current research as it relates to the professional literature on the principalship. Recommendations emerging from the research will be shared as well as areas where future inquiry might provide greater clarity on the autonomy of principals.

Chapter Five: Findings and Analysis

Chapter Five is organized into several sections. First, the post-positivist lens will be discussed to review this dissertation's philosophical framework, followed by a review of the research problems. The methodologies used in the analysis will also be discussed. From there, the research findings will be examined considering the professional literature. Chapter Five will conclude with a discussion of research implications and possible future research.

As discussed in Chapter One, Karl Popper's post-positivist framework is useful in this dissertation as the method of analysis is quantitative in nature. Post-positivism comes out of the pursuit of empirical research wherein objective truth is elusive, as exemplified in the research of physicists Werner Heisenberg and Niels Bohr (Crotty, 1998). While not an investigation of physics, this dissertation shares a common belief that mathematical/statistical analysis can yield insights into the world around us. However, this research effort pursues alignment with Popperian post-positivism; the results are tentative and very much open to further questions and investigations (Popper, 1962). Certainly, this research effort has done the same, as considerable literature (Adamowski & Petrilli, 2007; Chang, Leach & Anderman, 2015; Dillon, 2011; Flamer, 2005; Haynes & Licata, 1995; Ouchie, 2006) has informed and guided the course of this examination of principal autonomy within the 2015-16 school year.

Offered within this dissertation are hypotheses structured to be what Karl Popper referred to as "genuine conjectures" which are "highly informative guesses about the world which although are not verifiable (i.e. capable of being shown to be true) can be submitted to severe critical tests (1962)." In accordance with this perspective, considerable effort has been taken to create hypotheses that have been guided by and couched within the literature focused on

principal autonomy and the demographics of principals. Additionally, each hypothesis has been thoughtfully analyzed using appropriate standards and techniques to meet a rigorous standard.

Moving with the philosophy of post-positivism, the purpose of this study is to extend the discussion of autonomy to the principalship. Autonomy, as defined within self-determination theory, is regarded as a human need (Milyavskaya & Ryan, 2010; Church et al, 2012), which must be fulfilled to maintain psychological health (Baard, Ryan & Deci, 2004; Deci & Ryan, 2000). As principals are key decision-makers within a school (Peterson, 1986; Robbins & Alvy, 2004; Marzano, McNulty & Waters, 2005), where decisions are a regular aspect of the work, the following research questions have guided this inquiry:

- How much autonomy do US principals perceive they have in their schools as it relates to their professional responsibilities?
  - How much autonomy do principals have in district-level decisions as compared to building level decisions?
  - Are years of administrative experience linked to greater principal autonomy?
  - Do male administrators have more perceived autonomy than females?
  - Do white administrators have more perceived autonomy than other racial categories?
  - Is the effect of gender on professional autonomy different across racial categories?

In the next sections, an integrated analysis will be shared in the order the hypotheses were presented in Chapter One. The findings will be discussed within the context of the literature on principal autonomy and principal demographics. The dissertation will conclude with the implications of this dissertation and avenues for future research.

Principal Autonomy between the Building Level and System Level

In the first hypothesis, the goal was to identify whether building principals have more autonomy in building level decisions as compared to those areas that involve shared decision-making. The analysis showed there is indeed a statistically significant difference between building level decision making and those decisions that are areas of shared responsibility. Principals reported significantly higher autonomy in those areas related to building leadership.

