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The Intentions of Florida Educational Leadership Graduate Students to Pursue Administrative Positions

Daniel Wayne Eadens

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The Intentions of Florida Educational Leadership Graduate Students to Pursue Administrative Positions

by

Daniel Wayne Eadens

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education Department of Educational Leadership and Policy Studies College of Education University of South Florida

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Dedication

I dedicate this study to the memory of my loving mother, Catherine Marie Eadens,
and to my wonderful father, Charles Allen Eadens.
Acknowledgements

Foremost, I want to thank my Lord and Savior, Jesus Christ. Without him, none of this would be possible. The unending support and encouragement of my loving wife Danielle Maya Eadens and my precious children Joshua, Jacob, and Zachary have paved the way for my work. I am forever grateful for the prayers and support of Pastors Gary, Billy, and Doug. Dr. Bruner, my super hero and committee chair, believed in me continually and was always there for me. My outstanding committee members Dr. Black, Dr. Ferron, and Dr. Greenlee were also integral to the process and supported me above and beyond what was expected of any professor. They all have provided tremendous insight, high motivation, and strong direction every step of this long journey. I also want to thank my outside proposal defense chair, Dr. Young, who is an inspiration to me. Special thanks to my brilliant final defense outside chair, Dr. James, who set me straight many times. I want to thank all the university representatives who allowed me to study their departments and the Educational Leadership Graduate Student participants throughout Florida who took time to respond to my surveys.
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Abstract

This study examined the intentions of educational leadership students in Florida university graduate programs in regards to demographics and self-assessed leadership characteristics. The study employed a non-experimental design wherein Regression, ANOVA, and Multiple Regression statistical techniques were employed to explore intent. It examined the influences that self-assessed leadership behavior, gender, number of credits completed, and age had on respondent intentions as measured by the Leadership Practice Inventory and the Demographics and Intentions Questionnaire. The highest assessed priori sample size was 159 when power was set at 0.80, alpha was 0.05, and the expected effect size was set at .10. This study is important because it identified additional reasons administrative pools have perceived shortages of quality candidates using job choice theory as a frame of reference and identified. Results were made available in order to offer the Florida Department of Education, school district leadership academies, and university educational leadership departments valuable insight for reform of selection, recruitment, and retention.
Chapter I: Introduction and Background

Today, in the field of Educational Leadership, new pathways to administrator certification are being forged to enlarge administrator pools with quality candidates. Longstanding Department of Education policies and statutes are being rewritten to facilitate these changes (Archer, 2002). Lips and Ladner (2008) said, “In education reform, no state has been a more ambitious laboratory of democracy than Florida” (p. 2). Florida’s accountability movement has brought about reform that creates new pathways for both hiring and compensating quality.

Only a little more than half of those who graduate from administrator preparation programs ever end up in an administrative position (Darling-Hammond, LaPointe, Meyerson, & Orr, 2007). Despite increasingly flexible processes for obtaining administrative certification and growing pools of credentialed candidates, there remains a shortage of quality administrators in many states, including Florida (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). This shortage of quality school administrators could put a strain on school systems.

The U.S. Department of Labor and Statistics predicted a 23.6% increase in the need for elementary and secondary administrators by the year 2012 (Hecker, 2004). However, research on supply and demand found “little evidence of a nationwide crisis in the market for certified school administrators” (RAND, 2003, p. 1). The answer to this
gap or type of seemingly conflicting literature lies in the distinction of terms. There is a
distinction between certified administrator shortages and shortages of willing and
qualified administrator candidates. In other words, there are many candidates who will
receive educational leadership Level One certification, but are not ready for the
complexities of the position of assistant principal and/or are not willing to take the jobs
that are offered. This becomes more evident as supply and demand were examined more
closely and light is shed on the gap between those who intend only to be certified and
those who intend to be certified assistant principals.

Boehlert and O’Connell (1999) stated the number of educational administration
jobs were higher than in the past and are continuing to increase. Boehlert, O’Connell
(1999) and Tallerico and Tingley (2001) contended that misleading district-reported data
and reports of under-representation of women and minorities were of concern since
schools are becoming more diverse. This research might offer a partial explanation for
the seemingly contradictory perceptions in that there may not be an overall shortage, but
only a shortage within the areas of geography, gender and race. An administrator
shortage can be shown through ratios of unfilled positions to qualified candidates.

Hammond, Muffs, and Sciascia (2001) claimed a nationwide shortage of school
 principals. Likewise, Gewertz (2000) denoted a looming job-vacancy problem due in
part to a large number of administrators approaching retirement and a reluctance to enter
administration because of pressure to produce higher student academic achievement. In
addition, low pay and lack of respect, coupled with increasing responsibilities, as well as
not enough preparation for administrator’s difficult financial and political challenges of
running a school all create a lack of willing and qualified applicants. While reasons for
shortages were beginning to surface as early as a decade ago, others still debated whether a shortage really existed at all. Roza, Celio, Harvey, and Wishon (2003) acknowledged that school districts were aware of not only shortages in the number of administrative applicants, but they were keenly aware of shortages of the quality of their labor pools and anticipated increases in principal openings mainly due to age and retirement turnovers. School districts realized it would be more difficult to find certified quality candidates as time passed. In the height of the hysteria, Pounder and Crow (2005) proposed the shortage of qualified administrators was alarming. A year later, Flessa and Grubb (2006) argued that many districts continued to face principal shortages and reported that Florida’s school districts in particular, are faced with dramatic teacher and administrator shortages. Despite the literature that speaks of an alarming shortage, there is literature that suggests the looming vacancies are only for certain kinds of schools in certain locations for certain jobs (Flessa & Grubb, 2006).

In these challenging times, the issue of administrator shortages in school districts has intensified (Grubb & Flessa, 2006). Shortage of administrators largely exists for specific administrative positions in rural or challenging urban communities (Forsyth & Smith, 2002; Pounder, Crow, & Shepherd, 2003). Many districts purport to face a shortage of quality certified administrator candidates, especially in the high-needs schools. High needs districts are often identified as areas of low socio-economic status or those containing several inner city schools. This finding affirms claims that there are areas of greater and lesser need, and that the areas of highest need are those who would most benefit from competent and enthusiastic leadership and administration.
Much of the literature written during the last decade is dominated by perceived shortages of certified, qualified, and willing administrators (Flessa & Grubb, 2006). Even today, this literature exists and is varied and often seemingly dichotomous. Some of the literature claimed principal shortages and the subsequent national crisis that was sure to ensue, while other areas of literature simply say no shortage exists (RAND, 2003). Still, another area of literature offers specific reasons for shortages and speaks of solutions to the problem, both of which are discussed (Hammond, Muffs, & Sciascia, 2001). Finally, tantamount to that specific literature, other areas pointed not at the quantity of administrative candidates, but at quality of the applicants as being the real issue (Herrington & Wills, 2005).

If school districts in Florida want to be successful in recruiting positive and capable leadership for the role of principal, it becomes important that school districts identify and maintain current job satisfaction data to assess what satisfies and dissatisfies assistant principals (Taylor, 2007). To fully explore the dynamics of why a quality administrator shortage may be occurring, it is important to consider the intentions of educational leadership graduate students (Gates, Ringel, Institute, & Santibanez, 2003). This degree is a precursor to seeking administrative certification and entering into administrative applicant pools. This research study examined reasons why Florida educators pursuing graduate degrees in educational leadership administration intend, or do not intend, to pursue an assistant principal position.
**Methodological Framework**

Gall, Gall and Borg (2006) articulate that descriptive, casual-comparative, and correlational non-experimental research designs involve the study of behavior, cognition, and other attributes of individuals without researcher intervention and claim the purpose of correlational research is to discover relationships between variables through the use of correlational statistics. Reality can be shaped by empirical data derived from the senses.

In non-experimental research, the researcher does not manipulate the independent variables. Even though it is not possible to identify the cause and effect between variables, an examination of the relationship between variables is still possible. In understanding the difference between dependent and independent variables, it is also important to understand the different characteristics amongst variables. This study assumed that information gathered, via the Leadership Practices Inventory (LPI), as shown in Appendix A, and Demographics and Intentions Questionnaire (DIQ), as shown in Appendix B, are reality that can be measured and quantified into variables that can be statistically measured. The assumption for quantitative research assumes that reality exists, is fixed, and is measurable (Creswell, 2003). “The almost symbiotic nature of research and statistics is a result of research design producing data that need analyzing; and, statistical techniques requiring data in order to perform their function” (Johnson & Farmer, 2007, p. 4). Pegues (2007) stated, “The quantitative paradigm is induction to construction and experimental phenomena are used inductively to construct theory” (p.317). Quantitative research is consistent with the positivist philosophy in research (Johnson & Farmer, 2007).
Paradigm. It is the combination of data interpretations that yielded the construction of knowledge from this study (Huglin, 2003). Since a paradigm is a basic set of assumptions and values that guides our actions, both that are routine and those actions that result in purposeful scientific inquiry (Guba, 1990). This study’s data collection and design lent itself more towards positivism, because it used mathematics to represent and analyze features of social reality, the variables are expressed as a numerical scales, it used a deductive analysis to identify underlying themes and patterns, and it searched through the data for instances (Johnson & Farmer, 2007). Overall, the theoretical framework for this study came from this paradigm under the umbrella theory of job choice.

Theoretical Framework

Job choice theory. The job choice theory is essentially the examination of why individuals select one job over another. It is based upon the presumption that jobs are selected based on objective factors, such as financial incentives (Pounder & Merrill, 2001). Selection based on objective factors is considered rational, “Rational choice is a general theory of human behavior that views all humans as complex, fallible learners who seek to do as well as they can given the constraints that they face and who are able to learn heuristics, norms, rules, and how to craft rules to improve achieved outcomes.” (McGinnis, 2000, p. 487). Job choice theory can be considered a type of rational choice.

Behling, Labovitz, and Gainer (1968) originated job choice theory and it was furthered in the educational arena later by Young, Rinehart, and Place (1989). Young et al (1989) developed three separate theories of job choice: objective, subjective, and critical contact. Objective theory refers to job applicants as mainly economic and applicants join organizations that are the most economically competitive. Subjective
theory refers to applicants as psychological beings motivated by getting their psychological needs fulfilled via the job’s work environment. Critical contact theory of job choice says applicants are concerned with the work expectations and requirements communicated during the initial interview. In all three job choice theories, individuals seem to draw their motivation either externally or internally.

In this study, the incentive for selecting an administrative position was examined by comparing these external to internal motivators. The two internal factors considered were the self-assessed leadership on the Leadership Practice Inventory (subjective theory) and the self-assessed role economic incentives (objective theory) each play on graduates in seeking an administrative position after Level One certification. The external factors were equated to the direct amount of graduate program credits completed and demographics and intentions questionnaire criteria.

Statement of the Problem

Some authors espouse there are more applicants than openings (Boehlert & O’Connell, 1999; Tallerico & Tingley, 2001). One researcher claims “more people are earning administrative certificates, but fewer were actually applying for available positions” (MacAdams, 1998, p. 37). Simply stated, in many places there are enough certified candidates. States are certifying more school administrators than there are positions available. Georgia, for example, has less than 2,000 schools and there are 3,200 current administration licenses, yet they report not having enough qualified applicants (Herrington & Wills, 2005). In New York, two thirds of individuals who hold certification work in other areas. Many students obtain the graduate degrees and certification with no intention of obtaining an administrative position (Mazzeo, 2003).
However, quality administrator applicants are apparently not applying for certain district or schools in certain location and socio-economic regions. According to the State Action for Education Leadership Project (2003), only about 25% of certified principals apply and accept principal positions.

The literature supports the notion that there is not a shortage in the number of certified applicants for administrative positions. The literature also supports that school districts have concerns regarding the quality of applicants in their administrative applicant pool. Could the quality of the pool be affected by the numbers who are certified and choose not to apply for administrative positions? If this is the case, the question becomes why do some educators who become certified for administrative positions through educational leadership pursue an assistant principal position and others do not. Boehlert and O’Connell (1999) suggested that further studies of administratively certified teachers may provide answers to questions like this one.

**Purpose of the Study**

The study’s purpose was to analyze factors that influence the intentions of educational leadership graduate students enrolled in university educational leadership programs in Florida. The study analyzed which characteristics of graduate students in Florida might be associated with level of intention to seek an assistant principal position upon program completion via the lens of examining self-assessed leadership behaviors. To seek an assistant principal position in Florida, a candidate must have Level One certification. It requires all candidates obtain an Educational Leadership professional certification by successfully passing a comprehensive written state examination known as the Florida Educational Leadership Examination (FELE) and completion of an approved
Master’s Degree in school administration (6A-4.0081 Florida School Leaders Certification, 2007).

The researcher surveyed pre-certified graduate students, that is, ones who had not yet graduated with the Master’s degree in Educational Leadership Administration. The study looked at the influences of various defined elements of leadership behavior, number of graduate credits completed, gender, and age may have had on the intent of educational leadership students to pursue an assistant principal position with emphasis on those qualities that incline and disincline students.

The measureable research questions that guided this study are presented below. The questions were designed to investigate why educational leadership graduate students in Florida are more or less likely to intend to seek an assistant principal position via the lens of examining self-assessed leadership behaviors. Self-assessed leadership behaviors were measured using the Leadership Practices Inventory (LPI). Appendix A, the LPI, measured leadership behaviors that were categorized into five practices or constructs. The construct titles are shortened to read: ‘Encourage’, ‘Model’, ‘Enable’, ‘Inspire’, and ‘Challenge’. Each construct is a composite variable of its own. The DIQ (Appendix B), flushed out the intentions of the graduate students and yielded demographic characteristics and other important data.

**Research Questions:**

1. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior?

2. Is there a relationship between intent to seek an assistant principal position and gender (Male, Female)?
3. Is there a relationship between intent to seek an assistant principal position and number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)?

4. Is there a relationship between intent to seek an assistant principal position and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

5. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, gender (Male, Female), number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33), and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

Participants, Instrumentation, and Data Gathering

Participants. With the assistance of university department chairs, the researcher surveyed College of Education graduate students seeking Master’s degrees in Educational Leadership. These graduate students were enrolled in any of the following Florida’s public and private campus-based universities including: University of Florida, University of South Florida, University of Central Florida, Florida State University, Saint Leo University, and National Louis University. This degree is a precursor to Level One administrator certification and these universities are listed as a State-Approved Educational Leadership Programs (Bureau of Educator Recruitment, Development, and Retention, 2009). Convenience sampling was the type of purposeful sampling.

Instrumentation. Leadership Practices Inventory (Appendix A) and Demographic and Intentions Questionnaire (Appendix B) were the primary means of data collection for this study. While the researcher developed the DIQ, the LPI assessment is based on over 25 years of research (Posner, 2009). It was created for use with college
students and is designed to assess leadership practices in five dimensions with its 30 items (Posner, 2009). The LPI measures leadership personality characteristics. It is one of the most tested leadership inventories of its kind with 1.3 million test administrations to date (Posner, 2010; Zagorsek, Stough, & Jaklic, 2006). The LPI is an assessment tool, not a test. Its 30 items are written as behavioral statements. It utilizes a 10-point scale to detect level of agreement with the behavioral statement.

The LPI’s reliability was tested through analysis of internal reliability (Zagorsek et al., 2006). All of the five key leadership practices had strong consistent internal reliability (Posner, 2009). The LPI’s validity was tested using a positive workplace attitude scale where respondents were asked 10 Likert-scale type questions regarding their feelings and assessments about several factors (Posner, 2009). Test results show LPI has high face validity and predictive validity. Furthermore, the LPI has been applied extensively and is highly regarded in both academic and practitioner realms (Posner, 2009).

**Demographic and Intentions Questionnaire.** Several demographic characteristics were compared in the study’s analyses using the demographic data obtained through the DIQ (Appendix B). Some of the demographic-type characteristics within the questionnaire were gender, age, and ethnicity. Included in the questionnaire were the number of graduate credits completed, current teaching grade level and assignment, areas of certification, total years of any experience in public or private school teaching, county, and the type of degrees previously completed. This questionnaire asked if the participant had ever worked as a guidance counselor or special education teacher and it probed regarding the amount of influence that salary advances and personal
reasons have played in their decision to pursue a degree in educational leadership. The DIQ (Appendix B) asked about their intention to seek an assistant principal position or another administrative-type position, if it would be secondary or elementary, and how long after completion of their graduate program did they plan to seek an administrative position.

**Analysis.** The LPI assessment and DIQ data were analyzed to investigate self-assessed leadership behaviors, intentions, and if they were impacted by demographic factors. In order to analyze the quantitative data, it was first collected, coded, and entered into a spreadsheet using Microsoft Excel 2007 and Statistical Package for Social Science (SPSS) for Windows versions 17.0 (SPSS, 2009). The data were analyzed using applicable descriptive and inferential statistics including Simple Linear Regression and Multiple Regression.

Demographic information about participants was used to present a descriptive profile of the sample collected. Next, a Zero-order correlation table of the LPI instrument (Appendix A) was produced to evaluate internal relationships between variables. Furthermore, a Cronbach’s alpha coefficient was produced to measure degree of internal consistency of the questions asked. Prior to conducting inferential analyses, parametric assumptions were analyzed to ensure variables were normally distributed and met general assumptions related to the statistical tests conducted.

Simple Linear Regression and Multiple Regression were used to answer the five research questions. Specifically, for Research Question 1 a multiple regression was used to test the relationship between intent to seek and assistant principal position and self-assessed leadership behavior. For Research Question 2, a simple linear regression was
used to test differences in intent to seek an assistant principal position and levels of
gender. For Research Question 3, a multiple regression was used to test differences in
intent to seek an assistant principal position numbers of credits successfully completed.
For Research Question 4, a multiple regression was used to test differences in intent to
seek and assistant principal position and age levels. Finally, for Research Question 5, a
multiple regression will be used to test the differences between self-assessed leadership
behavior, gender, number of credits successfully completed, and age. The dependent
variable for each research question remained consistent: Intent to seek and assistant
principal position (as measured by the DIQ). The predictor variables were: self-assessed
leadership behavior, as measured by the LPI, gender, number of credits successfully
completed, and age.

Limitations, Assumptions, and Design Controls

Delimitations. This study surveyed state of Florida university students only. The
scope of this study was limited to graduate students seeking educational leadership
Master’s Degrees. Those graduate students that are seeking a Specialist Degree or
Doctorate Degree in Educational Leadership were not surveyed in this study.

Limitations. Limitations of the study included the methodological design,
survey design, population characteristics, and sampling procedure. For example, the
methodological design was strictly cross-sectional quantitative and did not observe
phenomenological behaviors or behaviors over time. In addition, the study used a survey
that is reasonably restrictive. That is, the LPI is a Likert-type instrument and it did not
allow personal insight or suggestions within its design (Appendix A).
The focus of this study concerned individual graduate students and their intentions to seek an assistant principal position. While there are many other district and school-based leadership positions a Master’s degree in Educational Leadership may qualify graduates for, this study did not attempt to examine why graduate students intend to seek or not seek any other of these administrative positions. Additionally, the study’s focal point was not concerned with how each graduate student perceived supply and demand or any particular school district’s promotion competitiveness. This study focused on the intentions of the graduate students to seek or not to seek an assistant principal position.

Furthermore, the purposeful sample was drawn from only the Florida public campus based and online universities and private universities that serve the Tampa Bay Metropolitan area. Purposeful sampling is a common sampling technique. However, it does restrict degree of variance and limits its generalizability. Finally, as warned by Rynes (1991), intentions and perceptions are very different from job choices. This study focused on intentions, not actual behaviors.

**Assumptions.** This study included several assumptions. First, there was an assumption that professors would allow ample time for the LPI and DIQ. There was an assumption that some students enrolled in an educational leadership graduate program would intend to seek an assistant principal position at some point in their K-12 career. Another assumption was the expectation that students would have been willing to complete the LPI and DIQ accurately and honestly.
Definition of Key Terms

To clarify several key terms that were frequently used throughout the study, a list of their definitions follows:

*A Administrative Certification* refers to educational leadership Level One certified educators with licenses which legally allow them to hold an administrative position.

*Assistant Principals* were staff members assisting the administrative head of the school. This classification also included assistant principals for discipline, administration, and curriculum.

*Educator* was an individual who holds a teaching license.

*Educational Leadership Graduate Students* were students currently working towards earning a Master’s Degree in Educational Leadership or School Administration.

*Intention* refers to an objective that one plans to do.

*Pool* was a group of assistant principals seeking a principalship or administratively certified educators seeking an assistant principal position.

*Principal* was one who legally serves in the role of the head administrator of a school.

*Qualified* individuals described administratively certified educators with additional skills and talents that make them ideal in the role of an assistant principal or a principal.
Summary

This study attempted to analyze factors that influenced the intentions of educational leadership graduate students currently enrolled in university educational leadership programs in Florida. The study analyzed why those graduate students in Florida were more or less likely to intend to seek an assistant principal position or another administrative position upon program completion via the lens of examining self-assessed leadership behaviors. The study used statistical techniques to analyze the influences that leadership style, number of graduate credits completed, gender, race/ethnicity, and age may have on respondent intentions as measured by the LPI and the DIQ. As a result, the study identified additional reasons administrative pools have perceived shortages of quality candidates using job choice theory as a frame of reference. Results are available to offer the Florida Department of Education, school district leadership academies, and university educational leadership departments’ valuable insight for reform of selection, recruitment, and retention and also offer a better understanding of the nature of perceived quality administrator shortages.

Organization of the Study

This study was organized into five consecutive chapters. The first chapter provided an overview of the problem and offers a view of the research efforts. The second chapter reviewed the literature. Chapter three explained the design of the study. The forth chapter described the findings of the research. The last chapter summarized the findings, presents study conclusions, and made recommendations for further research.
Chapter II: Review of the Literature

Examining how intentions of educational leadership graduate students may be influenced by leadership style, gender, and age is of primary importance in this study. Being able to identify how these factors shape an individual’s willingness to pursue an assistant principal position may assist educational leaders in school districts, departments of educational leadership and departments of education in better addressing the perceived benefits and detractors of the position of assistant principal. This might aid in understanding recruitment and selection. In so doing, the pipeline for the assistant principalships in many districts can become more productive, producing stronger and higher quality administrator candidates.

At the crux of the problem lies the question of why professional educators do or do not pursue an assistant principal position after obtaining a graduate degree in educational leadership administrative. Boehlert and O’Connell (1999) suggest further studies of administratively certified teachers may provide answers to remaining questions in regards to administrative applicant pools. However, much of the literature written during the last couple decades is dominated by perceived shortages of certified and/or qualified and willing administrators (Gates, Ringel, Institute, & Santibanez, 2003; Herrington & Wills, 2005). Even today, this literature exists and is varied and seemingly dichotomous. It has emerged in differing venues and often has tangents. Some of the
The literature makes claims to principal shortages and the subsequent national crisis that is sure to ensue (RAND, 2003), while other areas of literature simply proclaim no shortage exists (Board of Governors, Public School Administrator Supply and Demand Connecticut, 2003; Boehlert & O’Connell, 1999; Hess 2003; Levine, 2005; Roza et al., 2003; Tallerico & Tingley, 2001). Still, another corner of the literature offers specific reasons for shortages (Forsyth & Smith, 2002; Pounder, Crow, & Shepherd, 2003) and even speaks of solutions to the problem (Hammond, Muffs, & Sciascia, 2001).

Tantamount to that literature, other areas point not at quantity (Roza et al, 2003) of administrators candidates, but the quality as being the real issue (Gates, Ringel, Institute, & Santibanez, 2003; Herrington & Wills, 2005). The latter study offers an explanation of perceived shortages based on the intentions of graduate students prior to them becoming administratively certified.

Chapter two is an inclusive literature review that provides the foundation for the entire study. This literature surveys scholarly articles, books, dissertations and other sources relevant to the topic. Consideration has been given to assess each scholarly piece for its objectivity, persuasiveness, and value. The purpose of the literature review is to offer an overview of literature published on this topic. It places each work in context to develop a clearer understanding of the subject and describe relationships between pieces. The review sheds light on gaps in previous literature and resolve conflicts among seemingly contradictory previous studies.

The literature review begins with an identification of the problem and a discussion about the gap in the literature. For principal shortage literature, claims are reviewed and clarified. This section begins by reviewing literature claims about critical principal
shortages and ends with a clarification that the shortages largely exist for specific
positions in challenging areas. The next section of the literature review, entitled
sufficient supply of certified administrators, discusses the overproduction of certified
administrators and discusses academic drift. This section is followed by a discussion of
the shortages of willing qualified administrators and how the numbers of highly capable
candidates were decreasing. After these areas of the literature shed light on seemingly
contradictory works, an explanation follows in the next section entitled reshaping the
principalship. In order to understand the intentions of graduate students who may seek
administration, this part of the review focuses on the job and how its responsibilities have
changed affecting the position’s desirability and job choice theory.

The literature review’s last sections turn to differentiated labor markets and
highlights literature that claims not all positions are equal. Next, personal issues and
factors such as gender, age, race/ethnicity, leadership style, timing, and career path that
might affect intentions of graduate students are covered. The review then focuses on
programs issues such as selection, recruitment, commitment, and candidate intentions
followed by district partnerships, program competition, and academic drift. Finally, the
chapter ends with a summary of the literature review.

Gap

When political changes occur with state regulations and policies, it warrants
responses and obligates the school districts to keep abreast with the changes. According
to Flessa and Grubb (2006), these politics and accountability efforts calling for better
leadership, places high demands on principals. It is challenging to strive to increase the
quality of administratively certified educators in administrative pools and make
administrative positions more desirable amidst continual changes and complexities of the job. Some states including Florida, Colorado, Michigan, and South Dakota have relaxed their certification requirements leaving district level certification increasingly attractive in order to increase their pools with quality candidates.

The U.S. Department of Labor and Statistics predicted a 23.6% increase in the need for elementary and secondary administrators by the year 2012 (Hecker, 2004). But, research on supply and demand found “little evidence of a nationwide crisis in the market for certified school administrators” (RAND, 2003, p. 1). The answer to this gap or type of seemingly conflicting literature in part lies in a distinction of terms. There is a difference between certified administrator shortages and shortages of willing and qualified administrator candidates. In other words, there are many candidates that will receive educational leadership Level One certification, but are not ready for the complexities of the position of assistant principal or are not willing to take the jobs that are offered. This becomes more evident as supply and demand within the gap are examined more closely and light is shed on the gaps between those that intend to be certified and those who intend to be certified and become assistant principals. The literature review attempts to separate the literature voices to make sense of the themes.

