Managerial Behavioral Complexity and the Collegiate Registrar

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MANAGERIAL BEHAVIORAL COMPLEXITY AND THE COLLEGIATE REGISTRAR

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ABSTRACT

Managerial Behavioral Complexity and the Collegiate Registrar

By

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Colleges often put an emphasis on the student experience and the student as a “customer” that should be courted, tracked, and understood. Yet, there are few academic studies that address the administrative roles that oversee the offices with direct student contact. All colleges have a registrar’s office, or an office responsible for much of the institution’s infrastructure from enrollment to graduation. Gunn & Backes (1992) point out, “In a climate where schools are competing for the best students, something as simple as making the registration system run smoothly and efficiently for the student can have major impacts, providing services that do not detract from the student’s educational experience has been shown to be an important factor in retention” (p. 183). The registrar’s office has a central role in the administration of a college or university. The lack of research on this position equates to a gap in knowledge and a potential gap in service to students and to faculty.

The purpose of this study was to determine whether registrars, as managers, perceive themselves as exhibiting behavioral complexity (and to what extent), controlling for demographic variables (individual characteristics, institutional characteristics, and job complexity variables) that may influence their complexity level.
The study used an adaptation of an instrument founded upon an empirically and academically based model known as the Competing Values Framework (Quinn & Rohrbaugh, 1981, Cameron & Quinn, 1999). The instrument contains four quadrants with constructs addressing: Relating to People, Managing Processes, Leading Change, and Producing Results.

The registrar respondents indicated managerial behavioral complexity with mean average scores above the established minimum for each quadrant. The constructs of Managing Processes and Producing Results were scored highest while Relating to People and Leading Change were scored slightly lower. The individual characteristic of gender was both a positive and negative indicator of behavioral complexity (positive for female, negative for male). Majoring in the hard sciences was a negative indicator of behavior complexity while working at a private for-profit institution as well as the number of direct reports that the registrar oversees were both positive indicators. From a practical perspective, the results of this research give the registrar population, as well as other higher education administrators, a framework against which to measure themselves. Registrars could use the lower ratings in certain quadrants as inspiration for change or as indication they may need more training, coaching, and direct attention to leadership constructs (Relating to People and Leading Change). The results could also be a mechanism for fostering culture change at the registrar’s institution if the culture has resulted in a situation where certain quadrant constructs are valued over others.
DEDICATION AND ACKNOWLEDGEMENTS

I dedicate this dissertation to my Husband, Kevin and my parents Ron and Barbara Sparrow. A dissertation is not an individual effort, especially when one is newly married with a young family. Kevin, you were my sole source of encouragement when this doctoral program was repeatedly threatened to be discontinued and my opportunity lost. You were also there when I struggled through Statistics and other challenging subjects, and most importantly you were there to take on the bigger parenting role when our daughter was born and yet there were comprehensive exams and projects to be completed. If you had asked me to put this degree aside for the sake of our relationship and our family, I would have done so. Instead, you insisted that I see it to completion. You treated both the degree and me as something of value and pride and I am so proud that we’ve accomplished it together.

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work in the Enrollment Management field. I continue to look up to her as she has taken on new opportunities in higher education.
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CHAPTER 1
INTRODUCTION OF THE RESEARCH

The 2013 directory of Higher Education Publication, Inc. lists over 2800 individuals within the United States and its territories, with responsibility for educational record-keeping, from enrollment through graduation. The individuals in this role are most commonly referred to as Registrars. Outside of Higher Education, and even within it, the term registrar is often mistaken for a misspelling of the word “register.” Given the duties of the position, this isn’t entirely inaccurate, yet there is much to the registrar’s role. To understand this role, it is helpful to look at how the profession came about as well as whom its main constituents are and how it serves an institution. This will help to make the case that the registrar role is worth examining from the perspective of management behavior and the complexities required of managers in pivotal roles on college campuses.

To speak about the registrar as a sole entity is somewhat misleading, Collegiate registrar offices today typically have between three and fifty-five employees who are responsible for everything from recruitment and marketing, grading and degree conferral, academic scheduling and curriculum, institutional data analysis, and institutional database management. While not working alone, the “registrar” is usually at the helm of an operation that permeates all corners of the university. Lanier (2005) asserts, “The registrar is in the best position to understand how information must pass through the initial entry points and be distributed to others” (p. 1). In this way, the registrar’s office can be thought of as the frontline or face of the university. However, “To most members of a university, the Registrar is a remote figure whose signature they see on correspondence, forms and notices” (Lockwood, 1979, p. 307). Thus, the office could
also be considered the skeleton or spine of the institution, working discreetly on the back-end to ensure standards are met. Still others may interface with the registrar through the graduation process and at the commencement ceremony. This makes the registrar’s office one of the final, lasting impressions that an institution will make on those it serves.

When describing a registrar one might conjure up a stereotypical image: someone who is into numbers and data, someone who is male and dressed in a specific manner, “The image is one of a man doing largely senior clerical work, such as record-keeping, on those occasions when he is not on ceremonial duty in his quaint dress. It is a difficult image to break” (Lockwood, 1979, p. 306).

In the profession’s beginning, the average registrar would serve for decades and was considered “all-knowing” as a result. Lockwood (1979) mentions this when he explains how a new registrar might be perceived on campus, “If the former is a powerful personality who has been in the job for twenty years whereas the latter is an ordinary mortal and new to the job, then the gap between their work, roles and influence becomes enormous” (p. 301). However, today’s registrar, whether out of necessity or intention, might be considered a bit more dynamic. Registrars today are managing more functions, serving a more diverse faculty and student population, and implementing increasingly complex technology. Often today’s registrar will meet the needs of an eighteen year old first-generation student and their parent in the morning, hold a staff meeting at midday, and then convene with the institution’s president, provost, or most senior faculty members in the afternoon. “Registrars must be able to maintain open communication with students, faculty, administrators, and outside constituents as their offices are considered a primary point of contact” (McKrickard, 2008, p. 20). Registrars are
expected to be both sympathetic, “The registrar must lend a sympathetic ear and offer the most consoling advice he can think of” (McGinnis, 1937, p. 303), and stern. Registrars must present and pursue initiatives through faculty senate, work closely with admissions, financial aid, and student accounts, be on the same page as the office of information technology, and be able to keep their own department running smoothly; protecting the integrity of grades and other confidential records.

Registrars provide a service as the regulatory agency of campus academic policy…By controlling the information system, the registrar monitors the creation of new courses and programs. They monitor grades and graduation. They protect the content and integrity of the academic transcript. Because the registrar certifies the academic process, they need to stay close to the source of academic authority, the faculty and the chief academic officers of the campus. Many of the academic policies and decisions drive the administrative functions. (Lanier, 2005, p.1)

Demands on the registrar position, and many others who are higher education administrators and faculty, are for better communication, faster response times, greater efficiencies in processing, and more customer-friendly services all while battling budget woes, shrinking resources (the notion of doing more with less), and ever-changing state and federal policies. To have a management role in the higher education environment requires a multiform, multidimensional repertoire of behaviors on the part of the leader, and that repertoire of behaviors also reflects the inherent tension in the leadership task (Lawrence, Quinn, & Lenk, 2009). In other words the role is complex, serving many masters, and balancing many different demands.
This begs the questions, “Is today’s registrar adept at balancing a wide range of expectations and demands?” Do today’s registrars perceive themselves as able to relate to people, lead change, manage processes, and produce results, all at the same time? Are there differences between registrars’ management behavior and the type of institutions they serve at (size, classification, mission, region of the country), or their own individual characteristics (gender, number of years in the position, highest degree earned)? How is a registrar’s management behavior related to the complexity of their job (e.g. number of staff and functions managed)? These over-arching questions are posited as formal research questions further in this document.

**Background of the Registrar Profession**

The registrar position has its origin in Europe in medieval times. It gained prominence in the U.S. in the early 1900s. Early registrars typically came from faculty ranks. The office of the registrar was one of the first administrative offices to take hold in American higher education, after a baseline institutional structure was developed. “Registrar” had become a standard title for a full-time administrator of academic records by the turn of the twentieth century, and by the 1930s, nearly every college or university had one (Halfond, 1984). As the position developed, very little was written about it: “It is dismaying that no one from amongst the thousands of university administrators and the hundreds of Registrars, many of them skilled historians, produced a work on the development and roles of the full-time university administrator” (Lockwood, 1979, 306).

There are some exceptions, in the 1940s, Alma H. Preinkert, registrar at the University of Maryland from 1935 to 1954, wrote a manual for the profession. In her manual Preinkert (1942) explained the methods used to admit and enroll students and to
keep record of their work. She also wrote about the lesser known functions of the job such as editing catalogs, conducting statistical studies and providing reports, introducing and enforcing regulations, and the oversight of personnel. In essence, the registrar position may have come about in order to keep institutions in line. This isn’t always easy in that the registrar doesn’t want to stifle faculty and notions of academic freedom, “The registrar works in a challenging environment where interdisciplinary cooperation is of utmost importance, while departments are determined to be more entrepreneurial, follow non-standard calendars, and use non-traditional teaching methods” (Lanier, 2005, p. 3).

The basic function and even the mission of the registrar’s office of today is fundamentally similar to the past (taking into account the introduction of computers and technology), but expectations, the oversight of personnel, and the concepts of leadership and management continue to evolve in the ever-changing world of higher education.

**Statement of the Problem**

There are few academic studies that address the registrar from a management perspective. Given the registrar’s central role in the administration of a college or university, the lack of understanding of this position equates to a gap in knowledge about central administration in higher education in a general sense. Colleges often put an emphasis on the student experience and the student as a “customer” that should be courted, tracked, and understood. Yet, the internal customers of an institution may receive very little support or guidance in doing so. Gunn and Backes (1992) point out, “In a climate where schools are competing for the best students, something as simple as making the registration system run smoothly and efficiently for the student can have major impacts and providing services that do not detract from the student’s educational
experience has been shown to be an important factor in retention” (p. 183). It’s worthwhile to understand the registrar’s office better, and specifically the leadership within a registrar’s office, so that the institution can capitalize on this key role.

Registrars can and often do confer with counterparts at other institutions and can rely upon their professional organization. The American Association of Collegiate Registrars and Admissions Officers (AACRAO) has existed since the late 1800s; it got its modest start with a small group of early registrars. Today AACRAO is a thriving professional organization of over 11,000 members dedicated to serving and “advancing higher education by providing leadership in academic and enrollment services” (“About AACRAO,” n.d.). The members of AACRAO come together to find fellowship in their unique role and to discuss and collaborate on the latest tools to do the job well.

AACRAO provides a wealth of information to its members in the form of newsletters, journals, conferences, books, consulting, presentations by peers, and more. However, little to any of what the Association produces is empirically research-based.

**Purpose of the Study**

This study examined the perceived management behavior of a national sample of college and university registrars (how they relate to people, manage processes, lead change, and produce results), and compared those behaviors against various institutional and demographic variables. The study profiled registrars using an adaptation of an instrument intended to measure the complexity of a manager’s behavior (how well they exhibit the different management behaviors). The original instrument is based upon an empirical and academic framework known as the Competing Values Framework (Quinn & Rohrbaugh, 1981, Cameron & Quinn, 1999). The purpose of this study was to
determine whether registrars, as managers, exhibit behavioral complexity (and to what extent), controlling for demographic variables (individual characteristics, institutional characteristics, and job complexity variables) that may influence their complexity level.

**Theoretical Framework**

The recipe for strong and effective leadership is in a constant state of flux with hundreds if not thousands of theorists weighing in. The concept of leadership is widely studied and new definitions emerge regularly. Often, the concepts of “leadership” versus “management” are separated out in order to truly get at what makes one influential and how that influence leads to action in others. Hersey and Blanchard (1988) state that “leadership is a broader concept than management” (p. 5) and that the key difference lies in the term *organization*. “Leadership occurs any time one attempts to influence the behavior of an individual or group…. It may be for one’s own goals or for those of others and they may or may not be congruent with organizational goals” (Hersey & Blanchard, 1988, p. 5). Bolman and Deal (2008) discuss the relationship between leadership and management by noting that leadership can be "smothered" by the day-to-day tasks of being a manager. An additional challenge of leadership is that it calls primarily for "intangible human qualities" such as a person's heart, self-awareness, and courage (Bolman & Deal, 1994). Hersey and Blanchard (1988) differentiate management by noting that the “achievement of *organizational* objectives through leadership is management” (p.5). For the purposes of this study, the focus will be on management behavior (relating to people, managing processes, leading change, and producing results), using Hersey and Blanchard’s definition.
One of the ways that leadership and management are studied is through the use of models or theories driven by participation, and/or observation, and supported by research. The Competing Values Framework has been cited by the Financial Times as one of the 40 most important models in the history of business and is considered the dominate framework in the world for assessing organization culture. In the early 1980s, Quinn and Rohrbaugh developed the Competing Values Framework (CVF) model recognizing that organizational effectiveness can manifest as different qualities depending on the goals of an organization. For example, one organization might stress collaboration while another may focus on competition. These two objectives are seemingly at odds with one other, hence the term “Competing Values.”

Quinn and Rohrbaugh (1981) designed a grid with continua meant to signify the different effectiveness criterion that organizations use. They noted that some organizations emphasize Flexibility and Discretion while others were at the opposite end of the spectrum emphasizing Stability and Control. Quinn and Rohrbaugh then added a second continuum with the opposing elements of Internal versus External Focus. Quinn and Rohrbaugh posited that most organizations can be characterized along two dimensions, each representing alternative approaches to basic challenges that all organizations must resolve in order to function. Cross-classifying organizations on these two value’s dimensions results in four archetypes, referred to as Hierarchical, Rational, Entrepreneurial, and Team Cultures.

Over time and via numerous studies, researcher’s began to conclude that while most organizations had a dominant cultural type (which varied by organization), “More than 80% of thousands of organizations studied have been characterized by more than
one of the culture types identified by the framework” (Cameron & Quinn, 2011, p. 52). That is to say that many organizations operate under a balance of opposing and competing values. As the CVF concept continued to evolve, researchers focused on leadership and the managers within the organizations they studied. It was noted that the successful managers in the most effective organizations had dominant management traits that matched their organization’s dominant culture type. However, it was eye-opening to note that “the highest-performing leaders – those rated by their peers, supervisors, and subordinates, as the most highly effective – have developed capabilities and skills that allow them to succeed in each of the four quadrants (Cameron & Quinn, 2011, p. 54 citing Denison, Hooijberg & Quinn, 1995). Another way of putting this is that the most effective leaders are “self-contradictory, behaviorally complex leaders in the sense that they can be simultaneously hard and soft, entrepreneurial and controlled” (Cameron & Quinn, 2011 p. 54 citing Lawrence, Quinn, & Lenk, 2009).

Behavioral complexity is defined as “the ability to exhibit contrary or opposing behaviors (as appropriate or necessary) while still retaining some measure of integrity, credibility, and direction” (Denison, Hooijberg, & Quinn, 1995, p. 526). These opposing behaviors are organized using the dimensions of the CVF. In 2009, Quinn and two colleagues determined that although there was some empirical research on behavioral complexity in existence, significant progress on this topic was hampered by the lack of a more rigorous measurement instrument (Lawrence, Quinn, & Lenk, 2009). In response they developed a multidimensional instrument to measure behavioral complexity, using the CVF as the theoretical basis. Lawrence, Quinn, and Lenk subjected the instrument to intense scrutiny and analysis via structural equation modeling and circumplex modeling.
The authors suggest that the instrument is useful for further exploring the behavioral complexity of leaders. The instrument’s theoretical grounding in CVF and the development by Lawrence, Quinn, and Lenk suggest that it is a reliable instrument for use in this study.

Research Questions

The behavioral complexity instrument was slightly modified to make it more palatable to the registrar population and more appropriate for this study. The instrument, in conjunction with demographic questions such as experience, gender, size of institution, number of staff, etc. will allow scoring of the individual respondents to this study. This will result in a ranking of behavioral complexity; a continuum upon which each of the respondents will lie. The following research questions are posed:

1. What is the perceived level of management behavior complexity exhibited by collegiate registrars?

2. Are a registrar’s individual characteristics and institutional characteristics related to their behavioral complexity?

3. Is behavioral complexity related to a registrar’s job complexity?

4. What combination of job complexity, individual characteristics, and institutional characteristics explain a registrar’s management behavior complexity?

Babbie (2010) notes that sometimes it is most appropriate to select a sample population based on one’s understanding of, and knowledge about, a certain population. Babbie also indicates, “Any research topic can be approached from many different directions (p. 92).” This study was approached quantitatively and will draw on data collected from current registrars across the United States. Based on the survey results,
data were analyzed using descriptive and exploratory analysis. Question one used descriptive analysis to rank order respondents from high behavior complexity to low behavior complexity. Correlation and regression analysis was used to answer research questions two-four. The registrar respondents were asked to complete an online survey that began with the behavior complexity instrument and concluded with a series of demographic questions (Appendix A). The behavior complexity questions were posed as, “I see myself as being skilled in…” (Lawrence, Quinn, & Lenk, 2009) and responses were presented via a 5-point Likert scale. There were nine questions corresponding to each of the following four management behavior categories: Relating to people, leading change, managing processes, and producing results (36 behavioral questions total).

**Significance of the Study**

The registrar’s office has a hand in setting policy and is also responsible for its enforcement, thus its status as an “influential central office with the information and vantage point to guide an institution” (McKenna, 2007 p. 2).

The work of a registrar’s office can be sensitive in that the office handles data that is confidential or of great value and significance to its constituents (grades, graduation, etc). The work can also be time-sensitive and complex. “The registrar is a leader in the development of campus systems that tie the academic and administrative functions together. And because of the long history of records management, they are the best source to validate the data that flows into and out of the system” (McKenna, 2007, p. 10). Conversely, the work can be mundane and thankless, yet if it were not being done, the infrastructure of an institution could be impacted. The registrar is also considered a key
decision maker and Lockwood (1979) described the academic climate in which registrars operate in the following manner:

At a time when decisions are increasingly vital to the future academic, economic and political life of the university and when they have to be taken through structures which are in flux and under stress and in an environment which lacks a clear internal consensus but which requires that the basis and forms of the decisions to be open to any member or external agency sufficiently interested to want to know or challenge them. (p. 304)

The construct of behavioral complexity (the ability to apply different management styles to balance between competing demands) presents an opportunity to understand registrars as managers, and thus an opportunity to determine if a gap exists between the individual (registrar) and the demands of the job. This could potentially fuel further research, give senior academic leaders knowledge about the individual they have serving in the registrar role, and equip professional development organizations and consulting firms with information on how to serve this key position in terms of training and support.

Understanding the management behaviors of registrars will help to explain how registrars/registrar’s offices will respond to different situations and different expectations on campus environments. In addition, understanding current management behavior of registrars will assist in preparing future registrars to adapt and respond to changes in their role. Hesselbein (2002) asserts that developing its leaders is a topic that many organizations ignore, “relying instead on “raiding talent from competitors (p. 5).” This study will help with the understanding of where college registrars are at now as
managers/leaders, in terms of managerial behavior complexity, as opposed to where they may need to be.

There is also practical application for the results of the study as it pertains to key decision-makers and governing bodies. If there is a gap between the complexity of the registrar role and the management complexity exhibited by those therein, than a duty may exist to determine how to close this gap so that the registrar’s office can be more effective. Likewise, the results may show that registrars tend toward certain behaviors over others and that those strengths should be capitalized on when it comes to viewing the registrar as a key leader on campus. In fact, this study could lead to similar studies on other administrative roles such as Financial Aid Directors, Admission Directors, Student Accounts Directors, and Housing and Campus Life Directors.

Finally, it is worth noting that this study will contribute further research to the Competing Values Framework pool (CVF) and the concept of behavioral complexity. Neither the CVF nor the Behavioral Complexity Instrument has been applied to mid or senior level higher education administrators.

**Underlying Assumptions**

There are certain assumptions inherent in the study:

1. Management is a dynamic process that is a good candidate for assessment, and a self-rating evaluation is an appropriate way of gaining insight into management behavior complexities.

2. The registrar role is considered a management role on any campus and the individual serving in the role is responsible for managing at least one other individual.
3. Registrars serve multiple constituents (or stakeholders) and use a variety of approaches to serve these constituents, thus they are viable candidates for the behavioral complexity survey.

4. The registrar respondent is able and willing to assess their management behavior in an honest and insightful fashion.

5. The registrar’s behavioral complexity profile tells us something about how they carry out their job functions.

6. Registrars with similar institutional characteristics are assumed to have similar tasks and roles and serve similar constituencies.

7. Registrars with similar job complexity are assumed to have similar tasks and roles and serve similar constituencies.

8. An overall behavior complexity score can be attained for each registrar respondent by scoring their responses for each of the four quadrants (management styles) individually and then determining how similar or different the four scores are to each other (the distance between the scores in each of the quadrants).

**Limitations and Delimitations of the Study**

**Limitations**

1. This research was limited to the perspective of collegiate registrars in the United States who are listed in the Higher Education Directory.

2. There may be a natural tendency to inflate one’s attributes when responding to questions of the nature included in the study. This study
does not include the perspective of subordinates, which may or may not have offered a more well-rounded review of the respondent.

3. The Behavioral Complexity Instrument, while fully vetted, studied, and endorsed by Quinn, has not been heavily applied or used in empirical research to-date.

4. The survey was administered online and will be ignored by a small number of registrars who are technology adverse.

**Delimitations**

1. Participation was delimited to registrars who work at accredited institutions. This excluded institutions who have not met a federal operating standard.

2. The questions corresponding to the independent variables of individual characteristics, institutional characteristics, and institutional complexity were limited to a reasonable number and did not include all factors that could make-up each category.

**Definition of Terms**

The following terms were used in this study with the following universal definitions:

1. **AACRAO** – Is an acronym for the American Association of Collegiate Registrars and Admissions Officers. AACRAO holds conferences, forums, symposiums, and more and publishes the only journal dedicated to the registrar field. The journal titled *College and University* contains the
majority of the small number of studies (some of them empirically-based), reports, and white papers aimed at the registrar population.

2. **Accredited** - The Northwest Commission on Colleges and Universities (NWCCU) offers the following definition of accreditation. Accredited refers to institutions who have successfully met the accreditation standards: “Regional accreditation of postsecondary institutions is a voluntary, non-governmental, self-regulatory process of quality assurance and institutional improvement. It recognizes higher education institutions for performance, integrity, and quality to merit the confidence of the educational community and the public. Accreditation or preaccreditation by a postsecondary regional accrediting agency qualifies institutions and enrolled students for access to federal funds to support teaching, research, and student financial aid” (The Northwest Commission on Colleges and Universities, 2012, n.d.).

3. **Behavioral Complexity** – “The ability to exhibit contrary or opposing behaviors (as appropriate or necessary) while still retaining some measure of integrity, credibility, and direction” (Denison, Hooijberg, & Quinn, 1995, p. 526).

4. **Competing Values Framework (CVF)** – A combination of four management models into a larger framework allowing for the comparison of management behavior across two axes. A vertical axis ranging from flexibility to control and a horizontal axis ranging from internal focus to external focus (Quinn, Faerman, Thompson, & McGrath, 1996).
5. **Higher Education Directory** – “The *Higher Education Directory*® is the only single-source for academic and administrative personnel at accredited, degree-granting colleges and universities. Institutions listed in the *Higher Education Directory*® are accredited by agencies recognized by the Secretary of Education and/or the Council on Higher Education Accreditation” (About Higher Education Publications, Inc. 2012, n.d.).

6. **Individual Characteristics** – Characteristics that could be used to describe or define an individual such as gender, age, number of years on the job, and education level (highest degree earned).

7. **Institutional Characteristics** – Characteristics that could be used to describe or define an institution such as size, population-served, mission, funding-basis, and region of the country.

8. **Institutional Size** – According to the Carnegie Foundation (2009), very small institutions have less than 1,000 FTE students, small institutions have 1,000 – 2,999 FTE, medium-sized institutions have 3,000 – 9,999 FTE, and large institutions have more than 10,000 students. (Carnegie Classification, 2012, n.d.). For the purposes of this study, categories were developed that would adequately represent differences in how an institution or registrar’s office might operate:
   a. 0-5,000    
   b. 5,001-15,000    
   c. 15,001-25,000    
   d. 25,000

9. **Job Complexity** – Characteristics that could be used to describe the complexity of one’s job such as number of total employees, number of
employees that report to the manager directly, total areas of responsibility, and the types of responsibilities held (the scope and scale of the operation).

10. **Leadership** – “Leadership is thus a subtle process of mutual influence fusing thought, feeling, and action. It produces cooperative effort in the service of purposes embraced by both leader and led” (Bolman & Deal, 2008, p. 345).

11. **Management** – “The process of working with and through individuals and groups and other resources to accomplish organizational goals” (Hersey & Blanchard, 1988, p. 5).

12. **Registrar** – According to the Bureau of Labor Management, "Registrars are custodians of students' records. They register students, record grades, prepare student transcripts, evaluate academic records, assess and collect tuition and fees, plan and implement commencement, oversee the preparation of college catalogs and schedules of classes, and analyze enrollment and demographic statistics" (What is the College Registrar?, 2012, n.d.).

13. **Student Record** – Student records are commonly referred to by the term “Education Records.” The Family Educational Rights and Privacy Act (FERPA) defines an education record as, “those records that contain information directly related to a student and which are maintained by an educational agency or institution or by a party acting for the agency or institution” (FERPA Guide for Students, 2012, n.d.).
Summary

The chapter that follows this introduction provides an overview of relevant literature. Chapter Three focuses on the methodology used in this study, Chapter Four highlights the analysis of the data, and Chapter Five provides results, interpretations, an expanded focus on the limitations of the study, and implications for future research. It is hoped that this study will offer insights in various areas (the subjects, management as a function, and the theoretical models), as well as provide a building block for future research endeavors.
CHAPTER 2
REVIEW OF RELATED LITERATURE

Introduction

The registrar’s office serves a central role in the administration of a college or university and therefore it is important to understand how registrars lead. This literature review serves as a building block for an in-depth look into the collegiate registrar role and the management behavior exhibited therein. The literature review begins with a historical look at the establishment of the registrar position in Europe and will transition to when the infrastructure of American Postsecondary Education took hold. There will be a discussion of the duties and role of the registrar/registrar’s office and how that role has evolved over time. The literature review will then progress into a more general look at leadership and management; specifically traits and prominent theories. There will be specific focus on the Competing Values Framework established by Quinn and Rohrbaugh (1981), along with studies utilizing a version or interpretation of the Competing Values Framework. The Behavioral Complexity Instrument (Lawrence, Quinn, & Lenk, 2009) is highlighted, followed by a look at the unique aspects of management in a campus environment and the nuances of leading in an Academic arena. Last, attention will be given to the registrar role within the context of other Higher Education administrators and the registrar as a manager/leader. This thorough journey into the purpose and objectives of the collegiate registrar and the study of leadership/management sets-up both the need, and the importance of a study on the managerial behavioral complexities of today’s college registrar.
History of the Registrar Profession

The Registrar’s European Roots

Higher Education has its roots in medieval times so it is not surprising that the earliest mention of a role, resembling that of the registrar, comes out of this time period. It is believed that the registrar position that we know today was likely preceded by the position of Beadle. In early institutions the position of Major Beadle, “performed many functions including informing faculty members of meetings, helping faculty members with discipline, ringing bells for chapel, walking at the head of academic processions, and keeping a register of all graduates” (Conner, 2009, para. 2). The Beadle was privy to many confidential details about the institution, its staff and its students and was expected to maintain the highest levels of confidentiality. J. Douglas Conner, a former Executive Director of the American Association of Collegiate Registrars and Admissions Officers (AACRAO) stressed the seriousness of this historical role in remarks he made to the Association, “If the Major Beadle disclosed confidential university matters, his salary was not paid” (Conner, 2009, para. 2). As early institutions began to take root and permeate Europe, another set of responsibilities was added to the Beadles’ plate; the title of “Grapharin” which roughly translates to mean clerk or registrar. The additional duties included registering students and seeing to it that they completed the classes they undertook.