The significant finding confirms what the literature suggests; several work domains of the principalship are areas of shared leadership, particularly with district administrators like a Director of Curriculum and Instruction (DCI) being involved in key decisions (Mickelson, Appel & Prusso, 1969). Specifically, the DCI will help with topics like curriculum development and assist staff by providing curricular expertise, (Doll, Shafer, Christie & Salsbury, 1958; Hass, 1960; Mickelson, Appel & Prusso, 1969; Rutrough, 1970). More contemporary research also shows that district-level administration may find that professional development is a powerful way to impact teacher practice (Firestone, Mangin, Martinez & Polovsky, 2005), while others find that a shared responsibility perspective for professional development can meet building needs while satisfying the district office's directives (Donsky and Witherow, 2015; Micheaux, 2016). Additionally, other research suggests that principals should be working with district office when curricular expertise is needed and that principals should be held accountable for their school's instruction (Leithwood, 2010). This is not to discount the important role of principals in curricular matters, as there is much written on how principals greatly impact the instructional success of a school (DuFour & Mattos, 2013; Finkel, 2012; Waters, Marzano & McNulty, 2004), which is readily acknowledged in the early research regarding the DCI as well (Doll, Shafer, Christie, Salsbury, 1958; Mickelson, Appel & Prusso, 1969).

While there are certain areas where principals have shared decision-making authority, it is commonly recognized there are areas that principals often have enormous influence, which includes functions within human resources (Whitaker, 2003; Robbins & Alvy, 2004; Marzano, Waters & McNulty, 2005; Sergiovanni, 1991), student discipline (Marzano, Waters & McNulty, 2005), and with the school budget (Marzano, Waters & McNulty, 2005; Robbins & Alvy, 2004). These functions are very much a part of most principalships (O*NET, 2016), and while district office would presumably be ready to help a principal on these topics, they would largely be within the purview of most principal's regular work. It was thus expected that principals would report higher perceived autonomy ratings in building matters rather than in district level / shared areas of responsibility, which was confirmed in this dissertation's analysis of Hypothesis One. This finding is unique within the literature; to date, the difference in perceived autonomy between building and district level decisions has not been examined before using this methodology.

Curricular Autonomy and Principal Demographics

In this section, curricular autonomy will be discussed with respect to the results of the analysis and relevant literature. However, it should be noted the same literature on age and years of experienced guided the development of both Hypothesis Two and Four. To avoid unnecessary repetition in the budget-related sections of Chapter Five, the discussion of age and years of experience in the literature will not be repeated; the literature is generalist in nature and does not specifically address budgetary or curricular decisions, only that greater experience will presumably yield greater autonomy.

For Hypothesis Two, the results of the analysis showed that years of experience is not a significant predictor of perceived autonomy after controlling for age, community type, and US

region. Principal age was also not found to be a significant predictor. There is, however, research to suggest that years of experience and age are related to greater professional autonomy (Haynes & Licata, 1995; Van den Broeck, Ferris, Chang & Rosen, 2016), which has also been observed informally (Dillon, 2010); however, there are potential reasons why this effort did not yield the expected results. First, Haynes and Licata focused on what they call creative insubordination, which is not a commonly recognized work domain of the principalship (1995). Defined as the willingness of experienced administrators to adjust district office directives or engage in borderline insubordination to meet the needs of one's school, Haynes and Licata very much expand the discussion of principal autonomy; however, autonomy outside of the accepted responsibilities of the principalship was not explored in this dissertation. While the NTPS Principal Survey has generally remained similar from iteration to iteration, it would be interesting to see autonomy related questions focusing on less formal aspects of the principalship. Certainly, there would be justification for such questions as autonomy can be granted informally to experienced principals of successful schools (Dillon, 2011).

Specific to the Van den Broeck study focusing on autonomy, with an exploration of age and years of experience, Van den Broeck, Ferris, Chang and Rosen's meta-analysis did show these demographic factors are positively linked to professional autonomy. Yet, the studies used were not focused on education; the selections were primarily centered on those empirical studies that focused on the application of needs associated with SDT within the work environment (2016). It is possible the instruments used by the individual studies within the meta-analysis were more sensitive to the relationship between years of experience and autonomy as the studies and associated methodologies were focused on SDT; admittedly the NTPS surveys are set up to

find descriptive statistics on education and were presumably not developed with theories like SDT in mind.