Claims for Principal Shortages

Boehlert and O’Connell (1999) stated the number of educational administration jobs were higher than in the past and continued to increase. Fenwick and Pierce (2001, p. 25) say "states are reporting shortages of qualified principal candidates and many school districts are struggling to fill vacancies." “These shortages occurred among all types of schools rural, urban, suburban” (Whitaker, 2001, p. 82). Boehlert, O’Connell, and
Raymond (1999) and Tallerico and Tingley (2001) contended misleading district-reported data, along with reports of under-representation of women and minorities, were concerns as schools were becoming more diverse and that might offer a partial explanation for the seemingly contradictory perceptions. Their research indicated that a closer look at the data suggests there may not be an overall shortage, but one strongly influenced by geography, gender, and race. The degree to which an administrator shortage was an actual crisis appears, from the literature, to be in dispute with varying perceptions about the ratios of unfilled positions to qualified candidates.

At the turn of the century, Gewertz (2000) denoted a looming job-vacancy problem due in part to a large number of administrators approaching retirement, reluctance to enter administration because of pressure to produce increasingly higher student academic achievement, pay and respect that is not commensurate with the position, increasing responsibilities, and not enough preparation for an administrator’s difficult financial and political challenges of running a school. While reasons for shortages were beginning to surface as early as this, others still debated whether a shortage really existed at all. Hammond, Muffs, and Sciascia (2001) studied if there really was a leadership crisis or if the crisis was not real. In their research, they claimed to have found a nationwide shortage of school principals. Additionally, they offered reasons for the shortage and even suggested a few solutions such as in-house women and minority teacher development and veteran principal retention strategies.

Likewise, Roza et al. (2003), acknowledged that school districts were aware of not only size shortages, but shortages of the quality of their labor pools and anticipated increases in principal openings mainly due to age and retirement turnovers. They
realized it would be more difficult to find certified and qualified quality candidates as time passed. Flessa and Grubb (2006) argued that many districts continued to face shortages of appropriate candidates for the job and too few hero-principals exist for all openings available, especially in high needs districts.

Some literature alleges the shortage of administrators largely exists for specific positions like high school principals, particularly in rural areas or challenging urban communities (Forsyth & Smith, 2002; Pounder, Crow, & Shepherd, 2003). Many districts purport a shortage of quality certified administrator candidates, especially in the high-needs districts. High needs typically are areas of low socio-economic status or inner city schools. This finding affirms claims that there are areas of greater and lesser need, and it is unfortunate that the areas of highest need are those who would most benefit from competent and enthusiastic leadership and administration.

**Sufficient supply of certified administrators.** MacAdams (1998) said, “more people are earning administrative certificates, but fewer were actually applying for available positions” (p. 37). Boehlert and O’Connell (1999), Tallerico and Tingley (2001), Board of Governors, Public School Administrator Supply and Demand Connecticut (2003), and Roza et al. (2003) claim there are more certified applicants than administrative openings. Likewise, Roza et al. (2003) revealed that no district’s school has ever closed because it could not find a principal to lead it. The bottom line is in many cases, there are enough certified candidates. However, quality applicants are apparently not applying for certain districts or schools in certain locations and socio-economic regions.
Academic drift. This leads to more questions about quality. Administrative candidate quality might be affected by production numbers from higher educational institutions. Baker, Orr, and Young (2007) found on the production side, the number of graduate degree programs and degrees granted in educational leadership increased considerably from 1993 to 2003. Master’s degree programs in Educational Leadership increased by 16% and educational leadership Master’s degrees granted increased by 90%. Additionally, degree production has shifted by institutional type. For example, comprehensive colleges and universities enjoyed a four-fold increase while research universities declined in their production of master's, specialist, and doctoral degrees (Baker, Orr, & Young, 2007). Degree production fluctuates widely among states, unrelated to school population estimates. With the emergence of for-profit institutions offering the Master’s in Educational Leadership, graduate students might have more options, thus influencing their intentions on where to earn their degree, how they earn it, and subsequent administrative certification (Ruch, 2003).

Overproduction. Overproduction of graduate students in educational leadership may not be the answer to filling shortages of willing administrative candidates in pools. The Board of Governors, Public School Administrator Supply and Demand Connecticut (2003) reported that Connecticut’s higher educational institutions awarded 670 graduate degrees and that the state issued only 412 administrator certificates, yet only 223 vacancies existed in the 2000-2001 school year. Roza et al. (2003), observed other studies that showed training programs are overproducing certified graduates in California, where 34,000 hold credentials and only 23,000 principal positions actually exist. The magnitude of the problem of supply versus demand is not unique. In fact, it is
indicative of the situation across the nation. Even though surpluses exist nationwide, it is
too often the case that not enough certified and highly qualified educators apply for
administrative positions, especially at high-needs schools.

So, if overproduction is occurring, yet many states claim shortages of quality,
questions of intentions arise. Why are professional educators earning administrative
certification and why are so many not applying for administrative positions after earning
it? Some professional educators might seek educational leadership Master’s Degrees
because it is might be a flexible and easy degree program to enter into and in most cases,
it will earn them a salary increase.

**Shortage of willing and qualified administrators.** Herrington and Wills (2005)
claimed, “During the past few years, superintendents and district human resource officers
have reported increasing difficulty in filling vacant school leadership positions” (p. 182).
With so many principals retiring and others exiting administrators, 22% to 25% and entry
only being 22% to 25%, there is an increasing deficit of qualified school leaders (Gates,
Ringel, & Santibanez, 2003; Herrington & Wills, 2005). Roza et.al. (2003), Center on
Reinventing Public Education, claimed that for many school districts with a fairly stable
supply of principal candidates, the quality of candidates was the real issue, not quantity.
Almost two decades ago, Anderson (1991) asserted that although many candidates
possess the required certification, there is a perception that the number of “highly
capable” applicants may be tapering off. In some cases, willingness is an issue.
Herrington and Wills (2005) found Georgia has less than 2,000 schools, yet has 3,200
administration licenses and still claims to have a lack of qualified applicants. So, this is
evidence that qualified candidates are not always pursuing leadership positions, even
when they are available. Connecticut’s Board of Governors (2003) sites Connecticut as having 2,400 educators that hold administrative licenses yet choose not to work in administrative roles. In New York, Herrington, and Wills (2005) noted that two-thirds of its educators hold certification, yet work in other than administrative positions. Principal shortages, Borja (2001) claimed, were not because there were not enough qualified ready individuals who are willing.

Thus, this latter literature assumes a certified pool of professionals exists. But, the problem still remains, almost half of all teachers in some places possess a master’s degree, but do not many want the extra responsibility, additional stress, and time consuming work that administrative positions so often require. Looking at these working conditions of school administration, as cited in Howley, Andrianaivo, and Perry (2005):

Many educators are reluctant to pursue administrative positions because of the demands of the job, the increased pressure to show "results," and the inadequate remuneration (Cooley & Shen, 2000; Gewertz, 2000; Houston, 1998, 2000). Those who hold administrative positions, however, report that one of their greatest sources of satisfaction is the ability to make a difference. (Wesson & Grady, 1993, p. 758)

It would appear then, that the priority may not need to be in the training of new leaders, but also in identifying new ways of attracting, showing support for current school leaders, and reshaping the perception of the position itself.

**Reshaping the Principalship**

The literature suggests that among these fundamental challenges, the role of principal is not so much viewed as particularly desirable by many teachers. The work of
the principal is often seen as politically difficult, time-intensive, stressful and lonely (Cranston, 2007; Rousmaniere, 2007; Tillman, 2003). Principals are furthermore often considered neither administrator nor teacher, caught between two roles and accused by both sides of being out of touch with the daily realities of each function (Rousmaniere, 2007). Thus, the profession itself has some negative publicity to overcome if it is to become more desirable to those who might otherwise pursue the opportunity. How it evolved to this point, one might ask.

The first principal positions were created in the mid-nineteenth century, primarily in urban districts to address the organizational demands of increasingly complex, multi-grade schools. This early principal role was assigned “to act as an overarching authority to the whole, organizing the separate courses of study, administering discipline and supervising the operation of all classes” (Rousmaniere, 2007, p. 7). The focus of the principalship at this time was not on strategic planning, but on daily management and expediency, and there was no process for vetting, preparing or evaluating these early school leaders.

As the role of the principal became more professionalized and separate from that of the role of teacher, early criticisms from teachers took hold that principals were not sufficiently engaged with the classroom and its challenges, and from students that their role is only that of disciplinarian. Because one ascends to the principalship over time, it is postulated that these early criticisms, many of which persist today, play a role in the negative image of the position and the hesitation of people to pursue the role (Rousmaniere, 2007). By the mid-twentieth century, the principal’s office existed in nearly all schools, and its professional status continued to evolve. Specific career
pathways to the principalship evolved that included both experience in the classroom and education beyond teacher education to include coursework in management, budgeting and curriculum (Rousmaniere, 2007). At that time, graduate programs in educational administration emerged to meet the professional development needs of aspiring school leaders, and states created standards for certification to create uniformity in preparation. Maintaining graduate programs in principal preparation continues to be important to school districts and departments of education.

The role of the principal has grown enormously and the required amount of competency and tasks principals are responsible for is staggering (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Many scholars believe the job requirements far exceed the reasonable capacity for one individual. Teachers are not oblivious to the situation as they see policy makers placing increased pressure on principals. The lack of interested candidates in positions of educational leadership at the level of principal is problematic. Fewer aspiring administrators see the appeal of administration because it is seen as a burnout position, particularly at the high school level, and the job must be redefined if it is going to attract good candidates (Boehlert & O’Connell, 1999).

**Job Choice Theory**

Redefining the roles and benefits of the position of assistant principal remains in the control of individual school districts. Incentives and disincentives for choosing an assistant principal position may vary greatly among graduate students. Each individual has their own internal and external motivators that may affect their intentions and behavior. This research study was not about the way each graduate perceives district supply and demand, promotion competitiveness, or how hard a promotion might be to
obtain. Because this study has limits, it did not address individual school district’s labor markets or institutional constraints. The focus of this study was on individual graduate students’ intentions.

The foundation of Job Choice Theory lies in why individuals select one job over another. The question in this study is closely related, which is why graduate students would intend, or not intend, to seek and assistant principal position upon program completion. Pounder and Merrill (2001) say the presumption is that jobs are selected based upon objective factors of incentives and disincentives and motivators. Job applicants get their motivation either externally or internally. By comparing these external and internal motivators, the incentive for selecting an assistant principal position can be examined.

One of the three job choice theories, objective theory, focuses on the economic reasons job applicants consider a position (Young et al., 2001). External factors are considered through objective measures. An external factor studied in this research, was that of the self-assessed role salary played on an individual’s intent to seek an assistant principal position or not. It can be seen as an advantage to receive a pay raise that often accompanies a promotion to assistant principal. This external factor was measured using the DIQ. Question number 11 within the DIQ asked respondents to rate the influence that salary played in their decision to pursue this graduate degree in educational leadership. Another external factor considered in this study was the amount of credits completed in the graduate program. Number four of the DIQ asked respondents to identify the numbers of educational leadership graduate college credits successfully completed. Each credit might represent a graduate student’s economic investment.
In subjective theory, applicants see the job environment as their motivation because they may receive psychological fulfillment though the work setting (Young et al., 2001). Internal factors can be considered subjective. One internal factor to be considered was self-assessed leadership as measured by the LPI. The LPI measures five different leadership behavior constructs as individual composites. The psychometric properties of each construct are listed in chapter three.

Can the work environment be a motivation? Two longstanding motivation theorists Maslow (1954) and Herzberg (1959) have ideas about work environments as a motivating factor. Maslow's theory is hierarchical and based on the following needs: a) Physiological, b) Safety, c) Social, d) Esteem, and e) Self-actualization. Each need is said to motivate behavior. This theory claims lower level needs must be achieved prior to one ascending to a next higher level. Herzberg's theory supports the presence of two types of factors in every organization: hygienes that are extrinsic and motivators that are intrinsic. These extrinsic hygiene factors include: working conditions, supervision, company policy, interpersonal relations, and salary. The intrinsic motivators include: recognition, achievement, opportunities for advancement, and responsibility.

The dynamics involved with job applicants concerns with work requirements and expectations during the initial interview, is the basis for Critical Contact Theory (Young, et al., 2001). The job requirements for the position of assistant principal are usually vague, undefined, grayed and job conflicts and overload are frequent. Many agree there is a national principal shortage, and “although myriad commissions have been formed to find out why this is so, most principals will tell you that they know the reason: Too many teachers perceive the principalship to be “no fun" (Capelluti & Nye, 2005, p. 8). They
continue to complain that the hours are long and the stress level is high; “however, for the right person, the job of principal can not only be fun, but also it can provide an opportunity to make significant contributions in the lives of myriad children as well as the entire school community” (p. 8).

The following section of the review looks at both the perceptions and realities of the principal shortage, with particular emphasis on how this shortage is impacting education.

**Differentiated Labor Market**

Pounder and Merrill (2001) suggest the perceived shortages of applicants for administrative openings in high schools is not only about having numbers of certified candidates, but also an issue of perceptions of desirability of different principal positions. There is no shortage of qualified administrative candidates in some states, but there is a shortage of quality highly qualified candidates committed to work in under-served communities (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). According to Roza et al. (2003), finding principals for high needs schools with lower socio-economic status living situations and low test scores is problematic. There seems to be a need to re-distribute principal applicants from affluent districts to high need areas because districts in low-income areas seem to have more problems attracting principals (Roza et al. 2003). Many applicants were simply unwilling or unable to go where the jobs were located.

Even unions and associations get involved in recruitment to get the favored administrators for the right locations. O’Keeffe’s (2005) dissertation investigated if there was much variation among states, but she found that the majority of associations were engaged in recruiting principals. The study consisted of a national survey, document
analysis, and a qualified informant interview. They found “programs specifically targeting aspiring principals and association memberships for aspiring principals are two primary recruitment tools” (O’Keeffe, 2005, p. 80). However, there are concerns with an absence of a formal process to identify potential administrators and the lack of materials to use with recruits (O’Keeffe, 2005). Aside from not being selected for administration, may educators self select to not pursue administration for some of the reasons in the following section.

**Personal Issues**

Many legitimate concerns, fears, and personal complexities like ethnicity, age, gender, and leadership style may contribute to affecting intentions of educational leadership graduate students and their choices for career pathways. Howley, Andrianaivo, and Perry (2005, p. 760) say “several studies conclude that teachers, even those who hold certificates as principals, steer clear of the principalship because of perceived difficulties and frustrations associated with the job.” Clearly, there are disincentives and issues of leaving the educators ranks and becoming an administrator.

Jordan, McCauley, and Comeaux (1994) surveyed Louisiana teachers and found more than 80% professed no interest in the principalship. Similar results were found in California (Adams, 1999) and Indiana (Malone, 2001). According to Howley et al. (2005), “Teachers ranked the disincentives associated with the principalship in the following order: the profession is growing significantly more complex and constraining; it is a source of considerable stress; principals lack the means and support for doing a good job; the salary is too low; daily and yearly hours are too long; and finally, family
life suffers from the demands of the position” (p. 760). Others might have personal issues with negative perceptions about administration for a variety of other reasons.

A perception about preferential hiring practices based upon gender or ethnicity was found in a New York study (Hammond, Muffs, & Sciascia, 2001). Different types of disincentives were found in the Midwest, where guidance counselors, coordinators, and urban school educators had issues and concerns about tenure, family life, stressful workload, and reduced vacation time (Winter, Rinehart, & Munoz, 2001). In this latter study, they identified satisfaction with current work conditions as educators as actually being another major deterrent to enter into administration. Just as disincentives and issues may influence intentions, incentives may have similar influence upon intentions. Malone et al. (2001) highlighted that prospects most wanted to become administrators to make a difference and to influence school direction. Enwall and Fabal (1998) discovered that some educators were ready for more responsibility, wanted the financial increase, independent status, and a higher level of professional achievement. Thus far, these issues, disincentives, and incentives are not innate in nature like the following personal issues.

**Ethnicity.** In hiring, cultural bias does exist. “Administrators favor candidates with backgrounds similar to their own” (Roza et al., 2003, p. 45). Minorities are forced then to tend to have more credentials than their counterparts (Fenwick & Pierce, 2000). Minority student populations have changed as globalization is occurring and demographics are shifting. According to McCarthy (2002):

As to demographic shifts, already less than half of the students are Caucasian in California, Hawaii, Louisiana, Mississippi, New Mexico, and Texas, with Florida
and New York close to the tipping point (National Center for Education Statistics [NCES], 2000). Furthermore, students of color dominate many urban districts; indeed, the 100 largest school districts house more than two thirds of the minority students in our nation (NCES, 2001). (p. 210)

Despite an increasingly diverse world, the role of the high school principal did remain one populated mostly by white males (Rousamiere, 2007). Less than 10% of all American high school principals were African American, and only 4% were Hispanic. Even in urban schools where minority students make up the majority of enrollments, only one-third of all high school principals in those schools were African-American. In 1999-2000, 18% of public school administrators were from an ethnic/racial minority (Gates et al., 2004).

Similarly, the Indiana five-year study showed programs produced licensed building administrators that were 91.3% White, 7.8% Black, and 1% other initially minority (Black, et al., 2007). In 1999-2000, 18% of public school administrators were from an ethnic/racial minority (Gates, et al., 2004). Ogletree (2004) suggests that African Americans in particular are still deeply impacted by the widespread discrimination against African American educators following the Brown decision. McCray, Wright, and Beachum (2007) note that even when African American or Mexican American candidates were selected for principal positions, it is most often in schools that are similarly populated, while similarly white administrators find themselves hired most often in white schools. Race was identified in New York, according to Boehlert and O’Connell (1999) as reasons potential applicants did not seek an administrative career.
As candidates for principal conditions perceive their likelihood of gaining a position as influenced by their race or ethnicity, their likelihood to pursue the opportunity can be impacted. The critical shortage of minority candidates cannot be appropriately addressed without confronting the historic trends in minority hiring for these positions and the legacy that has left for those coming up through the educational system (Whittaker, 2001).

**Age.** In the past, according to Boehlert and O’Connell (1999), men were more likely to be discriminated against due to their age. Out of a total of 146 aspirant assistant principals taking the Aspirant Principal Questionnaire, Cranston (2007) found no statistically significant differences in responses with regards to age and he found no influence of age between those interested or disinterested in an administrative position. However, both Pounder and Merrill (2001) and Murphy, Elliott, Goldring, and Porter (2007) noted that experience played a strong role in the evolution of principal leadership skills and in interest in the position. Thus, age may not play a direct role in the likelihood of a candidate pursuing an assistant principal or principal administrative position, but experience does. Age may also play a role in the stated fears of principal candidates with regard to work-life balance (Murphy, Elliott, Goldring, and Porter, 2007).

**Gender.** Some research suggests pre-service administrators, professional educators, in some cases are groomed very early for administration. An American Association of School Administration study at the turn of the century shows women superintendents tend to actively encourage and recruit women and minorities more than their male superintendent counterparts do (Glass, Bjork, & Bruner, 2000). Administratively certified men, women, and minority seeking administrative careers face
barriers. Women and minorities were underrepresented in the administrative fields (Banks, 1995; Buell, 2001; DeFelice, 1999). However, times are changing and more women are entering school administration. So, maybe this will not be for much longer. According to McCarthy (2002, p. 209), “there has been a significant increase in the number of women being licensed for administrative positions since the 1970s. It is now common across universities for more than half of the educational leadership students to be women.” Educational Leadership programs in the last two decades continue to shift from mostly white male students to having a majority of white female students (Greenlee, Bruner, & Hill, 2009). In Greenlee et al. (2006), their study of 25 educational leadership program’s faculty indicated 65% of their students were female. In the Indiana five-year study, 51% of the licenses issued were to females and 49% were males. Yet only 39% presently employed administrators were women (Black et al., 2007).

Black et al. (2007) purports:

In comparison, nationally there was a 7% rise in principal positions between 1987 and 1999-2000, with a dramatic increase in female administrators and a much more modest increase in minority administrators. In particular, in 1993-1994, only 35% of public school administrators were women, while in 1999/2000 54% of new principals (with less than three years experience) were women and 44% of all principals were women. During that same academic year, 55% of public elementary schools were led by women administrators, while women were leading in administrative roles at 21% of high schools. (p. 38)

Less research has been conducted on the reasons why male administratively certified educators do not pursue administrative positions. Females traditionally face
balancing family with career causing many barriers. Work stress, family stress, economic stress, parenting stress, and work-family conflicts studies showed no significant difference between male and female (Carbone, 1991). Women tend to have more credentials than their male counterparts (Fenwick & Pierce, 2000) and tend to stay in the classroom more years before pursuing administration (Buell, 2001).

Wilmore’s (2002) study addressed the Graduate Record Examination scores (GRE), race, gender, and undergraduate grade point average (GPA) as predictors of principal certification examination success at a university with three administration certification master’s degree programs: students not in a cohort, those in a scholar cohort, and students in a paid administrative internship. In the latter program, all variables except undergraduate GPA were predictors of certification examination results. Gender was more significant in this program than in the other two. Likewise, in Britain, a female deputy primary school head had problems getting promoted for headship (Denison, 2004).

On the other hand, Cranston (2007) found no gender differences between those interested or disinterested in an administrative position, but did find that males were much more likely to pursue openings when they occurred. Female respondents rated the demands of the roles and responsibility higher as a barrier than male respondents, and made stronger references to challenges of work-life balance than males. Males rated perceived status more highly than female respondents, and placed less emphasis on professional development opportunities. Statistical significances found between gender and the discrimination reasons for not applying supports reasons to support women in administrative pursuits (Boehlert & O’Connell, 1999). Also, gender was identified as a
basis not to apply for an administrative position in New York where nearly 42.5% of women chose not to apply because of gender discrimination (Boehlert & O’Connell, 1999).

**Leadership style and aptitude.** Effective leadership at the level of building administrator demands a complex set of skills and abilities. Murphy, Elliott, Goldring and Porter (2007) propose that high performing leaders must demonstrate aptitudes that include having a vision for learning, an understanding of instructional programs, curriculum and assessment, the ability to establish and promote communities of learning, resource allocation and use, the ability to develop a healthy organizational culture and to act as a social advocate. Aspiring principals must bring to the role a base of experience and knowledge that establishes expertise for the role, but with that must also come personal characteristics, values and beliefs that will entice them to pursue the role and succeed in it.

This constellation of knowledge and experience, paired with personal characteristics, values and beliefs provides some insight into what types of leaders are drawn to this type of work. Aspiring principals in Cranston’s study indicated that leadership styles of effective principals must include strong interpersonal skills, the ability to make fair and ethical decisions, and the ability to inspire others and share vision (2007). Administrative skills took a back seat to instructional and interpersonal skills in Cranston’s study (2007), and this mirrors Murphy, Elliott, Goldring and Porter’s (2007) tenet of learning-centered leadership as a model for successful principal candidates. Pounder and Merrill (2001) echo these findings in noting that aspiring principal’s report
finding the opportunity to make a difference, to empower school change, to grow personal and to offer a vision for a school as primary motivators in their application.

The emphasis on interpersonal and learning endeavors as part of the ideal principal model, however, does not necessarily match reality. Current principals often reflect frustration over the large proportion of time spent away from the teaching enterprise and away from strategic planning, mired down in daily administrative tasks and managing accountability activities imposed by government and state departments of education (Cranston, 2007; Rammer, 2007; Rousmaniere, 2007). The fact that the majority of the work lies outside the functions that are most attractive about the position, often influences the willingness of a qualified candidate to pursue a position. The bottom line with issues, according to Howley et al. (2005, p. 759) is, “the body of empirical literature prioritizing teachers’ perspective on school administration likewise argues that the degree of readiness of potential principals depends on their ability to strike a suitable balance between their expectations and misgivings.” If an individual strikes that balance of those issues, then comes the question of when to obtain an assistant principal position.

**When to Obtain an AP Position?**

Managing young families in conjunction with a challenging task to assist the principal may not make one any less interested in the role, but may deter one’s actual pursuit of the position. Thus, some potential candidates may opt to postpone their candidacy for positions until they are beyond the age of having a young family at home. The sense of limited support in managing personal and work demands appears to be a strong deterrent for otherwise qualified candidates (Institute for Educational Leadership,
It would appear that there is a strong need to address this aspect of candidacy if the administrative pipeline is to be strengthened.

**Other Potential Factors**

Principal roles have become increasingly complex with a wide scope of job responsibilities. As schools are trying to provide more and more societal needs, administrator’s roles broaden and more complex skill sets are required. Unfortunately, the perceived shortage of applicants for available positions suggests that the system is not piquing the interest of most potential candidates and this is an issue that must be addressed if the preservation of quality education is to be accomplished. Lack of experience was the number one reason in New York, according to Boehlert and O’Connell (1999), that individuals did not apply for administrative positions. Until educational systems can strategically address and manage the perceived benefits and detractors of the principalship, it is likely that the pipeline for these positions will remain at their current levels. School Boards might want to recognize the demands of the job and be more realistic in regards to salary ranges, eliminate residency requirements, offer tuition reimbursements, add retirement benefits, and conduct further studies with administratively certified teachers if they want answers and solutions related to administrative pipeline problems and poor quality administrative applicant pools (Boehlert & Connell, 1999).

**Career Path.** Many administratively certified graduates could seek district level positions such as curriculum specialists, supervisors, and program coordinators that might be thought to be much easier and contain far fewer issues and controversial struggles. Past career choices and intent, commitment, and retention are all factors that might
influence professional educator’s future career decisions. For example, the experiences and roles guidance counselors, females, and special education teachers have had might affect self-assessed leadership and career pathways. A Stanford study researched exemplary pre-service and in-service administrator preparation programs. It found they shared common features. They discovered graduates of exemplary programs were more likely to be female, members of an ethnic minority group, had strong relevant teaching experiences, served frequently as coaches of other teachers, department chairs, team leaders, were committed to their communities, and capable of becoming instructionally grounded transformational leaders (Darling-Hammond. et al., 2007).

Discrimination might also be an influencing factor that could steer some to or away from seeking entrance into an assistant principal pool or position affecting their career paths. DeFlice (1999) reports men typically enter into education with administration in mind and generally go from teacher to assistant principal, principal, and finally district level administration with only about five years teaching experience in the classroom. Females generally tend to be very committed because they typically spend about ten to fifteen years in the classroom before entering administration and subsequently do well as instructional leaders. Males, females, and minorities experience internal and external barriers entering into administration. But, women are more likely to be discriminated against due to their gender and men are more likely to be discriminated against due to their age (Boehlert & O’Connell, 1999).