As recently as the 1970s there has been debate in Europe about what to call the individual who holds responsibility for the Beadle and Grapharin functions. The term Registrar is in use but in countries like England, there are many different interpretations of what a Registrar does and how much actual authority lies with the individual,
Thus at one extreme the Registrarship can be held by the single chief professional administrative officer of a large university with centuries of tradition supporting the office. At the other extreme it can be held by one of several second-tier officers in a small new institution. (Lockwood, 1979, 301)

In the 1970s, a major shift was occurring in Europe. A shift from institutions being revered and left to their own devices to being more tightly woven into the fabric of the community, Ashby (1974) stated it as such,

Today universities everywhere face a common peril; the peril of success. Formerly each was a detached organism, assimilating and growing in accordance with its own internal laws. Now Universities have become absolutely essential to the economy and to the very survival of nations. (p. 7)

As the purpose and expectations of higher education changed in Europe so did the registrar role, no longer was it being viewed as consisting mostly of record-keeping. Instead, awareness was growing that this was a position of influence and even power. In this regard,

Some groups see the Registrar as a sinister influence, hiding behind an image of servile neutrality but performing an obstructive political role in defence of the status quo; a manipulator of both events and the interpretations of them. Other groups see the Registrar as the wise steward using his duties and permanency to protect the institution against radical whims. (Lockwood, 1979, p. 308)

What might be more interesting though is how the registrar sees himself,

Not many, if any, Registrars see themselves as the team's captain, or the prolific goal scorer, or the flamboyant goalkeeper, or the teasing winger or the
towering centre back. No doubt some Registrars see themselves as the
team coach, the referee, the ball-boy, the selector, the club manager, the
gate-man, the sports reporter or even the ball. In the past, perhaps most
Registrars saw themselves as the club secretary. Increasingly, however, many
see themselves on the field playing in mid-field, perhaps scoring the occasional
goal, perhaps the occasional unfair tackle out of frustration, but
largely unnoticed by the spectators though central to the team's rhythm and
tactics. (Lockwood, 1979, p. 308)

In Europe, by the 1970s, the registrar duties fit rather nicely into three separate
categories: Secretarial Functions (business steward, maker of policies and processes),
Administrative Manager (overseer of administrative staff, coordinator of meetings and
trainings), and Advisor (providing insight to senior management on strategic plans,
hiring, and salaries) (Lockwood, 1979). Most of all, the registrar was expected to
exercise judgment. While some of these expectations remain in place at a date thirty-plus
years in the future, the scope and scale of the job has changed dramatically. Not only has
enrollment grown in European institutions, so has the complexity of the institutions that
registrars serve. There are a wider array of course and major offerings, there are main
campuses, branch campuses, and satellite campuses, there is an increasing diversity
among students and their needs, and there is greater competition for resources both within
and external to universities. It is in these ways that the position of Registrar is Europe is
melding with its brethren in the United States.

The Registrar Position in the United States
America took a page from its European counterparts in modeling its postsecondary education field. Many early American scholars such as Charles Eliot, William Rainey Harper, Daniel Coit Gilman, Andrew Dickson White and more, paid frequent visits to Europe to study its higher education infrastructure (Cohen & Kisker, 2010). It makes sense then that key roles were emulated in the United States. However, in the early years, “the registrar was often a faculty member who assumed the responsibility for college entrance requirements and admissions procedures” (Conner, 2009, para. 3). Later on, when higher education really started to surge in the United States and admissions standards became more rigid and complex, the need for an Office of the Registrar was born. Ezra Gillis is considered key to the growth of the registrar position in the United States. He was registrar at the University of Kentucky beginning in 1910. Under his guidance, the role of Registrar grew into a full blown profession with established national guidelines and collaboration among Registrars at different institutions. In addition, Ezra helped to build a professional association: The American Association of Collegiate Registrars. This association has expanded to include Admissions and Financial Aid and is going strong today with a membership of over 11,000 members. (Conner, 2009, para. 5)

**The Role of the Registrar/Registrar’s Office**

As mentioned, early registrars were often faculty who took on an administrative role on the side. In the book, “The Business Side of the Registrar’s Office” (Christenson, 1913), the author recognizes that separate divisions were beginning to emerge out the American higher education landscape: Teaching and research, physical operations and maintenance, and the administration. Over time, the registrar position moved from being
a side-duty in the teaching and research realm and found itself squarely in the administrative sector of the organization. As such, early registrars were charged with alleviating instructors from administrative details.

**The Way It Used To Be**

A day in the life of an early 20th century registrar likely included: Correspondence with prospective students, working with faculty committees to certify student work or articulate transfer work, supervising registration and graduation, recording grades, development of the academic catalog, alumni relations, and serving as the general information officer for the institution (Christenson, 1913). The concept of a registrar’s office quickly became synonymous with centralization and the registrar role itself as a sort of gate-keeper; ensuring the initial and continued legitimacy of an institution through diligent and accurate record-keeping. The work of the registrar’s office is what allows for today’s historical accounts of institutions (what is known as “facts and figures”). The longitudinal data collection and analysis made possible by the registrar’s work is vital to understanding how an institution operates and if it is meeting its stated mission.

There have been other less obvious duties as well. Howard McGinnis, Registrar at the State Teacher’s College of South Carolina in 1937 provided a detailed account of his daily life. McGinnis indicate he would attempt to arrive at work by 8:30am but, “such interruptions to this peaceful, early-morning trip are not uncommon.” McGinnis continued

Today, the dietitian had to be seen about an adjustment in the number of student helpers in the dining hall. Yesterday, a department head had to be seen about some data needed to complete the next quarter's course schedule. Tomorrow, it
will be a conference with a department adviser on some matter of record concerning one of his major students (McGinnis, 1937, p. 302).

McGinnis also indicated that he spent a large portion of his day interacting with students and conducting correspondence; much of it related to financial aid, scholarships, and loans (which would all now fall under the purview of the Financial Aid Office). Other work included helping a student understand how credits will apply towards graduation or how credits will transfer to another institution. McGinnis also shared that he responds to request from employers on recommendations for placements from his graduating student pool (a task now held by Career Services Offices). This is in conjunction with recruitment efforts on the front-end and the preparation and publication of written promotional materials to advance the reputation of the college (responsibilities which today fall under Admissions).

There was an undertone of frustration in McGinnis’ writing that may sound familiar to someone who has been in the registrar role themselves, and it could be because much of the work he relayed consisted of listening to excuses from students regarding their absences, their grades, or other matters and likewise, there is mention of faculty and administrative requests that require extensive time to research or require the provision of data and other information. McGinnis concludes the account of his day as such:

When on this day the office closed at 4:00 PM, there were still tasks to be done, but they had to wait until tomorrow; for each member of the staff in the registrar's office, consisting of two secretaries, three self-help students who give part time, the assistant registrar, and registrar, feels that he has done a good day's work and
that he is entitled to whatever relaxation he can secure before the next day's labors begin.

P. S.—A call by a school principal, who wanted to secure a teacher, and the preparation of this outline of work prevented my getting away from the office until 5:30 today. (McGinnis, 1937, p. 306)

**Today’s Registrar**

In the 150 or so years that higher education has been established in the United States, very little has changed and yet a lot has changed. The role of the registrar sits at the juncture between long-held practices, protocols, and beliefs and a shift to a so-called modern era where technology is king and automation is a driving force. Today’s registrars still have to be meticulously detailed and methodical and yet, they also need to be up-to-date with the latest software and gadgets. The editorial, “The Strategic Role of the Registrar: Changing Responsibilities in Light of Technology” (2012) addresses this duality head on. In fact, the author, Reid Kisling goes so far as to point out that with technology able to streamline most clerical and record-keeping tasks; a common question has become, is a registrar and a registrar’s office still necessary? The reality is that technology rarely replaces the need for staff but it does shift the skill-set of the staff and requires a different kind of leadership. Kisling goes on to point out that technology actually gives today’s registrars a chance to get back to the root of their role. He suggests using the role-shift to reconnect with faculty and the academic-side of the house, to reach out the olive-branch and look for ways to partner in light of more efficient ways of doing things. Realistically, some members of the campus community may buy-in to the misnomer that all a Registrar did/does is clerical. As a counter-point, today’s registrar
has a chance to show-off their strategic side, to use data to drive decisions and gain respect, and to make things easier when it comes to curriculum-generation, the start up of new programs and services, and the teaching of courses. Kisling summarizes it as this:

Data is best utilized when seen through the lens of desired educational outcomes, something that can happen when partnerships exist between enrollment and academics. Registrar staff are uniquely suited to fulfill this role due to the crossroads within the institution where the position sits—between service to students and the academic programs that students pursue. (Kisling, 2012, para. 9)

Today’s registrar duties include: “managing the registration of students, student records, class schedules, catalog production, classroom space utilization, the academic calendar, student information systems and third party software, and policy and procedural practices in-line with government guidelines” (Huddleston, 2000). If we look back at a day in the life of Howard McGinnis in 1937, we would note the following changes: catalog production on a much grander and much more technical scale, classroom and academic space assignments and reporting in conjunction with greater campus analysis of the needs of students and the willingness of faculty, sole responsibility for academic calendaring and ensuring that the calendar meets very specific institutional, state, and federal requirements, managing technical systems and taking a lead in the development and oversight of ever-increasing technological innovations.

Lanier (2005) is another proponent of capitalizing on the shift brought on by technology and a greater focus on data. Lanier sees the registrar as a chief coordinator on a campus; coordinating the input of data in and out of the system, coordinating the use of new technology by other faculty and staff, coordinating the introduction of more efficient
systems for students, and coordinating the privacy and integrity of all student information. Lanier also sees the registrar as having a bigger hand in policy development with the ability to influence changes based on the greater efficiencies that technology can provide (Lanier, 2005).

As expected, shifting a role that has been around for at least 100 years is not easy and the need for real-time information at every hour of the day is putting today’s registrars in a difficult position. The expectation is faster, faster, faster and there is a desire to have self-service, one-touch options for every function, “The Registrar must consider how applications will provide on-time and in-time information, customized for students, faculty, and administrators to make decisions and take action in this self-service environment (Lanier, 2005, subheading: The Student Information System as a Business Process Management System, para. 3). Lastly, the registrar has to shift their hiring, training, and management practices to be more about business process management. Registrars may also have to be more creative in combining units to maximize the talents of those who respond well to the new technical demands of a registrar’s office career. Lanier (2005) sums it up that a good registrar “must be a good referee, controlling the game but not interfering with the process” (subheading: Summary, para. 3).

As a result of shift in duties over time; Today’s registrar must hire and manage a highly technical and highly professional staff. No longer does the typical registrar’s office employee sit behind the scenes conducting data-entry; today more time is spent providing service to internal and external customers, troubleshooting, participating in committees and task-forces, managing the intake of payments for various services, and
ensuring that different departments on campus are linked; between students being admitted and beginning the matriculation process to student’s in their final years of study.

**A Registrar’s Skill-Set**

Many leaders hold responsibility for a wide array of functions under one umbrella, but this is particularly true in a college registrar’s office. As the evolution of the position has alluded, the registrar’s office has been a bit of a “catch-all” from its beginning. If a job is administrative in nature and there is some uncertainty over where to house it, chances are it will end up in the registrar’s office.

There are many jokes and stereotypes assigned to the registrar role (serious, stuffy, eye-glasses, tweed jacket, etc.) but an attribute that one would be hard-pressed to argue with is that a good registrar has to be responsible.

The registrar’s role as gate-keeper is a core function and likely what shapes the types of individuals either drawn to or persuaded to take on the registrar role. The registrar is often the front line point of contact with government agencies and the one most often called on for regulatory requirements. Because the registrar role is not one that someone typically aspires to from childhood, registrars are often formed from within and many take the following path: student worker – line-worker – supervisor – assistant registrar – associate registrar – registrar. You don’t have to look that hard to find registrars who have spent their entire career in the registrar’s office or their entire career at one institution. The Registrar is expected to be at once analytical, strategic, methodical, discerning, calm, and confrontational. They must manage tasks, functions, and the university’s technical database but they must also be seen as a leader of their unit.
and a figure head on campus who can contribute and collaborate. To date, there has been little if any empirical research devoted to the topic of a registrar as a manager/leader.

**Differences between Management and Leadership**

Clearly defining management as opposed to leadership is a lofty goal.

Bennis (2009) described the differences between leaders and managers as “enormous and crucial” identified by the following characteristics in Table 1:

Table 1.

**Differences Between Management and Leadership (Bennis, 2009, p. 209)**

- The manager administers; the leader innovates.
- The manager is a copy; the leader is original.
- The manager maintains; the leader develops.
- The manager focuses on systems and structure; the leader focuses on people.
- The manager relies on control; the leader inspires trust.
- The manager has short-range view; the leader has a long-range perspective.
- The manager asks how and when; the leader asks what and why.
- The manager has his or her eye always on the bottom line; the leader’s eye is on the horizon.
- The manager imitates; the leader originates.
- The manager accepts the status quo; the leader challenges it.
- The manager is the classic good soldier; the leader is his or her own person.
- The manager does things right; the leader does the right thing.

Rost (1991) defined management as “an authority relationship between at least one manager and one subordinate who coordinate their activities to produce and sell particular goods and/or services” (Rost, 1991, p. 145). Some highlights and distinguishing features between leadership and management as outlined by Rost, are shown below in Table 2:
Table 2.

*Distinguishing Leadership from Management (Rost, 1991, p. 149)*

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence relationship</td>
<td>Authority relationship</td>
</tr>
<tr>
<td>Leaders and followers</td>
<td>Managers and subordinates</td>
</tr>
<tr>
<td>Intend real changes</td>
<td>Produce and sell goods and/or services</td>
</tr>
<tr>
<td>Intended changes reflect mutual purposes</td>
<td>Goods/services result from coordinated activities</td>
</tr>
</tbody>
</table>

Some would say that leadership is more of a collaborative process and does not require the forcing of hands. Managing requires much more attention on the task itself, while leadership can look above and beyond the moment.

With differing definitions, it’s important to note that neither management nor leadership is superior to the other. While “Leadership” may be a broader or more desirable term, Rost (1991) makes an excellent point about management:

If you want to find out how much people love management, try these simple strategies: Deliver the payroll checks late, decrease the supplies people need to do their jobs, stop any utility service people need to live or work…Our civilization is so complex, it has to be managed. (Rost, 1991, p.141)

Whether one must act as a “manager” or a “leader” may depend on the context of a situation and the desired goals. The term leader and the concept of leadership may be the default or general term for someone in charge. As such it is useful to further define leadership and explore the different behaviors a leader may exhibit or different approaches they may take.

**Leadership**

Yukl (1989) stated, there is not one “correct” definition of leadership, but the choice of definition should depend upon how useful the definition is in further
understanding leadership. Yukl draws upon the work of Janda (1960, 1974) to present this table of both broad and restrictive conceptions of leadership:

Table 3.

_Different Conceptions of a Leader (Yukl, 1989, p. 4)_

<table>
<thead>
<tr>
<th>Broader Conception</th>
<th>More Restrictive Conception</th>
</tr>
</thead>
<tbody>
<tr>
<td>A person who influences group members (“distributed leadership”).</td>
<td>A person who exerts the most influence on other group members (“focused leadership”).</td>
</tr>
<tr>
<td>A person who influences group members in any manner.</td>
<td>A person who systematically influences member behavior toward attainment of group goals.</td>
</tr>
<tr>
<td>A person who influences group members to comply with his or her requests willingly or unwillingly.</td>
<td>A person who obtains the enthusiastic commitment of group members in carrying out his or her requests.</td>
</tr>
</tbody>
</table>

This presentation of leadership by Yukl (1989) matches other definitions in that an effective leader, through influence or inspiration, must have followers (Rost, 1991).

Rost defines leadership as a collaborative and multidirectional process that is not coercive, leadership is “an influential relationship among leaders and followers who intend real changes that reflect their mutual purposes” (p. 102). Burns (1978) defines leadership as:

Inducing followers to act for certain goals that represent the values and the motivations – the wants and needs, the aspirations and expectations – of both leaders and followers. And the genius of leadership lies in the manner in which leaders see and act on their own and their followers’ values and motivations.

(Burns, 1978, p. 19)
Bass (2008) summarizes a whole array of leadership themes and options for defining leadership:

There are many possible ways to define leadership. However the definition of leadership should depend on the purposes to be served. Leadership has been conceived as the focus of group processes, as a personality attribute, as the art of inducing compliance, as an exercise of influence, as a particular kind of activity, as a form of persuasion, as a power relation, as an instrument in the attainment of goals, as an effect of interaction, as a differentiated role, and as the initiation of structure (Bass, 2008, p. 25).

**Traits of Leadership**

Shifting from defining leadership as an act to what makes a good leader, is not an easy task. To answer the question correctly would require there to be a universal agreement on “good leader” versus “bad leader” and that is likely going to mean something different for different people. The fact that leaders have different traits that “distinguish them from followers” (Kezar, Carducci, & Contreras-McGavin, 2006, p. 7), is something we can likely all agree on. Stodgill’s (1948) is considered the most comprehensive study of its time. He found an array of traits that are present in leaders. Some of the most common traits Stodgill noted are: higher intelligence, scholarship, dependability, social participation, and socioeconomic status. Additional traits were originality, popularity, social skills, judgment, assertiveness, desire to excel, liveliness, and humor (Stodgill, 1948). As with any research, there were limitations to Stodgill’s work, the summary of traits was garnered in part using children, and school and social groups, rather than actual places of employment (Bass, 2008). Additionally, Stodgill’s
results have not necessarily been supported by more recent research. As time passed, research was able to show that leadership is hardly a one-way street. Instead, the follower must be motivated to follow and must be adequately empowered within the context of the organization and amongst other followers. (Bass, 2008; Bolman & Deal, 2008; Rost, 1991).

While Stodgill’s research still showed leaders as courageous, confident, strong, having social distance, and being intelligent (Bass, 2008; Bensimon, Neumann, & Birnbaum, 1989), recent research indicates that those characteristics are no longer related to a universal definition of leadership (Kezar et. al, 2006). Today, the characteristics present in leaders, are a bit broader and include: a shared value with followers, and a caring and collaborative approach (Bass, 2008; Kezar et. al, 2006). “A cognitive perspective would argue that the traits of potential leaders should affect the extent to which they are perceived as leaders by others” (Lord, De Vader, & Alliger, 1986, p. 203).

Jung and Sosik (2006) wanted to know more about follower’s reactions to leadership. They conducted a study of 218 managers and had 945 subordinates provide ratings of the manager’s leadership styles as it related to five traits: “self-monitoring, self-actualization, motive to attain social power, self-enhancement and openness to change” (p. 13). Managers who were rated high were given the high ratings by followers who exhibited high extra effort and organizational citizenship behaviors (OCB). “OCB refers to discretionary behavior that is not necessarily part of one’s formal contractual job requirements but that nevertheless promotes effective functioning within the organization” (Organ, 1990 as cited by Jung & Sosik, 2006, p. 14). What the highly-rated managers had in common was the self-described presence of the five leadership
traits listed above. Essentially, the highly-rated managers were effectively modeling behavioral traits that in turn show up in their followers.

More recent literature has aimed to examine leadership traits that span across cultures and situations. Traits are now being looked at as a prescription for how to do something, the term being used is “competencies” with the idea being that a leader needs to be competent in various areas (Bass, 2008, p. 103). This is outlined in Table 4 below:

Table 4.

<table>
<thead>
<tr>
<th>Type of trait</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive competency</td>
<td>Task competence and problem-solving abilities. Includes intelligence, judgment, decisiveness, knowledge, fluency of speech, resourcefulness, technical abilities, intellectually stimulating qualities, vision, imagination, articulateness, diagnostic skills, originality, and creativity</td>
</tr>
<tr>
<td>Social competency</td>
<td>Social intelligence, assertiveness, cooperativeness and the ability to enlist cooperation, attractiveness, affiliativeness, nurturance, sociability, interpersonal skills, social participation, tact, diplomacy, empathy, social insight, and attributional accuracy</td>
</tr>
<tr>
<td>Emotional competency</td>
<td>Emotional intelligence, emotional maturity, self-confidence, self-esteem, self-efficacy, hardiness, and optimism</td>
</tr>
<tr>
<td>Character competency</td>
<td>Integrity, honesty, moral reasoning, resilience, and discipline</td>
</tr>
</tbody>
</table>

Analyzing leadership traits is only one way to look at leadership but Lord, De Vader, & Alliger (1986) indicate, “Critics state, trait theories have not been seriously considered by leadership researchers since Mann (1959) and Stogdill (1948) reported that
no traits consistently differentiated leaders from nonleaders across a variety of situations” (p. 402). To fully understand leadership, it is important to study not only how someone does something but the impetus behind how they do it.

**Leadership Behavior**

Behavioral theories began emerging in the 1950s. They attempt to examine effective leadership behaviors. These theories are different from trait theories in that they posit that leadership can be learned through gaining specific skills and training (Kezar et. al, 2006). Behavioral theories in mind, an array of leadership programs, seminars, and books have been developed. These have ranged from fanciful popular psychology to highly developed empirical research.

Blake and Mouton (1964, 1981) helped to set the platform for many of the empirically-based studies on behavioral leadership. They put together an outline of management orientations through a behavioral lens. Their Academic Administrator grid assessed five major management styles based upon behaviors such as concern for others to concern for performance. They factored in the elements of decision-making, response to conflict, convictions, emotions, and effort. (Blake & Mouton, 1981).

Response to conflict, having strong convictions, and leading with an element of emotion fall under a behavioral leadership method deemed “Relational Management.” Uhl-Bien (2006) described relational leadership as this, “A social influence process through which emergent coordination (i.e., evolving social order) and change (e.g., new values, attitudes, approaches, behaviors, and ideologies) are constructed and produced” Specifically, “This perspective does not restrict leadership to hierarchical positions or roles” (p. 654). In relational management, leadership occurs when leaders and followers
develop mutually understood and beneficial relationships and where the leader then becomes an influential figure. The more that the leader and the follower create bonds in terms of shared experiences and contexts, the more productive the relationship becomes.

Behavioral theorists have been critiqued for not demonstrating an “adequate relationship between leaders’ behaviors and outcomes” (Kezar et al., 2006, p. 10). It is also felt that context is lacking with these theories. With this in mind, Yukl (1998) suggested that learning leadership behaviors should be based upon specific skills in certain situations. As leadership theories continued to develop, the importance of context has received more attention.

**Power and Influence of Leaders**

Theories that may better address situational context might fall under the category of power or influence theories. These theories deal with the situational social exchange process connected with the attainment and use of power (Burns, 1978; Etzioni, 1961; Homans, 1958; Zahn & Wolf, 1981). These theories also draw attention to the leader and follower relationship and how that is affected by the situation at hand.

French and Raven (1959) were early power and influence theorists who believed that different types of power could be categorized. They identified five major types of power: Reward, coercive, legitimate, referent, and expert. Reward power consists of the ability to provide rewards in exchange for action. The individual in the position of being able to give reward is considered to be in a position of stature. The concept of coercive power is similar to that of reward power but in this case, there is a negative impact if the follower does not oblige the leader instead of a positive one. Legitimate power comes from both a follower and a leader believing that their roles make sense. This may come
from a disparity in experience, education, even age but, for both individuals, there is no question about the legitimacy of their role (French & Raven, 1959). French and Raven (1959) explained that referent power is about mutual respect and even awe on the part of the follower who feels they have something to learn from the leader. Referent power may be similar to the mentor/mentee relationship; the follower chooses to follow. Lastly, expert power is all about expertise and the belief that the leader has “superior knowledge or ability in very specific areas” (French & Raven, 1959, p. 352).

The various forms of power, as outlined by French and Raven (1959), have been related to various aspects of university presidential leadership. Fisher and Koch (1996) applied the aforementioned power categories to the presidential role. In doing so they claimed that there is an order to the types of power in terms of their importance and how effective they are: (1) referent, (2) expert, (3) legitimate, (4) reward, and (5) coercive. They found that an effective university president should incorporate aspects of power and charisma. “Charismatic leaders have an extraordinary ability to inspire trust, loyalty, confidence, and performance” (Fisher & Koch, 1996, p. xii). However, Fisher and Koch also felt that a presidential leader must be transformational in their leadership. The concept of transformational leadership will be discussed at greater length later in this literature review.

Burns (1978) weighed in on power as a two-way relationship dependent upon the needs of both the leader and the follower, “Power wielders draw from their power bases resources relevant to their own motives and the motives and resources of others upon whom they exercise power” (Burns, 1978, p. 17). Power can take on many forms in this process including money, information, status, and political connections. Power relies
heavily on skills such as communication, timing, and judgment (Burns, 1978). From the basis of power being related to need, Burns developed three oft-cited leadership theories: transactional leadership, transformational leadership, and moral leadership.

**Transactional and Transformational Leadership**

Transactional and transformational leadership theories are still considered power and influence theories (Burns, 1978; Kezar et. al, 2006). However, Burns (1978) describes leadership as the “opposite of brute power” (p. 4). Burns viewed leadership as more of a joint effort, “a more socialized, collective, objective phenomenon, in the sense of persons requiring something needful in the view of others, as well as themselves” (Burns, 1978, p. 64).