Transitioning to Hypothesis Three, after controlling for the community type, the US region a principal works within, age, and years of administrative experience, male administrators were not found to have more autonomy than females. However, Hispanic administrators had lower odds of reporting low autonomy than whites in curricular decisions. The gender differences in autonomy were statistically equivalent across races. The findings related to Hypothesis Three were unexpected as males did not have significantly higher odds of reporting curricular autonomy; however, the literature's discussion of curricular autonomy does show support for female administrators having advantages within this work domain (Adkison, 1981; Eckman, 2004; Erickson, 1985).

Early research has shown that female administrators are generally more likely to emphasize instructional leadership (Adkison, 1981), which may be linked to having more years in the classroom than male administrators (Eckman, 2004; Erickson, 1985). Additionally, it is noted that female and male socialization is often quite different; on average, females are more likely to experience socialization that encourages a nurturing temperament suited for instruction, whereas male socialization may more often emphasize leadership qualities (Adkison, 1981). More contemporary research does challenge this notion, however, as females have a greater propensity towards transformational leadership (Brandt & Edinger, 2013) or elements of transformational leadership (Martin, 2015), building cohesive teams, and better interpersonal skills like listening, communicating, and empathy (Evans, 2014).

As a result of this research, one could expect that females would report higher autonomy ratings than males given their generally longer classroom experiences and a socialization process

that favors dispositions favorable to instruction, despite concerns of systemic gender privileges that males experience.   However, with this not being the case, the discussion of perceived professional autonomy and race will now be explored.

As stated above, race was a significant predictor of perceived principal autonomy in this dissertation, as those administers who identified as Hispanic reported lower odds of reporting little professional autonomy than administrators who identified as white in terms of curricular decisions. The differences between white administrators and administrators of other racial categories were not significant in this research effort nor were the gender differences across races significantly different. The racial findings are contrary to expectations, as there is literature to suggest that Hispanics experience challenges in educational administration given lower expectations and a lack of experienced mentors, despite efforts to provide effective mentorship (Magdaleno, 2006), which may be particularly true for Latina's (Méndez-Morse, 2004; Mendez-Morse, Murakami, Byrne-Jimenez & Hernandez, 2015), which could impact one's autonomy in areas like curriculum.

The research finding that Hispanics participants reported significantly lower odds of reporting little to no autonomy contradicts the oft-noted challenges for incoming Latina administrators such as the lack of professional mentorship and the presumed benefits a new administrator would have as a result of such a relationship. Research indicates that Latinas may have a propensity towards forming composite mentors, drawing from their families, particularly their mothers, to guide their leadership (Méndez-Morse, 2004); additionally, there is research to suggest that female aspirants to leadership roles would benefit from programs that focus on leadership topics (Sandler, 2014). In Méndez-Morse, she notes that forming composite mentors is considered necessary as professional mentors are often white males, who most commonly

support aspiring administrators who are also white males (2004). However, there is evidence that mentorship for Latina's within educational administration is of varying quality (Mendez-Morse, Murakami, Byrne-Jimenez & Hernandez, 2015), which speaks to a potential disparity in quality mentoring opportunities between racial/gender groups. This is particularly important, as the benefits of mentorship may well extend past helping a person find an administrative post; the mentoring relationship ideally will positively impact the readiness of pre-service administrators as they become principals. Despite these challenges, however, administrators who identify as Hispanic are interestingly reporting greater odds of having curricular autonomy than those administrators who identify as white.

The expectation in this dissertation was that administrators of color and females face obstacles that negatively impact their professional autonomy. One of these challenges was speculated to be that administrators of color and females may not have had the benefit of an experienced administrator's perspective and regular individual attention. While outside the scope of this study to definitively state that a lack of mentorship results in less curricular autonomy, future research may find mentorship is linked to curricular autonomy, particularly for administrators new to school leadership. The negative impact of not having a mentor may be true for principals as they begin their administrative career, however, additional studies would be necessary to evaluate this possibility.