Program Issues

The U.S. Department of Education (USDOE, 2005) described conventional educational leadership graduate programs as having a lack of purpose, vision, and
coherence. Hale and Moorman (2003) and Levine (2005) both criticize and doubt that colleges of education can overcome forces to foster change and believe they use leadership preparation programs as primary revenue source. According to Orr, Silverberg, and LeTendre (2006, p. 4), “In the past, university-based leadership preparation programs have been criticized for low quality (Griffiths, Stout, & Forsyth, 1988), lack of rigor (Bridges & Hallinger, 1997), outdated content, inappropriate pedagogy, and poor student recruitment and retention strategies (Bredeson, 1996).” Due to heavy criticism and mounting pressure and accountability, some programs have aligned to national standards. Black et al. (2007) reported in their five-year study, programs were aligning to the Interstate School Leadership Licensure Consortium (ISLLC) standards. Whether these past criticism claims were substantiated or not, the latter claims of poor recruitment strategies is of primary interest. Recruitment and selection must be addressed as they are crucial to understanding initial graduate intentions.

**Recruitment and selection.** Educational Leadership principal preparation programs have changed (Young, 2009). Some key factors may have contributed to these changes more than others. First, the Interstate School Licensure Consortium (1996) introduced administrative practice national standards which forced universities to revise their programs to meet accreditations standards (National Policy Board for Educational Administration 2002b), but congruent student admission requirements were not forced. Next, accountability requirements for schools receiving Title I funds, (No Child Left Behind Act, 2002) forced close looks at student learning. Then, the quality of principals came into question as well as calls for reform when the projection of nationwide principal
shortage was disproven (Hess 2003; Levine, 2005). The U.S. Department of Education (USDOE, 2005) claims students enroll themselves without any consideration of a candidate’s leadership experience and students complete courses without connection to real practice in local schools.

Black, Bathon, and Pointdexter (2007) contend, “critics question the purpose, coherence, content, and rigor of university based programs, while some champion alternative means of licensing educational administrators. Other concerns include the overproduction of licensed administrators who have no intention to apply for principalships and the existence of “low quality” administrator preparation programs that are nonetheless financially attractive to universities”; a “cash cow” argument (Fordham & Broad Foundations, 2003; Hess, 2003; Hess & Kelly, 2007; Levine, 2005).

How do programs recruit and select educational leadership students? It seems there is much research on the effectiveness of program design and learning activities, but far fewer empirical studies on candidate characteristics or intentions inside preparation programs (Murphy, 2006). More studies should be conducted from student entry to exit and career choices upon completion. Conventional programs were criticized for having self-enrolled students who have not been selected on the basis of leadership experience or potential (Black et al., 2007). Darling-Hammond et al. (2007) study on pre- and in-service administrator development programs observed programs that worked with school districts to actively recruit candidates who were known to have been excellent teachers with strong leadership potential. Most of the data for this report was derived from self-reported from candidates, principals, and program faculty with observations. But, Darling-Hammond et al. (2007) did research that was designed to actually examine what
graduates of effective educational leadership programs can actually do as seen by superintendents, principals, colleagues, and the graduates themselves. These candidates were also more likely to have strong relevant teaching experiences and served frequently as coaches, team leaders, department chairs, and were committed to their communities and capable of becoming instructionally grounded transformational leaders.

The Department of Education in Indiana funded a study of 17 leadership preparation programs approved by the Indiana Department of Professional (Black et al., 2007). In this study, the use of recruitment tools varied. For mostly financial reasons, from most used to least, the following represented recruitment techniques utilized: word of mouth, brochures, websites, targeted radio, newspaper, billboard advertising, targeted direct mailings, and presentations (Black et al., 2007). The study also found some formalized recruitment connections and formal links and contractual agreements with schools, districts, or professional entities that serve to recruit candidates. Few formalized recruitment connections between building level leadership programs and the teacher education programs within the same universities existed (Black, et al., 2007). However, there were many informal and adhoc connections between building level leadership faculty and undergraduate teacher education faculty in regards to recruitment.

**Program’s look at candidate intentions.** “The field of educational administration and leadership continues to use nonselective approaches to determining admissions to educational administration and leadership program programs nationwide” (Young, 2009, p. 212). For admission into a principal preparation program, some university based programs still require Graduate Record examinations (GRE) scores, letters of recommendations, writing samples, and an interview. To be licensed as an administrator,
some states require a minimum of two years of teaching experience, completion of a state-approved principal preparation program, or a state issued credential. According to Brown-Ferrigno and Shoho (2004), 11 states currently do not require teaching experience to be licensed as an administrator. The bottom line is that if program recruitment and selection even occurs at all, it is “informal, haphazard, and casual” (Murphy, 1992, p. 80).

The Indiana study examined entry requirements at the 17 institutions in Indiana. Their study reported the following admission requirements from most to least required: composite state-wide composite admission Grade Point Average (GPA) of 2.82, letters of recommendations, interview, prior teaching experience, valid teaching license, Graduate Record Exam (GRE) statewide average rates of a minimum score of 837.5, transcripts, writing sample, current resume, master’s degree, and performance in the first class (Black et al., 2007). The acceptance rates in most cases were over 95% and statewide in nearly a third of the building level leadership programs, 100% of the applicants that applied were admitted.

**Recruitment and commitment.** The role of the principal has grown enormously and the required amount of competency and tasks principals are responsible for is staggering (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Many scholars believe the job requirements far exceed the reasonable capacity for one individual. Teachers are not oblivious to the situation as they see policy makers placing increased pressure on principals.

Over a five-year period in the Indiana study, about half of program graduates were employed as administrators. “This is consistent with national critiques that highlight
the fact that administrator preparation programs are just as likely to prepare non-administrators as administrators” (Black et al., 2007, p. 52). In the Indiana study, from those completers that did get placed 42% were at the Elementary level, 27% Junior High/Middle School, and 31% were administrators in High Schools (Black, et al., 2007).

According to Buell (2001), the top reasons administratively certified educators in Tennessee do not apply for administrative positions is that they liked their current position and did not want the added responsibility. Forty-two percent felt encouraged pursuing administration and 67% were not willing to relocate (Buell, 2001). Pounder and Crow (2005) cite an alarming shortage of qualified administrators available to fill current principal openings and call for a system approach to cultivate novice and experienced administrators. Furthermore, they claim the entire professional education community should systematically coordinate resources in order to develop and sustain a robust pipeline of competent and caring leaders. Systematically strengthening field experiences, lengthening internships, redefining the role of the assistant principalship with shared leadership, and de-stressing the role of the principal are some of the systematic changes that are required to attract and retain committed mid-career quality administrators. Moving from heroic leadership to distributed leadership roles may not be easy for many veteran administrators. Pounder and Merrill (2001) found principal workloads, not enough altruistic aspects of the job, and the toll on a typical administrator’s personal life coupled with increasing intensity and complexity of the job make it harder for schools to attract new administrators. Another way to redesign the role of the assistant principal and principal is by implementing shared leadership.
**District partnerships.** “Absent significant changes to a web of social, economic, and institutional factors, the likelihood that deregulation policies will affect educational leadership and school organizations is very low” (Smith, 2008, p. 30). Notwithstanding, school reform is changing the landscape and is forcing districts to forge new partnerships and new avenues for certification. To maintain numbers in administrative applicant pools, some districts might be forced to consider circumventing university principal preparation programs or consider administrative alternative certification programs. Anthes (2004) claims 13 states already offer alternative certification such as these. Forty-eight out of 50 states still require principals to first obtain a license or certification (National Center for Education Information, 2003). Almost half of the states have created leadership academies (McCarthy, 2003).

The majority of states still require a couple years teaching experience and a graduate degree from a college of education (Mazzeo, 2003). However, some states now do not require the two years of teaching experience in order to enter into a graduate educational leadership degree program. The bottom line is that school districts should keep abreast with the changing policies regarding their state’s certification requirements and maintain information flow to its future administrators so their intentions are well versed.

**Program Competition.** “Since the 1970s there has been little variation in the number of institutions offering educational leadership graduate degrees and licensure programs, with about 370 - 375 institutions offering degrees in educational administration/leadership and about 100 additional institutions offering only administrative licensure programs (McCarthy, 1999). Despite calls to reduce the 500
programs to around 200 (maintaining those at research institutions), “more than half of the nation's school leaders continue to be prepared by institutions with limited or no doctoral offerings” (McCarthy, 2002, p. 207). It makes sense that the master's remains the most popular educational leadership graduate degree because of the substantial revenue generated by master's and licensure programs (McCarthy, 2002).

The Indiana Building Level Leadership Preparation Study examined licensure and Masters plus licensure programs that lead to building level certification. They studied over a five year period 2001-2005 looking at state, regional, and institutional licensure production trends. During that five-year period, Black et al. (2007) noted a rise in educational leadership programs from 10 to 17, the number of building level administrators rose from 368 to 435, but the total number of employed school administrators remained relatively constant. While more programs have been approved, there has been a trend towards fewer programs accounting for a larger percentage of licensure production (Black et al., 2007). A rise in programs is correlated to a rise in graduates. According to Black et al. (2007):

In a study of national educational administration degree production, Baker, Orr, and Young (2005) found that there has been an increase in degree production, with much of the growth occurring not at Carnegie Research 1 institutions, but rather at ‘newer’ institutions like comprehensive universities. They found that the number of Master’s Degree programs in educational administration grew 16% from 1990-2003, while educational administration degree production increased 90% from 1993 to 2003. (p. 38)
These days, many comprehensive institutions are offering master’s degrees in education. Some of these institutions are for-profit universities and offer attractive advantages such as increased flexibility in the delivery models to include in person or completely on-line, shorter semesters, weekend classes, job placement assistance, and less stringent admittance standards and requirements. For example, NOVA Southeastern University, National-Louis University, Rider University, Argosy Education Group, University of Phoenix, Liberty University, Kaplan University, and DeVry University are a few that offer masters degrees in education.

“Since 1990 the number of for-profit, degree-granting college and university campuses in the United States has quietly increased by 112 percent, from approximately 350 to 750 campuses. During that period, 200 non-profit colleges closed their doors (Ruch, 2003, p. 4). “In the past, for-profit institutions struggled to meet accreditation standards, and even when they did, the accrediting bodies were sometimes reluctant to grant accreditation to these institutions because of their ‘proprietary’ status” (Ruch, 2003, p. 5). Currently, in Florida, there are 11 public and nine private universities that have State-Approved Educational Leadership programs (Bureau of Educator Recruitment, Development, and Retention, 2009).

Today, not granting accreditation to a non-profit university that met all published standards would probably would bring a lawsuit of charges (Ruch, 2003). Some educators assume for-profit schools offer poor quality education due to less regulation (Ruch, 2003). Regardless, many graduate students probably simply want the master’s degree and subsequent administrative license so they may obtain some administrative position. With the emergence of for-profit institutions offering the master’s in
educational leadership, graduate students might have more options which may influence their intentions on where to earn their degree, how they earn their master’s degree, and subsequent administrative certification.

Opportunities for differing types of programs and competition among programs is growing. The following is a list of non-traditional programs that could have an impact on the educators in graduate programs or those considering graduate programs: The Boston Principal Fellowship, First Ring Leadership Academy in Cleveland, Leadership Academy and Urban Network for Chicago, New Jersey Expedited Certification for Educational Leadership, New Leaders for New Schools in New York and Washington D.C., and Principals excellence Program in Kentucky (U.S. Department of Education, 2004). The Boston Principal Fellowship Program (BPF), mentioned first, is designed to expedited principal preparation and focuses on developing effective leaders. Would-be graduate students could directly earn a Massachusetts Administrative Credential without needing to return to school in only one year and be supposedly prepared to take the helm of an urban school (U.S. Department of Education, 2004). It is debatable whether or not these programs were effective. However, Florida DOE has approved one district level Educational Leadership program in Duval County and its certification lasts until the year 2013 (Bureau of Educator Recruitment, Development, and Retention, 2009). The following is a list of the State-Approved Public University programs.

- Florida A & M University
- Florida Atlantic University
- Florida Gulf Coast University
- Florida International University
• Florida State University
• University of Central Florida
• University of Florida
• University of North Florida
• University of South Florida
• University of South Florida St. Petersburg
• University of West Florida

The following is a list of the State-Approved Private Universities.

• American College of Education
• Barry University
• Jacksonville University
• Lynn University
• National Louis University
• NOVA Southeastern University
• Stetson University
• Saint Leo University
• Southern University

**Academic Drift.** Principal preparation graduate programs are changing and should continue to change to maintain their relevancy. But, academic drift of doctoral programs away from Research institutions to Comprehensive and Liberal Arts institutions that have less institutional capacity to support rigorous doctoral programs has
implications for the quality of administrative candidates they produce (Baker et al. 2007). If doctoral degree programs become more accessible through less selective institutions, the Ed.D. and Ph.D. may lose some of its value as a symbol of prestige. Preparing advanced school leaders for the field may end up falling more and more on Comprehensive institutions while Research institutions focus on preparing future researchers and faculty members. Huisman and Morphew (1998) argue that government policy can guide institutions in certain directions: Comprehensive institutions prepare assistant principals, teacher leaders, and principals; while superintendents and central office leaders could be prepared by Doctoral institutions; and Research institutions would be left preparing future faculty researchers.

**Summary of Literature**

Examining how the interest and intentions of educational leadership graduate students may be influenced by leadership style, gender, ethnicity and age yields the potential identification in how these factors shape an individual’s willingness or intent to pursue an assistant principal position. In so doing, the pipeline for the assistant principalships in many districts might be more productive and produce stronger and higher quality administrator candidates. At the crux of the problem lies the question of why professional educators do or do not pursue an assistant principal position after obtaining a graduate degree in educational leadership administrative. Boehlert and O’Connell (1999) suggested further studies may provide answers with regard to this question regarding administrative applicant pools. The U.S. Department of Labor and Statistics predicted an increase in the need for school administrators by the year 2012 (Hecker, 2004) and Flessa and Grubb (2006) even argued Florida’s school districts faced
dramatic administrator shortages, but research on supply and demand found “little evidence of a nationwide crisis in the market for certified school administrators” (RAND, 2003, p. 1). Boehlert and O’Connell (1999), Tallerico and Tingley (2001), Board of Governors, Public School Administrator Supply and Demand Connecticut (2003), and Roza et al. (2003) all contend there are more certified applicants than administrative openings. Roza et al. (2003) observed studies that showed training programs were overproducing certified graduates.

This gap of conflicting literature in studies is clarified by distinguishing terms between certified administrator shortages and shortages of willing and qualified administrator candidates. Boehlert and O’Connell (1999), Gewertz (2000), Roza et al. (2003), and Pounder and Crow (2005) claimed the issue is a shortage of quality principal candidates. Forsyth and Smith (2002) and Pounder, Crow, and Shepard (2003) say shortages of willing administrators exist for specific positions like high school principals in rural or challenging urban communities. This might be because the work of the principal is often seen as politically difficult, time-intensive, stressful and lonely (Cranston, 2007; Rousmaniere, 2007; Tillman, 2003). No shortage of qualified administrative candidates exists, but there is a shortage of quality committed candidates willing to work in under-served communities (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). In the end, school boards should be more realistic in regards to salary ranges, eliminate residency requirements, offer tuition reimbursements, and add retirement benefits if they want solutions to administrative pipeline problems and poor quality administrative applicant pools (Boehlert & Connell, 1999).
Concerns, fears, and personal complexities like ethnicity (Fenwick & Pierce, 2000; Rousamiere, 2007; Shakeshaft, 1989), age (Boehlert & O’Connell, 1999; Cranston, 2007; Murphy, Elliott, Goldring & Porter, 2007; Pounder and Merrill, 2001), gender (Banks, 1995; Buell, 2001; DeFelice, 1999; Glass, Bjork, & Bruner, 2000; Grady, 1992), and leadership style (Cranston, 2007; Murphy, Elliott, Goldring & Porter, 2007; Pounder & Merrill, 2001) may affect intentions of educational leadership graduate students and their choices for career pathways. Discrimination might also be an influencing factor that could steer some to or away from seeking entrance into an assistant principal pool or position influencing their career paths (DeFlice, 1999). Additionally, simply managing young families in conjunction with a challenging task to assist the principal may deter pursuit of the assistant principal position. Thus, some may postpone their candidacy for positions until they are beyond the age of having a young family due to limited support in managing personal and work demands (Institute for Educational Leadership, 2000).

Because the requirements of the principalship has grown so enormously, the required amount of competency and tasks principals are responsible for is staggering (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). So, the quality of principals came into question when the projection of nationwide principal shortage was disproven (Hess 2003; Levine, 2005). Even though much research on the effectiveness of program design and learning activities has been conducted, but far fewer empirical studies on candidate characteristics or intentions inside preparation programs has been done (Murphy, 2006). Programs in institutions must try to stay relevant, if they want to maintain graduate enrollment Huisman and Morphew (1998) looked at guiding institutions as they change: comprehensive institutions prepare assistant principals,
teacher leaders, and principals; while superintendents and central office leaders could be prepared by doctoral institutions; and research institutions would be are left preparing future faculty researchers. When programs do not change and become outdated, competition increases and alternatives certifications or district partnerships begin to emerge. Thirteen states are currently offering alternative certifications, according to Anthes (2004), but 48 out of 50 states still require principals to first obtain a license or certification (National Center for Education Information, 2003).

While this literature review included a variety of research, it offers essential perspective for the foundation of the study. The literature review also provided the required background information necessary for objectively analyzing the results of the collected data that was identified in the next chapter. Additionally, this review of the literature enabled a basis for impartial discussion of the results and conclusion. Next, is chapter three, a presentation of the methods and analysis of the study.
Chapter III: Methods

Introduction

This chapter includes a description of the research design and methods used in the investigation. It begins with an introduction and contains sections on pros and cons of survey research, research methodology, research design, appropriateness of design, research questions, populations and sample, sample size, power analysis, data collection, instrumentations, validity of the Leadership Practices Inventory (LPI), reliability of the LPI, analysis of data, internal and external validity, ethical assurances, and a summary (Appendix A). The purpose of this study was to analyze factors that influence the intentions of educational leadership graduate students currently enrolled in university educational leadership programs in Florida. The study analyzed why these graduate students are more or less likely to intend to seek an assistant principal position upon graduation, via the lens of examining self-assessed leadership on the LPI, amount of program completion, and demographic criteria such as age and gender. This study may identify additional reasons administrative pools have perceived shortages of quality candidates using job choice theory as a frame of reference. The importance of the intent for this study is to disseminate, share, and publish a report of the findings in order to offer the Florida Department of Education (FDOE), school district leadership academies, and
university educational leadership departments valuable insight for restructuring to remain relevant.

**Pros and cons of survey research.** According to Cohen, Manion, and Morrison (2007), questionnaires with open and closed questions have distinct advantages and disadvantages. “Highly structured, closed questions are useful in that they can generate frequencies of response amenable to statistical treatment and analysis” (Cohen et al., 2007, p. 321). Furthermore, these types of questions enable comparisons, are quicker to code and analyze, and are often directly to the point and are more focused, and do not discriminate unduly on the basis of how articulate respondents. “Open-ended items are useful if the possible answers are unknown or the questionnaire is exploratory, or if there are so many possible categories of response that a closed question would contain an extremely long list of options” (Cohen, et al., 2007, p. 321). Surveys are supposed to combine sampling, questions design, and data collection methodologies for those who want to collect and analyze data (Fowler, 2008). A survey’s precision, accuracy, and credibility can be affected by how it is implemented. According to Fowler (2008):

The choice of data collection mode, mail, telephone, the Internet, personal interview, or group administration, is related directly to the sample frame, research topic, characteristics of the sample, and available staff and facilities; it has implications for response rates, questions form, and survey costs. (p. 69)

**Research methodology.** The methodological approach for the study was quantitative, confirmatory and deductive in nature (Creswell, 2003). This study assumed that information gathered through our senses was reality that can be measured. Physical and social realities are independent of those who observed it and unbiased observations
are considered scientific knowledge (Gall, Gall, & Borg, 2003). This perspective purports that reality should be shaped by empirical data derived from the senses. In this study, the information gathered through our senses, via the Leadership Practices Inventory (LPI) and the Demographics and Intentions Questionnaire (DIQ), was reality that can be measured and quantified (Appendix B). The theoretical framework for this study came from this paradigm under the umbrella theory of job choice.

**Research design.** This study employed a quantitative non-experimental research design wherein two statistical techniques—Simple Linear Regression and Multiple Regression were used. The basic design of a comparative study is to identify a difference between groups as a function of the identified dependent variable. Since the researcher did not have complete control over the variables of interest (participants or groups were not randomly assigned) the study was non-experimental and suggestive rather than rigorously causative. No attempt by the researcher was made to influence respondent attitudes.

**Appropriateness of design.** A quantitative non-experimental research design was determined appropriate for the research project since it enabled the collection of data from a large number of human participants fitting a specific demographic/attitudinal profile. Furthermore, a broad number of participants (e.g., greater than 50) was necessary to ensure differences and commonalities were appropriately represented within a sample, as reflected by the power analyses. An experimental design, first put forth by Mill (1874), allows the researcher to observe differences in participants’ performance and infer differences. This research approach enabled a single researcher with limited resources the ability to collect and analyze data from a sample in a comparatively short
time period. That is, data were collected within days and analyzed within weeks rather than weeks or months, respectively, for other types of designs.

**Research Questions**

The measureable research questions that guided this study are presented below. The items directly following the questions in the analysis section were key characteristics associated with the research questions. These characteristics included the Dependent variable, Independent variable, Statistical strategy, Population and Sample Size. These data to fully answer these research questions will be gathered with the LPI and DIQ.

**Research Questions:**

1. Is there a relationship between intent to seek an assistant principal position (DIQ) and self-assessed leadership behavior (LPI)?

2. Is there a relationship between intent to seek an assistant principal position and Gender (Male, Female)?

3. Is there a relationship between intent to seek an assistant principal position and number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)?

4. Is there a relationship between intent to seek an assistant principal position and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

5. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, gender (Male, Female), number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33), and age (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?
Population and Sample

This quantitative study assumed the population was educators seeking administrative certification in the continental United States. The identified initial pool of sample subjects were currently enrolled Florida Educational Leadership graduate students attending on campus, or online, at any of the following public or private universities: University of South Florida, University of South Florida Saint Petersburg, University of Central Florida, Florida State University, University of Florida, NOVA University, Saint Leo University, and National Louis University. While there were many more private universities, these specific universities were chosen because of their involvement in the Tampa Bay Metropolitan area and five surrounding counties. The population selected for the study consisted of educational leadership graduate students who were participants willing to respond to a survey. Since the sample was pooled, the researcher closely tracked from which university the data came.

Florida's Educational Leadership graduate programs have many similarities and differences compared with each other and with other programs around the United States. Clarifying this supported the study’s generalizability later. There are a few professional organizations which attempt to keep abreast with principal preparation graduate programs and are very involved with guiding the professional field and licensing. One such organization is the Educational Leadership Constituent Council (ELCC). It is an affiliate group authorized by National Council for Accreditation of Teacher education (NCATE) to review education administration preparation programs nation-wide. The ELCC used the standards developed by the National Policy Board for Educational Administration (NPBEA) for their review of graduate degree programs in school administration.
Approximately 632 colleges of education have volunteered to be accredited through NCATE. Since 1996, over 90 universities and colleges have participated in the ELCC program approval process. Florida’s main graduate programs used in this study were accredited and were listed on the state-approved program list. They had similar curricular designs and met Florida’s minimum qualifications. Many Educational Leadership graduate programs required between 33 and 39 credit hours and most consist of core courses, electives, and a field experience. Some required portfolios or comprehensive examinations.

Merriam (1998) asserts that there are two basic types of sampling, probability and nonprobability. Probability is described as being set up to allow the researcher to conduct a random sample and generalized the results to a population. Non-probability, on the other hand, does not deal with generalization and is described as attempting to logically solve qualitative problems such as “discovering what occurs, the implications of what occurs, and the relationships linking occurrences” (Honigmann, 1982, p. 84). There are several different types of purposeful sampling to include typical, unique, maximum variation, convenience, snowball, chain and network. Convenience sampling was the type of purposeful sampling that was used in this study as it encompassed the person that is readily available to be researched. Additionally, this type of purposeful sampling included a traditional and important preparation pathway that reflected the different demographic subsets studied. Specifically, Merriam (1998) offers this type of sample, “is based on time, money, location, availability of sites or respondents, and so on” (p. 63).

This method was referred to as convenience sampling and was used to select participants for this study. Convenience sampling is regularly used in exploratory
research to collect data that is generally representative of the population being studied. “This method is often used during preliminary research efforts to get a gross estimate of results, without incurring the cost or time required to select a random sample” (StatPac, 2007, p.1). This sampling method enables the researcher to act within a certain period and under conditions that facilitate data collection. By its nature, convenience sampling sacrifices generalizability and therefore, may not provide sufficient representation of the target population. This means that those selected for the study may only partially have represented the population investigated. As such, replication may be necessary to fully validate study results (Keppel & Zedeck, 2001).

Despite its deficiencies, convenience sampling is the best method of obtaining a population when time and conditions prohibit random sampling (Neuman, 2003). For example, convenience sampling cannot be used to randomly select participants from a population consisting of male Caucasians over the age of 35 years. One would have to somehow identify and contact up 35 million Caucasians fitting the profile and randomly select from that group: an improbable task. Thus, convenience sampling enables the researcher to seek an approximation of the truth when obtaining the truth (i.e., via random sampling) is conditionally prohibitive.

Convenience sampling does have an impact on study reliability and validity. Reliability relates to the extent to which an experiment, test, or any measuring procedure gives the same results on repeated trials. That said, study reliability may have been marginalized because a pure random sample was not obtained. That is, results obtained from this study may not be categorically replicated later using a convenience or random sample from the same population.
Similarly, study validity may be degraded as well. Conceptually, validity is concerned with how successful the study is at measuring what needs to be measured. Although results from the study may be valid for the population selected, it may not necessarily have been valid for the entire population. This study attempted to successfully measure what needed to be measured, but this may not be necessarily generalized to the greater population of educators.

**Sample size.** While it is ideal to have large sample sizes, practicality plays a role in what can be realistically used. The scope of participants in this study was limited to those participants currently enrolled in an Educational Leadership graduate program from the targeted public and private campus based and online universities. These graduate students were identified with the assistance of each University’s Educational Leadership Department Chair who in turn requested compliance from professors in their respective departments. While it would be ideal to have the first sample of graduate students situated in the beginning of their programs and another sampling of students surveyed with graduate students in the last semester of their graduate programs, it was not feasible in this study.