The role that *need* plays is vital in the discussion of transactional and transformational leadership. We have all heard of Maslow’s (1943) hierarchy of needs. Basic needs must be met in order to address higher, subsequent needs. The basic needs are air, food, water and other psychological needs which are all key to survival. Next in the hierarchy is the concept of safety and the ability to function without fear for one’s life. Safety can also relate to the concept of employment; addressing an individual’s desire for job security and protective benefits such as health insurance and retirement savings (Maslow, 1943). Next up is the need for love or belonging, followed by esteem which includes desire for achievement, adequacy, and confidence and recognition and the importance of appreciation. A main tenant at this level is to feel “being necessary in the world” and without meeting these needs, one may feel discouraged and helpless (Maslow, 1943). The peak of Maslow’s hierarchy is self-actualization, referring to “become actualized in what he (she) is potentially. This tendency might be phrased as the
desire to become more and more what one is, to become everything that one is capable of becoming” (p. 383).

Each time one’s needs are realized they look to the next level i.e. only when one has the basics: food, shelter, safety, and security, can they focus on being the best that they can be. Burns (1978) argued that leaders should aim to address the needs of followers and based his transactional, transformational, and moral leadership theories on this concept.

Transactional leadership is defined when “leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or subsidies for campaign contributions” (Burns, 1978, p. 4). Transformational leadership is a more complex effort and is defined by a leader looking for “potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower” (Burns, 1978, p. 4). Tying it back to power and influence theories, transactional leaders may exchange rewards or punishment for following or not following. Transformational leaders align themselves more with followers; appealing to their higher needs, and inspiring followers to move forward to a particular purpose (Bensimon et. al, 1989). Transformational leadership has ethics and a moral purpose (Burns, 1978) and is focused on matching leadership styles with followers’ needs and values (Kezar et. al, 2006).

One finds that aspects of context begin to appear more broadly in power and influence theories but there are theories that hinge much more strongly on context.

**Contingency Theories**

Fiedler (1970) pointed out that various types of people can be in leadership positions. He uses a study of Belgian naval officers to prove his point. He found that the
naval officers could be trained to become self-aware of their own leadership styles and how to apply the appropriate style at the right time to ensure success. He found that the more structured and routine tasks called for a more “managerial” and directive approach (p. 63). In more unstructured situations (such as times of crisis) there was need for increased discussions, meetings, and conferences in an effort to access various viewpoints and enhance buy-in. In an attempt to be most effective, leaders should enact various strategies at various times and that power can be used in flux (Fiedler, 1970).

Kaiser and Overfield (2010) studied leadership flexibility in terms of the ability to change behavior in response to changing work conditions. This is known as flexible leadership, they proposed the following definition:

Based on the literature, we propose the following definition of flexible leadership: 

*adjusting one’s leadership style, method, or approach in response to different or changing contextual demands in a way that facilitates group performance.*

It is implied that flexible leadership requires a wide behavioral repertoire corresponding to the many different types of social and organizational roles that leaders need to perform. It is further assumed that flexible leadership depends on knowing when to do what, and being able to skillfully execute what needs to be done (Kaiser and Overfield, 2010, p. 106).

Kaiser and Overfield (2010) studied a sample of ratings done by coworkers for 484 managers. They found that, “Flexibility in terms of how one leads drives subordinate attitudes, flexibility in terms of what organizational issues leaders focus on drives team results, and both forms of flexibility affect the perceived effectiveness of managers” (p.
115). This implies that a flexible leader, willing and able to adapt to situational contexts, is well-received.

Contingency theories do a good job of addressing context but alone they may be too narrow of an approach. This literature review has touched on the traits and behaviors of leaders as well as how power, influence and context play a role, but what about the internal thought processes of the leader and the various perspectives that a follower might take? There is a set of theories that place greater emphasis in these areas.

**Cognitive Theories**

Cognitive theories emphasize how individuals think and feel about leading and leadership. Cognitive theories shed light on “the mental process of leaders or other individuals involved in leadership processes” (Kezar et al., 2006, p. 46). The cognitive leadership theory shares a founding father with the contingency theory. Fieldler (1987) focused his Cognitive Leadership Theory on intelligence and the idea that a leader is in a constant state of choice and control over how the respond. Later, Fiedler (2001) threw the concept of experience into mix and suggested that there are situations where one’s experience has to kick in and override their cognitive thought, “organizational culture, practices, or conventions, may block leaders from effectively using their cognitive resources” (p. 132). While Fiedler gives examples of military leadership and fire department captains as an extreme he ultimately lands at the idea that IQ plus experience = performance.

Further research about the cognitive processes of leaders and followers is needed. Fielder points out flaws of cognitive leadership theorists himself, “First, they assume that having more of a desirable attribute like intelligence or experience will necessarily result
in better leadership performance. Second, they assume that individuals will make effective use of their abilities and skills, regardless of the nature of the leader’s immediate work environment (the “leadership situation”)” (Fiedler, 2001, p. 137). Additional examination of the cognitive theory along with other theories on leadership will help to increase the understanding of effective leadership, a concept that continues to be complicated and hard to qualify.

**Cultural/Symbolic Theories**

A thorough review of leadership theories and attributes is not complete without a look beyond context and behavior into the sociological aspects of working in a “group” environment or with a group mentality. Leadership might be slightly simpler to understand if it was all a 1:1 relationship, but that is not realistic. If one is to take a well-rounded approach to leadership, one must pay attention to the clues that a community of individuals puts forth and what is important in terms of culture, symbols, and sense-making. (Berquist, 1992; Bergquist & Pawlak, 2008; Schein, 1996). This concept is certainly relevant in the higher education environment where leadership must be mindful of a particular institution’s culture and values. “Rituals and stories make leadership a “meaningful” process that acknowledges context and interaction as well as symbols (Kezar et. al, 2006, p. 7). These symbols, rituals, and stories combined make up an organization’s culture. Schein (1985) provided a detailed definition of organizational culture as:

A pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that has worked well enough to be considered valid, and
therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems. (Schein, 1985, p. 9)

Later, Schein (1996), expanded upon his original definition of organizational culture as “the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments” (p. 236). A key aspect of culture is that the rules are often subtle and one would be hard-pressed to find them written down in any sort of comprehensive fashion. Culture can be so subtle that workers are not aware of their own culture until they experience a new one (Schein, 1996).

In reviewing qualitative and quantitative works, Schein (1996) put together three cultural definitions of managers: the operators, engineers, and executives. Schein saw the operators as the most common form of manager. These are the managers that assist with carrying out daily duties of an organization’s mission (Schein, 1996, p. 236). This type of manager might describe their own style as, “I won’t ask my subordinates to do any task that I wouldn’t take on myself.” These managers may have risen from the “ranks” themselves and therefore have the perspective that the work, at every level of the organization, is equally important. The next type of manager, the engineers, are intent on design structures that help to make the operation more efficient, they are often strategic, thinking slightly outside of the box and often incorporate the use of technology. This type of manager seems to fit the evolving role of the registrar described in the beginning of this literature review but, the problem is that this type of manager may not be able to address the other needs in the office and therefore may have trouble if they are the overall leader at the helm of a group versus one of a number of leaders within an organization.
Schein (1996) makes an important point that the “operators” and “engineers” may disagree in how to carry out the organization’s mission with operators utilizing a more human approach and engineers focusing on an alternative, technical solution (Schein, 1996). Top-level executives, including CEOs, would be found in the executive category. This is a manager often felt to be out of touch and yet this manager is charged with having a more global view and being able to see the different pieces of an organization and how they interact, most importantly, this type of leader often has to factor in the external environment and juggle competing demands and needs.

Culture continues to be a popular topic due to the complex and “baffling” dynamics of organizations (Bergquist, 1992, p. 1). Berquist and Pawlak (2007), building on Bergquist’s own earlier work and the work of Tierney (1988), went beyond looking at a single institution or organization’s culture and identified six broader cultures within academic institutions. Bergquist conducted a literature review and identified collegial, managerial, developmental, advocacy, virtual, and tangible cultures, which are different in history, perspectives, and values. These cultures are: The Collegial Culture, The Managerial Culture, The Developmental Culture, The Advocacy Culture, The Virtual Culture, The Tangible Culture (Appendix B).

The six cultures shed light on the variety of organizational contexts in higher education and are thought to be present in all institutions (Bergquist & Pawlak 2008). Bergquist (1992) proposes that there is often one main culture with other cultures operating in a secondary capacity. This concept of leadership against the back-drop of organizational culture is a key consideration for higher education leaders.
A variety of leadership theories have been discussed in this section, some building off of other(s). Along these lines, some important leadership theories utilize combined aspects of the previously discussed themes. Bolman and Deal (2008) proposed a multiple frame model of leadership that combined aspects of cognitive reframing depending upon the situation and context, and Bass (1985) created the Multifactor Leadership Questionnaire, which addresses aspects of transactional and transformational leadership along two additional variables (effective versus ineffective and active versus passive). Likewise, the competing Values Framework is a synthesis of organizational and leadership theories, and posits that most organizations or their leaders, can be characterized along two dimensions, each representing alternative approaches to basic challenges that all organizations must resolve in order to function. Therefore, a combination of theories or approaches to managerial or leadership effectiveness may make more sense than a single theory.

**Organizational Effectiveness and the Competing Values Framework**

Arguably all leaders are concerned with the concept of organizational effectiveness (Bass, 2008; Bolman & Deal, 1994, 2008; Quinn & Rohrbaugh, 1981). Different individuals have a different view of what makes an organization effective. For example, an Enrollment Services manager is concerned with admitting and graduating students in an efficient manner while a University Comptroller might be considering the best use of funds and how to pay the bills, a dean or faculty member may be focused on the quality of teaching while the average student may define an effective institution by an attainment of quality employment following graduation. In order to be effective,
organizations and managers must address these competing values (Quinn & McGrath, 1982).

Numerous researchers have attempted to define the attributes of an effective organization (Quinn & Rohrbaugh, 1981). In the early 1980s, organizational researchers Quinn and Rohrbaugh (1981) developed the Competing Values Framework as a conceptual framework to integrate criteria of organizational "effectiveness." The first set of competing values is the degree to which an organization emphasizes centralization and control over organizational processes versus decentralization and flexibility. The second set of competing values is the degree to which the organization is oriented toward its own internal environment and processes versus the external environment, and relationships with outside entities, such as: regulators, suppliers, competitors, partners and customers. Cross-classifying organizations on these two values dimensions results in four archetypes, referred to as hierarchical, rational, entrepreneurial, and team cultures.

The competing values framework has two axes with two extremes on each axis (flexibility versus control and internal versus external). Four quadrants are proposed: rational goal, open system, human relations, and internal process. Output and quality are a balance of the four quadrants in the center:
A key to an organization’s effectiveness and success is the leadership of the organization and specifically how leaders manage. The Competing Values Framework addresses a transformational cycle at the individual level (Quinn & McGrath, 1982). This framework is strongly applicable to someone in the registrar role especially given that juxtaposition exists in leading an office that can be considered the skeleton or spine of an institution but also its face or most exposed feature. Virtually every entity on campus (from students to faculty to administrators) interacts with the registrar’s office as do members of the public. As such, there is a need to serve a back-end *purpose* and a front-end *service*. The Registrar’s Office is often misunderstood. The office rarely sets policy and yet is responsible for its enforcement. The work of a registrar’s office can be highly

<table>
<thead>
<tr>
<th>Human Relations Model</th>
<th>Open System Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flexibility</strong></td>
<td></td>
</tr>
<tr>
<td>Means: Cohesion; morale</td>
<td>Means: Flexibility; readiness</td>
</tr>
<tr>
<td>Ends: Human Resource Development</td>
<td>Ends: Growth; resource acquisition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Process Model</th>
<th>Rational Goal Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td>Means: Information management; communication</td>
<td>Means: Planning; goal setting</td>
</tr>
<tr>
<td>Ends: Stability; control</td>
<td>Ends: Productivity; efficiency</td>
</tr>
</tbody>
</table>

Figure 1. Competing Values Framework from Quinn and Rohrbaugh, 1981, p. 269.
sensitive, confidential, of great value and significance to its constituents (grades, graduation, etc), time-sensitive, and complex. The work can also be mundane and thankless. In addition, technology is changing the work of the Registrar in fairly dramatic fashion. The effectiveness or ineffectiveness of a registrar’s office has implications for student satisfaction and success which in turn relates to recruitment, retention, and graduation. This in turn justifies an institution’s existence and either helps to secure or hinder institutional stability and/or growth. Quinn and McGrath (1982) described the nature of the competing values framework,

The criteria seem to initially carry a conflicting message. We want our organizations to be adaptable and flexible, but also want them to be stable and controlled. We want growth, resource acquisition, and external support, but we also want tight information management and formal communication. We want an emphasis on the value of human resources, but we also want an emphasis on planning and goal setting. (Quinn and McGrath, 1982, p. 49)

Models and Studies Related to the Competing Values Framework

Bolman and Deal’s Multiple Frame Leadership Model (2008) closely parallels the Competing Values Framework. The multiple frame model outlines when a leader should choose a specific frame (Bolman & Deal, 2008, p. 317). The frames themselves are reached by asking questions as presented in Table 5:
When a should a leader choose a specific frame (Bolman & Deal, 2008, p. 317).

<table>
<thead>
<tr>
<th>Question</th>
<th>If Yes:</th>
<th>If No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are individual commitment and motivation essential to success?</td>
<td>Human resource, Symbolic, Structural</td>
<td>Political</td>
</tr>
<tr>
<td>Is the technical quality of the decision important?</td>
<td>Structural</td>
<td>Human resource, Political, Symbolic</td>
</tr>
<tr>
<td>Are there high levels of ambiguity and uncertainty?</td>
<td>Political, Symbolic</td>
<td>Structural, Human resource</td>
</tr>
<tr>
<td>Are conflict and scarce resources significant?</td>
<td>Political, Symbolic</td>
<td>Structural, Human resource</td>
</tr>
<tr>
<td>Are you working from the bottom up?</td>
<td>Political</td>
<td>Structural, Human resource, Symbolic</td>
</tr>
</tbody>
</table>

Bensimon (1989) researched 32 university presidents through semi-structured interviews and assessed four frames that are very similar to those presented by Bolman and Deal, including bureaucratic (similar to structural), collegial (similar to human resources), political, and symbolic. Out of the 32 presidents, 13 used one frame, 11 utilized two frames, seven took on three frames, and one used four frames. Of the 13 presidents that used a single-frame orientation, five used bureaucratic and four used collegial frames. For the 11 presidents who used two frames, the collegial and symbolic combination was used most (from five presidents) while the collegial and political pair was utilized three times. Within more than three frames used, the
collegial/political/symbolic combination was used most frequently (by five presidents) (Bensimon, 1989).

Thompson (2000) used the Leadership Orientation Survey (Bolman & Deal, 1991) and Competing Values Leadership Instrument (CVLI) to address aspects of gender in relation to leadership and the four frames. Thompson (2000) found that educational leaders who use three or four leadership frames are “perceived to be more effective” (p. 983). In addition, results indicated no differences in leadership effectiveness between males and females. Results from this study were generated from a sample of 57 educational leaders at both K-12 and higher education levels and 535 subordinate participants. Of the 57 leaders, five were of lower management, 25 were from middle management, and 26 were from upper management. Thompson (2000) found that leadership types are the same for males and females. Analysis was conducted through a multivariate analysis of variance with leadership type from the Bolman and Deal LOS and gender as independent variables, and results from the CVLI as a dependent variable.

Parker (2004) is another researcher who utilized the competing values framework to examine leaders and their leadership style. Parker conducted a national study of 94 managers in the Agricultural Communications and Information Technology field. Her interest was in the Cooperative Extension branch of Higher Education and she posited that in order to remain viable, the managers of these branches must keep their operations relevant in a time of rapidly changing communication (internet, social media) and technology. Her goal was to examine the leadership styles of the managers to look for strengths as well as areas for improvement. Parker used the eight roles or behaviors identified in the Competing Values Framework.
Parker (2004) wanted to know if there was a difference among the manager roles preferred by agricultural communications leaders, information technology leaders, or leaders of combined agricultural communications and information technology units at land-grant institutions that are state partners in USDA-CSREES? She was also interested in if there was a difference between the manager roles preferred by men and women? Last, she wanted to determine if there was a difference based on other demographic factors, such as: age, education, department structure, units supported, years of employment, years of leadership experience, and region of the country employed?

Parker used a two-part instrument for the study, one was a tool to collect basic demographic information from survey participants and the second was the Competing Values Leadership Instrument: Self-Assessment developed by Quinn (1988), which is comprised of 16 statements. The results of Parker’s study did not show a significant difference in the leadership hat worn based on type of unit managed and the scope of the leadership role. As for research question two, there was only one area in which women showed a much stronger preference for a specific leadership style (that of producer) and
for all other styles, men and women were fairly evenly matched in their choices. When accounting for demographic variables, only one factor made a significant difference in the responses and that factor was the region of the country that the respondent was working in. Specifically, those from the Southern Region aligned more with the Coordinator role. Overall, the managers in this study assessed themselves above the midpoint of each of the leadership styles put forth on the instrument by Quinn (1988). However, “Quinn (1988) suggests the goal is to become a "master manager" by excelling in each of the eight roles. Quinn’s first implication is obvious, that all managers will become adept in each role. The second implication is somewhat subtler, that good managers will achieve balance in executing all eight roles.” (as cited in Parker, 2004, Achieving Strength an Balance in Leadership Roles section, para 1).

Zaft, Adams, and Matkin (2009) felt that identifying the leadership skills of engineering students and them measuring how those skills impacted team effectiveness would help to prepare students to work more effectively in a team environment post-graduation. They hypothesized, “Teams with high behavioral complexity will perform better than teams with low behavioral complexity” (p. 273). For the purposes of their study they signified high behavioral complexity as a student using three or four of the leadership styles and low behavioral complexity as student exhibiting zero, one, or two of the profiles from the competing values framework. Their study took place at a Midwestern University with high enrollment. They had an 80% participation rate (81 out of 101) of junior and senior students. Participants completed a self-evaluation and then a Likert-scale survey regarding their attitudes toward teams. The results showed that teams who had leaders with high behavioral complexity, outperformed teams with leaders who
had less behavioral complexity (in terms of final grades in the class). However, when it came to attitudes (an element of effective team behavior), “The findings demonstrate that the attitude of the team members was somewhat indifferent toward their teaming experience (Zaft, Adams, & Matkin, 2009, p. 278).

Researchers cite frequent uses of the Competing Values Framework (CVF) in looking at the Healthcare field. In 1999 the CVF was applied to data collected from 300 hospital managers and supervisors in a large Midwestern city in the U.S. (Kalliath, Bluedorn, Gillespie). Like others, the researchers wanted to see how the CVF operated as a representation for how organizations meet internal needs, balanced with external demands, spurred by competition and the need for growth. A 16 item competing values scale was used, adapted from the CVF model and the structural equation modeling (SEM) was used. The researchers felt that,

The present study contributes to the literature by adding a third statistical procedure, namely, SEM. We believe that if the results support the model, a triangulation strategy increases the confidence we have in the numerous students that have used the CVF to investigate multiple organizational phenomena (p. 153).

The researchers did find positive correlation and concluded that the question of what makes one organization more effective than another is an old one but that new research can provide new insight and research should continue to be conducted using different setting, populations and methodologies.

Enter a 2006 study undertaken as an attempt to assess whether the above study results would hold true when administered to non-supervisory employees in the
healthcare industry. The same instrument was applied consisting “of 16 items, measuring the four organizational cultural archetypes over four organizational domains or dimensions: facility character, cohesion, managers, and emphasis” (Heilfrich, Yu-Fang Mohr, Meterko, & Sales, 2007, p. 4). 71,776 employees from 168 VHA hospitals responded by scoring each survey item on a 5-point Likert scale. Exploratory and confirmatory analysis was conducted on the data. The result was that the researchers found issues with properties of the CVF subscales when applied to non-supervisory employees. “Employees did not appear to distinguish among entrepreneurial, team, and rational cultures. Furthermore, the subscales had mediocre reliability” (p. 9). Overall, the researchers felt that their study raised questions about the validity of CVF-based instruments when applied to certain populations because there can be a difference in perception among different organizational cultures.

Studies of leadership are closely tied to investigations of cultural and how an organization aligns itself with particular values or frames. Berrio (2003) undertook an organizational cultural assessment utilizing the competing values framework. The focus of her study was the Cooperative Extension Unit of Ohio State University. The members of the unit described the unit as client focused, proactive and successful. Citing research that highlights a connection between organizational performance and business results, Berrio’s goal was to look for the dominant leadership and organizational focus of the Extension by using an evaluation survey administered to a sample of the organization’s 965 personnel in over 88 Counties. The survey questions utilized came from Cameron and Quinn’s (1999) “Organizational Culture Assessment Instrument. The respondents were asked to think in terms of their current culture and the desired culture for their
organization. The results showed that the organization’s perceived dominant organizational culture was that of Clan. Their desired culture was that of Clan as well. An illustration of this is shown below:

![Competing values organizational assessment of Ohio State University Extension](image)

*Figure 3. Competing values organizational assessment of Ohio State University Extension.*

While there are traits of the other cultural types present (most prominently adhocracy and hierarchy), “The findings of this study are in agreement with the fact that almost two thirds of the colleges and universities in a nationwide study currently have a Clan culture type” (Berrio, 2003). A study by Smart and St. John (1996) showed that administrators, department chairs, and trustees all felt that the Clan Culture was the most appropriate and effective for colleges and universities. According to Cameron and Quinn (2006), the Clan Culture manifests itself as a friendly work atmosphere where there is loyalty and commitment and the leaders act as facilitators. This study showed that not only did the
Extension employees value the culture they currently had but they actually wished for an even stronger adherence to the Clan philosophy.

**Behavioral Complexity**

In the early years of competing values analysis Hart (1993) partnered with Quinn to look at executive leadership (CEOs) and how behavioral complexity; the ability to balance multiple competing roles, relates to business performance and the overall effectiveness of an organization. Hart and Quinn noted that research up to that date presented a unwieldy amount of research and support for why one style of leadership or leadership trait is more effective than another, “On the one-hand, effective leaders are portrayed as visionary, innovative, dynamic, charismatic, transformational, participative and empowering. On the other hand, successful leaders are described as being powerful, assertive, decisive, expert, analytical, stable, consistent, and demanding” (Hart & Quinn, 1993, p. 544). Hart and Quinn wanted to contribute to emerging research devoted to the idea that multiple forms of leadership behavior combined; may be the actual key to effective outcomes. They also felt that study of the highest level of leadership (large firm/corporations), were leadership was perhaps its most complex, was lacking. For their own study, Hart and Quinn looked at 916 high-level executives who responded to questions on their leadership styles as well as their firm’s performance. The questions were based on the competing values framework. In analyzing the responses it was found that the more that the executives saw their job as requiring mastery of all four leadership roles simultaneously, the higher they rated their firm’s performance in terms of corresponding categories of company financial performance, business performance, and
organizational, or stakeholder, effectiveness (compared against similar companies in their market).

In supporting their conclusion Hart and Quinn cite a 1990 study of 24 managers which found that in order to be effective, executives had to both support the status quo and be a model of stability yet also question and challenge norms (Jonas, Fry, & Srivastva cited by Hart & Quinn, 1993). They cite additional studies supporting the fact that, “High performing managers possess heightened levels of cognitive complexity and are able to utilize multiple frames of reference in dealing with problems” (Jacques, 1986; Kegan, 1982; Streufert & Swezey, 1986, Shrivastava & Schneider, 1984; Dreyfus, Dreyfus, & Athanasion, 1986 cited by Hart & Quinn, 1993, p. 155). Last, they mention further research that, “Leadership effectiveness demands not only complex thought processes, but also "behavioral complexity"--the ability to act out a wide range of roles in the interpersonal and organizational arena” (e.g., Torbert, 1987; Quinn, 1988; Hooijberg & Quinn, 1991 cited by Hart & Quinn, 1993, p. 156). Based upon their study and Hart and Quinn conclude that, “The best top managers should thus possess the ability to play multiple, even competing roles in a highly integrated and complementary way (p. 156).

**A Behavioral Complexity Instrument**

Behavioral complexity is “the ability to exhibit contrary or opposing behaviors (as appropriate or necessary) while still retaining some measure of integrity, credibility, and direction” (Denison et al. 1995, p. 526). These opposing behaviors may be organized using the dimensions of the Competing Values Framework (CVF) (Quinn 1988). Lawrence, Quinn, and Lenk (2009) point out that there is value in researching competing values because it establishes the link between cognitive complexity and social behavior.
They specifically looked for a new way to apply the competing values framework with an overarching goal “to advance the research on behavioral complexity by increasing our capacity to measure it” (p. 2). Starting from the premise that a person with high behavioral complexity is able to enact a broader array of behaviors than someone with low behavioral complexity, Lawrence, Quinn, and Lenk (2009) contend that a more highly complex manager is a more effective manager. “While behavioral complexity does not guarantee that a manager will exercise perfect judgment in applying the right behaviors at the right time, it does enable a manager to draw on a wider repertoire of behaviors to effectively meet competing demands (p. 4-5). Their goal was to create a new instrument, but they first had to concede that the Competing Values Framework is one of the more complex theories in existence and is difficult to map out. In a study mentioned previously, Kalliath, Bluedorn, and Gillespie (1999), used Structural Equation Modeling to put the Competing Values Framework to the test. Their study looked at organizational culture in the healthcare industry. Lawrence, Quinn, and Lenk (2009) desired to put forth and instrument that tests individual managerial behavior. In doing so they “expect that empirical tests of behaviorally complex individuals would produce lower correlations between diagonally opposite quadrants” (p. 7).

To test their instrument they surveyed 539 managers prior to their participation in an executive education course. The managers were to respond to 72 questions. The same managers were also evaluated by subordinates on the same scale. The questions were presented in Likert-scale fashion. The goal of the analyses was to come up with a set of questions that could be used to assess managerial behavior in each of four quadrants. The researchers ran their data through a series of confirmatory and exploratory analyses.
including reliability and validity tests: Cronbach’s Alpha, and Chi Square and the Standardized Root Mean Residual. Based on their analysis they were able to move from six behavioral constructs representing each of four quadrants to three, which was then measureable by a 36-item questionnaire rather than the original 72 items.

The final 36-item model included three scales in each quadrant to provide a representative range of complex behaviors. The “People” quadrant measured “encouraging participation,” “developing people,” and “acknowledging personal needs.” The “Change” quadrant included “anticipating customer needs,” “initiating significant change,” and “inspiring people to exceed expectations.” The “Processes” quadrant focused on “clarifying policies,” “expecting accurate work,” and “controlling projects.” Finally, the “Results” quadrant assessed “focusing on competition,” “showing a hard work ethic,” and “emphasizing speed” (p. 16).