While the perceived curricular autonomy between white and black administrators was not significantly different in this research, there is literature to suggest that mentorship for black females is especially desirable as well (Allen, Jacobson & Lemotey, 1995; Bell, 1992; Peters, 2012). Perhaps the mentorship disparity remains a concern because to be a woman of color is to be a member of what is often described as a twice-disadvantaged group, that differs from the

"mythical norm" of the white male (Lorde, 2007), resulting with a reluctance of would-be mentors to assist upcoming female leaders of color. Additionally, the twice disadvantaged categorization would also suggest a greater autonomy gap between male and female administrators of color; however, this did not prove to be the case for this data set.

Budgetary Autonomy and Principal Demographics

As to Hypothesis Four, the results of the analysis showed that years of experience is not a significant predictor of perceived autonomy after controlling for age, community type, and US region. Principal age was also not found to be a significant predictor either. Hypothesis Four is based on the same and literature and logic as described in Hypothesis Three. Further details about the literature regarding age and years of experience will be found in the above section for Hypothesis Three.

In Hypothesis Five the question was whether gender and race were significant predictors of budgetary autonomy when age, community type, the US region a principal works within, and years of administrative experience are controlled for. The analysis showed that females have lower odds of reporting low budgetary autonomy than males; however, significant gender differences across races were not observed.

This result was unexpected; historical literature has suggested that financial skills are a part of what has been considered masculine areas of concern (Adkison, 1981). A child's socialization often funnels into gender stereotypes that differ between boys and girls (Adkison, 1981). Adkison goes further, indicating that financial skills fit neatly into the professionalized view of management that favors the stereotypical upbringing of males (1981). The notion that some traits are linked to males more than females also have an empirical basis wherein a gender bias was found against females desiring leadership experiences (Scott & Brown, 2006).

While socialization is a powerful force within the development of children, during the 2015-16 school year, 51.1% of non-charter public school administrators were male and 48.9% were female (as reported in Table 4.1), which is a considerable difference from the 1999-2000 school year where 56.2% of administrators were male and 43.8% were female (NCES, 2000). Perhaps the greater number of women in school administration has contributed to a new perception of educational administration in the United States, which includes females as successful practitioners within all aspects of the principalship. While this is certainly a positive development, the literature does not provide a clear picture of why female administrators would have higher odds of reporting greater autonomy in budgetary matters.

Finally, it should be noted that females, and particularly females of color, face challenges in the workplace that males traditionally do not. Research suggests that women may not be as respected as male leaders and perceived as tough to work with (Adams & Hambright, 2004). This finding finds support in other research as well, where female leaders of color are not taken as seriously as their male counterparts (Reed, 2012; Meńdez-Morse, Murakami, Byrne-Jimenez & Hernandez, 2015) despite excellent credentials (Peters, 2012).

In conclusion, the research findings regarding budget are surprising. The literature described above shows the continued challenges that women face, especially those of color, which would suggest that women likely face challenges as they exert professional autonomy. However, around budgetary decisions, the current study did not find this to be the case.

Implications of Research

There are several important implications of this dissertation. First, principals share considerable responsibility with their district offices as shown in the results of Hypothesis One. As such, those pursuing administrative posts and those seeking to understand the dynamic

between schools and district office should expect significant areas of a school's function to be areas of shared responsibility between the two. Specifically, when it comes to areas like in-service scheduling, establishing curriculum, and setting performance standards, these discussions should be had with the district providing a context for these functions. Additionally, principals will need to understand areas like the school budget, student discipline, evaluating teachers, and hiring teachers are functions that principals will need to take the lead on.

As to the remaining work of this dissertation, budgetary decisions and the establishment of curriculum are not pursued by principals with equal amounts of perceived autonomy. The establishment of curriculum is expected to be a joint responsibility of principals and district office and that budgetary school decisions are largely within the purview of principals. As such, it is interesting that Hispanics show greater autonomy than whites in curriculum, an established area of shared leadership between principals and district office. Also, whether principals have generally the same amount of actual autonomy even if they feel they do not is an open question and beyond what can be discerned from the dataset used in this study.