The general rules of thumb for determining the minimum sample size depends on the expected effect size and the statistical procedure used. In this case, the regression was the statistical technique utilized and the suggested sample size was 20 per independent variable; for a medium effect size $N \geq 104 + k$ where $k$ is the number of independent variables; 40 per independent variable if stepwise regression was being used. In this study, the sample size was calculated using G* power version 3.1.2 (Faul, Erdfelder, Lang, & Buchner, 2007). This free software program used Cohen’s tables
There are criticisms with Cohen’s tables claiming they produce underestimates of power and overestimates of sample size for factorial designs (Bradley, 1995). Cohen (1992) says:

> in research planning, the investigator needs to know the $N$ necessary to obtain the desired power for the specified $\alpha$ and hypothesized $ES$. $N$ increases with an increase in the power desired, a decrease in the ES, and a decrease in $\alpha$. For statistical tests involving two or more groups, $N$ as here defined is the necessary sample size for each group. (p. 156)

The $ES$ stands for population effect size, $N$ was the sample size number, and $\alpha$ was the significance criterion.

**Power analysis.** When calculating the proposed sample size for the study there were several factors that were considered. These factors included the intended power of the study, the effect size of the phenomena under study, and the level of significance used in rejecting the null hypotheses (alpha). The power of the study was the probability of rejecting a false null hypothesis. As matter of convention, the power adequate to reject a false null hypothesis was .80 (Kuehl, 2000). The next factor of importance was the size of the expected effect, which was an estimate measurement of the strength of the relationship between the predictor / independent variables and dependent variables (Cohen, 1988). For multiple and multiple partial correlations and regressions, the effect size can be characterized as small .05, medium .10, or large .15 (Cohen, 1992). Additionally, the level of significance for alpha was set at .05.

To validate sample size, a formal power analysis (Appendix F) was conducted to statistically determine the number of participants needed to conduct the study. Four
separate power analyses were conducted because four of the research questions had differing amounts of predictor variables and required different statistical techniques. The power analysis with the largest sample size, from the five research questions, was used as the requisite number of participants needed for the study. In a priori power analyses, the sample size $N$ is computed as a function of the required power level $(1-\beta)$, the prespecified significance level $\alpha$, and the population effect size to be detected with probability $(1-\beta)$. As such to assess a priori sample size, for Research Question 1, power was set at $.80$ and the expected effect size was set at $.10$. Accordingly, for research question 1, the sample size necessary to likely determine a statistical difference was 134 participants where $\alpha = .05$. This means that there was an 80% probability that 134 participants were sufficient to find a statistical relationship (effect size of .10) between variables where $\alpha = .05$. For Research Questions 2, 3, and 4, sample size required was 81 participants where effect size $= .10$, power $= .80$ and $\alpha = .05$. This was true only if Research Questions 3 and 4 predictor variables were considered continuous. This was conditional under certain circumstances as the relationship of the data was examined. Lastly, for Research Question 5, the sample size required was 159 where power $= .80$ effect size $= .10$, and $\alpha = .05$ (Faul, Erdfelder, Lang, & Buchner, 2007). Thus, the minimum sample size necessary to conduct the study was 159. Table 1 illustrates the sample size choices and how they varied due to differing effect sizes for each Research Question respectively.
Table 1

Sample Size Variations Due to Differing Effect Sizes.

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>5 Variables (RQ1) n</th>
<th>1 Variable (RQ2, RQ3, RQ4) n</th>
<th>8 Variables (RQ5) n</th>
</tr>
</thead>
<tbody>
<tr>
<td>.05</td>
<td>263</td>
<td>159</td>
<td>309</td>
</tr>
<tr>
<td>.10</td>
<td>134</td>
<td>81</td>
<td>159</td>
</tr>
<tr>
<td>.15</td>
<td>92</td>
<td>55</td>
<td>109</td>
</tr>
</tbody>
</table>

Data Collection

The LPI and DIQ were the primary means of data collection for this study. A copy of the LPI is located within Appendix A. Appendix A contains a letter from Kouzes and Posner authorizing the researcher to utilize and reproduce the LPI for this study only. Anyone else must obtain permission directly from Kouzes and Posner to use or reproduce the LPI. All of the survey’s questions in this data collection method were Likert-type response options. The survey was distributed, or made available via Survey Monkey, to all respondents who participated in the study. Interaction with participants was conducted via direct contact through Survey Monkey online. That is, the researcher distributed a package containing the Leadership Practices Inventory (LPI) survey and Demographics and Intentions Questionnaire (DIQ) and supporting documents to participants in a college classroom setting or they received these same items online through a web link. A cover letter, intent, and importance of the study were included in the package that was distributed. Participants were not timed and were not encouraged to hurry. Respondents were asked to complete the LPI as they rated themselves on the frequency with which they think they engaged in each of the 30 behaviors. It was
expected that participants would have spent around 10 to 15 minutes completing the LPI survey and about five minutes completing the DIQ. Participants were instructed to complete the LPI and DIQ and immediately submit it to the proctor upon completion. Once all surveys were collected, the completed packages were transported and stored by the researcher in accordance with the Internal Review Board’s (IRB) protocol (Appendix D). Participants were not compensated for completing the surveys, but did have an opportunity to create a unique username and enter it into a free online raffle to win an iPod Touch to be claimed from their professor (Appendix C).

As a contingency, if there were some reason the researcher was not able to be present during the LPI and DIQ administration, the class instructor was to follow the same protocol listed above to remain consistent. The following script taken from the cover letter, listed in Appendix D, was read by the researcher or the instructor:

You have been identified as an individual student who is enrolled in an approved graduate degree program in the field of educational leadership from a private or public campus-based and online universities. Thank you for volunteering to participate in this study regarding the LPI and DIQ. While national and statewide reports suggest there is a shortage of quality certified administrative applicants, it is anticipated that there are a number of graduates seeking Level One administrative certification in Florida who will subsequently seek, or not seek, an assistant principal position. Your participation in this study is essential to my research and greatly appreciated. In addition, Florida universities, Florida Department of Education, and School Districts may use the collective Executive
Summary results from this study for program improvement purposes. However, your individual answers and personal information will be kept confidential.

**Instrumentation**

The Leadership Practice Inventory (LPI) is a seasoned leadership inventory with over 1.3 million administrations to date (Posner, 2010). The LPI was developed through a triangulation of quantitative and qualitative research methods, in-depth interviews, and written case studies from personal-best leadership experiences. This generated the conceptual framework, which consists of five practices or constructs of exemplary leadership: Model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart (Posner, 2009). It is a survey tool with 30 behavioral statements. Six statements represent each of the five leadership behavioral practices for a total of 30 items (Zagorsek et al., 2006).

The LPI inventory used a 10-point Likert scale to detect level of agreement with the thirty behavioral statements. Participants were asked to choose the rating scale number from 1 to 10 that best applied to each statement based upon how frequently do they engaged in the described behavior. The LPI’s Likert scale’s span was set as follows: 1 = Almost Never; 2 = Rarely, 3 = Seldom, 4 = Once in a While, 5 = Occasionally, 6 = Sometimes, 7 = Fairly Often, 8 = Usually, 9 = Very Frequently, and 10 = Almost Always. Question numbers 1, 6, 11, 16, 21, and 26 were associated with the leadership behavior practice entitled *Model the Way*. Questions numbers 2, 7, 12, 17, 22, and 27 were associated with *Inspiring a Shared Vision*. *Challenge the Process* deals with numbers 3, 8, 13, 18, 23, and 28. Numbers 4, 9, 14, 19, and 29 were associated with *Enable Others to Act*. The remaining questions number 5, 10, 15, 20, 25, and 30 were associated with
the leadership behavior practice entitled *Encourage the Heart*. The LPI’s five practices or construct’s titles were shortened to read: encourage, model, enable, iInspire, and challenge. The inventory normally takes approximately 10 to 15 minutes to complete.

Several demographic characteristics were compared in this study. These demographic characteristics and intentions were gathered using the DIQ. The DIQ has 15 questions. The DIQ was piloted in a Saint Petersburg College class. Some of the demographic-type characteristics that were compared included self-assessed leadership behavior, as measured by the LPI, and number of graduate credits completed. Gender, race/ethnicity, and age were other demographic characteristics included in the questionnaire. In addition, the number of graduate credits completed, total years of any experience in public or private school teaching, level, county, and the type of degrees previously completed were all included in the questionnaire. This questionnaire asked if the participant had worked in special education or as a guidance counselor and probed regarding any influence salary advances and personal reasons had on their decision to pursue a degree in educational leadership. The DIQ asked about their intentions of whether or not to seek an assistant principal position, if it will be secondary or elementary level, and when they intended to seek an assistant principal position after completion of their graduate programs. All of these questions were vital to the study and student motivation and intentions.

**Pilot study.** A pilot was conducted using these two instruments simply for instrument integrity and usability. Due to the limited number of educational leadership graduate students, the researcher utilized eight post bachelors degree education major students from Saint Petersburg College, a local educator preparation institute, to test the
usability of the study. The results identified two errors in this online survey, that questions 19 and 20 were the same and that the age group 50-55 years was also missing. As a result, the online DIQ instrument was modified. The researcher was able to make these corrections prior to the actual administration. These students only took the survey online and not in person.

Validity. The LPI has been applied extensively and is highly regarded in both academic and practitioner realms (Posner, 2010; Zagorsek et al., 2006). Over 1.3 million total respondents have participated in the LPI Online from 2005-2009. The LPI’s validity was tested using a positive workplace attitude scale where respondents were asked 10 questions using a five-point Likert-type scale regarding their feelings and assessments about several factors (Posner, 2009). The internal reliability, Cronbach alpha, for this scale was 0.92. The correlations shown in Table 2 between Positive Workplace Attitude and the Five Practices of Exemplary Leadership were all statistically significant ($p < .001$).

Table 2

<table>
<thead>
<tr>
<th>LPI Construct</th>
<th>Observer Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge</td>
<td>.30</td>
</tr>
<tr>
<td>Inspire</td>
<td>.29</td>
</tr>
<tr>
<td>Enable</td>
<td>.29</td>
</tr>
<tr>
<td>Model</td>
<td>.32</td>
</tr>
<tr>
<td>Encourage</td>
<td>.31</td>
</tr>
</tbody>
</table>

69
The data collected concluded that the LPI remains a valid and reliable instrument (Posner, 2009). In other aspects of validity, test results show LPI has high face validity and predictive validity (Posner, 2009). The psychometric properties of the LPI have also been studied by others as well Zagorsek et al. (2006). They suggested the LPI is best used for training and development purposes.

Reliability. The extent that an instrument contains errors that can skew scores, for reasons that are not directly related to respondent selections, is an indication of instrument reliability. The more reliable the instrument is, the fewer measurement errors it contains. The test and retest reliability was found to be high in the LPI (Posner, 2009). Generally, instruments that have reliabilities higher than .70 are considered to be very good. The LPI’s standard reliability was tested through analysis of internal reliability and all of the five leadership practices had strong consistent internal reliability. Their Cronbach Alpha coefficients were .79, .88, .73, .74, and .86 with \( N = 101,403 \) respectively as reflected in Table 3. Since the coefficients were all greater than .70, they are generally regarded as being very good. This means that the items are highly correlated within each scale (Posner, 2009).

<table>
<thead>
<tr>
<th>LPI Construct</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge</td>
<td>.79</td>
</tr>
<tr>
<td>Inspire</td>
<td>.88</td>
</tr>
<tr>
<td>Enable</td>
<td>.73</td>
</tr>
<tr>
<td>Model</td>
<td>.74</td>
</tr>
<tr>
<td>Encourage</td>
<td>.86</td>
</tr>
</tbody>
</table>
Analysis of Data

Research Question 1: Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior?

Statistics: Multiple Regression

Dependent Variable: Intent to seek an assistant principal position (DIQ)

Level of Measurement: Interval

Predictor Variable: Self-Assessed Leadership Behavior (LPI)

Level of Measurement: Interval

Sample Size: 134 (from a power analysis where effect size = .10, alpha = .05, power = .80)

Population: Educational Leadership Graduate students

Research Question 2: Is there a relationship between intent to seek an assistant principal position and gender (Male, Female)?

Statistics: Simple Linear Regression

Dependent Variable: Intent to seek an assistant principal position (DIQ)

Level of Measurement: Interval level

Predictor Variable: Gender (Male, Female)

Level of Measurement: Dichotomous

Sample Size: 81 (from a power analysis where effect size = .10, alpha = .05, power = .80)
Population: Educational Leadership Graduate students

Research Question 3: Is there a difference in intent to seek and assistant principal position and numbers of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)?

Statistics: Multiple Regression

Dependent Variable: Intent to seek an assistant principal position (DIQ)

Level of Measurement: Interval level

Predictor Variable: Number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)

Level of Measurement: Interval or Continuous

Sample Size: 81 (from a power analysis where effect size = .10, alpha = .05, power = .80)

Population: Educational Leadership Graduate students

Research Question 4: Is there a difference in intent to seek and assistant principal position and age (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

Statistics: Multiple Regression

Dependent Variable: Intent of seeking an assistant principal position

Level of Measurement: Interval

Statistics: Multiple Regression

Criterion Variable: Intent to seek an assistant principal position (DIQ)
Level of Measurement: Interval


Level of Measurement: Interval or Continuous

Sample Size: 81 (from a power analysis where effect size = .10, alpha = .05, power = .80)

Population: Educational Leadership Graduate students

Research Question 5: Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, gender, number of credits completed, and age?

Statistics: Multiple Regression

Dependent Variable: Intent to seek an assistant principal position (DIQ)

Level of Measurement: Interval

Predictor Variable1: Self-Assessed Leadership Behavior (LPI)

Level of Measurement: Interval

Predictor Variable2: Gender (Male, Female)

Level of Measurement: Dichotomous

Predictor Variable3: Number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)

Level of Measurement: Interval


Level of Measurement: Interval
Sample Size: 159 (from a power analysis where effect size = .10, alpha = .05, power = .80)

Population: Educational Leadership Graduate students

The study’s purpose was to analyze factors that influence the intentions of educational leadership graduate students enrolled in university educational leadership programs in Florida. The study analyzed which characteristics of graduate students in Florida might be associated with level of intention to seek an assistant principal position upon program completion. Differences in self-assessed leadership behavior, number of graduate credits completed, gender, and age were examined. The generalizability of the study to Florida was determined from reliability and validity factors. An in-depth analysis of the survey’s findings are discussed in chapter four.

In addition to the 30 items associated with the LPI instrument (Appendix A), participants were asked to respond to DIQ items (Appendix B) such as years of teaching experience, highest degree earned, gender, race, and likelihood to seek an assistant principal position. The DIQ was piloted in a Saint Petersburg College class. The results of the survey items were assessed by compiling the information and entering it into a spreadsheet using Microsoft Excel 2007. The list of variables entered into SPSS is found in Appendix G. A secondary qualified individual verified input and accuracy. Statistical Package for Social Science (SPSS) for Windows version 17.0 SPSS (2009) was used for the analysis of data. Finally, applicable descriptive and inferential statistics were examined as the data was run through Simple Linear Regressions and Multiple Regressions. Regression here, refers to a group of techniques which allow for measurement of the degree of relationship between a dependent variable and more than
one independent variables. According to Cohen (1992), within multiple and multiple partial correlations, “for \( k \) independent variables, the significance test is the standard \( F \) test for \( df = k, N-k-1 \). The ES index, \( f^2 \), is defined for either squared multiple or squared multiple partial correlations (\( R^2 \))” (p. 157). Additionally, a regression analysis was conducted as a residual analysis to identify any possible outliers.

The analysis procedure used SPSS software. This data analysis included descriptive statistics, means, standard deviations, and frequency counts where applicable. In addition, histograms have been presented as well as z scores and Normal P-P plots to support assumptions of normality in chapter 4. Further, an ANOVA table, and supporting figures are displayed, providing a main effect of condition is found. For this analysis alpha was set at \( \rho = .05 \) provided assumptions of normality are met. When assumptions were violated, the researcher determined the appropriate next steps. For example, when assumptions are slightly violated, the researcher had the option to reduce the chance of committing a Type 1 error (rejecting the null when it is true) by resetting alpha to .01.

**Internal validity.** Internal validity is defined as how confidently one can conclude that the change in the dependent variable was produced solely by the independent variable and not extraneous ones (Campbell & Stanley, 1966). Accordingly, there are eight empirically identified conditions that can threaten confidence in a study. These threats to internal validity include history, maturation, testing, instrumentation, statistical regression, selection, experimental mortality, and selection interaction. However, although all threats may be relevant, specific threats to this study potentially involved two. That is, these two threats may involve selection and testing. A selection
threat suggests that participants may not be functionally equivalent at time of testing. In the case of this study, efforts to mitigate this threat have been addressed by gathering a sample size that was sufficient for the study and statistical techniques used. A testing threat entails testing participants at different times or under different circumstances. That being said, the study design expects to test all participants at the same time and under the same environmental conditions.

**External validity.** The concept of external validity is defined as the extent to which the study can be generalized to the greater population. Generally, studies that employ randomization to select participants from the study population have more external validity than those that do not. That said, for this study, convenience sampling of students attending a university was used to sample the study population, which may weaken external validity. This strategy was used because random sampling of the study population was outside the scope of the researcher’s resources. Thus, results may not necessarily reflect study population attitudes. In this case, where convenience sampling was used, repeating the test to compare results may be advised, but was not done in this case.

**Ethical assurances.** This study was conducted in accordance with the University of South Florida’s Internal Review Board research protocols in recognition that Learners acting as researchers are faced with ethical concerns. Researchers must obtain informed consent from all participants (Gall, Gall & Borg, 2003). Elements of informed consent include notifying the participants of who will conduct the study; letting the participant know the time commitment required, explaining the study in easily understandable language; offering to answer any questions; informing participants that their involvement
is voluntary; informing participants that they can withdraw at any time; letting participants know the limits of confidentiality (Rudestam & Newton, 2001) and ensuring that participants will emerge from the research unharmed.

**Summary**

This study used the LPI and DIQ to investigate why educators seeking Educational Leadership graduate degrees in Florida public and private campus based or online universities were more or less likely to intend to seek assistant principal position. It identified additional reasons administrative pools have perceived shortages of quality candidates using job choice theory as a frame of reference. The intent of the researcher was to share an Executive Summary of the findings in order to offer the Florida Department of Education (FDOE), school district leadership academies, and university educational leadership department’s insights for restructuring and to remain relevant. Internal and external reliability were addressed and strict adherence to the IRB process was followed for all constituent protection.

Finally, survey data were analyzed to investigate self-assessed leadership behavior and how it is impacted by conditional factors. The study was analyzed and a discussion is presented in chapter four as to why these graduate students may be more or less likely to intend to seek an assistant principal position upon graduation, via the lens of examining self-assessed leadership on the LPI, amount of program completion, and several demographic criteria.
Chapter IV: Findings

Introduction

This chapter is delineated into major and minor sections. Following this introduction are major sections that detail response rates, demographics, analysis of participants’ intentions, and scoring guidelines. Reliability analysis and research question findings comprise the next two sections. Following is an analysis of open-ended question responses, additional findings, and a final summary.

The purpose of this study was to investigate the relationship between self-assessed leadership behaviors of educational leadership graduate students from Florida universities and their intentions to seek an assistant principal position upon program completion. Additionally, this study compared the strength of the association among factors of self-assessed leadership behavior, gender, age, number of credits completed and all of these factors together with regard to participants’ intentions to seek an administrative position upon graduation. Each individual respondent’s self-assessed leadership behavior was identified by using the Leadership Practices Inventory (LPI) and analyzing the five separate constructs: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart (Posner, 2009). The LPI was developed through a triangulation of quantitative and qualitative research methods, in-depth interviews, and written case studies from personal-best leadership experiences.
(Posner, 2009). The LPI is a survey tool with 30 behavioral statements. Each of the five leadership behavioral practices listed above have six statements for a total of 30 items. The Demographics and Intentions Questionnaire (DIQ) contained 15 questions that sought to document the respondent’s intentions so they could be analyzed and understood more fully. Consecutively administered, the LPI and DIQ were the only survey tools utilized in this study.

The research questions that framed this study were as follows:

1. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior?

2. Is there a relationship between intent to seek an assistant principal position and Gender (Male, Female)?

3. Is there a relationship between intent to seek an assistant principal position and number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)?

4. Is there a relationship between intent to seek an assistant principal position and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

5. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, Gender (Male, Female), number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33), and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?
Description of the Sample

Response rate. Not including the pilot study participants, students from seven different universities were surveyed. Surveys were distributed online and face-to-face depending on the needs of the institution. It is not possible to determine how many students were given access to the link online due to the fact that some of the university professors volunteered to forward the survey link to their students rather than having the instrument administered in person. The number of responses below was based on both the willingness of universities to respond to the request for participation and the willingness of students to complete the survey online. All students surveyed in person returned the survey. As shown in Table 4, out of the 223 surveys submitted, two hard copy and two online surveys were incomplete (two from the University of South Florida St Petersburg, one from the University of Central Florida, and one from the University of South Florida Lakeland) and were not used as they were missing more than five question responses. Additionally, when two respondents submitted their in-person survey, they admitted they had completed the survey already online; therefore, these two hard-copy in-person surveys were not included in the data analyses. As promised to the institutions to get them to participate, all data once collected were combined so institutional data were unidentifiable within the data set. This made the actual number of participants who were used in the study data, 217. Some survey data were not used. The next section discusses how many surveys were not utilized and why some surveys were not used by stating the criteria for exclusion.
Table 4

Responses per University

<table>
<thead>
<tr>
<th>University</th>
<th>Hard Copy n</th>
<th>Online n</th>
<th>Total n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: University of South Florida – Tampa (USF Tampa)</td>
<td>36</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>2: University of South Florida – St. Petersburg (USF SP)</td>
<td>40</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>3: University of Central Florida (UCF)</td>
<td>20</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>4: Florida State University (FSU)</td>
<td>0</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>5: Saint Leo University (SLU)</td>
<td>0</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>6: NOVA Southeastern University (NOVA)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7: National Louis University (NL)</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8: University of South Florida – Polytechnic (USF Poly)</td>
<td>12</td>
<td>28</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>115</td>
<td>223</td>
</tr>
</tbody>
</table>

Criteria for exclusion of missing data. After administering the LPI and DIQ surveys and reviewing the raw data, it was noted that some participants failed to respond to one or more questions on the survey instruments. If the missing response was in the demographics and intentions questionnaire, it was left blank. If it was in the LPI, then the following rules were applied. The first rule is that if five or more questions out of the survey were left blank, that participant was excluded from both the demographic/intention and LPI data. This rule applied to four of the 223 submitted surveys. If the participant failed to answer more than one question from any individual behavioral construct on the LPI, the information from the LPI for that participant was excluded from calculations. If the participant was missing only one question from any individual construct, then the average for that construct was used to replace the missing data point. From the entire LPI, out of the 217 surveys analyzed, exactly 100 were
missing no more than one response to one question from any single behavioral construct. Additionally, any LPI surveys that were missing two or more responses within any single construct were excluded from the analysis. After the criteria was used and all inclusions and exclusions were calculated, the next section describes associated the numerical values of the participants demographics. These descriptions are displayed in tables so patterns can be more easily viewed and discussed.

**Description of Participants’ Demographics**

After exclusions were completed, the data from 217 surveys yielded demographic results with regards to years of teaching experience, race/ethnicity, county, current position, grade level, setting, degrees, and whether or not the participants had guidance or special education teaching experiences. First, as shown in Table 5, the respective means of the years of teaching experience revealed that the majority of participants (89.5%) had between 0-14 years of experience. However, the mean was between 5-9 years of teaching experience, meaning that the majority of educational leadership students in this study did not have 10 years of teaching experience or more before entering an educational leadership graduate program.
Table 5

*Frequency Distribution for Years of Teaching Experience*

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>52</td>
<td>24.0</td>
</tr>
<tr>
<td>5-9</td>
<td>95</td>
<td>43.8</td>
</tr>
<tr>
<td>10-14</td>
<td>47</td>
<td>21.7</td>
</tr>
<tr>
<td>15-20</td>
<td>16</td>
<td>7.4</td>
</tr>
<tr>
<td>&gt;20</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The race/ethnicity of respondents was dominated by the White/Caucasian population with 84.3% of participants identifying themselves with this category, according to Table 6. As explored in the research question two findings, 75.6% of the participants in the study were female. Based on this data, the conclusion can be made that the majority of participants in this study were white females, which is commensurate with the findings in the study of educational leadership programs by Bruner, Greenlee, and Hill (2007).

Table 6

*Distribution of Responses by Race*

<table>
<thead>
<tr>
<th>Race Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>14</td>
<td>6.5</td>
</tr>
<tr>
<td>White</td>
<td>183</td>
<td>84.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11</td>
<td>5.1</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Missing response</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In examining the county in which the participants work, the four largest groups (between 11.5% -12.4%) came from Hillsborough, Pasco, Pinellas, and Polk as depicted in Table 7. This question on the survey had a large number of participants who did not respond (n = 39).

Table 7

<table>
<thead>
<tr>
<th>County</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alachua</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Baker</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Bay</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Brevard</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Citrus</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Collier</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Duval</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Flagler</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Hardee</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Hernando</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Highlands</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>25</td>
<td>11.5</td>
</tr>
<tr>
<td>Lafayette</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Lake</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Leon</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Levy</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Manatee</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Marion</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Orange</td>
<td>14</td>
<td>6.5</td>
</tr>
<tr>
<td>Osceola</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Pasco</td>
<td>26</td>
<td>12.0</td>
</tr>
<tr>
<td>Pinellas</td>
<td>27</td>
<td>12.4</td>
</tr>
<tr>
<td>Polk</td>
<td>26</td>
<td>12.0</td>
</tr>
<tr>
<td>St. Lucie</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Sarasota</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Seminole</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>Missing response</td>
<td>39</td>
<td>18.0</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>
A majority (75%) described themselves as current teachers as depicted in Table 8. If the scores for teachers and resource/lead teachers are combined, it represents 87.9% of the participants. Since many administrative jobs in the public school setting are not available to persons without an educational leadership graduate degree, this percentage was expected.

Table 8

<table>
<thead>
<tr>
<th>Position</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>162</td>
<td>74.7</td>
</tr>
<tr>
<td>Administrator</td>
<td>10</td>
<td>4.6</td>
</tr>
<tr>
<td>Resource/Lead Teacher</td>
<td>29</td>
<td>13.4</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>6.5</td>
</tr>
<tr>
<td>Missing response</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The distribution of the participant’s grade level was split between elementary (38.2%) and secondary teaching (46.5%) as demonstrated in Table 9. This is an 8.3% difference. That is, in this study, more participants were working in the secondary schools, not elementary. It should also be noted that the eight participants who answered “exceptional” may have also qualified as elementary or secondary as well.
Table 9

_Distribution of Responses by Current Teaching Grade Level_

<table>
<thead>
<tr>
<th>Position</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>83</td>
<td>38.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>101</td>
<td>46.5</td>
</tr>
<tr>
<td>Exceptional</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>Alternative</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Non-Classroom role</td>
<td>19</td>
<td>8.8</td>
</tr>
<tr>
<td>Missing response</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Not only were the majority secondary teachers, but after examining current teaching assignments, the majority of participants who responded to the question (62.7%) worked in the public school setting as evidenced in Table 10. It should be noted though that a large number of participants did not respond to this question (n=60).