In summary, their results reinforced the four quadrant measurement of the competing values framework and indicated that most managers exhibit behavior complexity that crosses at least three of the four quadrants. A versatile leader is one best positioned to handle an environment with competing demands.

The competing values framework has gained credibility over time but it will continue to be studied and assessed in terms of its applicability.

**Leadership within the Context of Higher-Education**

Higher education research has also supported the notion that effective leaders must match the situation in which they function (Vroom, 1983). However, the specific types of situations and leadership approaches have not been pinpointed. Dill (1984) recommends that a facilitator role is most likely to be effective in working with faculty.
For example, a more effective leader in working with faculty was one who “smoothed out problems” and sought resources (Dill, 1984, p. 79).

As Eddy and Vanderlinden (2006) state,

The literature suggests that alternative leadership styles are replacing the traditionally held definitions of leadership and provide new and different (and possibly superior) ways to understand leadership… An understanding of leadership within the realm of higher education relies upon the spectrum of various leadership theories purported over time and across disciplines (p. 6-8).

Higher Education leadership more than many other industries, calls for communication across disciplines, departments, and levels. Leaders are expected to be accountable and yet practice a participatory and “shared governance” leadership style. A UK study (Bolden, Petrov, & Gosling, 2008) points out, it’s believed that a distributive approach i.e. taking a page from many different leadership styles, is appropriate. This study will be detailed below but the real question is whether or not leaders are actually able and willing to practice the distributed leadership approach. 1700 community college administrators were put to this very test. They were given a survey instrument of 34 questions in early 2000 (Eddy & VanDerLinden, 2006). Then emergent coding was done and results compared between two researchers. The results were that, “Few administrators (3.1%) discussed empowering others, mentoring, advocating for others, role modeling, or motivating others as reasons why they were leaders at their institutions (p. 14). An even smaller number of administrators (1.9%) alluded to the concept of team or participative leadership. Coming in at a higher-percentage was the number of administrators who considered themselves change agents and overwhelming, the
administrators ranked themselves as having an authority level in line with the expectations of their position i.e. they have a position of leadership and thus they need to make decisions and take the heat. The conclusion of the research was that, “Currently there is still a reliance on the bureaucratic and reporting hierarchy in how administrators see themselves as leaders” (Eddy & VanDerLinden, 2006, p. 23). There may be more work to be done to match up perceived leadership styles with reality.

Student affairs managers face the difficulty of weaving together fragmented programmatic silos (Kleemann, 2005). This lack of coordination between programs creates service challenges for student affairs administrators. Burnett (2002) reports that there is a mismatch in the organizational structure of student affairs programs and serving students. “Organizational charts are vertical, serving the customer is horizontal,” (Burnett, 2002, p. 3-4). This also presents challenges in organizing to carry out a shared vision and how to handle a more complex world with existing departmental structures (Kleeman, 2005). In attempting to address these challenges, Lovell and Kosten (2000) identified successful administrative traits and skills in student affairs, including facilitation, knowledge of student development theory, integrity, cooperation, technology, assessment, political skills, and public policy knowledge. Higher Education, whether publicly or privately funded is under scrutiny for being slow and even resistant to change and being unwieldy in the face of decrees of low graduation rates and even lower job placement rates. Add those pressures to the need to bring in ever-increasing enrollment numbers, higher-caliber students, and to remain competitive in an expanding market and it is a wonder that anyone would want to put themselves on the line as a leader in the higher education realm. These pressures are not unique to the United States. In the
United Kingdom, there have been serious calls for reform and a sense that only strong and intentional leadership can bring about the type of change demanded for the public good. In the article “Tensions in Higher Education Leadership: Towards a Multi-Level Model of Leadership Practice” (2008) UK researchers lend insight into the following questions:

How is leadership experienced by those involved as it unfolds? And how is personal agency constrained and/or enhanced through access to and control of resources and other sources of power? (Bolden, Petrov, & Gosling, 2008, p. 362)

To answer these questions the researchers used a qualitative research approach, conducting in-depth interviews with 152 university leaders in England, Scotland, and Wales. The goal was to determine which of five different leadership approaches were in use most often: Personal (relying on charisma or a forceful character), social (networking, relationships, and outreach), structural (systems and processes), contextual (leadership out of necessity, when necessary), and developmental (the idea of being influential and making a difference). The result of the interview analysis was that one should use a distributed leadership approach, pulling from each of the five styles, in order to be effective managing, “the complex, varied and sometimes competing objectives of university work” (Bolden, Petrov & Gosling, 2008, p. 364). Still, despite a recognized understanding of a diversified leadership approach, leaders reported having a hard time being consistent in applying the distributive method. In all cases, a dynamic tension was experienced between the need for collegiality and managerialism, individual autonomy and collective engagement, leadership of the discipline and the institution, academic versus administrative authority, informality and formality, inclusivity and
professionalisation, and stability and change” (Bolden, Petrov, & Gosling 364). When it came down to it leaders often abandoned participative methods when it felt as though their jobs or what was good for the university overall was on the line. The interviews revealed a constant push and pull between desired leadership traits and practices and what leaders could maintain in the face of scrutiny. Competing interests resulted in a visible tension for most of the leaders. The researchers conducting this particular study concluded that universities, “usually attempt to resolve their problems either by focusing on key individuals or by restructuring, less often reflecting on the forces that connect people and enable them to work together in pursuit of a common aim” (Bolden, Petrov, & Gosling, 2008, p. 372). Thus a desire for distributive leadership was in conflict with the many competing forces on a higher education leader’s plate. This research concludes on the note that, “by paying close attention to the personal, social, structural, contextual and temporal dimensions of leadership it may be possible to alleviate somewhat the degree to which such forces conflict” (p. 373).

Funding constraints have yielded calls for heightened accountability in higher education (Burke, 2005). Accountability is a highly desired but elusive endeavor. Burke (2005) defines accountability in a number of ways ranging from who is accountable to whom and for what and the demands that are placed on officials in higher education settings. Burke (2005) defines six demands that are placed on officials in colleges and universities: (1) powers must be used properly (2) organizations must show they are working to achieve the mission or priorities that are determined by its office or institution, (3) performance must be reported, (4) accounting for the efficiency and effectiveness for resources and outcomes, (5) ensure quality of programs and services,
and (6) serve public needs. The interpretation of these demands is highly subjective and dependent on the contextual nature of each university department.

To meet the various demands on institutions to do more than just teach a student but provide an overall atmosphere for growth, it isn’t any surprise that the administration areas of higher education have grown over time. Brown (1981) took a look at this very thing when she conducted a longitudinal study of the growth of administration at four public universities in Kansas. Brown starts off by citing a study in which the development of administrative offices was measured in 32 institutions from 1890 when the median number of administrators was three to the 1930s when the number was 30.5. Brown felt it was time to look at the topic again because of complaints of institutions being top-heavy. The overarching goal was to determine if, “increases related to other indicators of growth such as numbers of students enrolled, numbers of graduates, and numbers of faculty members. To conduct this study, a definition of administrator has to be developed while Brown determined that the definition was far from clear-cut, she decided to go with, “any person with a title suggesting administrative duties or responsibilities for supervision” (340). Data were collected from personnel rosters and the most recent catalogs of each of the four universities. While growth in the administrative sector was recorded at all four universities, the interesting finding was that it did not necessarily correlate with growth in enrollment numbers. Instead, as the number of administrators increased, each college showed an increase in its number of graduates. The study was not conclusive due to its scope, scale, and a number of flaws with data collection but it is possible that there is a correlation between more administrative staff focusing on students/student services and more students persisting in school to
completion. Of course there are different levels of administrators with different roles and it is often those at the middle rungs who have the most direct influence over students and how students, parents and faculty are served. A registrar would fit the definition of a midlevel manager.

**Defining Middle Managers and Directors in Higher Education**

Midlevel managers are defined as: “those nonacademic employees classified as administrative, professional and technical staff members, who are in positions below the Dean level. Typical positions include such titles as: directors, managers, coordinators, advisors, counselors, technical and other specialists” (Johnsrud, Heck, & Rosser, 2000, p. 44). Researchers have found that effective middle managers take quick, decisive action, whereas effective executives are more thoughtful and deliberative in making big-bet decisions (Brousseau, Driver, Hourihan, & Larsson, 2006).

Midlevel managers also represent the university to constituents in the academic and public community and “must maintain a balance between their own supervisor's directions and delegations, and the faculty, students, and public who require their support and services” (Johnsrud & Rosser, 1999, p. 121). Middle managers serve key roles in various parts of the institution and are often a first point of contact for numerous constituents, such as parents, students, and community members (Rosser, 2004). Even with hard work and serving challenging institutional roles, middle managers often feel invisible (Johnsrud & Rosser, 1999), are rarely included in the governance process (Henkin & Persson, 1992), feel a lack of recognition for their competence, and report a limited opportunity for advancement (Johnsrud, 1996). Even though they may have these
negative experiences, middle managers still believe they can serve a larger role of leadership:

Though midlevel leaders often feel the pressure to perform, particularly in fiscally austere times, they see the importance of providing effective leadership in their units. By virtue of their mid-level placement within the organizational structure, midlevel leaders are often placed between institutional decision-making and policy implementation (Rosser, 2004, p. 331).

It could be rare to find someone who actually aspired to middle management leadership in the higher education field. You just don’t find many youth that proclaim, “I want to be a Registrar when I grow up” and yet for those that find themselves unintentionally in this place, it becomes about how to be a good leader within the higher education context.

In the article “Leadership as Learning” (Amey, 2005), the author focuses specifically on academic leaders facing diverse and unprecedented challenges. The concept is that for leaders within a higher education context, leadership cannot be a stagnant approach where one identifies a method and applies it in relentless fashion. Instead, leadership is about learning as one goes, and being cognizant of the fact that it is only by having an open-mind that one can deal with the unique aspects of the higher education environment (changing and competing demands, new technologies and systems), and continuously evolve and perfect their leadership style.

Leadership as learning, “invites images of skilled facilitators and navigators of diverse streams of thought who help to craft institutional goals and cultures with the multicultural beliefs and values of others”. It is an interesting concept/approach in that
the leaders, “cultivate a learning organization for themselves, not just for students” (Amey, 2005, p. 692). This approach is presented in the following model:

Table 6.

*Leadership as learning development (Amey, 2005, p. 692).*

<table>
<thead>
<tr>
<th></th>
<th><strong>Stage One</strong></th>
<th><strong>Stage Two</strong></th>
<th><strong>Stage Three</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Orientation</strong></td>
<td>Top-Down</td>
<td>Facilitative, inclusive</td>
<td>Web-like, Servant</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>Bureaucratic, single leader, conflict negotiator, primary communicator</td>
<td>Facilitative, inclusive. Moving towards increasing participation, early sharing of leadership responsibilities, flattening the hierarchy</td>
<td>Guide, facilitator of processes, translator</td>
</tr>
<tr>
<td><strong>Leadership Focus</strong></td>
<td>Task accomplishment</td>
<td>Task accomplishment, establishing learning environment, fostering shared goals</td>
<td>Relationship oriented, serving ongoing cultivation of learning environment</td>
</tr>
<tr>
<td><strong>Leadership as Learning</strong></td>
<td>Defines mission, vision, tasks, direction</td>
<td>Fostering intellectually neutral space to develop cognitive readiness of group members; multiperspective</td>
<td>Cocreating meaning, facilitating learning, skilled convener, interdisciplinary in thought</td>
</tr>
<tr>
<td><strong>Group Member Orientation</strong></td>
<td>Individual task accomplishment</td>
<td>Sense of group goals and parallel work orientation</td>
<td>Self-governing, intellectually connected, interdependent</td>
</tr>
<tr>
<td><strong>Members as Learners</strong></td>
<td>Leader-focused</td>
<td>Increased involvement in and ownership of processes an decision-making, making meaning for self</td>
<td>Cocreating meaning for self and others, sharing and collective leadership responsibilities an group maintenance</td>
</tr>
</tbody>
</table>

The model shows how a leader may begin, in stage one, with a very top-down bureaucratic approach. A leader in this stage would expect subordinates to follow without question, like-wise followers expect the leader to be the primary individual
dealing with conflict and communicating outside of the unit. As this type of leader develops and is open to other approaches, they may move into stage two. A stage two leader is a little more collaborative and inclusive; feeling that it’s pertinent to gather input and to enable team members to make decisions and represent the group in a larger capacity. The developer of this model notes that, “even though philosophically or theoretically this leader transition is necessary for continued learning to occur, it is not the case that members are always comfortable at first with relying on themselves for leadership apart from the designated title holder (Amey, p. 697). However, there is an inherent readiness in followers that will bring them along with leaders who are transitioning. The third stage of the leadership as learning transition sees the leader as more of a coordinator; guiding the team members to accomplish tasks and rely upon themselves.

Another way to look at this is through is through the life-cycle of a team or organization. In its early stages, it may be more heavily reliant upon the leader. As time goes by and trust develops, both the leader and the followers merge into a more shared reliance. In the higher education context, leadership as learning can be particularly appropriate to use in molding newer professionals; whether on the faculty or the administrative side of the house. New hires are often in it for the long haul and if developed properly by a leader who uses a developmental philosophy themselves, they can contribute to the institution and eventually become leaders themselves.

Childs (2012) in the AACRAO Professional Association Publication *College and University*, factors in his own 38 years of experience as a mid-level administrator at Brigham Young University combined with his doctoral studies in Higher Education
Leadership, in coming up with some tips for leaders in higher education. First, he believes one should be intentional and conscious of the business that one is in, “Even though your job may not be in a classroom, you are an educator by virtue of the fact that you work in education (subheading: On becoming an education leader, para: 1). Even if days are spent helping students obtain classes, join a club, or benefit from the recreation center, an administrative leader should keep in mind what the student is really at the institution to seek. Teaching and learning should be at the core of all intentions and if this is the case, it will keep the administrator from getting too caught up in bigger, better, or fancier ways of doing things. Childs next point is to make sure that one differentiates between leadership and management and does this by focusing on leading by example, “One can manage time and money, but one cannot really manage people. People are creative, freethinking individuals who want as much agency as possible to choose what they do” (Childs, 2012, subheading: Leadership starts with self, para. 1). Childs believe leaders should provide others with choices and guide them in making decisions. Another tip from Childs is to focus on being a problem solver and to do so in a collaborative way that recognizes that every individual has strengths and weaknesses. Next, Childs believes one should advocate for students, “When a student can justify his action, help him by making an exception without harming or eroding policy” (subheading: Be an advocate for students, para: 1). Lastly, Childs believes midlevel managers in the higher education context should be bridge-builders, doing what it takes to be a partner and facilitate strong connections across campus. Childs concludes, “Experience has taught that every time you help others on campus to solve a problem, the “bridge” will get stronger” (subheading: Be a bridge builder, para: 1).
The Registrar amongst Academic Leaders

Today’s registrar or the “new registrar” is part of a national movement to integrate the key functional offices that hold responsibility for, or can somehow impact enrollment growth, retention, and graduation rates. “Enrollment Management” is the umbrella term used for the approximately seven functional areas that encompass this movement. In a 1997 study by Huddleston and Rumbough (as cited in Huddleston, 2000, p. 66) the seven areas were identified as: institutional research and planning, marketing, admissions, financial aid, student orientation, retention and advising, and the registrar’s office. Huddleston (2000) explains enrollment management, “Optimally, an institution’s enrollment is comprehensively developed and is based on a strategic, integrative plan that includes the identification, attraction, selection, encouragement, registration, retention, and graduation of targeted student segments” (p. 65).

While the registrar’s office has always encompassed some or all of these duties, the difference for today’s registrar is increased collaboration, increased use of technology, and increased use of data all in an effort to be more strategic about meeting goals. Close relationships with some of the core enrollment management offices have been a part of the long history of the registrar’s office but under this newer and more collaborative context the relationships and the duties continue to evolve as does the registrar’s role at the leadership table.

When looking at enrollment management as a concept, the question of who a registrar’s office should report to comes up, as do the arguments about whether the services make sense under a Provost/President line or a Student Services/Student Affairs line. As a whole, there is much to examine and understand about the registrar/registrar’s
office. A logical starting point was to survey today’s registrars themselves to get an idea for what type of managers they believe themselves to be.
CHAPTER 3

METHODS

Research on leadership and management is abundant. One enduring contribution to the field is Cameron and Quinn’s (1999) Competing Values Framework, which is widely and actively used in management, leadership, and organizational effectiveness research (Yu, 2009). Lawrence, Quinn, and Lenk (2009) used the foundational dimensions of the competing values framework to develop the related idea of behavioral complexity (balancing completing values and demands), as applied to leadership. The construct of behavioral complexity is appropriate to apply to the field of higher education given that funding, growth, technology and the customer-base are continually evolving and complicating the higher education landscape.

While the broad topics of leadership and management are heavily researched, there is less research on mid-level managers in higher education, specifically those defined as administrators. “The administration is an important major unit within the University...The role of the administration is to provide support at all levels and areas of the university (some of its members should therefore reflect a faculty-view, others a university-view) and to perform both stewardship and management functions” (Fielden & Lockwood, 1973, as cited in Lockwood, 1979, p. 300).

There is even less research focused on the registrar position, an administrative role that holds responsibility for various duties. In the early days of the profession, a registrar’s duties were eclectic, “Today, the dietitian had to be seen about an adjustment in the number of student helpers in the dining hall. Yesterday, a department head had to be seen about some data needed to complete the next quarter's course schedule.
Tomorrow, it will be a conference with a department adviser on some matter of record concerning one of his major students” (McGinnis, p. 302). While the variety may have decreased slightly due to new units responsible for their own niche of the university (housing, advising, institutional analysis), “the responsibilities of the registrar are increasing as real-time processing has dramatically changed the way campuses deliver their academic services to students. The campus relies on technology to conduct more of its business, and this has created a greater need for coordination of functions” (Lanier, 2005, p.2).

This study examined the registrar position through the managerial behavior complexity lens. The methods used to execute the study are presented in this chapter. This chapter includes an overview of the research design, the data source from which the population will be drawn, a description of the registrar population and the specific sample surveyed, the data collection process, the research questions, the instrumentation and variables used, how the data were analyzed, and how the human subjects were protected.

**Research Design**

This quantitative study utilized a behavioral complexity instrument, based on the competing values framework, to determine the management behavior complexity profiles of today’s collegiate registrars. A population of 2,840 registrars received an email explaining the study and requesting their participation in an online survey. The online survey contained fifty questions. Thirty-six questions addressed management behaviors and fourteen questions covered demographic categories. The thirty-six management behavior questions were slightly revised as appropriate for the registrar population, and
came from the Behavioral Complexity Instrument (Lawrence, Lenk, & Quinn, 2009). The goal of the study was to answer the following research questions:

1. What is the perceived level of management behavior complexity exhibited by collegiate registrars?
2. Are a registrar’s individual characteristics and institutional characteristics related to their behavioral complexity?
3. Is behavioral complexity related to a registrar’s job complexity?
4. What combination of job complexity, individual characteristics, and institutional characteristics explain a registrar’s management behavior complexity?

The four quadrants of nine constructs are meant to measure the respondent’s proficiency in four areas: Relating to People, Managing Processes, Leading Change, and Producing Results. The demographic questions fell under one of three categories and were analyzed as individual, independent variables. The demographic questions captured individual characteristics such as experience, education, gender, etc.; institutional characteristics such as institution size, location, etc.; and job complexity including number of staff, number of functions managed, etc.; A better understanding of registrars as managers may increase understanding of managerial complexity (the ability to balance between encouraging staff, emphasizing the need for accuracy in work efforts, initiating bold and ambitious projects, producing faster office outcomes) as a concept, and fuel further research on the registrar population.

**Data Source**

The 2013 Higher Education Directory (HED), also known as the Higher Education Publication, Inc. contains the names and titles of approximately 80,000 higher
education administrators. It bills itself as the comprehensive resource for facilitating communication within the Higher Education Community. The first directory was published in 1982 and it is actively maintained today. This study utilized the online version of the directory which has a cost of $125 to access for one calendar year. The directory includes recognized, accredited post-secondary institutions. A search was done using the criteria of position type <Registrar> by state. Administrators do not have to give permission to be included in the HED nor do they solicit inclusion. The HED indicates that they conduct interim updates on their annual publication and note that their information comes directly from the source and that they receive a 99.9 percent response rate when fact-checking (“About Higher Education Publications,” n.d.).

**Population and Sample**

The registrar position was chosen as the subject of this study because of the many competing values and demands at play for this role. The registrar not only “enforces academic policy and data integrity through the maintenance of system controls” (Lanier, 2005, p.2) but “often performs functions of great value other than those assigned to him as part of his job” (Lockwood, 1979, p. 305). The sample was obtained via a search of the HED using position title and state as the defining criteria. The position title chosen was “Registrar”; all fifty states were included in the study. The resulting list was combed for legitimacy; excluding any duplicates, generic email addresses that did not seem as though they would reach an individual entity, or cases in which the email address was not included. The resulting list contained 2,840 names of current registrars from accredited degree-granting colleges and universities.

**Data Collection**
The data for this study were collected via the online survey software Qualtrics. It was assumed that the survey population would be familiar and comfortable with an email survey. The web-based method was thought to be most appropriate given a short timeframe to seek and receive input, as well as the volume and location/proximity of the survey population (Rea & Parker, 2005). In-person, telephone, and mailed surveys would all be more costly, time-consuming, and generally less effective. Typically, the web-based method of delivery is convenient on many counts: 1) allows for fast and efficient data collection, 2) allows the survey respondents to answer the questions when it works best for their schedule and to take the time they need to respond, 3) is easy to follow-up with (send reminders), 4) is confidential and secure, 5) is affordable, and 6) is easy to read meaning there is no need to transcribe or translate handwriting (Rea & Parker, 2005). Perhaps the biggest strengths of the web-format are that the researcher can designate the order in which the respondent sees and answers questions, make questions mandatory, or not allow a respondent to persist if they have a desire to skip questions.

Potential pitfalls with the online survey method were that there was not the opportunity for discussion or for the respondents to ask clarifying questions regarding the survey. Another pitfall was that distributing the survey via the web meant that respondents would not be a captive audience and they could have easily forgotten or disregarded the survey request. Additionally, as with anything technological, there could have been an issue or glitch that interfered with responses (Rea & Parker, 2005).

The survey was distributed in conjunction with an informed consent letter included in the body of the recruitment email as well as in the survey itself. The survey was sent on a Tuesday at approximately 10:00am pacific standard time (pst) with a two-
week deadline for response specified. A reminder was sent at the one week mark. An additional reminder was sent two days prior to the deadline. If a reasonable number of responses had not been elicited in the two week time-frame, the deadline would have been extended an additional week.

The survey was introduced as research for a doctoral dissertation. It was explained that the survey would be used for academic purposes as well as for general research purposes. Respondents were told that their input would inform the field and might be published or otherwise publicized.

**Instrumentation and Variables**

A two-part instrument was used for this study, covering a total of 50 questions. The survey instrument is shown in Appendix A. Part One of the survey instrument was the 36 item Competing Values Framework Managerial Behavior Instrument. This instrument was developed by Lawrence, Quinn, and Lenk (2009) and tested and measured via Structural Equation Modeling (SEM). The instrument acted as a self-evaluation with each question beginning with the phrase, “I would describe myself as being skilled in the following.” Each question was administered with a 5-point Likert-type scale (strongly disagree, disagree, neither agree/disagree, agree, strongly agree), as well as an option of “don’t know,” which was treated as missing data. The questions were interspersed throughout the first part of the actual online survey so that constructs were not grouped together.

Lawrence, Quinn, and Lenk (2009) established the behavioral complexity instrument believing that a rigorous tool for measuring managerial behavior complexity was not yet in existence. The instrument is based on the Competing Values Framework and is
considered a second-order measurement model. It was tested using both Structural Equation Modeling, to account for error in measurement and test the structure of the framework, and via a Circumplex Model to test the relationship between factors. The instrument originally started with 72 questions. “The Cronbach alpha reliability coefficients for the initial 24 scales ranged from .71 to .93. In previous research and in the structure of the survey instrument, all scales met the standard for reliability of .70, recommended by Nunnally (1978). The distribution of the items was not range restricted for any of the 72 items, with responses across the entire range.” (Lawrence, Quinn, & Lenk, 2009, p. 15). The instrument was narrowed to 36 items via exploratory analysis to determine the most effective set of constructs to represent each quadrant and was then retested to positive results, “The final 36-item model included three scales in each quadrant to provide a representative range of complex behaviors” (p. 17). Overall, it was concluded the instrument was a fitting tool to assist researchers in capturing, “the dynamic and contradictory nature of leadership behaviors” (p. 25). Fifteen of the survey constructs (questions) were revised slightly using terms that matched the perspective of a registrar and moving away from terminology based on competition to terminology based on goals/meeting objectives, examples are noted below.

Table 7.

Behavioral Complexity Questions – Revision Examples

<table>
<thead>
<tr>
<th>Original Construct</th>
<th>Revised Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging career development</td>
<td>Encouraging professional development</td>
</tr>
<tr>
<td>Coaching people on career issues</td>
<td>Coaching staff on career issues</td>
</tr>
<tr>
<td>Encouraging direct reports to try new things</td>
<td>Encouraging staff to try new things</td>
</tr>
<tr>
<td>Emphasizing the need to compete</td>
<td>Emphasizing the need to accomplish goals</td>
</tr>
<tr>
<td>Developing a competitive focus</td>
<td>Developing a goal-oriented focus</td>
</tr>
<tr>
<td>Insisting on beating outside competitors</td>
<td>Using goals to assess office performance</td>
</tr>
<tr>
<td>Showing an appetite for hard work</td>
<td>Showing a strong work ethic</td>
</tr>
<tr>
<td>Modeling an intense work effort</td>
<td>Modeling an intense work ethic</td>
</tr>
<tr>
<td>Getting work done quicker in the unit</td>
<td>Getting work done faster in the office</td>
</tr>
</tbody>
</table>
The results were tested with Cronbach’s alpha and for multicollinearity via tolerance and variance calculations. Part two of the survey, designed by the researcher, followed part one and included fourteen questions regarding demographic information pertaining to the respondents’ years of experience, educational backgrounds, gender, institutional characteristics, and immediate organizational environment. The respondents took between 5-20 minutes to respond. The responses were coded for use in SPSS, a statistical analysis software.