Finally, the question of autonomy and who happens to have it has implications for equity. Is it equitable for principals to approach their work with significantly different levels of perceived autonomy? While the expectation that white males would have the highest autonomy was not found, that principals of any racial category perceive greater autonomy offers questions about the similarity of professional experiences between racial groups. Further research into the mechanisms behind the greater autonomy of Hispanics, as it relates to curricular decision making, and that of females for budgetary decisions will help clarify the nature of perceived autonomy in US principals.

Limitations of the Research

To date, there is little quantitative research on the perceived professional autonomy of principals and even less that can be generalized to the national population of US public school administrators. The intent of this dissertation was to assist in meeting a gap in the literature on this important topic. As the results coming from this dissertation emerged from the analysis of one question from a lengthy national survey, there is much work to be done to establish whether the results are generalizable to the population. The unexpected results, however, do suggest that perceived principal autonomy in the US warrants further study.

To begin the discussion of limitations, the survey instrument itself could be improved. Had autonomy been measured with a more expansive scale, this dissertation could have provided insights into autonomy as a continuous variable, which would be more in line with SDT's stand that autonomy has a considerable range (Gagné & Deci, 2005; Ryan & Deci, 2000). Ideally, autonomy would be measured along a six-point scale, ranging from amotivation, through the four stages of extrinsic motivation, and a selection would be included for intrinsic motivation (see Figure 2.1). Survey respondents would be provided with information to help them understand the differences between amotivation, extrinsic motivation, and intrinsic motivation to ensure the differences between motivational states were understood. Within the 2015-16 Principal Survey, the range of responses does not have this level of complexity making it an incomplete measure of autonomy as defined by Self-Determination Theory. As the survey question reads, respondents are asked the extent to which they feel they can influence decisions, which helps to address the central perspective within SDT that people need to feel a level of autonomy in their lives. However, the question lacks the specificity to consider levels of motivation as described in SDT. The dataset used in this dissertation is admittedly imperfect,

however, it is the only dataset that can be linked to the broader discussion of autonomy with a national sample.

Additionally, this dissertation is guided by and limited by the theoretical constructs chosen for the dissertation as well as the biases of the researcher. Self Determination Theory and post-positivism were used in this dissertation; however, a constructivist theoretical underpinning could have yielded insights into perceived autonomy and how leadership identities are created within varying contextual circumstances. Research is inherently biased by the preferences and the lens a researcher brings to their work; this is certainly the case for this dissertation. Writing as a white male principal of an elementary school in a suburban school district, my perceptions of autonomy and how freely I am empowered to use it is likely different than those coming from different backgrounds. Administrators disadvantaged by systemic privilege, for instance, are more likely to have paths to leadership and their leadership identities negatively impacted, which in turn could affect their comfort in using the perceived professional autonomy they have.

Future Research

Presented in this dissertation is a unique contribution to the literature on principal autonomy that includes indications that perceived autonomy was not the same across all respondents or within all work domains; why is this? There are admittedly many questions that remain with regards to principal autonomy. Several interesting questions could yield useful information for others wishing to examine principal autonomy in the United States further.

First, one will note this dissertation focused on the perceived professional autonomy of principals (for curricular and budgetary decisions) as a group during the 2015-16 school year. Principals working in charter schools were not a part of this analysis, nor were considerations made for whether they worked in an elementary, middle school, or high school setting.

Continued research could use the charter school or school type variables to compare administrative autonomy between work settings and/or levels.   Interesting further research could also consider ways to include supervisors' perspectives on principal autonomy to get closer to actual autonomy versus perceived autonomy.

As to the regional variables, research could be conducted to determine why Southern and Western administrators report greater odds of budgetary autonomy than those in the Northeast. The regional questions are somewhat difficult to speculate around: within each of the US regions used in this study are several states and numerous community types of varying size and urbanicity. With regards to region, there is a reluctance to speculate about why perceived autonomy is different across regions because it could lead to overly simplistic, stereotypical, or even offensive views of how regions differ in the US (i.e. slower pace of life in the South, "cowboy mentality" in the West, liberal orientation in the Northeast).