Table 10

_Distribution of Responses by School Setting_

<table>
<thead>
<tr>
<th>Setting</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>136</td>
<td>62.7</td>
</tr>
<tr>
<td>Private</td>
<td>10</td>
<td>4.6</td>
</tr>
<tr>
<td>Magnet</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Charter</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Missing response</td>
<td>60</td>
<td>27.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To expand on the aspect of previous experience, participants were asked if they had ever had experience as a guidance counselor or special education teacher (SPED). Table 11
shows that majority of respondents (74.2%) had not had such experiences. However, in the Stanford study, they also discovered graduates of exemplary programs were more likely to be female, members of an ethnic minority group, had strong relevant teaching experiences, served frequently as coaches of other teachers, department chairs, team leaders, were committed to their communities, and capable of becoming instructionally grounded transformational leaders (Darling-Hammond et al. 2007). In this study, 25.8% indicating experiences as guidance counselor or SPED (special education) teachers is fairly high, considering the national average is notably lower.

Table 1

<table>
<thead>
<tr>
<th>Guidance or Special Education</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, had experience</td>
<td>56</td>
<td>25.8</td>
</tr>
<tr>
<td>No, no experience</td>
<td>161</td>
<td>74.2</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1 confirms the fact that the highest level of degree earned for the majority of respondents (77.4%) is only a baccalaureate degree, which was expected since those surveyed were enrolled in a master degree program. However, 21.9% did have masters degrees in other areas. More study is needed to investigate the certification areas of those who hold masters degrees to see if there is a trend by school level and/or subject matter.
Table 12

Distribution of Responses by Degrees Earned

<table>
<thead>
<tr>
<th>Degree</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS/BA</td>
<td>168</td>
<td>77.4</td>
</tr>
<tr>
<td>MA/MS</td>
<td>46</td>
<td>21.2</td>
</tr>
<tr>
<td>Ed.S</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Ph.D./Ed.D</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Summary of demographic information.** Of the 217 population of graduate students who participated in the study, 74.7% described themselves as teachers and 75.6% percent were female. The majority, 84.3%, identified themselves as White and/or Caucasian. The mean age range of persons in the study was between 31-35 years old. The vast majority (89.5%) of participants had between 0-14 years of teaching experience in the secondary (46.5 %) public setting (62.7%). Additionally, most of the participants had only a Bachelors degree (77.4%). More discussion of the results of the demographic characteristics and analysis discussion occur in Chapter 5. The next section is the analysis which is followed by the findings of the research questions.

**Overview of Analysis**

The second level of analysis utilized inferential statistics to determine the relationship between the independent variables (intent to seek an assistant principal position as measured by the LPI, number of credits successfully completed or program completion progress, gender, and age) and the dependent variable (intentions to seek an assistant principal position as measured by the DIQ). One question from the DIQ was used to measure graduate students’ intent to seek an assistant principal position upon
program completion. The question was scaled using a six-point Likert-type scale from 1 = Strongly Disagree to 4 = Strongly Agree, with the latter representing the greatest intent in seeking an assistant principal position.

The LPI consisted of 30 behavioral statements designed to measure self-assessed leadership behavior. Inferential statistics were used to draw conclusions from the sample population tested. The Statistical Package for the Social Sciences (SPSS) was used to enter data collected from the survey, conduct analyses and provide summarized values where applicable including the median, mean, central tendency, variance, and standard deviation. In addition, demographic data was processed using frequency statistics and a reliability analysis was conducted using Cronbach’s alpha test. Then, prior to analyzing the five research questions, data analysis options were conducted to ensure the variables of interest met appropriate statistical assumptions. The dependent variable was evaluated for normality, linearity, and homoscedasticity. Finally, regression, multiple regression, and analysis of variance (ANOVA) were used to detect amount of shared variance and strength of relationship between the variables.

**Reliability Analysis**

Reliability analysis allows one to study the properties of measurement scales and the items that compose the scales (Tabachnick & Fidell, 2007). Cronbach’s alpha reliability analysis procedure calculates a reliability coefficient that ranges between 0 and 1. The reliability coefficient is based on the average inter-item correlation. It is a measure of internal consistency and a high value of alpha is evidence that the items measure an underlying construct. Scale reliability is assumed if the coefficient is greater than or equal to 0.70.
Table 13 displays the results of the reliability analysis. Cronbach’s alpha (α) coefficients greater than .70 were assumed to be reasonably reliable. Overall, the instrument for this study’s sample proved to be reliable with Cronbach’s alphas ranging from .695 to .937. LPI results revealed that four LPI constructs were sufficiently reliable. That is, for each of the four 6-item constructs, Cronbach’s alpha was calculated at greater than .70 for Encourage, Model, Inspire, and Challenge constructs. Even though the psychometric properties of the LPI, from the author’s, report Enable as having a Cronbach alpha of .73, in this study the Cronbach’s alpha for Enable construct (α = .695) was slightly lower than the critical value. But, it is not significant enough to cause concern. That could be the result of some missing responses in the data. Cronbach’s alpha for the entire 30-item LPI was greater than .70.

Table 13

<table>
<thead>
<tr>
<th>LPI Sub-Constructs</th>
<th>Cronbach’s Alpha</th>
<th>Inter-Item Correlation Mean</th>
<th>Min Correlation</th>
<th>Max Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage</td>
<td>.846</td>
<td>48.677</td>
<td>.284</td>
<td>.694</td>
</tr>
<tr>
<td>Model</td>
<td>.718</td>
<td>49.677</td>
<td>.169</td>
<td>.478</td>
</tr>
<tr>
<td>Enable</td>
<td>.695</td>
<td>51.774</td>
<td>.114</td>
<td>.431</td>
</tr>
<tr>
<td>Inspire</td>
<td>.827</td>
<td>46.240</td>
<td>.267</td>
<td>.587</td>
</tr>
<tr>
<td>Challenge</td>
<td>.816</td>
<td>47.415</td>
<td>.281</td>
<td>.546</td>
</tr>
<tr>
<td>Leadership Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>.937</td>
<td>243.783</td>
<td>.009</td>
<td>.694</td>
</tr>
</tbody>
</table>

Note. N = 217
Findings Related to Research Questions

Summary of analysis overview. Research question one sought to determine if there was a relationship between intent to seek an assistant principal position and self-assessed leadership behavior. The results of research question one indicated no significant relationship was found between graduate students’ intent to seek an assistant principal position (Intentions) and their self-assessed leadership behaviors ($R^2 = .014, p = .715$). The data showed the majority of respondents (83.9%) do intend to seek an assistant principal position upon program completion.

Research question two examined if there was a relationship between intent to seek an assistant principal position and gender. The descriptive statistics of the dependent variable by gender showed 53 male and 164 females responded indicating their intent to seek an assistant principal position upon program completion. Even though the majority of respondents were female, results of research question two indicated no significant difference was found between graduate students’ intent to seek an assistant principal position and their gender ($R^2 = .020, p = .074$).

Research questions three investigated if there was a relationship between intent to seek an assistant principal position and number of credits successfully completed. In the 83.9% of respondents claimed they would seek an assistant principal position upon program completion and in the DIQ, 64.1% of respondents rated the influence salary had on their decision to pursue a degree in educational leadership as either somewhat important or one of the primary reasons. Each graduate credit represents a graduate student’s economic investment in their future and one step closer to program completion. While there could be many reasons to progress towards graduation, the results of research...
question three indicated no significant relationship was found between graduate students’ intent to seek an assistant principal position and the number of credits successfully completed ($R^2 = .006, p = .251$).

Research question four explored if there was a relationship between intent to seek an assistant principal position and age group. The highest percentage of respondents in this study were between 25 to 30 years of age. Since the age categories ranged from 25 to greater than 55, the actual design of this research question had to change in order to analyze it due to the skewness of the age range distribution. This variable had to be normalized to better represent any relationships in the data. Regardless of this change, the results of research question four still indicated no significant relationship was found between graduate students’ intent to seek an assistant principal position and their age ($R^2 = .004, p = .384$).

Research question five studied if there was a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, gender, number of credits successfully completed, and age. No individual relationships between predictor and dependent variables were found because this research question did not yield statistically significant results. The fact that the variables did not synergize with one another suggests that no significant relationships existed between leadership behavior scores via LPI, gender, number of credits completed, and age. However, 83.9% of the respondents did proclaim they intended to seek an assistant principal position after graduation and 14.3% claimed they intended to never seek an assistant principal position or that it is unknown when they would ever seek an assistant principal position. In Research question five, there was no significant difference between graduate students’
intent to seek an assistant principal position and a regression model containing leadership total, gender, credits, age, leadership multiplied by gender, leadership multiplied by credits, and leadership multiplied by age ($R^2 = .047$, $p = .188$) as further shown in Table 14.

Table 14

*Results Table Indicating No Research Question Reached Statistical Significant Differences*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Analysis</th>
<th>Criterion Variable</th>
<th>Predictor Variable</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Multiple Regression</td>
<td>Intentions</td>
<td>Encourage, Model, Enable, Inspire, and Challenge</td>
<td>.715</td>
</tr>
<tr>
<td>2</td>
<td>ANOVA</td>
<td>Intentions</td>
<td>Gender</td>
<td>.074</td>
</tr>
<tr>
<td>3</td>
<td>Regression</td>
<td>Intentions</td>
<td>Credits Completed</td>
<td>.251</td>
</tr>
<tr>
<td>4</td>
<td>Regression</td>
<td>Intentions</td>
<td>Age</td>
<td>.384</td>
</tr>
<tr>
<td>5</td>
<td>Multiple Regression</td>
<td>Intentions</td>
<td>Leadership total, Gender, Credits, Age, Leadership X Gender, Leadership X Credits, and Leadership X Age</td>
<td>.188</td>
</tr>
</tbody>
</table>
Research Question 1

The first research question addressed the relationship between intent to seek an assistant principal position and self-assessed leadership behavior. To analyze this research question, a multiple regression analysis was conducted. Figure 1, participant intentions to seek an assistant principal position, shows that the majority of respondents (83.9%) intend to seek an assistant principal position.

Figure 1. Graduate student intentions to seek an assistant principal position upon program completion.

Figure 1 shows that intention is significantly skewed with more participants indicating they strongly agreed on this Likert scale that ranged from strongly disagree, represented
by a one, through to strongly agree, indicated with a six. Self-assessed leadership behaviors were measured using the Leadership Practices Inventory (Appendix A). It measured leadership behaviors categorized into five practices or constructs. The construct titles were shortened to read: encourage, model, enable’, inspire’, and challenge. Each construct is a composite variable of its own. In Figure 2 below, the scores within the individual leadership behavior constructs show that “Model” and “Enable” have the highest average score while” Inspire”, “Challenge,” and “Encourage” scored approximately one point lower than the latter. The distribution of scores is highest within the constructs of “Inspire” and “Challenge.”

![Figure 2. LPI individual construct scores.](image-url)
Research Question 1 (RQ1) was analyzed using multiple regression. Multiple regression was employed to determine if a relationship exists between graduate students intent to seek an assistant principal position (Intentions) and self-assessed leadership behavior. The criterion variable, Intentions, was measured on a six-point Likert-type scale. Scores ranged from 1 to 6 with a mean of 4.392 and standard deviation of 1.527. The predictor variables for RQ1 were Encourage, Model, Enable, Inspire, and Challenge. The predictor variables were derived by adding up case scores across respected constructs and then dividing by the number of questions per construct (6) to produce an average score.

The questions were scaled using a 10-point Likert-type scale where 1 = Almost Never, 2 = Rarely, 3 = Seldom, 4 = Once in a while, 5 = Occasionally, 6 = Sometimes, 7 = Fairly Often, 8 = Usually, 9 = Very Frequently, and 10 = Almost Always. Scores for all five variables ranged from 2.33 to 10.00. Descriptive statistics for the criterion and predictor variables are shown in Table 15. Missing data were investigated by running frequency counts in SPSS. No cases with missing data were found in the data set. Thus, for RQ1, 217 responses from participants were received and all 217 were retained; N = 217.

**Tests of normality.** Before RQ1 was analyzed, basic parametric assumptions were assessed. That is, for the criterion variable and predictor variables, assumptions of normality, linearity, and homoscedasticity of variance were evaluated. That said, graphical devices were created to enable the researcher to visually evaluate the
aforementioned assumptions. In Figure 3, specifically, a standardized frequency histogram was produced to provide visual evidence of normality or non-normality.

Figure 3. Histogram of the criterion variable intentions to illustrate normality.

As depicted in Figure 3, the normalized histogram suggests negative skewness and no identifiable kurtosis; skewness = -0.690, kurtosis = -0.486. Associated descriptive statistics for the predictor and criterion variables are presented in Table 16. Using z-scores to evaluate normality, the criterion variable may have violated parametric assumptions. That is, z scores were created by dividing the skewness coefficient (-0.690) by the standard error of skewness (0.165). The resulting z score coefficient of -4.18 was compared to +/- 3.29, \( p > .001 \) and found to exceed the critical value of +/- 3.29. Tabachnick and Fidell (2007) suggest that z scores exceeding this critical value
may represent a non-normal distribution. Although a non-normal distribution may exist, transformation of the criterion variable was not conducted to normalize the distribution.

The predictor variables were investigated in the same manner and found to be negatively skewed (see Table 15 for details). Although being negatively skewed, the predictor variables were not transformed. The reason not to transform was made due to lack of impact on outcome.

Table 15

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage</td>
<td>2.33</td>
<td>10.00</td>
<td>8.11</td>
<td>1.229</td>
<td>-1.148</td>
<td>2.135</td>
</tr>
<tr>
<td>Model</td>
<td>4.00</td>
<td>10.00</td>
<td>8.28</td>
<td>1.009</td>
<td>-0.970</td>
<td>1.42</td>
</tr>
<tr>
<td>Enable</td>
<td>5.17</td>
<td>10.00</td>
<td>8.63</td>
<td>0.766</td>
<td>-1.066</td>
<td>2.24</td>
</tr>
<tr>
<td>Inspire</td>
<td>2.50</td>
<td>10.00</td>
<td>7.71</td>
<td>1.332</td>
<td>-0.914</td>
<td>0.851</td>
</tr>
<tr>
<td>Challenge</td>
<td>3.67</td>
<td>10.00</td>
<td>7.90</td>
<td>1.208</td>
<td>-0.790</td>
<td>0.561</td>
</tr>
<tr>
<td>Intentions</td>
<td>1.00</td>
<td>6.00</td>
<td>4.39</td>
<td>1.527</td>
<td>-0.690</td>
<td>-0.486</td>
</tr>
</tbody>
</table>

*Note. N = 217, Skewness Std. Error = 0.165, Kurtosis Std. Error = 0.329*

**Homoscedasticity and linearity.** The assumption of homoscedasticity was evaluated by examining the Normal P-P plot of standardized residuals. Linearity was evaluated by examining the scatter plot. Support for the assumptions of linearity and homoscedasticity was evident due to error terms symmetrically distributed around the mean and oval-shaped pattern of observed data points depicted in the scatter plot. The oval-shaped pattern implies that the variables were linearly related and the variability in scores for the dependent variable was roughly the same at all values of the predictor variable.
**Multicollinearity.** The assumption of multicollinearity was tested by calculating correlations between variables and collinearity statistics (Tolerance and Variance Inflation Factor). Correlations between criterion and predictor variables were not too low and correlations between predictor variables did not exceed 0.780. Tolerance is calculated using the formula $T = 1 - R^2$ and variance inflation factor (VIF) is the inverse of Tolerance (1 divided by T). Commonly used cut-off points for determining the presence of multicollinearity are $T > 0.10$ and $VIF < 10$. Results from the evaluation suggest there were no violations of multicollinearity. Additionally, given the preponderance of evidence provided, normality of the criterion variable and predictor variables is conditionally affirmed. That is, after examining the Normalized Frequency Histograms, descriptive statistics, Normal Q-Q, scatter plot and multicollinearity statistics, the variables are assumed to meet parametric assumptions.

**Multiple regression analysis.** There was no significant difference found in graduate students intent to seek an assistant principal position between a model containing five predictor variables (Encourage, Model, Enable, Inspire, and Challenge); $R = .116$, $R^2 = .014$, $F (5, 211) = 0.580$, $p = .715$ (two-tailed). Table 19 displays a model summary of the multiple regression analysis of RQ1.
Table 16

*Model Summary Generated from Multiple Regression Analysis of Graduate Students Intentions to Seek an Assistant Principal Position and Leadership Behaviors*

<table>
<thead>
<tr>
<th>Regression Model Detail</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R²</td>
<td>Standard Error</td>
<td>F</td>
</tr>
<tr>
<td>Omnibus Model</td>
<td>.116</td>
<td>.014</td>
<td>1.535</td>
<td>0.580</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nonstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.563</td>
</tr>
<tr>
<td>Encourage</td>
<td>-0.106</td>
</tr>
<tr>
<td>Model</td>
<td>0.040</td>
</tr>
<tr>
<td>Enable</td>
<td>0.220</td>
</tr>
<tr>
<td>Inspire</td>
<td>0.085</td>
</tr>
<tr>
<td>Challenge</td>
<td>-0.024</td>
</tr>
</tbody>
</table>

No predictor variables made a statistically significant contribution to the prediction of intention scores. Only, 1.4% of variance in Intentions was accounted for by leadership behaviors. Thus, results from analysis of RQ1 suggest no significant relationship between graduate students’ intention to seek an assistant principal position and leadership behaviors exists as identified by the LPI.

**Research Question 2**

The second research question addressed the relationship between intent to seek an assistant principal position and gender. Research Question 2 (RQ2) was analyzed using analysis of variance (ANOVA). ANOVA was employed to determine if differences exist between graduate students intent to seek an assistant principal position (Intentions) and their gender. The dependent variable for the question was student’s intent (Intentions) to seek an assistant principal position as measured by the *LPI*. The student’s gender
(Gender) serves as the independent variable for RQ2. The parameters for Gender were measured by 0 being Male and 1 being Female. Table 17 represents the gender variable illustrating the fact that the majority of the survey respondents were female.

Table 17

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>53</td>
<td>24.4</td>
</tr>
<tr>
<td>Female</td>
<td>164</td>
<td>75.6</td>
</tr>
<tr>
<td>Total</td>
<td>215</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Univariate outliers. A test for univariate outliers was conducted and no cases were found to exist within the distribution. Moreover, no cases with missing data were found; thus, for RQ2, 217 responses from participants were received and 217 were entered into the ANOVA model; $N = 217$.

Tests of normality. Before the RQ2 was analyzed, basic parametric assumptions were assessed. Refer to Research Question 1 for parametric assumptions of the dependent variable (Intentions). Descriptive statistics for the dependent variables by gender is presented in Table 18.
Table 18

**Descriptive Statistics of the Dependent Variable by Gender**

<table>
<thead>
<tr>
<th>Variable by Sub-Group</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Intentions</td>
<td>53</td>
<td>1.00</td>
<td>6.00</td>
<td>4.72</td>
<td>1.59</td>
</tr>
<tr>
<td>Female Intentions</td>
<td>164</td>
<td>1.00</td>
<td>6.00</td>
<td>4.29</td>
<td>1.50</td>
</tr>
</tbody>
</table>

*Note. Standard Error skew = .327, Standard Error Kurtosis = 0.644*

**Test of homogeneity.** To examine the assumption of homogeneity of variance, Levene’s test was run. Homogeneity of variance is evaluated to determine if distributions are equal across the two levels of the independent variable (Male, Female). Results from Levene’s test found that the distributions were equal across groups, $F(1, 215) = 0.491, p = .484$. These results suggest that the two distributions were equally distributed.

Given the preponderance of evidence provided, normality is conditionally affirmed. That is, after examining the descriptive statistics, Normalized Frequency Histogram, and Levene’s test, the distributions were assumed to meet parametric assumptions.

**ANOVA analysis.** Using SPSS, Analyze/Compare Means/One-Way ANOVA, no significant difference in Intention scores were found between male and female students; $F(1, 215) = 3.214, \text{eta-squared} = .015, p = .074$. For details, see Table 19 and Figure 4 for details. Table 19 provides descriptive statistics generated from the ANOVA analysis including sums of squares, degree of freedom ($df$), mean square, $F$ statistics ($F$), significant level (sig), and eta-squared.
Table 19

Descriptive Statistics Generated from ANOVA Analysis Indicating No Significant Difference between Intentions and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Eta-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>7.420</td>
<td>1</td>
<td>7.420</td>
<td>3.214</td>
<td>.074</td>
<td>.015</td>
</tr>
<tr>
<td>Within Groups</td>
<td>496.285</td>
<td>215</td>
<td>2.308</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>503.705</td>
<td>216</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean scores for Gender are found in Figure 4. Eta-squared indicates that only 1.5% of the variance found in the dependent variable was accounted for by Gender.

Based on these results, there is no difference between male and female students and their intent to seek an assistant principal position.
Research Question 3

The third research question addressed the relationship between intent to seek an assistant principal position and the number of credits completed within the educational leadership masters program. For Research Question 3 (RQ3), least-squares regression analysis was used to analyze relationships between graduate students intent to seek an assistant principal position (Intentions) and the number of credits successfully completed. The criterion variable for the question was students’ intent (Intentions) to seek an assistant principal position. The number of credits successfully completed (Credits...
Completed) served as the predictor variable for RQ3. The parameters for Credits Completed were measured by 1 being *Less than 3 credits*, 2 being *3-9 credits*, 3 being *10-15 credits*, 4 being *16-21 credits*, 5 being *22-27 credits*, 6 being *28-33 credits*, and 7 being *More than 33 credits*. All participants in this study were currently enrolled in a educational leadership masters degree program. Table 20 describes the large variety in the distribution of the number of credits completed.

<table>
<thead>
<tr>
<th>Number of Credits</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3</td>
<td>22</td>
<td>10.1</td>
</tr>
<tr>
<td>3-9</td>
<td>47</td>
<td>21.7</td>
</tr>
<tr>
<td>10-15</td>
<td>34</td>
<td>15.7</td>
</tr>
<tr>
<td>16-21</td>
<td>25</td>
<td>11.5</td>
</tr>
<tr>
<td>22-27</td>
<td>14</td>
<td>6.5</td>
</tr>
<tr>
<td>28-33</td>
<td>48</td>
<td>22.1</td>
</tr>
<tr>
<td>&gt;33</td>
<td>27</td>
<td>12.4</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Univariate outliers.** A test for univariate outliers was conducted and none were found to exist within the distributions. Standardized values were calculated by converting observed scores into z scores. Any values that exceed the critical value of \( \pm 3.29 \) were considered outliers (Tabachnick & Fidell, 2007). Furthermore, no missing values were found in the distributions; thus for RQ3, 217 responses from participants were received and 217 were entered into the regression model; \( N = 217 \).

**Tests of normality.** Before the RQ3 was analyzed, basic parametric assumptions were assessed. To avoid repetition, refer to Research Question 1 for parametric
assumptions of the criterion variable (Intentions). For the predictor variable “Credits Completed,” assumptions of normality, linearity, and homoscedasticity were evaluated. That said, a graphical device was created to enable the researcher to visually evaluate the aforementioned assumptions. Specifically in Figure 6, the Standardized Credits Completed frequency histogram was presented to provide visual evidence of non-normality or normality.

![Histogram of the credits completed, predictor variable, with normal curve superimposed.](image)

*Figure 5.* Histogram of the credits completed, predictor variable, with normal curve superimposed.

The normalized histogram indicates a slight positive skewness = .092 and some detectable kurtosis (kurtosis = -1.411) as shown in Figure 5. To test if this deviation
from normality was significant, a zscore was calculated using the standard error of the skew \((\text{std. error skew} = .165)\). Results indicated that the construct was normally distributed; \((\text{skewness} = .092, z = .558, p > 3.29)\).

Descriptive statistics for the criterion and predictor variables were presented in Table 21. Note that credits completed was coded in SPSS so the mean in Table 21 reflects a mean at nearly the 16-21 credit mark (credits is coded as “1”, 3-9 is “2”, 10-15 is “3”, and 16-21 credits is “4”, 22-27 is coded as “5”, 28-33 is “6” and >33 credits is “7”).

Table 21

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits Completed</td>
<td>3.99</td>
<td>4.023</td>
<td>.092</td>
<td>-1.411</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Intentions</td>
<td>4.392</td>
<td>1.527</td>
<td>-.690</td>
<td>-0.486</td>
<td>1.00</td>
<td>6.00</td>
</tr>
</tbody>
</table>

\textit{Note.} Standard Error skew = .165, Standard Error Kurtosis = .329

Regression analysis. Using SPSS, there was no significant relationship found between graduate students’ intent to seek an assistant principal position and the amount of credits completed; \(r = .078, R^2 = .006, F (1, 215) = 1.327, p = .251\) (two-tailed)—see Table 22 for details. Table 24 provides a model summary generated from the regression analysis including standard error (Std. Error), Beta, t statistics (t), and significant level (sig).
Table 22

*Model Summary Generated from Regression Analysis Indicating No Significant Relationship between Credits Completed and Intentions*

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omnibus Model</td>
<td>.078</td>
<td>.006</td>
<td></td>
<td></td>
<td></td>
<td>.251</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td>4.629</td>
<td>.231</td>
<td>20.051</td>
<td>.000</td>
</tr>
<tr>
<td>Credits</td>
<td>-.060</td>
<td>.052</td>
<td>-.078</td>
<td>-1.152</td>
<td>.251</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* DV: Intentions

The scatter plot presented in Figure 6 reflects no significant relationship between the criterion variable and predictor variable. R-squared (.006) might suggest that 0.6% of the reason why graduate students’ intent to seek an assistant principal position varies might be due to the amount of credits successfully completed. Given the results, the predictor variable (Credits Completed) cannot accurately predict student intentions.
Research Question 4

Research Question 4 (RQ4) was analyzed using regression. Regression was employed to determine if a relationship exists between graduate students’ intent to seek an assistant principal position (Intentions) and age groups. The criterion variable for the question was students’ intent (Intentions) to seek an assistant principal position. The students’ age group (Age) serves as the predictor variable for RQ4. The parameters for Age were measured by 1 being 25-30, 2 being 31-35, 3 being 36-40, 4 being 41-45, 5 being 46-50, 6 being 51-55, and 7 being 55+. As represented in Table 23, the highest percentage of participants came from the 25-30 years age range, but note that the mean

Figure 6. Scatter dot plot indicating no significant relationship between intentions and credits completed
age range was 31-35. One of the participants missing a response in Table 23 commented that she was 23 years of age and that there was no 20-24 age range listed.