**Demographic and Institutional Variables**

The management behavior of collegiate registrars is potentially influenced by a number of factors. This could include the respondent’s professional and cultural background (Bolman & Deal, 1994, 2008), institutional goals (Bolman & Deal, 1994, 2008; Kezar et. al, 2006), the goals of the office (Rayman, 1993), and the institution’s culture (Bolman & Deal, 1994, 2008; Kezar et. al, 2006; Schein 1985, 1996, 2004). A changing workforce that includes generational differences and the impact of technological advances also has the potential to impact management behavior (Presswood, 2011).

In studying person-situation fit, organizational behavior researchers have typically taken one of two broad paths. One has led to exploration of the interaction of individual characteristics and broad occupational attributes, the other to exploration of the fit between specific characteristics of an organization and the people in it. Examples of the second approach range from studying the match of individual skills to job requirements, to studying the relationship between individual characteristics and organizational climate.
Empirical research typically supports the hypothesis that congruence between individuals' background and the demands of their occupations are associated with positive affect (Mount & Muchinsky, 1978).

With the above concepts in mind, demographic variables including individual and institutional characteristics, for this study were collected. Examples of variables addressed by the questions were experience, level of education, major, current institutional size and region of the country, and gender. A copy of the survey is provided as Appendix A. The institution size guidelines were defined by the Carnegie Classification descriptions. Region of the country was defined by the United States Census, and disciplines of major were categorized according to the Faculty Survey of Student Engagement.

**Data Analysis**

Data obtained from the survey responses were analyzed using appropriate corresponding statistical procedures. The analysis of data included descriptive statistics, correlation coefficients, and regression. The probability level was set at .05 relative to the sample size in order to control for Type I and Type II errors. This corresponded with the norm for social science research projects. The analytical approach used for each research question is explained below:

**RQ1: What is the perceived level of management behavior complexity exhibited by collegiate registrars?**

In order to address Research Question One a descriptive analysis was run. The respondents answered survey questions corresponding to each of the four quadrants of the behavioral complexity table (based on the competing values framework). The nine
scores within each quadrant were averaged to create a single score that represented each individual quadrant (four quadrant mean scores, per respondent). The four quadrant mean scores were then averaged together, resulting in a total mean score that corresponded with the behavior of each respondent (a total mean behavior score). Next, a mean absolute deviation (MAD) was calculated to establish the average distance of the quadrant mean scores from the total mean score. This was a novel approach devised for this study. The MAD represented each individual’s complexity score. Each respondent then had a behavior score and a complexity score. To finish the analysis the respondents were ranked, first by their MAD (lower scores indicate that the four quadrant mean scores are closer together) and then by their total average mean (higher total average mean indicates a participant has more attributes of each quadrant). Respondents needed to rank at a three or more for each quadrant, and for the total average mean, to qualify as behaviorally complex. The average of three was chosen because the scale ratings are from 1 – 5, and 3 is past the midpoint for each item. There may have been respondents whose average rating in each quadrant was a one, for example, and although this individual would demonstrate even ratings across all four quadrants, the low ratings could indicate weak management skills in each of the areas. The order rankings of the respondents, from lowest MAD, and secondarily, from highest to lowest total average mean, represented the highest to lowest behaviorally complex individuals. Thus, after calculating the total average mean score and the MAD, each respondent was ranked relative to the others from most behaviorally complex to least behaviorally complex.

Research Questions 2-4 were approached using exploratory analysis:
RQ2: Are a registrar’s individual and institutional characteristics related to their behavioral complexity?

Research Question Two entailed establishing scores for questions related to individual and institutional characteristics and then comparing those scores with the respondent’s level of behavioral complexity to determine if any themes were present. Respondent demographics were the independent variables and management behavior complexity level was the outcome or dependent variable. Pearson Correlation Coefficients were run followed by a backward stepwise regression, given that there was not a prior determination of variable importance indicated in the literature. The regression formula was as follows: \[ Y = a_0 + a_1x_1 + a_2x_2 + \ldots + a_nx_n \] (Keppel & Wickens, 2004). \[ Y \] represented the level of behavioral complexity as identified in the analysis for Research Question One. \( x_n \) corresponded with individual and institutional characteristics as defined by the survey items in Part B of the survey instrument.

**Individual Characteristics**

The independent variables chosen to represent the category of individual characteristics were questions related to experience (total number of years as a registrar and number of years in current position), education (highest degree earned and discipline), and gender. Gender (sex) was chosen as a variable because it is a factor often studied and it may tell us something innate about the respondents that also relates to how they manage and their level of complexity. There are “stereotypical assertions that, “masculinity” equates with leadership and “femininity” does not” (Thompson, 2000, p. 970). Highest degree earned and discipline may demonstrate that time spent as a student of higher education influences how one manages. Likewise, the type of degree earned
may have implications for how one applies theory to practice. The years spent as a registrar may reveal whether experience has anything to do with managerial behavior complexity or conversely whether time spent in a role breeds inflexibility. Lastly, the number of years in current position and the number of years at current institution will reflect the concepts of familiarity, fresh ideas/perspective, and ability to enact change.

Institutional Characteristics

The institutional characteristics for the study come from the concept of Where You Work Matters (Hirt, 2006) and included the region of the country the respondent’s current institution is located in, as well as institutional type, funding classification (public v. private, etc.) and, size. The system of higher education in America is structured around types of organizations that are distinctive in their missions, and the students they serve. Hirt, Collins, and Plummer (2005) identified three themes of workplace differences: Work environment, work pace, and the production of work (p. 2). Their research also noted, “Work at community colleges and research universities is more bureaucratized than at other types of campuses” while “those at liberal arts and religiously affiliated institutions report their environment as being far more centralized than their counterparts, as well as far less professionalized” (p. 4).

The Carnegie Classification of the respondent’s current institution (e.g. two-year, four-year, doctoral granting, etc.) reveals something about the institution’s purpose and mission and may lend insight into how complex the registrar’s job is at a particular institution. Likewise, the size of the respondent’s current institution may mean that the registrar is managing a wider variation of tasks on a larger scale, or it could mean that the registrar is not directly managing people and has other leadership staff to cover specific
areas and thus the competing demands are dispersed across staff. Conversely, a smaller institution size could result in a registrar who has to do some of everything or is very hands on in all facets of the job. The number of years that the respondent’s current institution has existed may point to whether the institution is still getting its feet wet and “finding itself” or whether protocol is steeped in tradition and responsibilities passed down in a very formal manner. Last, different regions of the country may have different cultural norms that could result in the registrar approaching their work from a different perspective or could change the expectations or priorities placed on the registrar.

**RQ3: Is behavioral complexity related to a registrar’s job complexity?**

Research Question Three was answered by first running Pearson Correlation coefficients to link level of management behavior complexity with scores from each of the four job complexity questions. Pearson correlation coefficients are appropriate as they are used to assess if a relationship exists between variables. This allowed for a broad overview of how job complexity factors may relate to behavioral complexity. The Pearson correlation coefficients were run in SPSS version 20 (2011) and the independent variables of job complexity were ordinal in nature. The Pearson Correlation Coefficients were followed by running a backward stepwise regression with all of the job complexity variables included.

The demographic questions that addressed the complexities of the job were the total number of staff in the respondent’s office, the number of staff directly reporting to the respondent, the number of staff with supervisory responsibilities, and the number of functions managed within the respondent’s span of control. The total number of staff has implications for how hands on the respondent must be within their office, as well as how
adaptable their management skills must be as possibly the more staff one has, the more personalities to manage. The number of staff directly reporting to the respondent, and the number of staff with supervisory responsibilities may indicate whether there are layers of leadership and whether the respondent is directly responsible for most of the office, or is responsible for a small number of staff who in turn are supervisors themselves. The number of functions within the respondent’s span of control will help to illustrate the scope and scale of their level of responsibility.

**RQ4: What combination of job complexity, individual characteristics, and institutional characteristics explain a registrar’s management behavior complexity?**

Research Question Four involved multiple regression analysis with a regression being run to determine if the elements of individual characteristics, institutional characteristics, and job complexity contribute to higher or lower levels of overall management behavior complexity. The following regression formula was used (Keppel & Wickens, 2004): \( Y = a_0 + a_1x_1 + a_2x_2 + \ldots + a_nx_n \). \( Y \) represented behavioral complexity, \( x_1 \) will corresponded to the first demographic characteristic, \( x_2 \), and \( x_3 \) to the third.

**Protection of Human Subjects**

The research procedures were designed with the protection of participants or human subjects in mind. The researcher and dissertation chair applied to the Institutional Review Board for human subjects’ research approval. The survey sample population was provided with the conditions for informed consent in the recruitment e-mail. This included an explanation of time commitment, benefits, and risks. Procedures for confidentiality were also included in the recruitment email specifying: “*All individual responses for this research will be held confidential and will only be viewed by the*
researcher and the researcher’s dissertation chair. While the results of the study may be of interest to you and may be a useful contribution to the study of management and the registrar field, there are no direct benefits to you from participating, nor are there any risks besides those of everyday life. Information collected from this study will be kept in a password protected website (Qualtrics, an online survey website) with access allotted only to the researchers for this study. To participate, please click on the link for the informed consent for this research and survey.”

Summary

This chapter provided an overview of the research design, participant selection, data collections procedures, data analysis and ethical considerations. In studying the concept of behavioral complexity and how that might relate with one’s individual, institutional, and job characteristics, the use of the quantitative methodology was deemed appropriate because of the explanatory nature of the study and the limited knowledge available on this topic of inquiry.
CHAPTER 4
RESULTS

The results of the study are presented in this chapter. The chapter begins with a descriptive overview of the survey respondent demographics. Next, reliability analyses are covered pertaining to each of the constructs (nine questions each) representing the four behavioral complexity quadrants. This reliability analysis was run to assess Cronbach’s Alpha for all behavioral complexity constraints by quadrant, given that there was some minor adjustment to the questions in Lawrence, Quinn, and Lenk’s (2009) original behavioral complexity instrument. These minor adjustments were an attempt to make the questions more appropriate for the survey population; the adjustments were made in conjunction with, and pre-screened by, a small group of individuals who know the registrar field well. This chapter concludes by specifically addressing each research question and providing supportive tabular, graphical, and summary results.

Descriptive Statistics

Invitations to participate in the survey were sent to the email addresses of 2,840 collegiate registrars. The addresses came from the 2013 Higher Education Directory also known as Higher Education Publication, Inc. Some of the addresses may have been defunct as realized when some included individuals had auto-responses indicating they were no longer with an institution, had moved positions or recently retired. Responses were received from 705 individuals resulting in a response rate just under 25%. The final number of responses deemed usable for this research analysis was 482 (17%). This determination was made after identifying and removing any instance where a respondent skipped one or more question in their survey response. Responses were also removed in
instances where respondents scored themselves straight 5’s (without variation) on the 1 to 5 Likert scale for all 36 behavioral complexity questions. Respondents all came from the United States. An initial email was sent followed by two reminder emails to individuals who had not responded. The survey was open for a two week period. According to the Raosoft online sample size calculator (“Sample Size Calculator by RaoSoft, Inc.” 2004), a total of 339 responses is the recommended minimum sample size for a population of 2,840. This ensures a 5% margin of error and a 95% confidence level.

**Demographic Responses**

After responding to the 36 behavioral complexity statements, the survey respondents answered 14 demographic questions. The groupings or ranges were predetermined as choices in the survey. Table 8 shows the outcomes:

Table 8.

<table>
<thead>
<tr>
<th><strong>Respondent Population Summary</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Most Frequent Response</strong></td>
</tr>
<tr>
<td>Total Yrs of Registrar Experience</td>
</tr>
<tr>
<td>Total Yrs in Current Position</td>
</tr>
<tr>
<td>Level of Education</td>
</tr>
<tr>
<td>Major</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Region</td>
</tr>
<tr>
<td>Institution’s Degree-Granting Status</td>
</tr>
<tr>
<td>Institution’s FTE</td>
</tr>
<tr>
<td>Institution’s Funding Status</td>
</tr>
<tr>
<td>Institutional Age</td>
</tr>
<tr>
<td>Total # of Staff</td>
</tr>
<tr>
<td># of Direct Reports</td>
</tr>
<tr>
<td># of Staff Who Supervise</td>
</tr>
<tr>
<td># of Functions Managed</td>
</tr>
</tbody>
</table>
• The mean total years of experience in the registrar field for the 482 usable responses was 13 or greater (63.3%) followed by those with 8-12 years of experience (20.2%).

• Most of the respondents had been in their current position at their current institution for 4-8 years (29.7%) followed closely by those who have been at their current institution for 0-3 years (28.1%), 13+ years (24.5%), and 8-12 years (17.7%).

• Most of the respondents have earned master’s degrees (66.5%) in the discipline of Education (32%). The discipline categories came from the categories used for the Faculty Survey of Student Engagement (FSSE, 2013).

• Most were serving at institutions in the southern region of the United States with the United States Census boundaries being used as the geographic boundaries for this study.

• The institutions themselves were mostly baccalaureate degree-granting (29.9%), meaning that the respondent’s institution offers less than 50% master’s degrees and less than 20% doctoral degrees according to the definition used in the Carnegie Classifications. This was followed by institutions that grant doctorates (24.7%), Associates (23%), and Masters (22.4%).

• The majority of the 482 usable survey respondents reported having 1-5 total staff members (47%) with up to three of those staff members reporting directly to the registrar position (47%).
Most of the respondents worked in departments responsible for at least 11 different functions (52.1%). Examples of functions included registration, grading, graduation, scheduling, curriculum, and transfer articulation.

**Reliability Analysis of Behavioral Complexity Questions**

The Behavioral Complexity instrument used in this research was developed by Lawrence, Quinn, and Lenk (2009), and contains thirty-six questions organized into four quadrants of nine constructs. The four quadrants of nine constructs are meant to measure the respondent’s proficiency in four areas: Relating to People, Managing Processes, Leading Change, and Producing Results. Cronbach’s α was calculated for each of the nine behavioral questions making up the four quadrants. George and Mallery (2003) provide the following guidelines for the evaluation of Cronbach’s alpha related to internal consistency of a measure: “if alpha is greater than .9 = Excellent, greater than .8 = Good, greater than .7 = Acceptable, greater than .6 = Questionable, greater than .5 = Poor, and less than .5 = Unacceptable” (p. 231). Cronbach’s alpha for each quadrant of the Behavioral Complexity Instrument used in this research yielded the following results: .8 for Relating to People, .8 for Managing Processes, .8 for Leading Change, and .75 for Producing Results. Given the guidelines from George and Mallery (2003), the Cronbach’s alphas for the Behavioral Complexity Quadrants, fell in the acceptable to good range for internal consistency. This means that item groupings on the behavioral complexity instrument reliably represent the four behavioral complexity quadrants for the registrar sample population represented in this study.

**Research Questions and Statistical Analysis**
RQ1: What is the Perceived Level of Management Behavior Complexity Exhibited by Collegiate Registrars?

Descriptive analyses were run to address research question one. First, a mean score for each respondent, for each of the four quadrants was determined. Respondents assigned a score for each of 36 statements, nine statements per quadrant, based upon how well that statement described their management style; 1 Strongly Disagree through 5 Strongly Agree. The overall mean scores for each quadrant are shown in Table 7. Managing Processes was the quadrant with the highest mean score (4.29) and lowest standard deviation (.40), although it was also the quadrant with the lowest minimum score and highest range. Producing Results was the quadrant with the second highest mean and second lowest standard deviation and was also the quadrant with the highest minimum scores and smallest range of scores. In fact, the constructs to which respondents scored themselves the highest were ‘Showing a Strong Work Ethic” and “Emphasizing the Need for Accuracy in Work Efforts.” Both of these constructs were from the Producing Results quadrant. The Leading Change quadrant had the lowest mean followed closely by Relating to People. The statements within each quadrant to which respondents scores themselves the lowest were “Seeing that Everyone has a Professional Development Plan,” and “Coaching Staff on Career Issues” from the Relating to People quadrant, along with “Providing Tight Project Management” from the Managing Processes quadrant. See Appendix C for the mean and standard deviation for all 36 survey constructs:
Table 9.

*Behavior Complexity Profile by Quadrant*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relating to People</td>
<td>482</td>
<td>2.78</td>
<td>5</td>
<td>4.02</td>
<td>.46</td>
</tr>
<tr>
<td>Managing Processes</td>
<td>482</td>
<td>2.22</td>
<td>5</td>
<td>4.29</td>
<td>.40</td>
</tr>
<tr>
<td>Leading Change</td>
<td>482</td>
<td>2.67</td>
<td>5</td>
<td>4.01</td>
<td>.47</td>
</tr>
<tr>
<td>Producing Results</td>
<td>482</td>
<td>3.00</td>
<td>5</td>
<td>4.16</td>
<td>.43</td>
</tr>
</tbody>
</table>

The four quadrant mean scores were averaged for each respondent, resulting in an overall behavioral complexity mean score that corresponds with the respondent’s overall managerial behavior. This was followed by a calculation of the mean absolute deviation (MAD) of each respondent to establish the average distance of each respondent’s quadrant mean scores from their total mean score. The purpose of the MAD score, the distance between the respondent’s scores in each of the four quadrants, which was then averaged, was to provide a proxy for how behaviorally complex each respondent is. Table 10 shows the overall mean behavior complexity score for the respondents as well as the standard deviation:

Table 10.

*Total Behavior Complexity Profile*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>MAD Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Behavior Complexity</td>
<td>482</td>
<td>3.08</td>
<td>4.97</td>
<td>4.13</td>
<td>.35</td>
<td>0.00 – 0.72</td>
</tr>
</tbody>
</table>

The 482 respondents were also ranked, first by their MAD score (with a lower score indicating that the four quadrant mean scores were closer together), and secondly by their total average mean (with a higher score indicating a participant ranked themselves highly across each quadrant). A high mean score coupled with a low MAD score is an indicator
of greater behavioral complexity. A low MAD score indicates “balance” between the four quadrant scores. The respondent ranking as most behaviorally complex, or most balanced, had a mean score of 4 and a MAD score of .00. The respondent ranking as least behaviorally complex, or balanced, had a mean score of 3.94 and a MAD score of .72.

In terms of answering Research Question One, the survey data show that the majority of registrar respondents agreed with most of the managerial behavior statements and the majority believe themselves to be relatively proficient as managers across the categories. However, Managing Processes and Producing Results ultimately had higher means scores and lower standard deviations than Relating to People and Leading Change. The next research question builds upon these descriptive features and examines significant correlations between the demographic characteristics of the respondents themselves, as well as their institutions, and their jobs, and higher or lower overall behavioral complexity scores.

**RQ2: Are a registrar’s individual characteristics and institutional characteristics related to their managerial behavior complexity?**

Given that this research was exploratory, Pearson Correlation Coefficients and backward stepwise multiple regression, were used to determine if registrar’s individual and institutional demographic characteristics explained their perceived behavioral complexity. Several demographic variables required dummy coding, so this process is explained before the results of the analysis.

**Dummy Variable Coding**
Prior to running the analysis, dummy variables were created for questions whose responses were nominal. When creating a dummy variable, all cases falling into a specific category take on a value of 1, while all cases that do not fall into the category take on a value of zero. When using dummy variables, decisions have to be made about which variables to leave out when running the regression equations in order to allow for a degree of freedom. “One dummy variable must be excluded from the regression if a constant or intercept is estimated to prevent less than full rank matrices” (Garavaglia & Sharma, 1998, p. 5). An initial decision was made to leave out the dummy variable with the lowest response rate per nominal category. However, for the question, “What was the discipline of study for your highest degree earned?” Responses were first coded into eight categories based upon the discipline categories used in the Faculty Survey of Student Engagement. The categories of Biological Sciences, Physical Sciences, Engineering, and Other Professional (Architecture, Medicine, Dentistry, etc.) all had low response rates compared to the other categories, but were considered to be similar and important for the purposes of comparing those with a hard science or technical background against the other categories. Thus, these four categories were combined into one dummy variable and included in the analysis. The dummy variable of Social Science had the next lowest response rate and was not included in the regression equations (allowing a degree of freedom).

Once the dummy variables had been created and decisions made about which variables to remove, an initial correlation analysis was run to scan for hints and clues as to which independent variables might be related to the total behavioral complexity score and the four quadrants which compromise the total behavioral complexity score.
Pearson Correlation Coefficients

Though correlation does not indicate causation, it can be used as a way to select predictor variables in a regression analysis if the number of cases per independent variable is problematic. Given the number of dummy variables in this study, it made sense to run the initial correlations in order to make some choices about which variables to leave in and which to exclude. Appendix D summarizes the outcome of the correlation coefficients. Table 11 below outlines the individual and institutional characteristics that were significant having either a positive correlation or a negative correlation.

Table 11.

**Individual and Institutional Characteristic Correlations**

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Pearson Correlation Range</th>
<th>Sig. Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>BC Total, Managing Processes, Producing Results</td>
<td>.15 to .20</td>
<td>.00 to .001</td>
</tr>
<tr>
<td>Science Majors</td>
<td>Managing Processes, Leading Change, Producing Results</td>
<td>-1.20 to -.02</td>
<td>.00 to .03</td>
</tr>
<tr>
<td>FTE (Inst. Size)</td>
<td>BC Total, Leading Change</td>
<td>.11 to .18</td>
<td>.000 to .02</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Managing Processes, Leading Change</td>
<td>-.09 to .10</td>
<td>.03 to .04</td>
</tr>
<tr>
<td>Southern Region</td>
<td>Relating to People</td>
<td>.11</td>
<td>.02</td>
</tr>
<tr>
<td>Yrs in Current Position</td>
<td>Relating to People</td>
<td>-.09</td>
<td>.05</td>
</tr>
<tr>
<td>Public 4yr</td>
<td>Leading Change</td>
<td>.13</td>
<td>.01</td>
</tr>
<tr>
<td>Total yrs exper.</td>
<td>Leading Change</td>
<td>.14</td>
<td>.002</td>
</tr>
<tr>
<td>Doc-Granting</td>
<td>Leading Change</td>
<td>.13</td>
<td>.005</td>
</tr>
</tbody>
</table>

- As Table 13 illustrates, female gender was the variable that correlated most often with behavioral complexity total, and the individual quadrants.
• The next most frequent variable to correlate with behavioral complexity and the quadrants was major from a discipline falling in the hard sciences category. This was always a negative correlation.

• Level of education had a negative correlation when it came to Managing Processes but a positive correlation with Leading Change.

• The Southern region of the United States positively correlated with the Relating to People quadrant.

• The number of years spent in one’s current position and current institution had a negative correlation with Relating to People.

**Backwards Stepwise Regression – Individual Characteristics**

The next step of the analysis was to run two backward stepwise regression models to answer Research Question Two. One regression equation was run for individual characteristics and a separate equation was run for institutional characteristics. The regression equation representing individual characteristics contained the following eight demographic variables as the independent, or predictor variables: Total years of experience in the registrar field, years of experience in the respondent’s current job/current institution, highest degree earned, academic discipline of highest degree earned which was entered as four separate dummy variables with “Social Science” being excluded due to the small number of responses in that category, and gender which was entered as a dummy variable with “female” coded as the included variable. Total behavioral complexity score, the mean of the four quadrants for each respondent, was the dependent variable. Four additional backward step-wise regressions examined individual characteristics in relation to each of the four behavioral complexity quadrants.
**Backwards Stepwise Regression – Institutional Characteristics**

The regression equation representing institutional characteristics contained the following twelve independent variables: region of the country current institution is in which was based on the regions used in the U.S. Census (three separate dummy variables with the “west” being excluded), degree-granting status of the respondent’s current institution (three separate dummy variables with “master’s” being excluded), full-time enrollment of the current institution, funding status of the current institution (four separate dummy variables with “private two-year” excluded), and age of the respondent’s current institution. The total behavioral complexity score was the dependent variable.

Four additional backward step-wise regressions examined institutional characteristics in relation to each of the four behavioral complexity quadrants.

**Appropriate Use of Backwards Stepwise Regressions**

Backward stepwise regression is appropriate when existing research does not provide an indication of which independent variables in the analysis may have more bearing on the dependent variable (Field, 2009). Predictor variables were removed or “stepped out” from the equation in SPSS when a variable exceeded the preset .10 threshold. After each step, the predictor variable with the least significance was removed from the equation. The analysis was then repeated until either all variables were removed or a significant model was obtained.

There is conventional wisdom among researchers that thirty is the appropriate number of cases per independent variable in order to obtain a stable regression model, however, some believe this number may range from five to fifty. Stevens (2009) recommends at least fifteen cases per independent variable for multiple regression.
analysis. The number of cases per independent variable entered into the Individual Characteristics backward stepwise equation was sixty. The Institutional Characteristics equation included twelve independent variables for a total of forty cases per independent variable. Both of these numbers are within Stevens’ acceptable range.

**Multicollinearity**

When using multiple regression certain assumptions are made, including the assumption of no multicollinearity. A violation of this assumption occurs when two variables are so highly correlated that they may measure the same construct (Field, 2009; Myers, 2000). Two tests were run to assure that multicollinearity did not exist in this data: VIF (Variance Inflation Factor) and Tolerance. VIF provides an index to see how much variance is increased because of multicollinearity while tolerance is the reciprocal of VIF (Field, 2009). If the average VIF is greater than ten, the regression may be biased (Bowerman & O’Connell, 1990). For the two regression models in this research question, the largest VIF values were all below 10. Tolerance was also analyzed, and if tolerance is below .1, a serious problem of multicollinearity is present, while tolerance below .2 is a potential problem (Bowerman & O’Connell, 1990). Tolerance values for the regression models in this research did not present any potential or serious problems and were all .9 or greater.

**Research Question Two Results**

Table 12 shows the individual and institutional characteristics that significantly correlated with behavioral complexity. For the backward stepwise regression looking at individual characteristics as compared to behavioral complexity total it is important to note that the ANOVA results indicate a significant model ($F_{3,474}=8.31$, $p < .05$). R square
For the backward stepwise regression looking at institutional characteristics as compared to behavioral complexity, a significant model emerged again. In both cases, the R-squares are weak, but the t-values and the low alphas are worth noting. \((F_{6.474}=2.64, p < .05, R \text{ square} = .032)\):

Table 12.