Continued research regarding the relationship between community type and perceived administrator autonomy would also be interesting and is easier speculate about. Why do principals working in the Northeast report the greatest odds of curricular autonomy and cities report lower odds of autonomy than other community types? Why did rural and town principals report higher odds of diminished autonomy in budgetary decisions as compared to cities? When it comes to community type, a few tentative speculations are offered. Perhaps in rural areas and towns, the budget is more modest than in other community types, making it easier for one district office administrator to control the budget with great specificity. By extension, with district office preoccupied with budgetary matters, perhaps rural and town principals are expected to be stronger instructional leaders. Given the unexpected strength of region and community type as

predictors, it would have been interesting to examine the interaction of both community type and US region with gender and race.

Additional questions could also be asked and studied. For those interested in the gender and racial differences, follow up studies to examine autonomy in a qualitative fashion would certainly be up for consideration. Research could examine why females reported greater odds of perceived autonomy in budgetary decisions and why Hispanics reported greater odds of autonomy than whites in terms of curricular decision-making. As a final area for further examination, there does remain an important question unanswered by this dissertation: how much autonomy should a principal have? Are too many areas of autonomy a problem, wherein the expectations of principals are too great and too varied for one person to address in a quality fashion?

The NTPS will continue to collect data on principals, which will hopefully continue to include questions regarding administrator perceptions of perceived autonomy. Continued analysis of perceived principal autonomy using the methodologies included in this dissertation would offer continued insights into administrative autonomy as the era of the ESSA continues.

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Appendix: Survey Questions

Selected Questions from the 2015-16 Principal Questionnaire from NTPS

1-5. PRIOR to this school year, how many years did you serve as the principal of THIS OR ANY OTHER school?

- Do NOT include any years you served as Assistant Principal.
- Count part of year as 1 year.
- If non, please mark (X) the box

☐

None   Year(s) as principal of this or any other school.

2-2. How much ACTUAL influence do you think you have as a principal on decisions concerning the following activities?

	▪ Mark (X) one box on each line.				
	No Influence	Minor Influence	Moderate Influence	Major Influence	Not applicable
a. Setting performance standards for students at this school	☐	☐	☐	☐	☐
b. Establishing curriculum at this school.	☐	☐	☐	☐	☐
c. Determining the content of in-service professional development programs for teachers of this school	☐	☐	☐	☐	☐
d. Evaluating teachers of this school	☐	☐	☐	☐	☐
e. Hiring new full-time teachers of this school	☐	☐	☐	☐	☐

f. Setting discipline policy at this school	☐	☐	☐	☐	☐
g. Deciding how your school budget will be spent	☐	☐	☐	☐	☐

6-1. Are you male or female?

☐   Male
☐   Female

6-2. Are you of Hispanic or Latino origin

☐   Yes
☐   No

6-3. What is your race?

Mark (X) one or more races to indicate what you consider yourself to be.

☐   White
☐   Black or African-American
☐   Asian
☐   Native Hawaiian or Other Pacific Islander
☐   American Indian or Alaska Native

6-4. What is your year of birth?

1	9		

CURRICULUM VITAE

Steven Ross Williams

Place of Birth: Wausau, WI

Education
> B.S., University of Wisconsin-Oshkosh, May 2005
> Major: Broadfield Social Studies
> Minor: History
>
> M.S., University of Wisconsin-Stout, December 2008
> Major: Training and Development

Educator Experience
> Social Studies Teacher, Colby High School, August 2005-June 2006
>
> Social Studies Teacher, Merrill Senior High School, August 2006-August 2011
>
> Assistant Principal, Germantown High School, August 2011-July 2014
>
> Principal, MacArthur Elementary School, July 2014-Present