Table 23

<table>
<thead>
<tr>
<th>Years of Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-30</td>
<td>83</td>
<td>38.2</td>
</tr>
<tr>
<td>31-35</td>
<td>46</td>
<td>21.2</td>
</tr>
<tr>
<td>36-40</td>
<td>30</td>
<td>13.8</td>
</tr>
<tr>
<td>41-45</td>
<td>27</td>
<td>12.4</td>
</tr>
<tr>
<td>46-50</td>
<td>19</td>
<td>8.8</td>
</tr>
<tr>
<td>51-55</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>&gt; 55</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>Missing response</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Univariate outliers. A test for univariate outliers was conducted and no cases were found to exist within the distribution. Moreover, two cases with missing data were found and removed; thus, for RQ4, 217 responses from participants were received and 215 were entered into the regression model; \( N = 215 \).

Tests of normality. Before the RQ4 was analyzed, basic parametric assumptions were assessed. To avoid repetition, please refer to Research Question 1 for parametric assumptions of the criterion variable (Intentions). For the predictor variable “Age,” assumptions of normality, linearity, and homoscedasticity were evaluated. A graphical device was created to enable the researcher to visually evaluate the aforementioned assumptions. Specifically, the Standardized Age frequency histogram was presented to provide visual evidence of non normality or normality—see Figure 7.
The normalized histogram indicates positive skewness = .934 and slight kurtosis (kurtosis = .018). To test if this deviation from normality was significant, a zscore was calculated using the standard error of the skew (std. error skew = .166). Results indicated that the construct was not normally distributed; (skewness = .934, z = 5.626, p > 3.29). Z scores that exceed the critical value of +/- 3.29 suggests a non-normal distribution (Tabachnick & Fidell, 2007). Descriptive statistics for the criterion and predictor variables were presented in Table 24.

*Figure 7.* Histogram of the age predictor variable with normal curve superimposed.
Table 24

Descriptive Statistics for Criterion and Predictor Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>2.48</td>
<td>1.600</td>
<td>.934</td>
<td>0.018</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Intentions</td>
<td>4.386</td>
<td>1.530</td>
<td>-.687</td>
<td>-.498</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. Standard Error skew = .166, Standard Error Kurtosis = .330

Regression analysis. Using SPSS, there was no significant relationship between graduate students’ intent to seek an assistant principal position and their age; \( r = .060, \)

\( R^2 = .004, F (1, 213) = 0.760, p = .384 \) (two-tailed)—see Table 25 for details. Table 25 provides a model summary generated from the regression analysis including standard error (Std. Error), Beta, t statistics (t), and significant level (sig).

Table 25

Model Summary Generated from Regression Analysis Indicating No Significant Relationship between Age and Intentions

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>Unstandardized Beta (B)</th>
<th>Std. Error</th>
<th>Standardized Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omnibus Model</td>
<td>.060</td>
<td>.004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.384</td>
</tr>
<tr>
<td>Constant</td>
<td>4.245</td>
<td>0.193</td>
<td>22.008</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.057</td>
<td>0.065</td>
<td>0.060</td>
<td>0.872</td>
<td>.384</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The scatter plot presented in Figure 8 reflects no significant relationship between the criterion variable and predictor variable. R-squared (.004) might suggest that 0.4% of the reason why graduate students’ intent to seek an assistant principal position varies might be due to their age. Given the results, the predictor variable (Age) cannot accurately predict student intentions.
Research Question 5

The final research question addressed the relationships between intent to seek an assistant principal position, self-assessed leadership behavior, gender, number of credits completed, and age. Research Question 5 (RQ5) was analyzed using Multiple Regression (MR). Regression was employed to determine if a relationship exists between graduate students’ intent to seek an assistant principal position (Intentions) and a model containing LPI, Gender, Credits, and Age. The criterion variable for the question was students’
intent (Intentions) to seek an assistant principal position and the predictors were LPI, Gender, Credits, and Age, LPI (x) Gender, LPI (x) Credits, and LPI (x) Age. The three interaction terms were derived by using the Compute tab in SPSS. Using SPSS, there was no significant relationship between graduate students’ intent to seek an assistant principal position and a regression model containing LPI Construct Total, Gender, Age, Credits, LPI (x) Gender, LPI (x) Age, and LPI (x) Credits (Omnibus Model); \( r = .216, R^2 = .047, F (1, 207) = 1.446, p = .188 \) (two-tailed)—see Table 26 for details. Table 26 provides a model summary generated from the regression analysis including standard error (Std. Error), Beta, \( t \) statistics (\( t \)), and significant level (sig) for each predictor. No individual relationships between predictor and dependent variables were found.

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>( B )</th>
<th>Std. Error</th>
<th>Beta</th>
<th>( t )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omnibus Model</td>
<td>.216</td>
<td>.047</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.188</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td>1.808</td>
<td>2.997</td>
<td>.603</td>
<td>.547</td>
<td></td>
</tr>
<tr>
<td>Leadership Total</td>
<td></td>
<td></td>
<td>0.013</td>
<td>0.012</td>
<td>0.242</td>
<td>1.090</td>
<td>.277</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>1.573</td>
<td>2.259</td>
<td>0.444</td>
<td>0.696</td>
<td>.487</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>0.096</td>
<td>0.252</td>
<td>0.100</td>
<td>0.381</td>
<td>.704</td>
</tr>
<tr>
<td>Credits</td>
<td>-0.033</td>
<td>-0.002</td>
<td>-0.009</td>
<td>0.009</td>
<td>-0.625</td>
<td>-0.950</td>
<td>.343</td>
</tr>
<tr>
<td>Leadership (x) Gender</td>
<td></td>
<td></td>
<td>-0.009</td>
<td>0.006</td>
<td>-0.034</td>
<td>-0.126</td>
<td>.900</td>
</tr>
<tr>
<td>Leadership (x) Age</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.002</td>
<td>-0.084</td>
<td>-0.123</td>
<td>.902</td>
</tr>
</tbody>
</table>

*Note.* DV = Intentions

**Self-Assessed Behavior Constructs Relationships.** To analyze the strength of the relationships among the LPI constructs, the Pearson Product Moment Correlation
values are presented in Table 27 for each of the respective domain relationships in a five-by-five correlation matrix. According to the correlation testing, every domain was significant at the .01 level with a 2-tailed test with each of the other domains and the total LPI score. The strongest relationship appears to be between the constructs Inspire and Challenge and the construct most predictive of the total LPI score is Challenge.

Table 27

<table>
<thead>
<tr>
<th>Construct</th>
<th>Model</th>
<th>Inspire</th>
<th>Challenge</th>
<th>Enable</th>
<th>Encourage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>-</td>
<td>.65**</td>
<td>.65**</td>
<td>.55**</td>
<td>.71**</td>
</tr>
<tr>
<td>Inspire</td>
<td>.65**</td>
<td>-</td>
<td>.76**</td>
<td>.42**</td>
<td>.57**</td>
</tr>
<tr>
<td>Challenge</td>
<td>.55**</td>
<td>.76**</td>
<td>-</td>
<td>.55**</td>
<td>.66**</td>
</tr>
<tr>
<td>Enable</td>
<td></td>
<td></td>
<td>.55**</td>
<td>-</td>
<td>.59**</td>
</tr>
<tr>
<td>Encourage</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>LPI Overall</td>
<td>.85**</td>
<td>.83**</td>
<td>.88**</td>
<td>.70**</td>
<td>.85**</td>
</tr>
</tbody>
</table>

Note. ** = p < .01

Length of wait until seeking assistant principal position. Upon graduation from the Educational Leadership program, participants were asked how quickly they would begin seeking an assistant principal position. As shown in Table 28, over half (61.3%) plan to pursue the position within two years of graduation. Exactly 14.3% claim they never will seek and assistant principal position or it is unknown when they will or will not ever seek and assistant principal position.
Table 28

Frequency Distribution Indicating When Participants Will Seek an Assistant Principal Position

<table>
<thead>
<tr>
<th>Rating</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately</td>
<td>61</td>
<td>28.1</td>
</tr>
<tr>
<td>1-2 years</td>
<td>72</td>
<td>33.2</td>
</tr>
<tr>
<td>3-5 years</td>
<td>39</td>
<td>18.0</td>
</tr>
<tr>
<td>&gt;5 years</td>
<td>10</td>
<td>4.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>24</td>
<td>11.1</td>
</tr>
<tr>
<td>Never</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Missing response</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In examining why participants would choose to wait, students were asked to explain their response to this question and the responses were coded and analyzed as described in the next section.

**Analysis of Open-Ended Question**

The qualitative question was analyzed by a theme analysis. The responses to each question were categorized into response categories by grouping similar answers together. Each of the respective response themes were quantified and a qualitative coding key was developed (Appendix E).

First, the data reduction process for the open-ended questions is discussed. Then, frequency distributions for each respective domain are presented for both answer categories and themes. Inter-rater reliability was performed, between the researcher and another professor, in the categorization of responses within each theme. It was determined to be within acceptable limits. There was only one conflict within one of the
open-ended question responses. Additionally, the researcher clarified the rules based on this conflict to ensure that the coding system was reliable.

**Data reduction.** The data from the exploratory question were categorized. The exploratory question is the latter portion of this question: “When do you intend to seek an assistant principal position? Explain”. This question was analyzed for themes and most common responses were identified. The themes were coded. A key for response and theme coding is presented in Appendix E and later in this paragraph. Of the 217 submitted surveys, only 85 respondents participated in these open-ended responses. The content of each open-ended question’s responses were analyzed and categorized into categories by grouping similar answers together. Then, general categories of responses were quantitatively coded to measure respectively.

Each of the respective response categories was quantified and an open-ended questionnaire coding key was developed (Appendix E). The coding guide categories are as follows: not waiting (on seeking an assistant principal position), waiting to get more experience in current or next position, waiting to earn more degrees, certifications, or professional development, waiting to get a district level, higher education, DOE, or specific position, and waiting due to family related reason. The data from the open-ended response analysis were converted into response categories by taking the content of the response and assigning it to a value.

**Data display.** After the reduction of data, an analysis of each question’s response categories and respective themes was completed through frequency distributions which are presented below in Table 29. From the 217 respondents, 85 responded to the open-ended question. Within these 85 respondent surveys, 22 respondents (25.9%) indicated
they would seek an assistant principal position immediately upon program completion.

Finally, 63 (74.1%), the majority, said they would wait to seek an administrative position. The preponderance, 33 respondents (38.8% of those who responded to the open ended question), of the reasons for waiting was because they wanted more experience in their current position or the next position before seeking an assistant principal position. Of the remaining, 35.3% indicated they were choosing to wait to seek an assistant principal position: 10.6% were waiting to earn another degree, more certifications, or other professional type development; 18.8% claimed to not be seeking an assistant principal position, but were waiting to get a district level position, higher education position, Department of Education position, or another specific position other than an assistant principalship; and 9.4% intended to wait due to family-related reasons.

Table 29

<table>
<thead>
<tr>
<th>Response Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0: not waiting</td>
<td>22</td>
<td>25.9</td>
</tr>
<tr>
<td>1: waiting to get more experience in current or next position</td>
<td>33</td>
<td>38.8</td>
</tr>
<tr>
<td>2: waiting to earn more degrees, certifications, or professional development</td>
<td>9</td>
<td>10.6</td>
</tr>
<tr>
<td>3: waiting to get a district level, higher ed., DOE, or specific position</td>
<td>16</td>
<td>18.8</td>
</tr>
<tr>
<td>4: waiting due to family-related reason</td>
<td>8</td>
<td>9.4</td>
</tr>
<tr>
<td>Total who responded to this question</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td>Missing responses (not used to calculate %)</td>
<td>132</td>
<td>60.8</td>
</tr>
</tbody>
</table>

Additional Findings

Motivation and intention are inexplicably intertwined. One of the questions on the DIQ asked participants to rate the influence salary played in their decision to pursue a
degree in educational leadership. As seen in Table 30, 64.1% of respondents rated salary as either somewhat important or one of the primary reasons.

Table 30

*Frequency Distribution for Influence of Salary*

<table>
<thead>
<tr>
<th>Rating</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No role</td>
<td>35</td>
<td>16.1</td>
</tr>
<tr>
<td>Not that important</td>
<td>42</td>
<td>19.4</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>105</td>
<td>48.4</td>
</tr>
<tr>
<td>One of the primary reasons</td>
<td>34</td>
<td>15.7</td>
</tr>
<tr>
<td>Missing response</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to Table 31, it appears that participants were split when asked which level of assistant principal they intended to become. However, a very slight majority (52.5%) indicated they intended to seek an Elementary assistant principal position upon program completion.

It was noted that when asked on the DIQ if respondents intended to seek an assistant principal position upon program completion, 26 out of 53 (49%) selected strongly agree. But, only 44 out of 164 (27%) of the females selected strongly agree. While these findings reveal DIQ respondent demographic differences, the next section contains an exploratory analysis of the LPI’s self-assessed leadership behavior individual constructs to find search for more patterns or trends within the data.
Table 3

<table>
<thead>
<tr>
<th>Level</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>114</td>
<td>52.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>102</td>
<td>47.0</td>
</tr>
<tr>
<td>Missing response</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Exploratory Analysis

Table 32 displays the results from the exploratory analysis conducted to investigate if there were any trends or patterns in the data that might be relevant to the study. Specifically, a second look at the LPI and intent to seek an assistant principal position from the DIQ was conducted. The LPI’s self-assessed behavioral constructs were standardized and categorized by intensity. Groups were specified by retrieving cases with $z$ scores $\leq -0.5$ and cases with $z$ scores $\geq 0.5$. This strategy removed approximately 34% of the cases clustered around the mean. Effectively, only those responding with high and low scores were retained to determine if any trends or differences existed between groups with regards to intent to seek an assistant principal position. In sum, instead of just examining overall intent, only those most likely to seek an assistant principal position were retained. Cases with $z$ scores greater than -1.0 were retained for analysis. This strategy only extracted those participants likely to seek an assistant principal position. Those unlikely to intend to seek the position were categorically removed. This same procedure was duplicated for all five constructs.
Results from this analysis found a distinct trend in the data, listed in Table 32. It seems for the constructs, low leadership practice construct scores on intent to seek an assistant principal position were lower than those with high leadership practice construct scores. These findings suggest that those respondents likely to intend to seek an assistant principal position have more self-assessed leadership behavior qualities.

Table 32

*Summary of LPI Exploratory Analysis Searching for Trends and Patterns*

<table>
<thead>
<tr>
<th>DV</th>
<th>IV</th>
<th>F</th>
<th>Sig</th>
<th>Mean Low</th>
<th>Mean High</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Intentions</td>
<td>Encourage</td>
<td>3.465</td>
<td>0.066</td>
<td>4.64</td>
<td>5.03</td>
</tr>
<tr>
<td>High Intentions</td>
<td>Model</td>
<td>7.490</td>
<td>0.008**</td>
<td>4.54</td>
<td>5.22</td>
</tr>
<tr>
<td>High Intentions</td>
<td>Enable</td>
<td>2.809</td>
<td>0.098</td>
<td>4.42</td>
<td>4.86</td>
</tr>
<tr>
<td>High Intentions</td>
<td>Inspire</td>
<td>2.922</td>
<td>0.092</td>
<td>4.70</td>
<td>5.12</td>
</tr>
<tr>
<td>High Intentions</td>
<td>Challenge</td>
<td>4.355</td>
<td>0.040*</td>
<td>4.65</td>
<td>5.16</td>
</tr>
</tbody>
</table>

*Note.* * = $p < .05$, ** = $p < .01$

**Encourage.** Encouraging the heart construct measured respondent’s view of how well they recognized contributions or others and celebrating other’s values and victories.

To search for trends and patterns in the data, constructs associated with the LPI were standardized and categorized by intensity. Groups were specified by extracting cases with $z$ scores $\leq -0.5$ and cases with $z$ scores $\geq 0.5$. Thus, 21 cases were removed leaving only those likely to intend to seek an assistant principal position upon program completion. Figure 10 illustrates results from this analysis found no significant difference existed between groups at the alpha .05 level; $F (1,101) = 3.465, p = .066$. 

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However, a trend was evident in mean scores across groups. Specifically, participants with low encourage scores were less likely to seek an assistant principal position than those with higher scores ($M = 4.64, M = 5.03$ respectively) as seen in Figure 9.

![Figure 9](image)

**Figure 9.** High intentions scores correlate with high encourage scores.

**Model.** Modeling the way construct measured respondent’s consistency with clarifying values and setting the example for others. To identify any trends in the data, constructs associated with the leadership inventory were also standardized and categorized by intensity. That is groups were specified by extracting cases with z scores $\leq -0.5$ and cases with z scores $\geq 0.5$. In Figure 10, results from this analysis found a significant difference existed between groups at alpha .05 level; $F (1,71) = 7.490, p = .008$. A significant trend was evident in mean scores across groups. Specifically,
participants with low Model construct scores were less likely to seek an assistant principal position than those with higher scores ($M = 4.54$, $M = 5.22$ respectively).

**Figure 10.** High intentions scores correlate with high model scores.

**Enable.** Enabling others to act construct on the LPI was designed to solicit self-feedback on respondent’s view of how they foster collaboration and strengthen others. To investigate trends in the data, self-assessed leadership behavior constructs associated with the LPI were standardized and categorized by intensity. That is, groups were specified by extracting cases with $z$ scores $\leq -0.5$ and cases with $z$ scores $\geq 0.5$. Results from the analysis found that no significant difference existed between groups at alpha .05 level; $F(1,67) = 2.809$, $p = .098$ as can be viewed in Figure 11. However, despite the non-significant $p$-value, a trend was evident in mean scores across groups. Specifically,
participants with low Enable construct scores were less likely to seek an assistant principal position than those with higher scores ($M = 4.42$, $M = 4.86$ respectively).

![Figure 11](image)

*Figure 11.* High intentions scores correlate with high enable scores.

**Inspire.** Envisioning the future and enlisting others was the focus of the LPI’s construct that measured how respondents indicated they inspire shared vision. To investigate trends in the data, self-assessed leadership behavior constructs associated with the LPI were standardized and categorized by intensity. Groups were specified by extracting cases with $z$ scores $\leq -0.5$ and cases with $z$ scores $\geq 0.5$. As illustrated in Figure 12, results from this particular analysis found no significant difference existed between groups at alpha .05 level; $F(1,72) = 2.922$, $p = .092$. However, a trend was evident in mean scores across groups. Specifically, participants with low Inspire
construct scores were less likely to seek an assistant principal position than those with higher scores ($M = 4.70$, $M = 5.12$ respectively).

Figure 12. High intentions scores correlate with high inspire scores.

**Challenge.** Challenge the process construct measured how respondents search for opportunities and experiment and take risks. To investigate trends in the data, self-assessed constructs associated with the LPI were standardized and categorized by intensity. Groups were specified by extracting cases with $z$ scores $\leq -0.5$ and cases with $z$ scores $\geq 0.5$. In Figure 13, results from the analysis found a significant difference existed between groups at alpha .05 level: $F(1,73) = 4.355$, $p = .040$. A trend was evident in mean scores across groups. Specifically, participants with low challenge scores were less likely to seek an assistant principal position than those with higher scores ($M = 4.65$, $M =...$
5.16 respectively). In order to be objective about the data within these tables, figures and paragraphs, readers must be cognizant of the limitations of this study. After Figure 13 is statement of actualized study limitations to maintain perspectives.

![Graph showing relationship between challenge and intentions scores.](image)

**Figure 13.** High intentions scores correlate with high challenge scores.

**Limitations**

This study reliability may have been marginalized somewhat because a pure random sample was not obtained and the study was limited in methods design, survey design, population characteristics, and sampling procedures. The strictly cross-sectional quantitative methodological design does not observe phenomenological behaviors or behaviors over time. This was administered once, not replicated many times. Additionally, the study’s surveys were restrictive. Likert-type instruments do not allow personal suggestions or insight by design and there is no guarantee in accuracy with self
reporting. Even with these limitations, the findings still offer perspective of graduate students in Florida who may or may not pursue administrative positions upon program completion.

**Summary of the Findings**

Five research questions were posed for investigation in this study. Results of Research Question 1 indicated no significant relationship was found between graduate students’ intent to seek an assistant principal position and their self-assessed leadership behaviors ($p = .715$). Results of Research Question 2 indicated no significant difference was found between graduate students’ intent to seek an assistant principal position and their gender ($p = .074$). Results of Research Question 3 indicated no significant relationship was found between graduate students’ intent to seek an assistant principal position and the number of credits successfully completed ($p = .251$).

Likewise, results of Research Question 4 indicated no significant difference was found between graduate students’ intent to seek an assistant principal position and their age ($p = .384$). The results of Research Question 5 also indicated no significant difference was found between graduate students’ intent to seek an assistant principal position and a regression model containing Leadership total, Gender, Credits, Age, Leadership $\times$ Gender, Leadership $\times$ Credits, and Leadership $\times$ Age ($p = .188$). Finally, the largest theme of open-ended responses as to why educational leadership students plan to wait after graduation to seek an assistant principal position is that they were waiting to get more experience in their current or next position. Chapter five follows with a detailed discussion of these findings.
Chapter V: Discussion

Introduction

Chapter five briefly summarizes the methods and procedures used in this study. It also includes a discussion of major findings, implications, and recommendations for future research. The study set out to investigate the relationship between self-assessed leadership behaviors and intentions to seek an assistant principal position as well as to compare the strength of the association among factors such as gender, age, and number of credits completed with regard to participants’ intentions to seek an administrative position after finishing their masters degree.

The purpose of this study was to examine factors that influence the intentions of educational leadership graduate students currently enrolled in university educational leadership programs in Florida. This was accomplished by analyzing the characteristics of graduate students in Florida that were associated with the intention to seek an assistant principal position upon program completion. Of particular interest was the influence of self-assessed leadership behaviors on intention to pursue an assistant principal position. The research questions that framed this study were as follows:

1. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior?
2. Is there a relationship between intent to seek an assistant principal position and Gender (Male, Female)?

3. Is there a relationship between intent to seek an assistant principal position and number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)?

4. Is there a relationship between intent to seek an assistant principal position and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

5. Is there a relationship between intent to seek an assistant principal position and self-assessed leadership behavior, Gender (Male, Female), number of credits successfully completed (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33), and age groups (25-30, 31-35, 36-40, 41-45, 46-50, 51-55, > 55)?

Procedures

The research questions were answered through a comparative study that employed quantitative non-experimental research design using linear and multiple regression and Analysis of Variance statistical techniques. The study design included a sample of 217 educational leadership masters degree seeking graduate students in universities across Florida. The instruments used for this study were the Leadership Practices Inventory (Appendix A) and Demographic and Intentions Questionnaire (Appendix B), both of which were distributed either via an online survey or in person. The sample population was Florida Educational Leadership graduate students attending campuses at selected universities. Two hundred seventeen participants from seven universities took part in the study. Chapter 4 provides a full account of the data and results of the survey, while Appendices F provides a list of variables used in the SPSS program. The following
section provides an overview of the findings.

Summary of the Findings

Of the respondents in the study, 74.6% described their current positions as a teacher, and another 13.4% reported their current position as a resource or lead teacher. Three quarters of the respondents were female and 84.3% identified themselves as White and/or Caucasian. The average age range of respondents was 31-35 years. The majority (89.5%) of participants had between 0-14 years of teaching experience, but the most of respondents in this sample had between 5-9 years of teaching experience. Respondents provided data that explored the research questions that framed this study. The following sections provide a brief summary of the findings for each of those questions.

Discussion of the Findings

The relationship between intention to seek a leadership position and self-assessed leadership behavior. Research Question 1 explored the possibility of a relationship between the respondent’s intention to seek an assistant principal position and their self-assessed leadership behavior. The data did not reflect significance with regard to the respondent’s self-assessment, but 83.9% of the respondents did intend to seek an assistant principal position.

The influence of gender on the intention to pursue a leadership position. While the self-assessed leadership behavior of the respondents did not appear to exert influence on the intention to pursue an assistant principal position, gender also was not found to be a significant factor. A significant difference between male and female students was not found. This means that the estimated marginal means for females was not significantly higher than males, indicating neither gender had significantly stronger
intentions to seek an assistant principal position upon program completion. It is noted that 75.6% of the population surveyed were female, but it appears that females do not necessarily have stronger intentions to seek assistant principal positions than males. It was noted that when asked on the DIQ if respondents intended to seek an assistant principal position upon program completion, 26 out of 53 male participants (49%) selected strongly agree. But, only 44 out of 164 (27%) of the females selected strongly agree.

The influence of degree progress on the intention to pursue a leadership program. The third research question sought to understand how a graduate student’s progress in their degree program might influence their intentionality toward an assistant principal position. Similar to self-assessed leadership behaviors using the LPI not indicating significant differences, degree progress was not shown to be a significant factor in determining intentionality toward seeking an assistant principal position upon program completion either. While it might seem that the further a graduate student progresses in the educational leadership program, the stronger the intent to seek an assistant principal position might become, the data did not support this conclusion (or a conclusion in the other direction). No such prediction to the general population can be made since statistical significance was not found.

The influence of age on the intention to pursue a leadership position. Age was not found to exert an influence on the likelihood to pursue an assistant principal position. Data in this study did not support age as a factor in graduate students’ intentions to seek an assistant principal position upon program completion. However, it must be mentioned that the average age range of Florida's educational leadership graduate
programs in this study was 31 to 35 years. These findings mirror Cranston (2007) who found no differences with regards to age and no influence between those interested or not in an administrative position. However, experience seems to have played a strong role in the evolution of administrative leadership skills and in interest in a principalship (Murphy, Elliott, Goldring, & Porter, 2007; Pounder & Merrill, 2001).

How the variables come together to create the intention to seek a leadership position. The final research question sought to determine whether any of the factors explored individually in the first four research questions might intermingle to create a significant interaction influence when analyzed in conjunction with one another. The multiple regression analysis of the four variables did not reflect any significant interactions with the graduate students’ intentions to seek an assistant principal position. These results were not surprising based upon the separate findings presented.

Limitations Restated

Some of the limitations of this study were the methodological design, survey design, population characteristics, and sampling methods. During the research, the limitations did not appear to influence the results themselves. However, it does constrain the generalizability of the results. That said, study reliability may have been marginalized because a pure random sample was not obtained. This is a study conducted with a small number of respondents, number of institutions, and incorporates only a specific setting, these limitations must be recognized. These few limitations should not diminish the research value. This study’s focus was not concerned with student perceptions of supply and demand or competitiveness, but on perceptions of intentions which can be different from the actual job choice behaviors (Rynes, 1991). Finally, the
sample was drawn only from Florida’s public campus based universities and a few from private institutions that serve the Tampa Bay Metropolitan area. Additionally, there is no guarantee of response accuracy with self-reporting. This restricts the degree of variance and limits generalizability. Notwithstanding all of these limitations, the following sections consider the conclusions and implications of this study.