*Backward Regression Results for Research Question Two*

<table>
<thead>
<tr>
<th>Significant Independent Variables</th>
<th>Dependent Variable</th>
<th>T-Value</th>
<th>Sig.</th>
<th>B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (Female)</td>
<td>BC Total</td>
<td>3.10</td>
<td>.002</td>
<td>.11</td>
<td>.14</td>
</tr>
<tr>
<td>Science Majors</td>
<td>BC Total</td>
<td>-2.75</td>
<td>.006</td>
<td>-.18</td>
<td>-.12</td>
</tr>
<tr>
<td>Total Yrs Experience</td>
<td>BC Total</td>
<td>2.47</td>
<td>.01</td>
<td>.04</td>
<td>.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significant Independent Variables</th>
<th>Dependent Variable</th>
<th>T-Value</th>
<th>Sig.</th>
<th>B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Class: Private For Profit</td>
<td>BC Total</td>
<td>2.77</td>
<td>.006</td>
<td>.33</td>
<td>.20</td>
</tr>
<tr>
<td>Funding Class: Private 4yr</td>
<td>BC Total</td>
<td>2.28</td>
<td>.02</td>
<td>.23</td>
<td>.32</td>
</tr>
<tr>
<td>Funding Class: Public 4yr</td>
<td>BC Total</td>
<td>2.13</td>
<td>.03</td>
<td>.23</td>
<td>.27</td>
</tr>
<tr>
<td>Funding Class: Public 2yr</td>
<td>BC Total</td>
<td>2.02</td>
<td>.04</td>
<td>.21</td>
<td>.24</td>
</tr>
</tbody>
</table>

In answering Research Question Two, three individual characteristics influenced managerial behavioral complexity: Gender (a positive relationship for females), whether the respondent had majored in one of the Sciences (negative relationship), and the respondent’s total years of experience in the registrar field with more experience, there was a slightly higher the complexity score. An additional backward stepwise regression with male as the included dummy variable (instead of female), showed that male correlated with lower overall behavioral complexity scores.
The institutional characteristic of funding classification of the institution was shown to have a significant effect on behavioral complexity. An additional backward stepwise regression with private two-year as an included dummy variable instead of private for-profit resulted in a significant negative relationship, meaning that respondents serving at private two year institutions reported less managerial behavior complexity compared to their counterparts serving under other funding classifications.

**Research Question Two Results by Quadrant**

An additional eight regression equations were run to explore the relationship between behavioral complexity, and individual and institutional characteristics. Appendix E shows how the individual and institutional characteristics related to each of the four individual behavioral quadrants: Relating to People, Managing Processes, Leading Change, and Producing Results. A summary of this information is included in Table 13.
Table 13.

*Individual and Institutional Characteristic’s Relationship to Quadrants*

<table>
<thead>
<tr>
<th></th>
<th>Relating to People</th>
<th>Managing Process</th>
<th>Leading Change</th>
<th>Producing Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDIVIDUAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender - Female</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Gender – Male*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Majors</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Majors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Yrs Experience in Field</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Yrs Experience at Current Institution</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSTITUTIONAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Region</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>FTE</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Two-Year*</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Funding – Private For Profit</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Funding – Public 2yr</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Funding – Public 4yr</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Funding Private 4yr</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

*Additional equations run with these dummy variables included

**Relating to People** - Respondents at institutions located in the Southern region of the United States had a positive relationship with the “Relating to People” category.

**Managing Processes** - Gender (positive relationship for females, negative relationship for males) and Business majors were significant indicators.

**Leading Change** - Total years of experience in the field had a positive relationship while total number of years at the respondent’s current institution, in the respondent’s current position had a negative relationship. Full-time enrollment also had a positive relationship with the more students being served indicating the respondent was more adept at leading change.
Producing Results – Gender, with a positive relationship for females and a negative relationship for males, Science majors with a negative relationship, funding classification as a positive relationship, and respondents from institutions located in the Southern region as a positive relationship, all came up as significant.

**RQ3: Is behavioral complexity related to a registrar’s job complexity?**

Pearson correlation coefficients were used to assess if a relationship exists between the respondent’s job complexity and how behaviorally complex they are as a manager. The four job complexity variables included in this research were: The total number of staff in the respondent’s current department including themselves, total number of staff directly reporting to the respondent, number of staff directly reporting to the respondent who have supervisory responsibilities themselves, and the number of separate functions that the respondent manages. These variables measure the scope and scale of the respondent’s job. Four separate correlations were run, one per job complexity variable, to assess any possible relationships with behavioral complexity. The individual job complexity scores were then combined in a mean overall job complexity score and a Pearson correlation was run to gauge whether the respondent’s overall job complexity score correlated with their behavioral complexity score.

The significant results of the Pearson correlations are shown in Table 15 below. The correlations were significant at the 0.01 level (2-tailed). A two-tail test was used since there was no prior hypothesis to indicate directionality, which would then indicate that a one-tailed test would be appropriate. There were positive relationships between total number of staff, number of direct reports, number of staff with supervisory responsibilities themselves, and total job complexity score. The more staff that a
respondent supervised, the slightly higher their overall mean behavioral complexity score. The only job complexity independent variable that did not result in a positive correlation was the number of functions managed.

Table 14.

*Job Characteristics of Significance*

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Pearson’s r value</th>
<th>n</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of Staff</td>
<td>BC Total</td>
<td>.13</td>
<td>482</td>
<td>.005</td>
</tr>
<tr>
<td># of Direct Reports</td>
<td>BC Total</td>
<td>.17</td>
<td>482</td>
<td>.000</td>
</tr>
<tr>
<td># Staff W/Supervisory Responsibilities</td>
<td>BC Total</td>
<td>.12</td>
<td>482</td>
<td>.01</td>
</tr>
<tr>
<td>Job Complexity Total</td>
<td>BC Total</td>
<td>.17</td>
<td>482</td>
<td>.000</td>
</tr>
</tbody>
</table>

When looking at the job complexity variables compared to each of the four individual quadrants (Relating to People, Managing Processes, Leading Change, and Producing Results), the number of direct reports correlated with Managing Processes, Leading Change, and Producing Results. The number of total staff members under the respondent’s purview and the number of staff the respondent supervises who have supervisory duties themselves (the number of managers, managed), correlated with Leading Change. Lastly, the overall job complexity score correlated with Leading Change and Producing Results. This is displayed in Table 15:
Table 15.

*Job Characteristic’s Relationship to Quadrants*

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Pearson’s r value</th>
<th>n</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Direct Reports</td>
<td>Managing Processes</td>
<td>.12</td>
<td>482</td>
<td>.009</td>
</tr>
<tr>
<td># of Direct Reports</td>
<td>Leading Change</td>
<td>.20</td>
<td>482</td>
<td>.000</td>
</tr>
<tr>
<td># of Direct Reports</td>
<td>Producing Results</td>
<td>.11</td>
<td>482</td>
<td>.01</td>
</tr>
<tr>
<td>Total # of Staff</td>
<td>Leading Change</td>
<td>.20</td>
<td>482</td>
<td>.000</td>
</tr>
<tr>
<td># of Staff that Supervise</td>
<td>Leading Change</td>
<td>.17</td>
<td>482</td>
<td>.000</td>
</tr>
<tr>
<td>Job Complexity Total</td>
<td>Leading Change</td>
<td>.24</td>
<td>482</td>
<td>.000</td>
</tr>
</tbody>
</table>

Hinkle et. al (2003) interpret the strength of correlations, both positive and negative, as: .00 – .30 little if any correlation; .30 – .50 low correlation; .50 – .70 moderate correlation; .70 – .90 high correlation; .90 – 1.00 very high correlation. Again, correlations are also sensitive to sample size. Given these guidelines, the correlations above have a low strength of association though they are still significant.

**Backward Stepwise Regressions**

Backward stepwise regression then examined job complexity in relation to overall behavioral complexity and four additional regressions examined job complexity in relation to each of the four quadrants. The number of direct reports that the respondents had, that is, individuals reporting directly to them versus reporting to them via another staff member, showed a significant positive relationship with overall behavior complexity ($F_{4,475}=4.42$, $p<.05$, $R^2=.031$,) and with Managing Processes ($F_{4,475}=1.96$, $p<.05$, $R^2=.016$), Leading Change ($F_{4,475}=7.69$, $p<.05$, $R^2=.055$), and Producing Results.
(F_{4,475}=1.94, R^2=.014). Total number of staff (size of office) had a significant relationship with Leading Change (F_{4,475}=7.69, p<.05, R^2=.055).

**RQ4: What combination of job complexity, individual characteristics, and institutional characteristics explain a registrar’s management behavior complexity?**

The analysis for research question four included multiple regression equations. The main regression equation included ten of the twenty-seven independent variables available. This number was chosen both to maintain the integrity of the analysis and because the ten variables were significant in research questions two and three: Total years experience, Science majors, gender, private for-profit, private four-year, public four-year, public two-year, total number of staff, number of direct reports, and number of staff with supervisory responsibilities. Table 16 displays the results. Tolerance was met for this equation and while the R-Square was low, there were significant t-values and alphas (F_{10,468} = 4.52, p < .05, R^2=.088):

**Table 16.**

**Individual, Institutional, and Job Characteristics of Significance**

<table>
<thead>
<tr>
<th>Significant Independent Variables</th>
<th>Dependent Variable</th>
<th>T-Value</th>
<th>Sig.</th>
<th>B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>BC Total</td>
<td>2.91</td>
<td>.004</td>
<td>.10</td>
<td>.13</td>
</tr>
<tr>
<td>Science Majors</td>
<td>BC Total</td>
<td>-2.81</td>
<td>.005</td>
<td>-.18</td>
<td>-.13</td>
</tr>
<tr>
<td>Private For Profit</td>
<td>BC Total</td>
<td>2.59</td>
<td>.01</td>
<td>.31</td>
<td>.19</td>
</tr>
<tr>
<td># of Direct Reports</td>
<td>BC Total</td>
<td>1.99</td>
<td>.047</td>
<td>.10</td>
<td>.10</td>
</tr>
</tbody>
</table>

In this regression, there is at least one independent variable representative of each of the categories identified for this research. Gender and college major are individual
characteristics, funding status is an institutional characteristic, and the number of direct reports is an indicator of job complexity.

**Multiple Regressions by Quadrant**

Independent variables were also examined in relation to each individual behavior complexity quadrant (Relating to People, Managing Processes, Leading Change, and Producing Results), using the same ten variables in the first regression. Significant outcomes are displayed in Table 17 below. No variables emerged as significant in the Relating to People category.

Table 17.

*Individual, Institutional, and Job Characteristic’s Relationship to Quadrants*

<table>
<thead>
<tr>
<th>Significant Independent Variables</th>
<th>Dependent Variable</th>
<th>Managing Processes (F10,468 = 2.30, p &lt; .05, R square .05)</th>
<th>Leading Change (F10, 468 = 4.46, p &lt; .05, R square .087)</th>
<th>Producing Results (F10,468 = 3.63, p&lt; .05, R square .072)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Managing Processes</td>
<td>3.01(female)/-3.01(male)</td>
<td>2.23</td>
<td>4.11/-4.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.003</td>
<td>.03</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.12</td>
<td>.37</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.14</td>
<td>.17</td>
<td>.19</td>
</tr>
<tr>
<td>Private For-Profit</td>
<td>Leading Change</td>
<td>2.23</td>
<td>.04</td>
<td>.61</td>
</tr>
<tr>
<td># Direct Reports</td>
<td>Leading Change</td>
<td>2.12</td>
<td>.06</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.04</td>
<td>.06</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Leading Change</td>
<td>2.12</td>
<td>.06</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.11</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>Gender</td>
<td>Producing Results</td>
<td>4.11/-4.11</td>
<td>.000</td>
<td>.18</td>
</tr>
<tr>
<td>Private For-Profit</td>
<td>Producing Results</td>
<td>2.49</td>
<td>.01</td>
<td>.37</td>
</tr>
<tr>
<td>Science Majors</td>
<td>Producing Results</td>
<td>-2.03</td>
<td>.045</td>
<td>-.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.09</td>
<td>.19</td>
<td>.19</td>
</tr>
</tbody>
</table>
Gender, major, number of direct reports, and working at a private for-profit institution were all significant for certain quadrants:

- Gender had a positive relationship for females and a negative relationship for males when it came to Managing Processes and Producing Results.
- Those majoring in the Science disciplines had a negative relationship with Producing Results.
- Those serving at private for-profit institutions have a positive relationship with Leading Change and Producing Results.
- Those with more direct reports were more adept a Leading Change.

**Summary**

In summary, the research results suggest registrars are a fairly complex population in terms of managerial behavior as self-reported for this particular research study. Higher scores (usually a 4 or 5), across all quadrants was the norm. Research Questions Two, Three, and Four all indicated a small number of independent variables that have an impact on the respondent’s behavioral complexity score, however slight. There were also some interesting findings of significant independent variables per the individual behavioral complexity quadrants. Gender, Science majors, and the variable of private for-profit stood out. The data and tables in this chapter were meant to introduce the results of this research. The following, final chapter will provide possible interpretations and implications of these results as well as implications for future research.
CHAPTER 5

INTERPRETATIONS

This chapter provides discussion relative to the findings. The interpretations include possible explanations for the outcomes as well as implications for theory and practice. It also includes questions and/or future research recommendations.

Descriptive Statistics Interpretations

This survey was administered to a national listing of registrars that included all types of higher education institutions. The final response rate for this survey was 482 (17%) which met the criteria for a 5% margin of error and a 95% confidence level according to the Raosoft online sample size calculator (Sample Size Calculator by RaoSoft, Inc., 2004). The composition of the respondent pool met expectations on some accounts in other cases, the results were surprising. The registrar position is somewhat of a terminal administrative position (HigherEdJobs.com considers the position a “Senior Level Administrator”), and it was expected that the respondent pool would include many with a significant amount of experience in the field overall. Thus, it was not surprising that 63.3% of the survey respondents indicated they had 13+ years of experience, which was the highest response available. The finding that most respondents had been at their current position, at their current institution, for between 4-8 years (29.7%), also held true with expectations. The registrar position is one that individuals often stay in for a long period of time. However, with the prominence of the professional association (AACRAO) for networking and career searches, the activity of recruitment firms and the ease of online job searches, more registrars have the opportunity to move between institutions and this may be impacting the tenure at a specific institution. The descriptive
statistic from this current study of collegiate registrars mirrors a Bureau of Labor Statistics (BLS) report on Employee Tenure (Employee Tenure in 2012: A BLS Report, 2012). In January 2012, median employee tenure for men was 4.7 years and for women it was 4.6 years. Though respondents may have had experience ranging from 4-8 years in this study’s survey, it seems likely that the medium tenure is at least equal to or greater than the BLS medium results. One reason why registrars may have equivalent or greater tenure than a general pool of employees across a range of professions may be because of relatively competitive salaries. According to College and University Professional Association for Human Resources (CUPA-HR), the median starting salary for a registrar across all types of institutions is $78,329 and $102,250 at Doctoral-granting institutions (Administrators in Higher Education Salaries, 2013). This median starting salary for registrars across all institutions is almost $30,000 more than the median household income in the United States according to U.S. News and World Report (Francis, 2012).

A higher salary range for registrars, combined with the survey results of what appears to be a longer seniority than a general population of employees in all professions, seems consistent with what one would expect to find in a survey.

A third outcome of the descriptive statistics was somewhat unexpected. One-third of survey respondents had earned a Master’s degree, even though historically many registrar vacancies have not required a Master’s degree. The majority of respondents (32%) had earned their highest degree in Education and many in Higher Education specifically. This degree emphasis, while fairly new, may be gaining in popularity for higher education administrators and those who aspire to be administrators. The high
representation of advanced degrees in Education may also suggest that the majority of the respondents in this survey have taken an intentional degree path specific to their field.

A fourth finding from the descriptive analysis was notable: the dominance of female respondents (72.8%). Interestingly, the registrar field, along with many other fields, started out dominated by males. The representation of women in this study’s survey may be related to a couple factors. Most registrar positions require a bachelor’s degree at minimum if not a master’s. More women than men are completing college degrees in general, in the Education discipline specifically, and likely in advanced degrees related to Higher Education, as noted above (The Condition of Education, 2013). The representation of female respondents in the survey is supported by professional association statistics. The American Association of Collegiate Registrars and Admissions Officers provides data representative of their membership pool which indicates that the membership is 67% females versus 31% male with 2% not reporting (AACRAO Demographics, 2013).

Another descriptive statistic that aligns with data available is region of the country the respondent’s current institution is located in. The National Center for Education Statistics (NCES) reports data on the number of institutions by state that when converted to number of institutions by census region, mirrors the data from this survey (Census Regions, n.d.). This is shown in Table 18.
Table 18.

Region of Country Statistics

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of Institutions by Region</th>
<th>Percentage of Survey Respondents by Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>20.1%</td>
<td>22% (n = 106)</td>
</tr>
<tr>
<td>Midwest</td>
<td>25.7%</td>
<td>28.2% (n = 136)</td>
</tr>
<tr>
<td>South</td>
<td>33.8%</td>
<td>33.2% (n = 160)</td>
</tr>
<tr>
<td>West</td>
<td>20.4%</td>
<td>16.6% (n = 80)</td>
</tr>
</tbody>
</table>

This indicates the respondent pool appropriately represented the four census regions and provided a fairly equal distribution among the regions. Ultimately, the West region was excluded in the regression analysis in order to account for a degree of freedom.

Another observation from the initial analysis was that the majority of respondents serve at institutions that primarily offer baccalaureate degrees (29.9%). Data from the Carnegie Classifications for Institutional Type indicates the number of institutions primarily focused on 4-year degrees is 52.5%, so there is implication that registrar’s from the 4-year sector are actually under-represented in this research (Carnegie Classifications, 2013). It was initially surprising that the majority of those four-year institutions were private not-for-profit institutions (50.6%). However, the Carnegie Classifications support this outcome indicating that approximately 50% of all institutions offering bachelor’s degrees fit the description of a private-not-for-profit institution.

Respondents by funding classification (public two-years and four-years, private two-years and fours, and private for-profits) seemed proportionally representative relative to national data but the number of respondents from private four-year institutions was a
disproportionately high number for this survey compared to the other classifications. It will be important to be cognizant of this when proceeding through the research questions.

Perhaps the most surprising institutional characteristic from this survey was the predominance of institutions with enrollment of 2,000 or less (39.6%). Carnegie Classification statistics indicate the average enrollment across institutions in 2009 was 4,473 (Carnegie Classification, 2013) and that institutions with enrollment at or under 2,000 only made up 13.1% of the total distribution of institutions and enrollment. The high representation of smaller-size institutions in this survey is another factor that will need to be taken into account in the research question analysis. Even with the predominance of participation from schools with lower enrollment, 49.5% of survey respondents came from institutions that are well-established having been around for over 100 years which could mean that a campus culture is firmly in place.

The final demographic responses indicate that although respondents may be serving a relatively small number of students, the majority oversee offices charge with at least 11 different functions (52.1%), meaning there is sizable scope to their operation. Despite the scope, most of the respondents oversee a small number of staff, with over half of the respondent pool citing 1-5 total staff members (52.1%), with 1-3 of those staff members reporting directly to the respondent (47%). Overall, the respondents had little supervisory assistance and were responsible for most of their operation and staff directly. Over 80% of the respondents had only 0-2 staff operating as supervisors underneath them.

**Descriptive Statistics Summary**
The majority of respondents in this research study manage a large number of functions with relatively small staff sizes, and little supervisory help. This means that the respondents not only have managerial responsibility but probably get involved in daily operational details more than a stereotypical “mid to senior level administrator” perception might lead us to believe. This corresponds with the fact that many of the respondents are serving at smaller, private institutions which likely have less layers than a larger public institution. Given the characteristics of the respondent pool, an outcome of high managerial behavior complexity would make sense.

**Question One Interpretations: What is the perceived level of management behavior complexity exhibited by collegiate registrars?**

Descriptive analyses were run to examine Research Question One. Survey respondents answered 36 questions (statements) about their management style on a Likert scale of 1-5 with a “5” meaning that the respondent strongly agreed with the statement presented. The 36 statements represented four separate categories or quadrants with nine constructs each. The mean average scores for the quadrants ranged from 3.08 to 4.97. In order to consider a respondent behaviorally complex, the respondent needed to score a minimum of a 3 across all quadrants. The entire respondent pool met this threshold indicating the registrar population is behaviorally complex as demonstrated in Figure 4.
Explanations of Ratings: Self-Affirmation and Social Desirability

There are several potential explanations as to why the respondent averages were skewed to the high end of the model. The self-affirming nature of first person responses that individuals provide in surveys, may reflect higher self-perceptions of confidence relative what might be reported by supervisors, peers, or subordinates. Gecas (1982) indicated that there is a self-esteem motive that causes one to view oneself favorably and to try to enhance or maintain a positive evaluation of oneself. Another explanation is Social Desirability Bias whereby respondents tend to answer questions in a manner that would be viewed favorably by others, responding the way they think they should respond versus providing a true assessment (Thomas & Kilmann, 1975). The original survey questions may need to be rephrased, so they avoid self-affirmation and social desirability bias. For example, forced rankings may have required the respondents to more critically think about their effectiveness in each of the areas. These factors should be taken into consideration for future research. For this research, it made it important to a) take an
additional step and look at responses by quadrant, and b) scrutinize the data even more finely by examining each question to determine where and if there are differentiators.

**Quadrant Results: Managing Processes**

Managing Processes was the quadrant with the highest mean score and lowest standard deviation. This result reconciles with the need to manage processes, which the literature shows is typical of the registrar’s role on a campus. A 2004 study that reviewed registrar position advertisements in the Chronicle of Higher Education found that higher education institutions were seeking registrars who could, “Demonstrate successful experience with the management of large and complex computerized databases for storing and maintaining student academic records; experience with classroom scheduling software; leadership experience in planning, implementing, and augmenting technology-based solutions; and experience implementing or maintaining online applications” (Stewart & Wright, 2005, p.24). Registrar’s offices are usually responsible for a large portion of the back-end infrastructure of an institution; this means everything from setting the academic calendar and schedule of classes, to putting in place the curriculum parameters for teaching a particular course. The single largest piece of infrastructure on any college campus may be the Student Information System through which information flows and everything from enrollment to grades is managed. This is following closely by web interfaces which allow students real-time access to their records and other institutional data. The registrar is expected to “Be a resource to all of the system users of student information (Lanier, 1995, p.2) and to assist campus users in understanding and processing the information made available to them in the system by putting forth easy-to-understand processes and procedures (Pace, 2011). Even the more front-end/hands-on
services, such as providing transcripts to students and conferring graduation, are all processes that must be run and continuously fine-tuned via hands-on management. Thus, the idea that the survey respondents would rate themselves as most proficient in Managing Processes is consistent with external perceptions and what is found in the literature.

**Quadrant Results – Producing Results**

The next highest mean score and lowest standard deviation fell in the Producing Results category. This reconciles with a registrar’s office being highly technology and data driven and heavily focused on numbers. Chuck Hurley, the registrar at Notre Dame states it this way, “We have turned a corner in the profession, and the time has come to append our traditional definition, the duty of a registrar is to assure the accuracy and integrity of the student’s record and to maintain strong jurisdiction over the sphere of technology containing student and faculty data” (2009, p.51-52). He goes on to indicate that registrars need to look at the profession on a macro level and see themselves as a leader when it comes to making things happen on a campus. Registrar’s offices may be held wholly or partially accountable for significant functions on a campus, from how many students enroll to how many graduate. As the higher education market becomes increasingly competitive and funding more difficult to come by, the registrar’s office is increasingly called upon to produce better technology and faster services, along with more students enrolling and ultimately reaching graduation – that is, the registrar’s office is expected to focus on and produce results. “There is little doubt that the business of student enrollment has become big industry” (Hossler, 2009, p. 3). On top of producing tangible results, the registrar’s office is also expected to help keep the institution in-line
with regulations and expectations as they pertain to accreditation and following state and federal guidelines. This concept is reinforced by the survey question in this quadrant to which the respondents gave themselves the highest marks, “Emphasizing the need for accuracy in work efforts.” It is expected that the registrar will run their office in an orderly and disciplined manner.

**Quadrant Results – Leading Change and Relating to People**

The two categories for which the registrar respondents scored themselves slightly lower were Leading Change and Relating to People. When it comes to leading change, many registrars may simply not see themselves as influential institutional leaders or as Hirt (2006) notes, administrators at certain institution types may not deem risk-taking as being valued at their particular institution. The majority of respondents reported serving at four-year private institutions with low enrollment numbers, and a small number of staff. Often times, administrators in these types of organizations are the only professional on campus with a certain kind of expertise. As such, they may need to stay directly involved in the day-to-day efforts of their organization and may not have much room for delegating tasks and working in a more outward or creative fashion (Hirt, 2006).

In fact, many registrars better identify with the title of “Inconspicuous Leader;” someone whose influence occurs in the background. According to Meredith Braz (2012), the Registrar at Dartmouth, this may be due to the simple fact that many on campus and in society do not know what a registrar does and thus a registrar takes on the unsung or out-of-the-spotlight persona. Braz insists that registrars need to learn to “come into the limelight once in a while” (p. 47). The lower scores in the Leading Change quadrant may also be attributable to the higher education environment in general. Colleges and
universities generally do not allow for a top-down style of leadership or strategic
decision-making. Rather, postsecondary institutions are loosely coupled professional
bureaucracies composed of individual employees and academic units that can pursue
individual strategies with little or no input from management (Mintzberg 1979,
Mintzberg and Rose 2007; Weick 1976). The idea of “management” and “leading” may
be frowned upon in an academic environment where the emphasis is on freedom of
thought and creativity. Fuggazzotto (2009) points out that, “Through its emphasis on
competition, much of the literature assumes that strategy operates only in in corporate
settings” (p. 56). He goes on to indicate that leaders who want to introduce strategy into
the higher education setting often have to do so carefully and tentatively. As such,
registrars may be conditioned to stick with managing processes and producing results
over leading change.

Relating to People was the second lowest mean score among the four quadrants. It is
another concept that is perhaps not as natural to the average registrar as managing
processes, for example. Relating to people may, however, present challenges for any
manager. Blake and Mouton (1964) have conducted extensive research on task orientation
(Concern for Task) versus people focus (Concern for People). While the role of
management innately contains elements of people-focus, many choose the easier, less
complex route such as managing processes and producing results as opposed to managing
the more challenging human dynamic inherent in relating to people. In some cases, those
chosen for the leadership role, or rising to the leadership rank may be there not because
of their people skills but because of their ability to get things done. The Peter Principle
(Peter & Hull, 1969) asserts that individuals who are good in one job are not necessarily good in the job into which they are promoted.