Conclusions, Implications, and Reflections

The relationship between intention to seek a leadership position and self-assessed leadership behavior. Some research suggests leadership behavior aptitudes can be measured (Posner, 2009). Respondents’ self-assessed leadership behavior scores using the LPI instrument were not significantly correlated with graduate students intentions to seek an assistant principal position upon program completion. This does not mean there is not a link between these two variables, but this study in this setting did not reveal one. However, the strongest relationship appears to be between the constructs Inspire and Challenge and the construct most predictive of the total LPI score was Challenge.

It was noted that 83.9% of this survey’s respondents intended to seek an assistant principal position, 3.2% indicated that they never intend to seek an assistant principal position, and 11.1% claim it is unknown when they would seek an assistant principal position. The remaining percentages were due to missing responses. However, concerns, fears, and personal complexities like age (Boehlert & O’Connell, 1999; Cranston, 2007; Murphy, Elliott, Goldring & Porter, 2007; Pounder & Merrill, 2001), gender (Banks, 1995; Buell, 2001; DeFelice, 1999; Glass, Bjork, & Bruner, 2000; Grady, 1992), and leadership style (Cranston, 2007; Murphy, Elliott, Goldring & Porter, 2007; Pounder &
Merrill, 2001) may indeed affect intentions of educational leadership graduate students and their choices for career pathways. Through the absence of a correlation, this study found that there was no link between self-assessed leadership behavior and intention to seek an assistant principal position.

In the face of more flexible processes for obtaining certification and growing pools of credentialed candidates, there still remains a shortage of quality administrators in many states, including Florida (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). This problem is exacerbated by the numbers of teachers who are potential leaders, but who do not want to be school principals. They most often cited the stress of the job, time required for the job, and societal problems as reasons for not pursuing school leadership positions (Hewitt, Pijanowski, Carnine, & Denny, 2008).

According to Pounder and Merrill (2001), professional development incentives might attract minority candidates, who are especially needed if leadership demographics are to approach that of school student enrollment. Graduate student paid administrative Internships, field experiences, and specific in-house training might all aid in luring qualified candidates (Pounder & Merrill, 2001). Districts also need to explore other ways to improve the daily work life of administrators and workload management. These are only a couple techniques that might assist in recruitment, selection, and retention.

Subsequently, only a little more than half of those who graduate from administrator preparation programs ever end up in an administrative positions (Darling-Hammond, LaPointe, Meyerson, & Orr, 2007) and the vast majority (83.9%) in this study claim they intend to seek an assistant principal position. So, the question shifts to what happens to the others after program completion?
The influence of gender on the intention to pursue a leadership position.

More fully understanding the role that gender may play in influencing the intention of educators to pursue administrative positions has implications for public policy, scholarship, and incentive decisions. In this study, the estimated marginal means of intentions for females were not significantly higher than males; this means that females do not indicate stronger intentions to seek an assistant principal position upon program completion than males. While the data from this study did not reveal a statistical significance in the relationship between gender and intent to seek an assistant principal position, it does not necessarily mean differences were nonexistent.

In this current study’s population of Florida graduate school respondents, it appears that there were more females in educational leadership programs. This current study revealed high numbers of females (75.6%) in the population sample of Florida educational leadership programs surveyed. These findings are consistent with the literature and mirror the prior work of Greenlee, Bruner, and Hill (2009) who claimed it is common that women make up more than half of the educational leadership students across universities. Educational Leadership programs in the last two decades continue to shift from mostly white male students to having a majority of white female students. Bruner, Greenlee, and Hill’s study (2007) of 25 educational leadership programs held that 65% of their students were female. This current study’s findings supports that research since 75.6% of respondents were female and 84.3% identified themselves as White. This is a 10% rise in the number of educational leadership graduate student females in proportion to the 65% in found in Bruner et al. (2007).
If there is a decrease in male graduate students in educational leadership programs or an increase in female graduate students in educational leadership administration, are females graduating and seeking assistant principal positions? A decade ago, the literature suggested women are underrepresented in the administrative fields (Banks, 1995; Buell, 2001; DeFelice, 1999; Grady, 1992), but that landscape has changed. McCarthy (2002) claimed that there has been a significant increase in the number of women being licensed for administrative positions. Similarly, 51% of the licenses in the Indiana five year study were issued to females (Black et al., 2007). The School and Staffing Survey (SASS) 2007-2008 support that school principalships are equally held by males (49.7%) and females (50.03%).

From this current study, it does not appear that females in Florida were necessarily more likely to seek an assistant principal position than males. Likewise, Cranston (2007) found no gender differences between those interested or disinterested in an administrative position. On the other hand, Boehlert and O’Connell (1999) did find statistical significances between gender and intention.

The bottom line is that while this study does support and affirm the literature that cites increases in females pursuing educational leadership degrees, it did not address the gaps between female underrepresentation in school administration positions and where the link is between gender and intentions. Clearly, more studies in this area are needed to examine the gap between graduate student completing certification and actually seeking an assistant principal position. If these studies are conducted, such insight can aid in recruitment efforts in practical settings. For instance, armed with the knowledge that either female graduate students seeking school administration might be rising or male
graduate students seeking school administration is shrinking, recruitment efforts can be appropriately adjusted to match the upcoming population reality with current and projected administrative openings in relation to gender, if disproportionality exists. Additionally, this study and the literature listed above coupled with gender trend analysis, could be examined by DOE officials and school districts in order to maintain administrative gender balance efforts particularly in the number of females in leadership positions in secondary schools.

The influence of degree progress on the intention to pursue a leadership program. This research question sought to identify if there was a statistical relationship between a graduate student's progress in the degree program and their intentions to seek an assistant principal position. Strahan and Wilson (2006) claimed that proximity to a future possible self has an impact on current motivation to act in ways to achieve future goals. However, the number of credits successfully completed and degree progress was not shown to be a significant factor in determining intentions towards seeking an assistant principal position upon program completion in this current study. Preconceived notions that the more credits completed in the educational leadership program, the more the intent to seek an assistant principal position, is simply not supported in this study’s population. The lack of a significant finding in the influence of degree progress and intentions may suggest there is no relationship between the number of credits a respondent has completed and their intention whether to become an assistant principal in the future or not.

What factors are influencing and motivating graduate students in the sample population causing 83.9% to indicate on the DIQ they intend to seek an assistant
principal job? Even though this study’s data did not reveal statistical significance linking degree progress and intent to seek and assistant principal position, the DIQ does offer insight into what is driving their intentions. Is it the job itself or the possibility for economic gain that drives their intentions? Maslow (1954) and Herzberg (1959) leaned toward the work environments as a motivating factor, but job choice theories claim individuals seem to draw their motivation either externally or internally.

In Young et al. (1989), objective choice theory refers to applicants joining the most economically competitive jobs and subjective theory refers to applicants as psychological beings motivated by getting their psychological needs fulfilled via the job’s work environment. In this study, incentives for seeking an assistant principal position can be examined by comparing these external to internal motivators. Two internal factors, self-assessed leadership on the LPI (subjective theory) and the self-assessed role economic incentives (objective theory) each play a role in seeking an administrative position upon program completion. The external factors are equated to the direct amount of graduate program credits completed and the DIQ criteria.

In the DIQ, 64.1% of respondents rated the influence salary had on their decision to pursue a degree in educational leadership as either somewhat important or one of the primary reasons. Each graduate credit represents a graduate student’s economic investment as well. So, while these graduate students might be motivated to graduate and stop paying tuition, many might also be rewarded with a pay increase due to the graduate degree incentive pay. Additionally, these students potentially could be one step closer to another pay raise and promotion to assistant principal where their psychological fulfillment needs could be met. So, external and internal (objective and subjective)
incentives are in place respectively for program completion. With 83.9% of respondents indicating they will seek an assistant principal position upon program completion, it appears to affirm and support this notion. Additionally, 38.8% of those who responded to the open ended question, as to the reasons for waiting, they revealed it was because they wanted more experience in their current position or another position such as an academic coach before seeking an assistant principal position. It could be the case that some might be getting fulfillment from their current position or they were not yet receiving the psychological fulfillment to the levels they need before wanting to seek an assistant principal position. The 9.4% that intended to wait to seek an assistant principal position stated it was due to family related reasons.

The influence of age on the intention to pursue a leadership position. 

Data in this study did not support the age as having a significant impact on graduate student intentions to seek an assistant principal position. Because the average age range of Florida's educational leadership graduate programs in this study was 31 to 35 years old, the design of the analysis of this research question had to change due to the skewness of the age range distribution. The mean age of the respondents in this study was between 31 and 35 years. Categories on the original design had ranges that exceeded 55 years of age. This variable had to be normalized to better show any relationships in the data.

The fact that age does not appear to be a factor of influence in the pursuit of an administrative position supports other perspectives. This finding affirms the work of Cranston (2007). Out of a total of 146 aspirant assistant principals taking the Aspirant Principal Questionnaire, Cranston found no statistically significant differences in responses with regard to age and he found no influence of age between those interested or
disinterested in an administrative position. Additionally, this study’s results are mirrored by both Pounder and Merrill (2001) and Murphy, Elliott, Goldring and Porter (2007) who posited that even though experience may have played a strong role in the evolution of principal leadership skills and in interest in the position, age may not have played a direct role in the likelihood of a candidate pursuing an assistant principal or principal administrative position.

With regard to experience, the majority (89.5%) of this study’s participants had between 0-14 years of experience which corresponds to the fact that the mean average of participants were between 31 and 35 years of age. The vast majority of respondents were Caucasian female (74.3%), secondary teachers or lead teachers (46.5%), holding at least one bachelors degree (77.4%), and working in a public school (62.7%). This median description or respondent profile mostly appears to be career oriented experienced teachers. Yet, Mazzeo (2003) claims many students obtain the graduate degree and certification with no intention of obtaining an administrative position. What happens to the graduate student’s intentions post program completion might play a role in the many who do not actually seek an administrator position. Only 14.3% of this study’s respondents claim they never intend to seek an assistant principal position or claim they do not know how long they would wait. Examining the median description of a typical graduate student respondent in this study, it would not be unreasonable to surmise that many may not seek an assistant principal position due to family related reasons. There were varied responses on the DIQ for reasons for waiting to seek a position due to family. Some of the reasons were: I have children in the system and want to wait until they are out of high school; I just started a family and plan to pursue a career in leadership after
having children; I want my children to be in middle school before I become an administrator; I want my children to be old enough to be in Kindergarten first; I’m taking time off to raise my daughter and when she is school age, I’ll apply, probably in five years; and my wife and I just had a child so when things settle down, I will send resumes out. But, they all are claiming to wait until the right time when their children are old enough. More research is needed in this area.

However, the DIQ data indicated only (9.4%) of respondents were waiting for family related reasons. Actually, according to the DIQ results in this study, most of the applicants that claimed they would wait to seek an assistant principal position indicated they were waiting to get more experience (38.8%). Some (18.8%) said they were waiting for a specific district level position, higher education position, Department of Education position, or a very specific position.

Other studies confirm that qualified candidates are waiting or are not even pursuing leadership positions, even when they are available. Connecticut’s Board of Governors (2003) claimed to have 2,400 educators and two-thirds of all of New York’s (Herrington & Wills, 2005) educators actually already hold administrative licenses, yet choose not to work in administrative roles. Critical contact theory of job choice says many do not seek positions due to concerns with the work expectations and requirements. Since the role of the principal has grown enormously and required competencies and tasks are staggering, job requirements far exceed the reasonable capacity for an administrator (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Teachers are not oblivious to the increased pressure on principals and are many become genuinely disinterested in becoming administrative candidates. Fewer aspiring administrators see
the appeal of administration because it is seen as a burnout position, particularly at the high school level (Boehlert & O’Connell, 1999).

**The influence of leadership behavior, gender, degree progress, and age on the intention to pursue a leadership position.** The final research question was designed to uncover if there were any interaction relationships between intent to seek an assistant principal position and the following variables: self-assessed leadership behavior, gender, number of credits successfully completed, and age. This research question did not yield statistically significant results. The fact that the variables did not synergize with one another suggests that no significant relationships existed between leadership behavior scores via LPI, gender, number of credits completed, and age. No significant link was found between graduate students’ intentions to seek an assistant principal position and the factors in this study. However, 83.9% of the respondents did proclaim they intended to seek an assistant principal position after graduation. What about the 14.3% of that claim they intend to never seek an assistant principal position or that it is unknown when they would ever seek an assistant principal position?

According to the literature, there are other options that could be linked and affect graduate students’ intentions. It might be easier and reduce controversial struggles if some administratively certified graduates would seek district level positions such as curriculum specialists, supervisors, program coordinators, etc. Past career choices and intent, commitment, and retention are all factors that might influence professional educators’ and graduate students’ future career decisions. This current study, in part, supports the literature finding in the Stanford study where exemplary pre-service and in-service administrator preparation programs were researched, finding that graduate
students were more likely to be female, members of an ethnic minority group, had strong relevant teaching experiences, served frequently as coaches of other teachers, department chairs, team leaders, were committed to their communities, and capable of becoming instructionally grounded transformational leaders (Darling-Hammonds et al., 2007). This current study did affirm part of the Stanford findings in that the preponderance of respondents were highly capable experienced female teachers.

Males, females, and minorities experience internal and external barriers entering into administration. It was reported that men typically enter into education with administration in mind from the beginning and that they generally go from teacher to assistant principal, principal, and finally district level administration with only about five years teaching experience in the classroom (DeFlice, 1999). Females generally tend to be very committed to teaching because they typically spend about ten to fifteen years in the classroom before entering administration and subsequently do well as instructional leaders. This study supports DeFlice’s research with the females in this sample having more than 10 have years of teaching experience. Although this study did not investigate a possible link between discrimination and intent to seek an assistant principal position, much literature claims women are more likely to be discriminated against due to their gender and men are more likely to be discriminated against due to their age (Boehlert & O’Connell, 1999).

Finally, Murphy, Elliott, Goldring and Porter (2007) stated that aspiring principals must bring to the role a base of experience and knowledge that establishes expertise for the role, but with that must also bring personal characteristics, values and beliefs that will entice them to pursue the role and succeed in it. A combination of experience and these
factors paired with personal characteristics, values and beliefs provides some insight into what types of leaders are drawn to this type of work (Cranston, 2007). Pounder and Merrill (2001) noted that aspiring administrators claimed the opportunity to make a difference, to empower school change, to grow personal, and to offer a vision for a school as primary motivators in their administrative applications. However, since the majority of the work lies outside the functions that are most attractive about the position, the willingness of a qualified candidate to pursue a position may be influenced. In the end, the bottom line according to Howley et al. (2005) is that “the body of empirical literature prioritizing teachers' perspective on school administration likewise argues that the degree of readiness of potential principals depends on their ability to strike a suitable balance between their expectations and misgivings” (p. 759).

**Discussion of Open-Ended Results**

The largest theme of responses as to why educational leadership students plan to wait after graduation to seek an assistant principal position is that they are waiting to get more experience in their current or next position. One thing that should be noted from this study’s results is that 18.8% (nearly 1 in 5) of the 85 open-ended respondents plan to seek something other than an assistant principal position. This study is supports the findings of Darling-Hammond, LaPointe, Meyerson, and Orr (2007) who claimed that little more than 50% of those who graduate from administrator preparation programs ever end up in an administrative positions. This study’s participants indicated they were waiting to get a district level position, higher education position, Department of Education position, or another specific position other than an assistant principalship. Additionally, 10.6% were waiting to earn another degree, more certifications, or other
professional type development. This has implications for educational leadership curriculum and instructional programming, whereby it needs to meet the needs of learners seeking district, higher education, and/or DOE positions in addition to those who seek the more-traditional assistant principal administrative route upon program completion.

**Discussion of Exploratory Analysis**

A second look at the LPI and intent to seek an assistant principal position was conducted to search for any trends in the data. Self-assessed Leadership behavior constructs associated with the LPI (encourage, model, enable inspire, and challenge) were standardized and categorized by intensity. Groups were specified by extracting cases with z scores $\leq -0.5$ and cases with z scores $\geq 0.5$. This strategy removed approximately 34% of the cases clustered around the mean. Essentially, only those responding with high and low scores were retained to determine if any trends or differences existed between groups on intent to seek an assistant principal position. In addition, instead of only investigating overall intent construct, only those most likely to seek an assistant principal position were retained. Specifically, cases with z scores greater than -1.0 were retained for analysis. This strategy only extracted those participants likely to seek an assistant principal position. Those unlikely to seek the position were categorically removed.

Results from the analyses found a distinct trend in the data. For every sub-construct, low leadership practice construct scores on intent to seek an assistant principal position were lower than those with high leadership practice construct scores. These findings suggest that those likely to intend to seek an assistant principal position (high
intensity) have higher self-assessed leadership behavior potential and/or qualities. It further suggests that students with low self-assessed leadership behavior quality construct scores (encourage, model, enable, inspire, and challenge) may be self-selecting themselves out. That is, participants with low scores may want to be in a leadership position, but temper their intent due to a lack of self-efficacy about their self-assessed leadership. These exploratory findings may suggest that universities need to concentrate more on teaching and training leadership behaviors to ensure those who would like to be in an assistant principal, but feel they may not imbue high leadership behavior qualities, will be given the needed assistance to reach their goal. After all, whatever an individual’s learning style may be, they continually do more to improve themselves (Posner, 2009).

**Recommendations for Further Study**

The findings of this study challenge some of the existing literature focusing on educational administration. Specifically, studies such as Davis, Darling-Hammond, LaPointe, & Meyerson (2005); Hecker (2004), Gewertz (2000); and Hammond, Muffis, and Sciascia (2001) that examined claims about shortages of administrative candidates, yet the results of the DIQ in this study indicated that 83.9% of this respondents intend to pursue an assistant principal position. The question, then, is whether there is truly a contradiction in these findings or if the intentions of applicants changes over time after program completion. Future research needs to be conducted to discover what changes graduates’ intentions and it should address the reasons so many graduates complete the program and obtain certification without the intent of using their degrees in educational leadership for career advancement.
My first recommendation is that future researchers examine more closely what happens to their intentions to seek an assistant principal position after graduation, particularly at those graduates who intend to wait extended times prior to applying for assistant principal positions. Research needs to be conducted on wait times by comparing those who claimed they intended to wait and the actual wait times before individuals are hired into administration. More extensive research needs to be conducted on what motivates or hinders graduates with regards to intent to seek an assistant principal position since no significant link was found with self-assessed leadership behavior, gender, age, and degree progress. Using DOE records, this future research could examine what occurs after graduate school and completing the program and after certification. In this study, the data does not support using the LPI as an instrument to find a statistical relationship to intent to seek an assistant principal position. This dissertation creates a need for further study of graduate intentions regarding administrative applicant pools as also recommended by Boehlert and O’Connell (1999). The research should examine if and how the intentions change and see how many actually do pursue or obtain a position. Via FDOE public record, the names of those recently certified graduates could be found and investigate to see why some never applied for an assistant principal position. A new DIQ could be sent to check their current intentions.

In the current study and in the motivation literature (Pounder & Merrill, 2001), economics (Young, et al., 2001) do play a role in intentions. While some metropolitan school districts reimburse exam fees and license update fees along with awarding pay supplements for earned master’s degree, these funds are not available in other school
districts. In addition, supplements for advanced degrees should be examined in regards to motivation for advanced degrees or vice versa. Discovering more about how much these economic factors play a role in affecting intentions needs to be examined.

Further study is required with regard to gender differences. In addition to the findings in this study and the literature that expressed administrator shortages of quality candidates in assistant principal pools, it also purports gender differences in that female graduate students in educational leadership programs and females certification rates are on the rise (Black et al., 2007; McCarthy, 2002). Even though this study revealed higher numbers of females in the population sample of Florida educational leadership programs, this study needs to be done in a larger setting. Although gender had no significance in this study, more research needs to be conducted to uncover more specifically which gender specific factors may affect intentions to seek assistant principal positions after program completion.

Finally, students could be tracked at two, five, seven, and ten years for comparison. This study could also be replicated in the future, in possibly five to ten years, to capture the impact of changes in educational leadership curricula, certification standards, accountability expectations, demography, and other characteristics. Convenience sampling was used to collect data in this study because random sampling of the study population is outside the scope of the researcher’s resources. Since results may not necessarily reflect study population attitudes, repeating the test to compare results may be advised. The study could also be replicated to emphasize breakdown by geographic area or county, the specialized training background, or other variables. It would be interesting to compare respondents between institutions in the future as well,
although getting permission from those institutions may prove to be difficult. In this current study, one online university refused to give permission, another institution in this study only agreed to participate if their institution’s data was not compared with another, and another institution did not support the effort as only one respondent participated.

Beyond research, the application of this study also shows potential for improving practice in educational leadership and teacher education. The final section of the paper provides recommendations for improving practice based on the results of the research.

**Recommendations for Practice**

Recommendations for practice based on this study include developing and/or revising higher education curricular programming for those who do not seek an assistant principal position. Since 21.9% did have Masters Degrees in other areas, more study is needed to investigate the certification areas of those who hold masters degrees to see if there is a trend by school level and/or subject matter. Given the fact that many respondents were pursuing the degree without a goal of seeking an administrative position, university programs might develop two tracks within the educational leadership masters degree, one for those seeking Educational Leadership FLDOE certification, and others who simply want more knowledge about leadership and administrative practices to enhance their teacher leadership skills. In addition, it is evident that there is a need for more effort put forth to support female and minority students to increase enrollment and retention in administrative credentialing programs to increase the diversity of the assistant principal pool of candidates.
Summary and Conclusion

No statistical significance was found between the variables that provided the focus for this study. Historically, women have been underrepresented in the administrative fields (Banks, 1995; Buell, 2001; DeFelice, 1999; Grady, 1992), but the market continues to rapidly change. This study is yet another that affirms the fact that the majority of graduate students in Educational Leadership programs are female (Bruner et al., 2007; McCarthy, 2002) and that more than half of administrative licenses being issued are for women (Black et al., 2007).

Degree progress based upon number of college credits successfully completed was not shown to be a significant factor in determining intentionality toward seeking an assistant principal position upon program completion. Like gender not exerting a significant influence on the likelihood to pursue an assistant principal position, neither did age. Although, it is interesting to note that the mean average age range of Florida's educational leadership graduate programs in this study was 31 to 35 years old. However, if these individuals remained in education, they would have another 30 years of time to wait to apply for an assistant principal position. As could be expected, none of the factors explored individually had statistical significance in their interaction either. These latter results were not surprising based upon the separate findings presented.

The importance of the study is identifying graduate student’s self-assessed leadership behavior and their intentions to practice in formal school leadership roles in Florida. Educational Leadership departments can benefit from the knowledge of these results and better understand educational leadership graduate student’s intentions. In this sample, the majority of respondents were female, which is consistent with literature that
claims a higher female population in educational leadership graduate programs and the vast majority do intend to seek assistant principal positions upon program completion. Albeit almost a third claimed to intend to seek an assistant principal position immediately, only a tenth of respondents claim they will wait to seek an assistant principal position so they can earn another degree, more certifications, or obtain other professional type development. Finally, a substantial amount of students claimed they intend to never seek an assistant principal position or that it is unknown when they would ever seek an assistant principal position. This information may be very important for developing educational leadership programs.

This research has benefitted the field because it has examined where the links between research and practice do and do not exist. The study uniquely contributed to identifying graduate student’s intention before they seek school leadership roles. These findings and insight is available to offer the Florida Department of Education, school district leadership academies, and university educational leadership departments valuable information for administrative reform of selection, recruitment, and retention.
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the Center on Reinventing Public education. Daniel Evan’s School of Public Affairs. University of Washington.


Appendices
Appendix A: LPI, LPI by Construct, and Permission to Reproduce

1. LPI

**LPI**

by JAMES M. KOUZES & BARRY Z. POSNER

**INSTRUCTIONS**

Write your name in the space provided at the top of the next page. Below your name, you will find thirty statements describing various leadership behaviors. Please read each statement carefully, and using the RATING SCALE on the right, ask yourself:

**“How frequently do I engage in the behavior described?”**

- Be realistic about the extent to which you actually engage in the behavior.
- Be as honest and accurate as you can be.
- DO NOT answer in terms of how you would like to behave or in terms of how you think you should behave.
- DO answer in terms of how you typically behave on most days, on most projects, and with most people.
- Be thoughtful about your responses. For example, giving yourself 10s on all items is most likely not an accurate description of your behavior. Similarly, giving yourself all 1s or all 5s is most likely not an accurate description either. Most people will do some things more or less often than they do other things.
- If you feel that a statement does not apply to you, it’s probably because you don’t frequently engage in the behavior. In that case, assign a rating of 3 or lower.

For each statement, decide on a response and then record the corresponding number in the box to the right of the statement. After you have responded to all thirty statements, go back through the LPI one more time to make sure you have responded to each statement. Every statement must have a rating.

<table>
<thead>
<tr>
<th>1 = Almost Never</th>
<th>2 = Rarely</th>
<th>3 = Seldom</th>
<th>4 = Once in a While</th>
<th>5 = Occasionally</th>
<th>6 = Sometimes</th>
<th>7 = Fairly Often</th>
<th>8 = Usually</th>
<th>9 = Very Frequently</th>
<th>10 = Almost Always</th>
</tr>
</thead>
</table>

The RATING SCALE runs from 1 to 10. Choose the number that best applies to each statement.

When you have completed the LPI-Self, please return it to:


Thank you.
Your Name:

To what extent do you typically engage in the following behaviors? Choose the response number that best applies to each statement and record it in the box to the right of that statement.

1. I set a personal example of what I expect of others.
2. I talk about future trends that will influence how our work gets done.
3. I seek out challenging opportunities that test my own skills and abilities.
4. I develop cooperative relationships among the people I work with.
5. I praise people for a job well done.
6. I spend time and energy making certain that the people I work with adhere to the principles and standards we have agreed on.
7. I describe a compelling image of what our future could be like.
8. I challenge people to try out new and innovative ways to do their work.
9. I actively listen to diverse points of view.
10. I make it a point to let people know about my confidence in their abilities.
11. I follow through on the promises and commitments that I make.
12. I appeal to others to share an exciting dream of the future.
13. I search outside the formal boundaries of my organization for innovative ways to improve what we do.
14. I treat others with dignity and respect.
15. I make sure that people are creatively rewarded for their contributions to the success of our projects.
16. I ask for feedback on how my actions affect other people’s performance.
17. I show others how their long-term interests can be realized by enlisting in a common vision.
18. I ask “What can we learn?” when things don’t go as expected.
19. I support the decisions that people make on their own.
20. I publicly recognize people who exemplify commitment to shared values.
21. I build consensus around a common set of values for running our organization.
22. I paint the “big picture” of what we aspire to accomplish.
23. I make certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on.
24. I give people a great deal of freedom and choice in deciding how to do their work.
25. I find ways to celebrate accomplishments.
26. I am clear about my philosophy of leadership.
27. I speak with genuine conviction about the higher meaning and purpose of our work.
28. I experiment and take risks, even when there is a chance of failure.
29. I ensure that people grow in their jobs by learning new skills and developing themselves.
30. I give the members of the team lots of appreciation and support for their contributions.

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### 2. LPI by Construct

<table>
<thead>
<tr>
<th>Questions</th>
<th>Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sets a personal example of what is expected</td>
<td>Model</td>
</tr>
<tr>
<td>2 Talks about future trends influencing our work</td>
<td>Inspire</td>
</tr>
<tr>
<td>3 Seeks challenging opportunities to test skills</td>
<td>Challenge</td>
</tr>
<tr>
<td>4 Develops cooperative relationships</td>
<td>Enable</td>
</tr>
<tr>
<td>5 Praises people for a job well done</td>
<td>Encourage</td>
</tr>
<tr>
<td>6 Makes certain that people adhere to agreed-on standards</td>
<td>Model</td>
</tr>
<tr>
<td>7 Describes a compelling image of the future</td>
<td>Inspire</td>
</tr>
<tr>
<td>8 Challenges people to try new approaches</td>
<td>Challenge</td>
</tr>
<tr>
<td>9 Actively listens to diverse points of view</td>
<td>Enable</td>
</tr>
<tr>
<td>10 Expresses confidence in people's abilities</td>
<td>Encourage</td>
</tr>
<tr>
<td>11 Follows through on promises and commitments</td>
<td>Model</td>
</tr>
<tr>
<td>12 Appeals to others to share dream of the future</td>
<td>Inspire</td>
</tr>
<tr>
<td>13 Searches outside organization for innovative ways to improve</td>
<td>Challenge</td>
</tr>
<tr>
<td>14 Treats people with dignity and respect</td>
<td>Enable</td>
</tr>
<tr>
<td>15 Creatively rewards people for their contributions</td>
<td>Encourage</td>
</tr>
<tr>
<td>Asks for feedback on how his/her actions affect people's</td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
</tr>
<tr>
<td>16 Shows others how their interests can be realized</td>
<td>Inspire</td>
</tr>
<tr>
<td>17 Asks &quot;What can we learn?&quot;</td>
<td>Challenge</td>
</tr>
<tr>
<td>18 Supports decisions other people make</td>
<td>Enable</td>
</tr>
<tr>
<td>19 Recognizes people for commitment to shared values</td>
<td>Encourage</td>
</tr>
<tr>
<td>20 Builds consensus around organization's values</td>
<td>Model</td>
</tr>
<tr>
<td>21 Paints &quot;big picture&quot; of group aspirations</td>
<td>Inspire</td>
</tr>
<tr>
<td>22 Makes certain that goals, plans, and milestones are set</td>
<td>Challenge</td>
</tr>
<tr>
<td>23 Gives people choice about how to do their work</td>
<td>Enable</td>
</tr>
<tr>
<td>24 Finds ways to celebrate accomplishments</td>
<td>Encourage</td>
</tr>
<tr>
<td>25 Is clear about his/her philosophy of leadership</td>
<td>Model</td>
</tr>
<tr>
<td>26 Speaks with conviction about meaning of work</td>
<td>Inspire</td>
</tr>
<tr>
<td>27 Experiments and takes risks</td>
<td>Challenge</td>
</tr>
<tr>
<td>28 Ensures that people grow in their jobs</td>
<td>Enable</td>
</tr>
<tr>
<td>29 Gives team members appreciation and support</td>
<td>Encourage</td>
</tr>
</tbody>
</table>
3. Permission to Reproduce

KOUZES POSNER INTERNATIONAL
15419 Banyan Lane
Monte Sereno, California 95030
FAX: (408) 354-9170

February 10, 2009

Mr. Daniel W. Eadens
1000 Bluffs Circle
Dunedin, Florida 34698

Dear Daniel:

Thank you for your request to use the Leadership Practices Inventory (LPI) in your dissertation. We are willing to allow you to reproduce the instrument in written form, as outlined in your letter, at no charge, with the following understandings:

1. That the LPI is used only for research purposes and is not sold or used in conjunction with any compensated management development activities;
2. That copyright of the LPI, or any derivation of the instrument, is retained by Kouzes Posner International, and that the following copyright statement is included on all copies of the instrument: "Copyright © 2003 James M. Kouzes and Barry Z. Posner. All rights reserved. Used with permission.”;
3. That one (1) electronic copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data be sent promptly to our attention; and,
4. That you agree to allow us to include an abstract of your study and any other published papers utilizing the LPI on our various websites.

If the terms outlined above are acceptable, would you indicate so by signing one (1) copy of this letter and returning it to us. Best wishes for every success with your research project.

Cordially,

Barry Z. Posner, Ph.D.
Managing Partner

I understand and agree to abide by these conditions:

(Signed) Daniel W. Eadens Date: 2/16/09

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Appendix B: Demographics and Intentions Questionnaire

1. Gender (Male, Female)


3. Ethnicity (Black, White, Hispanic, Asian, Other)

4. Numbers of educational leadership graduate college credits successfully completed prior to the current semester (< 3, 3-9, 10-15, 16-21, 22-27, 28-33, > 33)

5. Current Teaching Grade level (Elementary, Secondary, Exceptional, Alternative, Post-Secondary, Non-Classroom Role)

6. Total years of any experience in public or private school teaching (0-4, 5-9, 10-14, 15-20, > 20 years)

7. Type of degrees previously completed (BS/BA, MA/MS, Ed.S, Ph.D/Ed.D)

8. Have you ever worked as a guidance counselor (Yes/No) or special education teacher (Yes/No)

9. Current teaching assignment (Pre-K, Elementary, Middle, High, Alternative, Other) and (Public, Private, Magnet, Charter, or Other) and County (______________)

10. Current position (Teacher, Administrator, Resource/Lead Teacher, or Other)
11. Rate the influence that salary played in your decision to pursue this graduate degree in educational leadership 1= No Role 2 = Not that important 3 = Somewhat important 4 = One of the primary reasons

12. I intend to seek an assistant principal position upon completion of this program

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Disagree more than Agree</th>
<th>Agree more than Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

13. If I seek an assistant principal position upon completion of this program, I prefer it would be at the Elementary Level more than at the Secondary Level.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Disagree more than Agree</th>
<th>Agree more than Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

14. I intend to seek another administrative position other than assistant principal upon completion of this program

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Disagree more than Agree</th>
<th>Agree more than Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
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<td>4</td>
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</tbody>
</table>

15. Upon program completion, when will you likely seek an assistant principal position? (Immediately, 1 to 2 years, 3 to 5 years, > 5 years, Unknown, Never) (Explain- Open

Ended)__________________________________________________________________________

Survey Feedback (Open

Ended)__________________________________________________________________________
Appendix C: Raffle

1. Raffle Content Post

Raffle from Graduate Students' Intentions Survey

Below, please complete the two required questions. The first ensures that you took the survey to prevent others on the Internet from completing it and then the second asks for a VERY unique user-name that in no way tells me your identity. You may enter this contest only once and if a duplicate user-name is discovered, both will be excluded from the raffle. The winning user-name (selected randomly after all surveys have been collected) will be posted on this site post-August. The winning user-name is to contact his/her professor who will contact me. I will deliver/mail the iPod touch to your professor/department and you can pick it up there, which ensures your complete anonymity.

* Required

This survey asked about my intentions to become... *

- an engineer
- a politician
- an assistant principal
- a crime scene investigator

My VERY unique user-name (which does not contain my first or last name) is: *

Submit
## 2. Raffle Responses Spreadsheet

<table>
<thead>
<tr>
<th>Timestamp</th>
<th>My VERY unique user-name (which does not contain my first or last name)</th>
<th>The survey asked about my intentions to become...</th>
<th>Timestamp</th>
<th>My VERY unique user-name (which does not contain my first or last name)</th>
<th>This survey asked about my intentions to become...</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/15/2010 14:08:03</td>
<td>santhan</td>
<td>an assistant principal</td>
<td>6/16/2010 15:56:13</td>
<td>h44362</td>
<td>an assistant principal</td>
</tr>
<tr>
<td>6/16/2010 09:07:33</td>
<td>RiemannStuder12</td>
<td>an assistant principal</td>
<td>6/16/2010 09:44:02</td>
<td>colley9092</td>
<td>an assistant principal</td>
</tr>
<tr>
<td>6/16/2010 12:23:26</td>
<td>fawan</td>
<td>an assistant principal</td>
<td>6/16/2010 15:00:06</td>
<td>Diamend</td>
<td>an assistant principal</td>
</tr>
<tr>
<td>6/16/2010 17:45:21</td>
<td>Infopyers</td>
<td>an assistant principal</td>
<td>6/16/2010 19:00:01</td>
<td>monkeyman14</td>
<td>an assistant principal</td>
</tr>
</tbody>
</table>
3. Random Number Generator Result

What's this fuss about true randomness?

Perhaps you have wondered how predictable machines like computers can generate randomness. In reality, most random numbers used in computer programs are pseudo-random, which means they are generated in a predictable fashion using a mathematical formula. This is fine for many purposes, but it may not be random in the way you expect if you're used to dice rolls and lottery drawings.

RANDOM.ORG offers true random numbers to anyone on the Internet. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs. People use RANDOM.ORG for holding drawings, lotteries and sweepstakes, to drive games and gambling sites, for scientific applications and for art and music. The service has existed since 1998 and was built and is being operated by Mads Haahr of the School of Computer Science and Statistics at Trinity College, Dublin in Ireland.
Raffle from Dissertation Study of Dan Eadens

Winner!
posted 14 minutes ago by Daniele Eadens, Ph.D. [updated 8 minutes ago]

The winner of the ipod Touch is:
sillygirl58

sillygirl58, please contact your Ed. Leadership Professor from Summer 2010 and request that they let me know that you won.

To protect your anonymity, please ask them to contact me and I will mail the iPod to them at their University to distribute it to you. Congratulations!

(Reply post)
Appendix D: Informed Consent Letter and IRB Approval Letter

1. Informed Consent Letter

Classroom ICF

Information to Consider Before Taking Part in this Research Study

IRB Study # ID: Pro00000913

Researchers at the University of South Florida (USF) Tampa and Saint Petersburg Campuses and the University of Central Florida (UCF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study.

We are asking you to take part in a research study that is called:

THE INTENTIONS OF FLORIDA EDUCATIONAL LEADERSHIP GRADUATE STUDENTS
The person who is in charge of this research study is Daniel W. Eadens. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge.

The person explaining the research to you may be someone other than the Principal Investigator, namely your department chair or professor. Other research personnel who you may be involved with include: Dr. Darlene Bruner, Dr. William Black, Dr. Bobbie Greenlee, and Dr. John Ferron.

The research will be done at USF (Tampa), USF (Saint Petersburg), and UCF.

Purpose of the study

The purpose of this study is to

You have been identified as an individual student who is enrolled in an approved graduate degree program in the field of educational leadership from a Florida university. Thank you for volunteering to participate in this study regarding the Leadership Practices Inventory (LPI) and Demographics and Intentions Questionnaire (DIQ). While national and statewide reports suggest there is a shortage of quality certified administrative applicants, it is anticipated that there are a number of graduates seeking Level One administrative certification in Florida who will subsequently seek, or not seek, an assistant principal position. Your participation in this study is essential to my research and greatly appreciated. In addition, Florida universities, Florida Department of Education, and School Districts may use the
collective results from this study for program improvement purposes. However, your individual answers and personal information will be kept confidential.

This study is being conducted as partial fulfillment for my doctoral degree in Educational Leadership and Policy Studies from USF.

Study Procedures

If you take part in this study, you will be asked to

Participants will be instructed to complete the LPI and DIQ and immediately submit it to the proctor upon completion.

While there is no time requirement, it should only require between 10 and 15 minutes for the LPI and about 5 minutes for the DIQ for a total of approximately 15 to 20 minutes.

This is a one-time survey and there will be no other requirements.

The LPI and DIQ will be the only means of data collection. The researcher will provide the LPI and DIQ on Survey Monkey or personally distribute to each voluntary participant the package that contains a cover letter, LPI, and DIQ.

Once the LPI, DIQ, and informed consent letters are collected, the completed packages will be transported and stored by the researcher in accordance with the Institutional Review Board’s (IRB) protocol.

As a contingency, for the in person surveys, if there is some reason the researcher cannot be present during the administration, the class instructor will follow the same protocol listed above to remain consistent. The script taken from the cover letter will be read by the researcher or the class instructor.

You have the alternative to choose not to participate in this research study.

Benefits
We don’t know if you will get any benefits by taking part in this study.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

We will not pay you for the time you volunteer while being in this study. If you do choose to participate in this study, you will have an opportunity to receive a free raffle ticket number. On a later date, one winner will have the opportunity to claim a free prize from your professor.

Confidentiality

We must keep your study records as confidential as possible.

The privacy of participants will be accomplished through anonymous submission of survey packets and the pooling of packets prior to monitoring the data. During collection, each submission will be anonymous. All survey packets will be pooled together and put into a folder for transport.

Upon collection of all data, all survey packets from each university will be pooled together by term in order that no one individual can be identified.

For storage, the survey packets with informed consent letters, LPIs, and DIQs will be stored in locked filing cabinets or on disc at the researcher’s home for five years after the final report has been submitted. Once the data is entered, the files on the researcher’s computer are password-protected so that no one else has access to individual data.

All documents and computer files will be shredded and/or deleted after five years.
Anonymous aggregated data results will be shared with professionals at the Florida Department of Education, school district leadership academies, and university educational leadership departments for valuable insight towards reform.

However, certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

The research team, including the Principal Investigator, study coordinator, and all other research staff.

Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety. These include: The University of South Florida Institutional Review Board (IRB) and the staff that work for the IRB. Other individuals who work for USF that provide other kinds of oversight may also need to look at your records.

The Department of Health and Human Services (DHHS).

We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study, to please the investigator or the research staff. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this
study. Your decision to participate or not to participate will not affect your graduate
student status or job status.

Questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, call Daniel Eadens at
my cellular phone (727) 831-1968 or my home phone (727) 230-0257.

If you have questions about your rights as a participant in this study, general questions, or
have complaints, concerns or issues you want to discuss with someone outside the
research, call the Division of Research Integrity and Compliance of the University of
South Florida at (813) 974-9343.

If you experience an unanticipated problem related to the research call Dr. Darlene
Bruner at (813) 9743420.

Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study.

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can
expect.
2. Internal Review Board Consent

May 25, 2010

Daniel Eadens
Educational Leadership

RE: Exempt Certification for IRB#: Pro00000913
   Title: Graduate Student's Intentions

Dear Daniel Eadens:

On 5/24/2010, the Institutional Review Board (IRB) determined that your research meets USF requirements and Federal Exemption criteria as outlined in the federal regulations at 45CFR46.101(b):

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

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in the Belmont Report and with USF IRB policies and procedures. Please note that changes to this protocol may disqualify it from exempt status. Please note that you are responsible for notifying the IRB prior to implementing any changes to the currently approved protocol.

The Institutional Review Board will maintain your exemption application for a period of five years from the date of this letter or for three years after a Final Progress Report is received, whichever is longer. If you wish to continue this protocol beyond five years, you will need to submit a continuing review application at least 60 days prior to the
exemption expiration date. Should you complete this study prior to the end of the five-year period, you must submit a request to close the study.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-9343.

Sincerely,

Krista Kutash, PhD, Chairperson
USF Institutional Review Board

Cc: Various Menzel, CCRP, USF IRB Professional Staff
### Appendix E: Open-Ended Question Coding

**Question**
Upon program completion, when will you likely seek an assistant principal position? (Immediately, 1 to 2 years, 3 to 5 years, > 5 years, Unknown, Never). Explain.

**Theme coding (responses to “Explain”)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Theme</th>
<th>Example(s) of responses coded in this theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>not waiting</td>
<td>“I feel that as soon as I graduate, I will begin the process of qualifying to be a candidate in the administrative pool.”</td>
</tr>
<tr>
<td>1</td>
<td>waiting to get more experience or time in current or next position</td>
<td>“Gain more experience.” “I would like to have at least 6 years teaching experience prior to becoming an AP.”</td>
</tr>
<tr>
<td>2</td>
<td>waiting to earn more degrees or certifications or professional development</td>
<td>“May obtain a Specialist degree before entering into an Assistant Principal position.”</td>
</tr>
<tr>
<td>3</td>
<td>waiting to get a district level or higher ed or specific position or DOE position</td>
<td>“Ideally, I would prefer to seek a position at the district level in Staff Development or in Curriculum though other departments are not out of the question. Seeking a position as an Elementary AP would be a second choice. I will seek a position change as soon as the opportunity presents itself upon my completion of my degree.”</td>
</tr>
<tr>
<td>4</td>
<td>waiting due to family related reason</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: Power Analysis

F tests – Linear multiple regression: Fixed model, $R^2$ increase

Analysis: A priori: Compute required sample size

Input:
- Effect size $f^2$ = .05
- $\alpha$ err prob = 0.05
- Power (1 - $\beta$ err prob) = 0.80
- Number of tested predictors = 5
- Total number of predictors = 5

Output:
- Noncentrality parameter $\lambda$ = 13.1500000
- Critical F = 2.2491449
- Numerator df = 5
- Denominator df = 257
- Total sample size = 263
- Actual power = 0.8015305

F tests – Linear multiple regression: Fixed model, $R^2$ increase

Analysis: A priori: Compute required sample size

Input:
- Effect size $f^2$ = .10
- $\alpha$ err prob = 0.05
- Power (1 - $\beta$ err prob) = 0.80
- Number of tested predictors = 5
- Total number of predictors = 5

Output:
- Noncentrality parameter $\lambda$ = 13.4000000
- Critical F = 2.2850398
- Numerator df = 5
- Denominator df = 128
- Total sample size = 134
- Actual power = 0.8002857

F tests – Linear multiple regression: Fixed model, $R^2$ increase

Analysis: A priori: Compute required sample size

Input:
- Effect size $f^2$ = .15
- $\alpha$ err prob = 0.05
- Power (1 - $\beta$ err prob) = 0.80
- Number of tested predictors = 5
- Total number of predictors = 5

Output:
- Noncentrality parameter $\lambda$ = 13.8000000
- Critical F = 2.3205293
- Numerator df = 5
- Denominator df = 86
- Total sample size = 92
- Actual power = 0.8041921
QUESTIONS #2


F tests – Linear multiple regression: Fixed model, R² increase

Analysis: A priori: Compute required sample size

Input:  
- Effect size f² = 0.05
- α err prob = 0.05
- Power (1−β err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

Output:  
- Noncentrality parameter λ = 7.9500000
- Critical F = 3.9013722
- Numerator df = 1
- Denominator df = 157
- Total sample size = 159
- Actual power = 0.8001975


F tests – Linear multiple regression: Fixed model, R² increase

Analysis: A priori: Compute required sample size

Input:  
- Effect size f² = 0.10
- α err prob = 0.05
- Power (1−β err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

Output:  
- Noncentrality parameter λ = 8.1000000
- Critical F = 3.9618920
- Numerator df = 1
- Denominator df = 79
- Total sample size = 81
- Actual power = 0.8027075


F tests – Linear multiple regression: Fixed model, R² increase

Analysis: A priori: Compute required sample size

Input:  
- Effect size f² = 0.15
- α err prob = 0.05
- Power (1−β err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

Output:  
- Noncentrality parameter λ = 8.2500000
- Critical F = 4.0230170
- Numerator df = 1
- Denominator df = 53
- Total sample size = 55
- Actual power = 0.8050826

182
**Questions #3 & 4**


**F tests** – Linear multiple regression: Fixed model, \( R^2 \) increase

**Analysis:** A priori: Compute required sample size

**Input:**
- Effect size \( f^2 \) = 0.05
- \( \alpha \) err prob = 0.05
- Power (1-\( \beta \) err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

**Output:**
- Noncentrality parameter \( \lambda \) = 7.9500000
- Critical F = 3.9013722
- Numerator df = 1
- Denominator df = 157
- Total sample size = 159
- Actual power = 0.8001975


**F tests** – Linear multiple regression: Fixed model, \( R^2 \) increase

**Analysis:** A priori: Compute required sample size

**Input:**
- Effect size \( f^2 \) = 0.10
- \( \alpha \) err prob = 0.05
- Power (1-\( \beta \) err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

**Output:**
- Noncentrality parameter \( \lambda \) = 8.1000000
- Critical F = 3.9618920
- Numerator df = 1
- Denominator df = 79
- Total sample size = 81
- Actual power = 0.8027075


**F tests** – Linear multiple regression: Fixed model, \( R^2 \) increase

**Analysis:** A priori: Compute required sample size

**Input:**
- Effect size \( f^2 \) = 0.15
- \( \alpha \) err prob = 0.05
- Power (1-\( \beta \) err prob) = 0.80
- Number of tested predictors = 1
- Total number of predictors = 1

**Output:**
- Noncentrality parameter \( \lambda \) = 8.2500000
- Critical F = 4.0230170
- Numerator df = 1
- Denominator df = 53
- Total sample size = 55
- Actual power = 0.8050826


**QUESTION #5**

[1] -- Tuesday, April 27, 2010 -- 00:20:00

**F tests** – Linear multiple regression: Fixed model, $R^2$ increase

**Analysis:** A priori: Compute required sample size

**Input:**  
- Effect size $f^2$ = 0.05  
- $\alpha$ err prob = 0.05  
- Power $(1-\beta$ err prob) = 0.80  
- Number of tested predictors = 8  
- Total number of predictors = 8

**Output:**  
- Noncentrality parameter $\lambda$ = 15.4500000  
- Critical $F$ = 1.9693231  
- Numerator df = 8  
- Denominator df = 300  
- Total sample size = 309  
- Actual power = 0.8011506

[2] -- Tuesday, April 27, 2010 -- 00:20:07

**F tests** – Linear multiple regression: Fixed model, $R^2$ increase

**Analysis:** A priori: Compute required sample size

**Input:**  
- Effect size $f^2$ = 0.10  
- $\alpha$ err prob = 0.05  
- Power $(1-\beta$ err prob) = 0.80  
- Number of tested predictors = 8  
- Total number of predictors = 8

**Output:**  
- Noncentrality parameter $\lambda$ = 15.9000000  
- Critical $F$ = 2.0006249  
- Numerator df = 8  
- Denominator df = 150  
- Total sample size = 159  
- Actual power = 0.8027471

[3] -- Tuesday, April 27, 2010 -- 00:20:14

**F tests** – Linear multiple regression: Fixed model, $R^2$ increase

**Analysis:** A priori: Compute required sample size

**Input:**  
- Effect size $f^2$ = 0.15  
- $\alpha$ err prob = 0.05  
- Power $(1-\beta$ err prob) = 0.80  
- Number of tested predictors = 8  
- Total number of predictors = 8

**Output:**  
- Noncentrality parameter $\lambda$ = 16.3500000  
- Critical $F$ = 2.0323276  
- Numerator df = 8  
- Denominator df = 100  
- Total sample size = 109  
- Actual power = 0.8040987
Appendix G: List of Variables Entered into SPSS

Source (Institution)
Method (Online/Hard-copy)

I set personal example of what I expect of others.
I talk about future trends that will influence how our work gets done.
I seek out challenging opportunities that test my own skills and abilities
I develop cooperative relationships among the people I work with
I praise people for a job well done
I spend time and energy making certain that the people I work with adhere to the principles and standards we have agreed on
I describe a compelling image of what the future could be like.
I challenge people to try out new and innovative ways to do their work.
I actively listen to diverse points of view.
I make it a point to let people know about my confidence in their abilities.
I follow through on the promises and commitments that I make.
I appeal to others to share an exciting dream of the future.
I search outside the formal boundaries of my organization for innovative ways to improve what we do.
I treat others with dignity and respect.
I make sure that people are creatively rewarded for their contributions to the success of our project.
I ask for feedback on how my actions affect other people's performance.
I show others how their long-term interests can be realized by enlisting in a common vision.
I ask, "What can we learn?" when things don't go as expected.
I support the decision that people make on their own.
I publicly recognize people who exemplify commitment to shared values.
I build consensus around a common set of values for running our organization.
I paint the "big picture" of what we aspire to accomplish.
I make certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on.
I give people a great deal of freedom and choice in deciding how to do their work.
I find ways to celebrate accomplishments.
I am clear about my philosophy of leadership.
I speak with genuine conviction about the higher meaning and purpose of our work.
I experiment and take risks, even when there is a chance of failure.
I ensure that people grow in their jobs by learning new skills and developing themselves.
I give the members of the team lots of appreciation and support for their contributions.
Model
Inspire
Challenge
Enable
Encourage
<table>
<thead>
<tr>
<th>Total</th>
<th>AVG</th>
<th>Gender</th>
<th>Age</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of educational leadership graduate college credits successfully completed prior to the current semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Teaching Grade level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total years of any experience in public or private school teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of degrees previously completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever worked as a guidance counselor or special education teacher (Yes/No)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Level</td>
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<td></td>
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</tr>
<tr>
<td>Setting</td>
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<td></td>
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</tr>
<tr>
<td>County</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate the influence that salary played in your decision to pursue this graduate degree in educational leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intent (I intend to seek an assistant principal position upon completion of this program)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If (If I seek an assistant principal position upon completion of this program, I prefer it would be at the Elementary Level more than at the Secondary Level. )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I another (I intend to seek another administrative position other than assistant principal upon completion of this program)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upon (Upon program completion, when will you likely seek an assistant principal position? (Immediately, 1 to 2 years, 3 to 5 years, &gt; 5 years, Unknown, Never))</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
About the Author

Daniel Wayne Eadens earned a Bachelor’s degree in Education in 1992 and a Master’s in Educational Leadership in 1996 from the University of South Florida. While in the Master’s program, Daniel worked as a teacher and a citizen soldier. He has taught in public schools at the Elementary, Middle, and High School settings and has served as school Administrator on more than one occasion. Additionally, Daniel has experience in Adult Education and Special Education. He has directly worked with self-contained autistic spectrum primary students and main-streamed students with mild disabilities at the secondary level.

In 2000, Daniel entered the Educational Leadership Ed.D program at the University of South Florida. Daniel served a tour with the Army Reserves in Iraq from 2006 to 2007. He has taught college courses at the University of South Florida, University of Tampa, and St. Petersburg College. Daniel has presented at UCEA in 2002, FCEC in 2010, and at AAER in 2010.