Many of today’s registrars, like other enrollment management professionals, may see themselves as first being judged by their functional expertise and ability to set in place structure and workflow with matches with Managing Processes and Producing Results, and only later by their ability to motivate the employees therein and to lead the department through changes and challenges attributes aligned with Relating to People and Leading Change. Beyond that, a registrar’s duties may be diverse enough and their office staff small enough, that there may simply be little time left for people-oriented focus. The majority of respondents in this study had staff sizes less than five but managed functions numbering over eleven, providing further evidence of this observation. Furthermore, the two questions in which the survey respondents scored themselves the lowest were “Seeing that everyone has a development plan” and “coaching staff on career issues” both from the Relating to People quadrant. In implementing a performance review process on his campus, Barnds (2011), an enrollment manager, noted that no performance appraisals had been conducted for at least the previous five years in the office he took over and even informal review records were non-existent. Not only may there not be time or the proper focus for these important endeavors, the registrar, like other staff in academia who find themselves in leadership positions, may not receive management training and coaching that would give them the tools to be a good coach themselves. Kalargyrou, Pescosolido, and Kalargiros (2012) note that, “Leadership in the academic setting is routinely described as either the function of a particular office, or is described as an individual trait and not something that can be emulated, learned, or
developed” (p.40). The academic arena is unique in that the primary focus is often on the promotion of teaching and learning and the advancement of students with less focus on the development and advancement of the leaders therein. When looking beyond the institution itself to the type of professional development that exists for mid-level administrators in the student and academic services arenas, there are professional associations, conferences, and organizations but the larger percentage of sessions and products focus on technical skills versus people skills. In the registrar's own professional association, AACRAO, the emphasis of the last 5-10 years has been on the concept of Strategic Enrollment Management (SEM). SEM signifies the following (Bontrager & Pollock, 2009):

- be a catalyst for establishing comprehensive enrollment goals;
- promote academic success;
- promote institutional success;
- address specialized student challenges;
- help create a data-rich environment;
- strengthen internal and external communications; and
- increase campus collaboration

While the SEM concept and goals are very important, they are almost entirely externally-focused and technical in nature which aligns with Managing Processes and Producing Results. As a registrar seeks to accomplish the SEM mission, they may spend less time on their internal relational skills or relating to people, and developing their staff.

**Distinction between Management and Leadership in the Results**

The data from this survey indicates that while the respondents are complex in their managerial behavior (demonstrating competency in all four quadrants of Quinn and Rohrbaugh’s computing values framework) a distinction may lie between a registrar as a manager and a registrar as a leader. Roof and Presswood (2004) describe management as
more process and results oriented and leadership as an act meant to inspire. The registrar sample in this survey showed higher mean scores for Managing Processes and Producing Results, which could reasonably be most strongly equated with management, while Leading Change and Relating to People could be reasonably equated with Leadership.

Morley and Eadie (2001) have studied the difference between management and leadership in the higher education realm and have found that higher education managers tend to operate “within the walls of the institutional box” and may be conditioned to stay within institutional boundaries. Managers who want to operate in more of a leadership fashion may have to challenge status quo which could take more time and expertise than a registrar has. This might also involve working with people (Relating to People) and convincing them of the need to change from status quo (Leading Change). The survey results back the understanding that the registrar role tends to be a long-term or terminal position with over 60% of respondents in the field for 13 years or greater. Peters (2002) makes the point that leadership can be risky and that leaders need to be prepared for, and know when to, leave an organization. This need for leaders to operate as short-term “change agents” may run contrary to a registrar’s tendency toward longevity in their role and be yet another reason that the respondent’s scored lower in the quadrants that align with leadership over management.

Question Two Interpretations: Are a registrar’s individual characteristics and institutional characteristics related to their managerial behavior complexity?

The second research question sought to tie demographic variables to behavioral complexity outcomes. The demographic variables for this study fell into three separate categories, though only two categories were used for this research question: Individual
Characteristics (Experience, Education, Major, Gender) and Institutional Characteristics (Region, Degree-Granting Status, Size, Funding Status, Institutional Age). The research question was answered through regression analysis, but an initial step of running frequencies and a correlation analysis provided hints and clues to guide independent variable selection for the regression equations (accounting for either size of the equation(s) or per degrees of freedom requirements).

Backward stepwise regressions were run to determine which, if any, of the individual and institutional characteristics influenced the respondent’s managerial behavior complexity levels. Two initial regressions were run, one using individual characteristics and one using institutional characteristics, with mean total behavior complexity score as the dependent variable. This was followed by additional regression equations with each of the quadrants as a dependent variable.

The results of the individual characteristic regressions were that the female gender and the respondent’s total years of experience in the registrar field had a positive significant relationship with overall behavior complexity. Gender also had a significant relationship with the Managing Processes and Producing Results quadrants while experience showed significant results for Leading Change quadrant. Major, specifically whether the respondent had majored in the Sciences had a negative relationship with overall behavior complexity, Leading Change and Producing Results.

The results of the institutional characteristics regressions indicated that each of the funding status variables had a positive significant relationship with overall behavior complexity. The private two-year variable, which was ultimately excluded due to the small sample size and to account for degrees of freedom, would have shown a negative
correlation. These same funding status variables also produced a significant result in the Producing Results category.

**Gender**

In this study females demonstrated greater behavior complexity and also showed greater capacity for managing processes and producing results than their male counterparts. This result merits further examination of the gender construct and how that might bridge to the results of the study. Gender roles are thought to be developed in youth and can become more or less defined over time. As women and men progress through cognitive, social/emotional, student, and career-related developmental processes, their gender values may change (Street & Kimmel, 1999). Thus there are both inherent and learned differences between the female and male genders. In childhood, a gender role may be defined with regard to several parameters: dress, interest in toys, make-believe and dress up play, peer preferences, and so on. Into adulthood, the definition of a gender role may include a person’s preference for, or adoption of certain behavioral characteristics. It may also include the endorsement of specific personality traits that are linked to a culture’s notions of masculine and feminine (Ruble & Martin, 1998). Compassion (female) and power (male) are examples of traits innately attributed to gender that researchers believe may actually be reflections of socially accepted and expected behavior (McCormick and Jesser, 1983; Scher, 1984). All of this this eventually affects how each gender operates and is perceived in the workplace. Handy (1994) shares this assessment of the female gender that highlights what may be innate complexities in behavior:
They (organizations) want people who can juggle several tasks and assignments at one time, who are more interested in making things happen than in what title or office they hold, more concerned with power and influence than status. They want people who value instinct and intuition as well as analysis and rationality, who can be tough but also tender, focused but friendly, people who can cope with necessary contradictions. They want, therefore, as many women as they can get (p. 179).

Handy’s quote indicates that females are more complex in their thinking and actions with greater ability to multi-task than males. Such attributes align well with proficiencies inherent in the constructs for the Managing Processes quadrant of behavioral complexity, for which female respondents demonstrated greater capacity as evidenced by a positive, significant beta. Females in this study indicated higher scores in the Producing Results quadrant. Countless studies have indicated that women prefer more participative styles of leadership and may take the approach of focusing on internal quality, that is minding the day-to-day tasks and ensuring consistent outcomes, versus external glory (Gibson, 1995; Eagly & Mlagdinic, 1989; Vinnicombe & Colwill, 1995). Further explanation for the results of this study is that the female respondents in this survey may not a typical representation of the female population. To begin with, they are individuals in a management role. As such, they likely possess attributes akin to management and historically viewed as “male.” Rosener (1990) notes that while women tend to prefer a more relational style, they have been influenced by a cultural and work-force push to adopt a more male-oriented style when in the leadership role. This may result in over-compensation, with females working harder to earn and maintain respect through
managing and producing to a higher degree than their male counterparts. Additionally, the respondents in this survey are individuals working in a field that has become increasingly female. As such, they are not working in isolation and have many colleagues of the same gender that may model behavior, or provide support within the larger registrar community. Data shows more females then males in the profession. AACRAO, the registrar’s professional association lists 67% of the membership population as female and this study had 72.8% female respondent percentage. This means females have established themselves and garnered expertise in the registrar role, which may further explain their strong grasp of processes and their tendency toward producing results.

**Experience**

Higher levels of experience in this study positively influence higher managerial behavior complexity, and a higher capacity for the Leading Change quadrant. Experience is an attribute unique to the individual. How one interprets something and what he/she takes away from their experience is influenced by many factors. Experience level also increases familiarity with situations in a given domain and influences behavioral responses. A 2012 study by Unal and Unal looked at how teacher’s classroom management styles change based on their years of experience in the field. They found that teachers exerted minimum classroom control early in their careers, interactive or shared control during the middle part of their career, and complete teacher control once they had become experienced in the classroom. Unal and Unal (2012) buttress the finding that respondents in this study would be more adept leading change once fully established in the field. The majority of the respondent pool has been in the field for 13+ years. In this time, it is likely they have come to rely on their staff more for internal
functions, thus allowing them to take on a broader role that aligns with leading change. Experience and leading change are tied together in the literature in other ways as well. Goffee and Jones (2006) state that, “leaders rely heavily on their instincts” and have the experience to detect shifts in climate and determine when it is best to act (p.52). Experience also leads to increased levels of emotional intelligence and emotional intelligence has been correlated with more effective leadership:

Emotional intelligence played an increasingly important role at the highest levels of an organization, where differences in technical skills are of negligible importance. In other words, the higher the rank of a person considered to be a star performer, the more emotional intelligence capabilities showed up as a reason for his or her effectiveness. (Goleman, 1998, p. 94)

In summation, it is likely the combination of authority level, comfort-level, and the development of emotional intelligence result in a significant positive relationship between experience in the field and both overall behavioral complexity and leading change.

Major

College major was included in this study to investigate whether educational experience and exposure influences management behavior. Presumably, those coming from science-based disciplines have developed a different skill-set, one more technical in nature. Jones (2011), referring to the Biglan’s (1973) Discipline Classification Scheme, indicates, “Disciplines with high paradigmatic development such as Chemistry, Physics, and Engineering are classified as hard disciplines” (p. 16). For the purposes of this study, the following disciplines fell in the Sciences category: Biological Science, Physical
Science, Engineering, Architecture, and Medical and Technical Degrees. The technical nature of the registrar job and the emphasis placed on candidates with technical backgrounds may signal that Science majors may be good at certain functions inherent in the registrar job. Holland (1973, 1997) proposes that individuals who are practically-oriented will seek out an occupation where those skills are valuable. Litecky, Arnett, and Prabhakar (2004) define technical skills as, “those skills acquired through training and education or learned on the job, and specific to each work setting.” Conversely they define soft skills as, “The cluster of personality traits, social graces, language skills, friendliness, and optimism that mark each of us to varying degrees.” One interpretation of these definitions is that one possessing a technical skill-set, while highly competent in many ways, may be less behaviorally complex than someone conditioned in soft skills and coming from a less technical degree background. This interpretation aligns with the negative beta coefficient that Science majors had with Leading Change and Producing Results. Technically-minded individuals may be adept at the process for arriving at a decision (step-by-step methodology found in Managing Processes for example) but less inclined to actually make the decision. Additionally, studies have shown that individuals from Science majors are more likely to view knowledge as static and less likely to rely upon their own independent reasoning (more likely to defer to authorities in the field or scientific fact) (Jehng, Johnson, & Anderson 1993, Schommer, 1990, Perry 1970). This could affect how one manages and interacts as a leader.

The influence of major could also be seen as the influence of innate personality type. Pulkkinen and Caspi (2002) refer to this as a self-selection rather than a socialization effect. The constructs making up the Leading Change and Producing
Results quadrants address initiating bold projects, starting ambitious programs, inspiring creativity, modeling an appetite for hard work and an intense work ethic, working quickly, and responding quickly to issues. Science majors may naturally prefer to use their sensory abilities over intuition, thinking through processes versus making decisions based upon a feeling, and being able to make a sound judgment call over trusting their own or someone else’s perception (Anaam, 1997). This perhaps makes them reluctant to take on bold or ambitious projects that are associated with higher risk.

**Funding Classification**

The institutional characteristics of funding classification produced a significant relationship (significant beta weight) with overall behavior complexity and the Producing Results quadrant. Funding classification was included as a demographic variable in this survey since registrars work at different types of institutions. Different institution types may have different revenue streams and thus be accountable to different constituencies ranging from the general public, to specific donors, to corporations. Likewise, decision-making practices may be different based on the overall purpose and mission of the institution.

All of the funding classifications (public two-year, public four-year, private two-year, private four-year, private for-profit) showed a significant relationship with overall behavior complexity and Producing Results. Private two-year was the only funding status to show a negative relationship, all others were positive. Private-For-Profit was the institution type with the highest positive T-value (2.765) and lowest p-value (.006). Private For-Profit institutions may have the most unique attributes compared to the other institution types in the survey (all others being public or not-for-profit). Private For-
Profit institutions have received much media attention especially as it relates to cost of attendance and value of the degree. Some refer to the institutions as ‘Drive thru universities’ with more of an office complex or industrial park feel (Kirp, 2003). The goal of these institutions is to turn profits while producing graduates quickly and in a non-traditional fashion. A recent news article outlined the practice of one for-profit institution, “to keep students enrolled as long as possible to harvest more of the federal financial aid dollars that make-up nearly all of company’s higher education revenues” (Kirkham, 2011, para. 3-4) which was backed up by dozens of complaints filed by former students with the Attorney General’s Office. A registrar at a for-profit institution may have many of the same tasks as a registrar anywhere else. Many for-profit schools do seek accreditation and all enroll students, provide grades, and confer degrees in similar fashion to their counterparts. The difference may be in the other duties for which the for-profit registrar is responsible. Some registrars at for-profit institutions may operate as recruiters, meeting directly with potential students. They may also be directly responsible for setting the curriculum of the institution (versus it being a faculty role), and they may determine student’s schedules for them versus the student picking their courses. The article cited above indicated that one particular for-profit institution did not want students to withdraw and would continue to registrar them in classes after the student had left the institution (Kirkham, 2011). This indicates that the need for high student numbers, or the producing of results, is at the forefront of the institution’s agenda. For-profit registrars may serve smaller student bases (or work with students exclusively online or via phone) and work with less staff, some even operating as one-person offices). As a result, a For-
Profit registrar would be expected to show slightly higher behavioral complexity and to be more proficient at producing results which includes a focus on competition and speed.

**Research Question Three Interpretations: Is behavioral complexity related to a registrar’s job complexity?**

The third research question continues to look at variables that influence the respondent’s behavioral complexity outcomes; specifically whether certain conditions of the respondent’s job result in higher or lower complexity levels. The variables for this question fall into the category of job characteristics: total number of staff managed (size of office), number of staff directly reporting to the respondent (scope of supervision), number of staff with supervisory responsibilities themselves (scale of supervision), and number of functions managed (scope and scale of operation). These characteristics were chosen to cumulatively represent job complexity. Simon (1969) defines complexity as “the number of parts that interact intensively in a system” (p. 183). It was anticipated that the number of individual staff managed, along with the number of specific functions managed could impact how well the registrar respondents handled the different aspects of management (their management behavior complexity): Contingency models of leadership contend that situational factors impact the leadership behaviors and traits that are most successful (Humphreys & Berthiaume, 1993).

The research question was answered through regression analysis after first running frequencies and a correlation analysis. When all four job complexity variables were combined into a mean job complexity score, the result was a significant correlation. This reinforces the idea that the scope and scale of the registrar role may also explain the managerial behavior complexity exhibited therein. Importantly, as the job complexity
increases, higher scores in the Relating to People quadrant do not follow. This could have to do with time constraints, the level of staff in the office and whether or not there is an emphasis on their development, or a lack of relational management expertise or training for the registrar.

A backward stepwise regression examined job complexity in relation to overall behavioral complexity and four additional regressions examined job complexity in relation to each of the four quadrants. The number of direct reports that the respondents had (individuals reporting directly to them versus to them via another staff member) showed a significant positive relationship with overall behavior complexity and with Managing Processes, Leading Change, and Producing Results. Total number of staff (size of office) had a significant relationship with Leading Change.

**Direct Reports**

The regression equations indicate that the more staff the registrar oversees directly, the more behaviorally complex they are in their overall management focus and in three of the four quadrants. Amey (2005) indicates that leadership is learned behavior, “an ongoing process of learning” that happens over time and with exposure (p. 690). In this case, exposure to a larger number of staff over periods of time (the average respondent has been in their current position 4-8 years and in the field for 13 years of greater) seems to expand the respondent’s managerial skill-set. Registrars with more direct reports also may have perfected the ability to balance between the various needs and obligations of their offices. Cameron and Quinn (1999) note that managers may need to choose between opposite or opposing assumptions in their daily work and that the
better the manager can balance between competing demands, the better their working relationships with those around them will be.

The registrar respondents in this research have likely learned to, or aspire to, strike a balance between the competing demands of their position. This is reflected in certain aspects of job complexity positively influencing both overall managerial behavioral complexity and three of the four individual quadrants. However, the one quadrant for which there is not a significant relationship with number of direct reports is Relating to People. Even though the results did not indicate a negative relationship, relating to people is a critical success factor in Manager Behavior Complexity, therefore it is worth speculating on why there were no predictors for it; and the literature may provide clues as to how we might build this aspect of complexity for registrars.

The Relating to People quadrant focuses on encouraging employee participation, developing staff, and acknowledging the personal needs of staff. The lack of a significant relationship might be explained three different ways, which overlap with the literature. First, the registrar respondents may be juggling multiple priorities and simply may not have adequate time to devote to employee relations and relationship building. Lockwood (1979) described the recruitment, training, duties, and career development of the registrar’s staff as, “A crucial but perhaps neglected role” in light of the registrar’s “secretariat” function and the registrar’s role as advisor to the university’s most senior management (p. 309). Over 50% of the respondent pool indicated responsibility for over 11 different functions. A 2012 study showed that when managers were assigned to multiple priorities at once, they were more effective using their multi-tasking skills and managing the interdependence between the priorities than utilizing a team-based
A relational approach focused on motivating the staff assigned to the priorities (Patanakul, 2012).

A second explanation for the absence of predictors for Relating to People could be the type of staff being managed by the respondents. The descriptive statistics indicated that over 82% of the respondents had 0-2 staff members in supervisory positions. This suggests that the majority of their staff do not have a supervisory role or the job expectations that come with leadership or increased responsibility and leadership. Instead, they may be line level staff hired with a general skill-set that has then been applied to a specific function in the registrar’s office. In turn, the professional development opportunities for the majority of the respondent’s team members may be minimal. On a national level, the United States falls behind Germany and Japan when it comes to focusing on employee development. When U.S. organizations do put an emphasis on employee relations and development, the focus is often on the white collar or “professional” staff versus the line level staff (Powell, 1996). The “line” level specialized staff members may even perpetuate that themselves, “Sometimes seeing oneself as a specialist only serves to differentiate and separate members rather than bring them together readily for shared work assignments, team functions, or cross-unit task forces” (Amey, p.692).

A third explanation may be the innate lack of relational skills or relational management training for the individual in the registrar role. Stewart and Wright (2005) described the basic functions of a registrar as a record-keeper and steward of enrollment practices and procedures. It may be that the registrars are drawn to or find themselves in their roles via their technical and functional expertise and that their career progression did
not emphasize or include coaching on how to be a relational manager. The registrar role has evolved, but those in the role may still be learning what it means to be a multi-faceted leader. Childs (2012) writes, “It takes conscious effort to become a leader in education. Usually it doesn’t just happen.” He also indicates, “If you believe your only purpose is to admit students, schedule classes, register students, and keep records, then you may not be correct” (para. 3). Fife (1989) observed, “Most academic leaders are unschooled and unsure about what comprises effective leadership (p. 13). Once in the role, the registrar may not have, or may not receive, the tools needed to appropriately develop their staff.

**Total Number of Staff**

The total number of staff in the registrar’s office was a significant predictor of the Leading Change quadrant. This may be due to many of the same factors that explain the Direct Reports finding. Additionally, while the majority of respondents reported working at smaller size institutions, those working at larger institutions with larger staff sizes may have influenced this association. Registrars with larger staff sizes at larger institutions may face bigger/broader expectations for leading change and taking action on campus. Registrars with larger offices at larger institutions may be working on campuses with broader initiatives and alongside academic and senior administrative faculty that are highly qualified and engage in research. This aligns with the Pearson Coefficient findings that FTE (institution size) and Degree-Granting Status (Doctoral-granting) also correlated with Leading Change. As the scope and scale of the institutional characteristics/job complexity increase, so do the scores for the Leading Change quadrant. A study was conducted in six large, urban institutions in New Zealand aimed at how academic leadership in these institutions was conceptualized and what was
expected of the academic leadership (Cardno, 2013). The study found that for directors of the front line at these large institutions, “leadership in terms of direction-setting and inspiring change was the main role” (p. 133).

Other explanations are that transparency is likely higher at large institutions because of the increased likelihood the institutions are accountable to the public and also may have more prominent media presence both locally and nationally. Registrars at large, doctoral-granting institutions are also the highest paid according to the College and University Professional Association for Human Resources (CUPA-HR), and as such, their position descriptions likely call for higher level leadership on campus.

**Research Question Four Interpretations: What Combination of job complexity, individual characteristics, and institutional characteristics explain a registrar’s management behavior complexity?**

Research question four was addressed via a multiple regression analysis. The first multiple regression equation looked at overall behavior complexity as the dependent variable and used ten of the original twenty-seven independent variables. The ten variables used were those that showed significance in research questions two and three. Limiting the number of independent variables was intentional in order to maintain the integrity of the equation.

The following independent variables were significant predictors of overall behavior complexity: Gender, major (specifically the sciences), institutional funding status (specifically private four-year), and number of direct reports. Additional multiple regression equations were run with the same ten independent variables and each of the four quadrants. The Relating to People quadrant did not produce significant results.
Gender was the only independent variable to show a significant relationship with the Managing Processes quadrant. Funding status (private for-profit) and number of direct reports showed significant relationships with the Leading Change quadrant. Gender, funding status (private for-profit), and major (Sciences) showed a significant relationship with Producing Results. Gender had the highest T-values and lowest p-values in each case where it was significant. In analysis where major (sciences) was significant, the beta coefficient was negative (those coming from the sciences showed less overall behavior complexity and less aptitude for Producing Results).

The independent variables that emerged as significant in the comprehensive regression equations in research question four were the same variables that emerged as significant in the more specific tests in research questions two and three. When all the variables were combined in research question four, at least one variable was representative of each of the demographic subcategories, meaning that disaggregated (research question two) and aggregated (research question four) analyses reinforced predictors of managerial behavioral complexity.

Gender and major are individual characteristics, funding status is an institutional characteristic, and number of direct reports is a job characteristic representing job complexity. In answering research question four, it could be stated that a combination of demographic factors, some of them intrinsic (innate to the individual) and some of them extrinsic (environmental), influence the respondents’ behavior complexity profiles. Intrinsic factors are a part of one’s being or belief system and are usually thought of as innate (Fox and Calkins, 2003). Extrinsic factors are influenced by an external force (e.g. funding, resources). This suggests that given the statistical tests in this research,
managerial behavior complexity (how well one balances between the different managerial roles) is influenced both by intrinsic and extrinsic forces. The individual shapes and contributes to managerial complexity and his/her managerial complexity is influenced by outside forces, since the outside forces may define the extent to which complex management responses are needed. Innately, the respondents hold certain values and beliefs and apply them to their work. Conversely, certain expectations and demands of a role, guide how that role is carried out. If those expectations or demands change, the behavior could change as well, “Applied behavior analysis holds that behavior is under the control of environmental contingencies (Skinner, 1938). One way to look at the results of this research is to relate it to the debate on whether it is nature or nurture that influences an individuals end behavior (in this case, managerial complexity). In reality, it is both nature and nurture that influence the behavioral result.

**Implications for Theory**

The implications for this research are both theoretical and practical. From a theoretical standpoint, this research applied the Behavior Complexity Instrument produced by Lawrence, Quinn, and Lenk (2009), which was based upon Cameron and Quinn’s Competing Values Framework, to a new population--registrars. Application of the instrument strengthens its use in research. The instrument has not been applied to managers in the higher education realm. The registrar respondents were able to understand and respond to the constructs of the instrument and the instrument’s validity was maintained as evidenced by Cronbach alpha statistics that met acceptable thresholds. The validity of the instrument was maintained even though a number of questions were slightly reworded, to adapt it to a non-profit educational audience rather than a corporate
one. While intended use of the original instrument did not include the element of demographic factors as independent variables, the use of such variables in this research is an approach that could be modeled and repeated for other populations as researchers attempt to distill which factors in different professions may influence managerial behavioral complexity.

Importantly, the research contributed to the literature on behavior complexity as it relates to job complexity. Cameron and Quinn (2011) assert that jobs are becoming more complex over time and managers that are responsive to competing demands are better positioned to respond to change. Assessments of this nature can be used to measure and increase managerial effectiveness.

The influences of gender and the college major of the respondent on managerial behavioral complexity are particularly noteworthy. Numerous studies exist on gender roles and what that means for the workplace (Gianakos, 2002, Hielman, 2001, Nadler & Stockdale, 2012). In this research, the female gender was a positive predictor of behavior complexity and certain individual quadrants, while the male gender was a negative predictor. One substantiated speculation in Chapter Five is that female respondents may be conditioned to operate in a male-oriented fashion while males may need to increase their complexity in general. A recent study supports this concept suggesting that both genders should adopt traits from one another in order to become androgynous leaders (Way & Marques, 2013).

A degree in a Science major was also a significant result in this research, correlating negatively and operating as a negative predictor of overall behavioral complexity and certain individual quadrants. This finding aligns with literature that
indicates science majors, either by nature or by environmental influence (classes and training), are more pragmatic than those who choose or are conditioned by soft majors or soft sciences (Jehng, Johnson, & Anderson, 1993, Schommer, 1990, Perry 1970). Hersey and Blanchard (1988) describe three competencies of leadership. The first called “diagnosing” is a cognitive or cerebral competency; a problem to be solve. The other two capacities are “adapting” and “communicating” which are less technical traits. The “diagnosing” competency connects with a science-based pragmatic approach and fits with some aspects of the registrar position. However, a focus on diagnosing at the expense of other competencies could result in a registrar focused on particular areas or tasks versus exhibiting behavioral complexity effectively across all of the behavioral complexity quadrants (Relating to People, Managing Processes, Producing Results, and Leading Change).

There is little or no empirical research on the remaining two demographic variables that consistently came up as significant positive predictors overall. One speculation is that the funding classification of private for-profit institutional types had a significant beta because the decision-making processes and practices may be different in those organizations and require that a registrar operate more like a sales manager in a corporate environment. Finally, the number of direct reports may have had a significant result given that exposure to more staff could expand one’s ability to manage both tasks and staff, and to adequately balance between the competing demands of the job.

**Implications for Management and Leadership Theories**

This study was focused on collegiate registrars; a role with responsibility for both staff (employee relations), and executing functions related to the tasks that fall under the
registrar. The results of the study also reinforce the interpretation that “managing” as in managing processes and producing results, versus “leading” as in relating to people and leading change, are perhaps related but distinct phenomena. Management is considered a more task-oriented process and leadership more of an inspirational or motivational act (Rost, 1991, Bennis, 2009). In this research, the quadrants with constructs focused on Managing Processes and Producing Results (task-oriented constructs) had slightly higher mean scores than those that represented Leading Change and Relating to People (inspiration-focused constructs). The literature on the responsibilities of the registrar seems to reinforce an emphasis on task-oriented activities (e.g. scheduling), with very little emphasis on inspirational or motivational aspects of leadership in the field. It is little surprise then that in this analysis, the registrar role leaned more toward the management quadrants than the leadership quadrants. This could be related to both the nature of job and the type of individual drawn to the job.

There are a number of traits associated with leadership, and two that receive significant attention in the literature are the concepts of being relational (Uhl-Bien, 2006) and/or charismatic (Fisher & Koch, 1996). The idea behind relational leadership is that there’s an element of emotion to how the leader approaches and treats others. Additionally, there is investment in employees’ growth, development, and overall happiness. A relational leader thrives on interaction and is both supportive and considerate (Stodgill, Goode, & Day 1962). Charismatic leaders are spellbinding and have the type of magnetic personality and dynamic speaking skills that naturally motivate others (Willner, 1984). While the results of this research suggest that registrars do exhibit behavioral complexity by indicating means scores above 3 on all four quadrants,
the registrars identified least with the constructs of Relating to People and Leading Change and thus may not fit the definition of a relational or charismatic leader. Additionally, the Relating to People quadrant was not significantly predicted by any of the demographic variables. Overall this suggests that the tenets of relational or charismatic leadership may not come naturally to all leaders or may not fit with the priorities of certain roles.

This research suggests that the innate and learned characteristics of the registrar position and those in the position may lend to a more transactional style of leadership (as opposed to a transformative style more innate to a relational or charismatic leader). A transactional leader may focus more on the inputs and outputs of the job while the transformative leader engages others in larger goals (Burns, 1978). The descriptive statistics (smaller staff size but responsibility for a large number of functions) and the prominence of significant results for the Managing Processes and Producing Results quadrants support the differences between the transactional and transformative traits. Williams (2011) notes that the challenge of the registrar position is to balance student and faculty cultures when enforcing policies and procedures, or when implementing new technologies. Registrars by the nature of their job are hands-on, and this intense focus on daily transactions may leave less time for employee development and other transformative efforts.

The Role of Context

This research highlighted the fact that context can also be a factor in managerial behavioral complexity. Context is frequently mentioned in management/leadership theories (Fiedler, 1970, Kaiser & Overfield, 2010), and it seems an appropriate
application to this research as well. The overall descriptive statistics support the idea that environmental or cultural factors influence one’s management style. The majority of respondents are serving at smaller, private institutions, in the southern region of the United States. Respondents at these institutions have responsibility for a large number of functions (over half the respondent population reported responsibility for eleven or more functions). Additionally, the significance of funding classification of the respondent’s institution and the number of staff they are directly responsible for, repeatedly emerged throughout the data analysis. FTE (institution size), and total number of staff also came up as significant predictors of certain quadrants. These results are all indicative of the strong influence of context on one’s behavior complexity.

**Cognitive Theories, Culture, and Symbolism**

Another set of theories supported by this research are cognitive theories. Cognitive theories focus on how managers think and feel and the internal processes that take place in completing a task or making a decision (Kezar, 2006). Experience plays an important role in the cognitive approach. The respondents in this research not only have significant experience in the field (13 years or greater), but experience (both cumulative and in their current role) was a significant predictor of overall behavior complexity as well as some of the individual quadrants. Feidler (1970) asserts that a combination of experience and intelligence lend to effective use of resources. The majority of the respondents in this research have acquired master’s degrees specifically in the field of higher education, and thus they have developed their cognitive skills not only through education in a general sense but through a focus on their specific field. Cognitive theories viewed within the context of the results of this research reinforce the idea that conscious
thought within the framework of experience and education can result in higher behavioral complexity and higher proficiency in Managing Processes and Producing Results.

A final set of leadership theories supported by this research are those focused on culture and symbolism. The homogeneity of the respondent pool (63% with significant experience in the field, 73% female, 67% with master’s degrees), and the small amount of variance between the total means scores for the different behavior quadrants, infers that there are cultural norms that may exist in the registrar role. The implicit tasks of a registrar’s office vary little from institution to institution as evidenced by the fact that a professional association exists for the registrar field based on the concept of shared norms and practices. Further, there are federal regulations that all registrar offices must comply with. Schein (1996) indicated that the, “set of assumptions that a group holds” will determine how the group, “perceives, thinks about, and reacts to its environment” (p. 236). Hirt, Collins, and Plummer (2005) note that, “Differences in the nature of professional life by institutional type are very real and that professionals would be well served to understand the work and rewards associated with the environment of their institutional type” (p. 8). However, It was clear in this research that there was very little variance in how the overall respondent pool rated themselves, and this was likely, at least in part, due to cultural norms of the profession versus cultural norms of the institution.

**Implications for Practice**

Much of the literature on registrars focuses on how the registrar’s role has had unique features from its origins and also evolved and changed over time (Christenson, 1913; Conner 2009; Lockwood 1979; Kisling 2012). There is an underlying theme of needing to balance the different duties of the registrar position and the sentiment of
wanting to be a good leader or manager as well (Childs 2012). From a practical perspective, the results of this research give the registrar population a framework against which to measure themselves. For example, registrars could use the slightly lower ratings in certain quadrants as inspiration for change or as indication that registrars may need more training, coaching, and direct attention to leadership training that has to do with both Relating to People and Leading Change. The results could also be a mechanism for suggesting culture change at the registrar’s institution if the culture has resulted in a situation where certain quadrant constructs seems to be valued over others.

Most importantly, there is now a research instrument in place that can be applied repeatedly or in new or different ways as a measure of higher education leaders’ competency in meeting the various demands of their job. The tool could be used for ongoing assessment or as indication that mid to senior level higher education leaders could benefit from more focused training (specifically on the constructs of Relating to People and Leadership) as a way to expand their management behavior complexity.

**Limitations of this Research**

Heppner and Heppner (2004) point out that, “Limitations always exist about the extent to which you can generalize findings” (p. 340). In this case, the research is only representative of a sample of those in the registrar role. The R squared and t-values were also low suggesting that amount of variance explained by the regression models was low (Dancer & Tremayne, 2005). The use of the behavior complexity survey instrument is fairly new (although the Cronbach alpha levels were acceptable) and the demographic variables were chosen specifically for this study. It is possible that the survey constructs did not speak to the registrar field and were not an appropriate fit. The demographic
constructs could have been limiting; for example, there may be a large difference between tenure in one’s job for four years as opposed to eight, and yet the respondents were restricted to the ranges made available to them. The demographic constructs also could have generated confusion. For example, determining the difference between mostly baccalaureate-granting and mostly master’s-granting required the respondent to pay close attention to the parameters of the response options. If the respondents did not make the correct determination or just skimmed the question and answered quickly, their response could have skewed the data.

Additionally, the overall research is restricted by the specific demographic variables presented as options (different variables could have meant different results). Further, the self-report nature of this research means that there may have been bias in responses that affected the findings. There was no input from those that work with or for the respondents and thus no way to substantiate if how the respondent’s viewed themselves matches how others view them. Input from staff who are managed, or from those who the registrar’s report to, would address this potential bias. In addition, if the survey tool were to be administered again without input of management or subordinates, it might be wise to reword the questions or rather than use a rating scale, require that respondents “force rank” the different questions so that not every question receives a similar rating.

Another limitation in this research is that in surveying a population who has a similar role, there is the risk of homogeneity in the responses. Other populations i.e. other higher education leaders or leaders in general, were not included in the survey pool, which meant the results could not be compared and contrasted among and between
different professional populations. Furthermore, the descriptive statistics for this research indicate that not only do the respondents share a similar role but there is further homogeneity in the nature and background of the respondents. This is pertinent given that the results of the research show little variance from respondent to respondent.

The time of year in which the survey was administered (close to the end of the academic year), as well as the time allotted for completion of the survey (two weeks) could have impacted response rates and resulted in respondents replying hastily without full consideration of their responses.

**Recommendations for Future Research**

The results of this study lead to several recommendations for future research. One approach would be to use the behavior complexity instrument in a survey of either supervisors or subordinates of the registrar position. This would expand beyond the registrar’s self-report of behavior and bring in the perspective of those that work with them. Another approach would be to include other higher education administrators in the survey population, making the respondent pool less homogeneous and allowing for managerial comparison across fields or functions. Another route would be to adjust the demographic variables to smaller ranges or bring in other demographic variables such as ethnicity, previous work experience, and reporting line (student affairs, academic affairs, etc.) relative to managerial behavioral complexity. Future research could also focus on particular areas of management such as the Relating to People constructs and be positioned as a study on relational and charismatic leadership or transactional versus transformative leadership styles. Any future surveys could also include open-ended questions, in-person interviews, or case studies.
Future research suggestions could be further broken down to highlight the significant results of the demographic variables. The female gender positively correlated with overall behavior complexity as well as three of the four quadrants while the male gender had a negative correlation. This held true for the regression equations as well. Future research could be positioned to better highlight gender differences and get at why differences may exist. The same concept applies to the category of college major, respondents whose highest degree came from the Sciences was a negative predictor of overall behavior complexity as well as for two of the individual quadrants. Studies could be conducted specifically on how college major affects manager’s behavior complexity levels. Institution type was another significant predictor in this research, and a study on the role at not-for-profit versus for-profit institution would generate greater insight into the differences of the institution types at a time when funding, cost of an education, and value of a degree are highly relevant. Last, it may be prudent to look deeper at the variable “number of direct reports” and to determine whether size of staff significantly affects managerial behavior complexity across fields and in general.

**Challenges to Future Research**

The concept of managerial behavior complexity stemming from the competing values framework seems to have mass appeal and can be applied across all fields. Any study of this nature would benefit in moving beyond self-report bias and garnering manager or subordinate input, however, such studies are more difficult and time-consuming to conduct. It may also be beneficial to rethink how questions are worded or what types of demographic questions are posed, and these efforts may require pre-testing.
Research on middle and senior managers in higher education tends to receive less of an emphasis than research on college presidents or executives in the corporate world. The registrar population is even more of a niche field and thus studies focused on the position are not likely to be common. The only journal dedicated to the registrar field is non-refereed and does not contain a significant amount of empirical research. Professional associations, conferences, and list-serves tend to focus on the technical functions of the registrar position. While registrars may be interested in topics of self-assessment and professional development, their job conditions or constraints may limit the time or money spent on such endeavors.

Summary

The registrar role is not highly publicized or heavily researched and yet the registrar plays a significant part in higher education. How well registrars balance between the competing demands of their multi-faceted position has implications for how well a university runs; whether it is meeting student needs, fulfilling its mission, or complying with appropriate rules and regulations. Likewise, the concept of managerial complexity and being a mid to senior level manager who can balance competing demands is appropriate as the customers of the registrar’s office continue to evolve, and as new technologies are introduced and greater efficiencies expected. Staff members may be changing as well, and staff may have different or greater expectations of their management.

This chapter covered research findings that provided a descriptive profile of those in the registrar position and offered insight into the managerial behavior complexity of collegiate registrars. Gender, major, funding classification, and number of direct reports
were significant predictors of behavior complexity. Other variables such as experience and total number of staff also emerged as predictors of behavior complexity and specific quadrants. Implications for theory were discussed as were implications for practice for both the registrar position and those with senior oversight in the higher education field. The findings of this research also provide a good starting point for future research on both managerial behavior complexity and demographic variables of influence on middle to senior managers in higher education, across all administrative functions.
Appendix A

Survey Questions

Managerial Behavior (questions were randomized in the survey software)

Instructions: For the self-evaluation portion of this survey, use the introductory phrase, “I would describe myself as being skilled in the following…” Your response will fall along a 5-point Likert-type scale (strongly disagree, disagree, neither agree/disagree, agree, strongly agree).

I would describe myself as being skilled in the following:

1. Making it legitimate for staff to contribute opinions:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

2. Seeing that everyone has a development plan:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

3. Encouraging people to have work/life balance:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

4. Providing fast responses to emerging issues:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

5. Insuring that office and institutional policies and procedures are known:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree
6. Developing a goal-oriented focus:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

7. Employing participative decision making:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

8. Encouraging career development:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

9. Inspiring direct reports to be creative:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

10. Getting work done quicker in the office:
    a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

11. Making sure formal guidelines are clear to people:
    a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

12. Maintaining an open climate for discussion:
    a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree

13. Making sure formal guidelines are clear to people:
a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

14. Emphasizing accuracy in work efforts:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

15. Emphasizing the need to accomplish goals:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

16. Demonstrating full exertion on the job:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

17. Making sure formal guidelines are clear to staff:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

18. Being aware of when staff are burning out:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

19. Modeling an intense work ethic:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree

20. Providing tight project management:
  a. strongly disagree  
  b. disagree  
  c. neither agree/nor disagree  
  d. agree  
  e. strongly agree
21. Recognizing feelings:
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

22. Meeting with customers (anyone outside of the office that the office serves) to discuss their needs:
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

23. Starting ambitious programs or projects:
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

24. Emphasizing the need for accuracy in work efforts:
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

25. Focusing on how the office measures up (compared to other areas and other institutions):
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

26. Producing faster office and unit outcomes:
   a. strongly disagree    b. disagree    c. neither agree/nor disagree    d. agree    e. strongly agree

27. Identifying the changing needs of the customer (anyone outside of the office that the office serves):
28. Getting unit members to exceed traditional performance patterns:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
29. Staying closely involved in all office projects:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
30. Anticipating what the customer will want next:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
31: Initiating bold and progressive projects:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
32. Seeing that federal, state, or other regulatory guidelines are understood:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
33. Launching important new efforts:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
34. Expecting people to get the details of their work right:
   a. strongly disagree   b. disagree   c. neither agree/nor disagree   d. agree   e. strongly agree
35. Closely managing projects:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

36. Showing an appetite for hard work:
   a. strongly disagree  b. disagree  c. neither agree/nor disagree  d. agree  e. strongly agree

   **Demographic Questions**

37. What is the highest level of education you have completed?

38. What was the discipline of study for your highest degree earned?
   __________

39. How many years of experience do you have in your current field?
   a. 0-3 years  b. 4-8 years  c. 8-12 years  d. 13+ years

40. How many years have you served in your current position at your current institution (including both interim and permanent status)?
   a. 0-3 years  b. 4-8 years  c. 8-12 years  d. 13+ years

41. What state is your current institution located in?
   __________ (respondents given a choice of states along with an “other” option)

42. What is the full-time enrollment of your institution, including both undergraduate and graduate students?
   a. 1-2,000  b. 2,001-5,000  c. 5,001-15,000  d. 15,001-25,000  e. 25,000+

43. What is the degree-granting status of your current institution?
a. Associate’s (<10% bachelor’s)  b. Baccalaureate (<50 master’s, <20 doctorates)  
c. Master’s (<20 doctorates)  d. Doctorate

44. What is the funding classification of your current institution?

a. Public 2-year  b. Public 4-yr  c. Private, not-for-profit 2-year  
c. Private not-for-profit 4-year  d. Private for-profit

45. The number of years your current institution has been in existence (number of years since established)?

a. 0-10  b. 11-50  c. 51-100  d. 101+

46. The total number of staff in your current office at your current institution (including you)?

a. 1-5  b. 6-15  c. 16-25  d. 26+

47. The number of staff directly reporting to you in your current role at your current institution (you are their direct supervisor and they do not report to someone else through you)?

a. 1-3  b. 4-6  c. 7-10  d. 11+

48. Of those directly reporting to you, how many have supervisory responsibilities?

a. 1-2  b. 3-4  c. 5-6  d. 7+

49. The number of separate or individual functions you manage at your current office, at your current institution (examples of functions: registration, grading, graduation, scheduling, curriculum, transfer articulation, etc.)?

a. 1-3  b. 4-6  c. 7-10  d. 11+

50. What is your gender identify?

a. Male  b. Female
Appendix B

Six Cultures of the Academy (adapted from Bergquist & Pawlak, 2008):

1. **The Collegial Culture**
   - Finds meaning primarily in the disciplines
   - Values: faculty research and scholarship, shared governance
   - Believes in: rationality
   - Goal: the generation of knowledge, the development of specific values among young men and women who are the future leaders of our society

2. **The Managerial Culture**
   - Finds meaning primarily in the organization of work that is directed towards specific goals
   - Values: fiscal responsibility, effective supervisory skills
   - Believes in: its capacity to define and measure its goals effectively
   - Goal: the teaching of specific knowledge, skills, and attitudes in students so they might become successful and responsible citizens.

3. **The Developmental Culture**
   - Finds meaning primarily in the: creation of activities furthering the personal and professional growth of all
   - Values: fiscal personal openness, service to others, systematic institutional research and curricular planning
   - Believes in the: desire of all men and women to attain their own personal maturation, while helping others to become more mature
   - Goal: the encouragement of potential for growth for all

4. **The Advocacy Culture**
   - Finds meaning primarily in the: establishment of equitable politics, and procedures for the distribution of resources and benefits within the institution
   - Values: confrontation and fair bargaining
   - Believes in the: ultimate role of power
   - Goal: the establishment of new and more liberating social attitudes and structures.

5. **The Virtual Culture**
   - Finds meaning primarily in: responding to the knowledge generation and dissemination capacity of the postmodern world
   - Values: the global perspective of open, shared, responsible educational systems
   - Believes in: the ability to make sense of the fragmentation and ambiguity that exists
   - Goal: broadening the global learning network

6. **The Tangible Culture**
   - Finds meaning primarily in: its roots, its community, and its spiritual grounding
   - Values: the predictability of a value-based, face-to-face education in a stable physical location
   - Believes in: the ability of established systems and technologies to instill the institution’s values
   - Goal: the honoring and reintegration of learning from a local perspective
### Appendix C

Means and Standard Deviations for the 36 Behavioral Complexity Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Mean Range</th>
<th>Most Frequent Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging Staff to Contribute Opinions</td>
<td>4.44</td>
<td>.60</td>
<td>1-5 (range of 4)</td>
<td>Strongly Agree (49.2%)</td>
</tr>
<tr>
<td>Employing Participative Decision Making</td>
<td>4.26</td>
<td>.68</td>
<td>2-5 (range of 3)</td>
<td>Agree (53.3%)</td>
</tr>
<tr>
<td>Maintaining an Open Climate for Discussion</td>
<td>4.49</td>
<td>.59</td>
<td>1-5 (range of 4)</td>
<td>Strongly Agree (52.5%)</td>
</tr>
<tr>
<td>Encouraging Professional Development</td>
<td>4.19</td>
<td>.72</td>
<td>2-5 (range of 3)</td>
<td>Agree (51%)</td>
</tr>
<tr>
<td>Seeing That Everyone Has a Professional Development Plan</td>
<td>3.26</td>
<td>.94</td>
<td>1-5 (range of 4)</td>
<td>Neither Agree nor Disagree (36.3%)</td>
</tr>
<tr>
<td>Coaching Staff on Career Issues</td>
<td>3.57</td>
<td>.88</td>
<td>1-5 (range of 4)</td>
<td>Agree (44.2%)</td>
</tr>
<tr>
<td>Being Aware of When Staff is Burning Out</td>
<td>3.98</td>
<td>.73</td>
<td>1-5 (range of 4)</td>
<td>Agree (60.6%)</td>
</tr>
<tr>
<td>Encouraging Staff to have Work/Life Balance</td>
<td>4.22</td>
<td>.79</td>
<td>2-5 (range of 3)</td>
<td>Agree (42.9%)</td>
</tr>
<tr>
<td>Acknowledging Staff Feelings</td>
<td>4.14</td>
<td>.75</td>
<td>1-5 (range of 4)</td>
<td>Agree (54.4%)</td>
</tr>
<tr>
<td>Seeing that federal and state regulatory guidelines are understood</td>
<td>4.51</td>
<td>.60</td>
<td>2-5 (range of 3)</td>
<td>Strongly Agree (56.4%)</td>
</tr>
<tr>
<td>Ensuring that office and institutional policies are known</td>
<td>4.45</td>
<td>.63</td>
<td>1-5 (range of 4)</td>
<td>Strongly Agree (51.9%)</td>
</tr>
<tr>
<td>Making sure formal office an institutional policies are clear to staff</td>
<td>4.35</td>
<td>.64</td>
<td>2-5 (range of 3)</td>
<td>Agree (52.5%)</td>
</tr>
<tr>
<td>Emphasizing the need for accuracy in work efforts</td>
<td>4.67</td>
<td>.51</td>
<td>2-5 (range of 3)</td>
<td>Strongly Agree (68.9%)</td>
</tr>
<tr>
<td>Expecting staff to get the details of their work right</td>
<td>4.54</td>
<td>.55</td>
<td>2-5 (range of 3)</td>
<td>Strongly Agree (56.8%)</td>
</tr>
<tr>
<td>Emphasizing accuracy in work efforts</td>
<td>4.65</td>
<td>.50</td>
<td>3-5 (range of 2)</td>
<td>Strongly Agree (66%)</td>
</tr>
<tr>
<td></td>
<td>Rating</td>
<td>SD</td>
<td>Scale</td>
<td>Agree</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>--------</td>
<td>-----</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>Providing tight project management</td>
<td>3.57</td>
<td>.85</td>
<td>1-5 (range of 4)</td>
<td>Agree (44.8%)</td>
</tr>
<tr>
<td>Keeping projects under control</td>
<td>4.13</td>
<td>.63</td>
<td>2-5 (range of 3)</td>
<td>Agree (65.8%)</td>
</tr>
<tr>
<td>Closely managing projects</td>
<td>3.76</td>
<td>.86</td>
<td>1-5 (range of 4)</td>
<td>Agree (49%)</td>
</tr>
<tr>
<td><strong>LEADING CHANGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting with customers (those from outside the immediate office)</td>
<td>4.18</td>
<td>.78</td>
<td>2-5 (range of 3)</td>
<td>Agree (46.1%)</td>
</tr>
<tr>
<td>Identifying the changing needs of the customer (those from outside the immediate office)</td>
<td>4.11</td>
<td>.67</td>
<td>2-5 (range of 3)</td>
<td>Agree (59.3%)</td>
</tr>
<tr>
<td>Anticipating what the customer (those from outside the immediate office) will want next</td>
<td>3.99</td>
<td>.74</td>
<td>2-5 (range of 3)</td>
<td>Agree (59.8%)</td>
</tr>
<tr>
<td>Initiating bold and progressive projects</td>
<td>3.85</td>
<td>.85</td>
<td>1-5 (range of 4)</td>
<td>Agree (46.1%)</td>
</tr>
<tr>
<td>Starting ambitious programs</td>
<td>3.80</td>
<td>.86</td>
<td>1-5 (range of 4)</td>
<td>Agree (46.7%)</td>
</tr>
<tr>
<td>Launching important new efforts</td>
<td>4.21</td>
<td>.68</td>
<td>2-5 (range of 3)</td>
<td>Agree (54.8%)</td>
</tr>
<tr>
<td>Inspiring staff to be creative</td>
<td>3.96</td>
<td>.78</td>
<td>1-5 (range of 4)</td>
<td>Agree (53.7%)</td>
</tr>
<tr>
<td>Encouraging staff to try new things</td>
<td>4.23</td>
<td>.70</td>
<td>2-5 (range of 3)</td>
<td>Agree (50.4%)</td>
</tr>
<tr>
<td>Getting staff members to exceed previous performance levels</td>
<td>3.78</td>
<td>.74</td>
<td>2-5 (range of 3)</td>
<td>Agree (54.4%)</td>
</tr>
<tr>
<td><strong>PRODUCING RESULTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasizing the need to accomplish goals</td>
<td>4.17</td>
<td>.68</td>
<td>2-5 (range of 3)</td>
<td>Agree (56.6%)</td>
</tr>
<tr>
<td>Developing a goal-orientated focus</td>
<td>3.97</td>
<td>.75</td>
<td>1-5 (range of 4)</td>
<td>Agree (57.1%)</td>
</tr>
<tr>
<td>Using goals to assess office performance</td>
<td>3.78</td>
<td>.86</td>
<td>1-5 (range of 4)</td>
<td>Agree (49.4%)</td>
</tr>
<tr>
<td>Showing a strong work ethic</td>
<td>4.73</td>
<td>.49</td>
<td>2-5 (range of 3)</td>
<td>Strongly Agree (75.3%)</td>
</tr>
<tr>
<td>Modeling an intense work ethic</td>
<td>4.38</td>
<td>.80</td>
<td>1-5 (range of 4)</td>
<td>Strongly Agree (55.2%)</td>
</tr>
<tr>
<td>Demonstrating full exertion on the job</td>
<td>4.26</td>
<td>.73</td>
<td>2-5 (range of 3)</td>
<td>Agree (46.1%)</td>
</tr>
<tr>
<td>Getting work done quicker in the office</td>
<td>4.01</td>
<td>.79</td>
<td>1-5 (range of 4)</td>
<td>Agree (50.8%)</td>
</tr>
<tr>
<td>Producing faster office outcomes</td>
<td>3.95</td>
<td>.75</td>
<td>2-5 (range of 3)</td>
<td>Agree (54.5%)</td>
</tr>
<tr>
<td>Providing fast response to issues</td>
<td>4.18</td>
<td>.71</td>
<td>2-5 (range of 3)</td>
<td>Agree (52.1%)</td>
</tr>
</tbody>
</table>
Appendix D

Summary of Correlation Analysis for all Independent Variables

**Individual and Institutional Characteristics:**

<table>
<thead>
<tr>
<th></th>
<th>Total Behavior Complexity</th>
<th>Relating to People</th>
<th>Managing Processes</th>
<th>Leading Change</th>
<th>Producing Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Major, Gender</td>
<td>Experience</td>
<td>Education level, Gender</td>
<td>Experience, Education Level, Major</td>
<td>Major, Gender</td>
</tr>
<tr>
<td>Characteristics:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>FTE, Funding Status</td>
<td>Region</td>
<td></td>
<td>FTE, Degree-Granting Status, Funding Status</td>
<td>Funding Status</td>
</tr>
<tr>
<td>Characteristics:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Job Complexity Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Total Behavior Complexity</th>
<th>Relating to People</th>
<th>Managing Processes</th>
<th>Leading Change</th>
<th>Producing Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Complexity</td>
<td># of Direct Reports</td>
<td># of Direct Reports</td>
<td>Total # of Staff, # of Direct Reports, # of Staff that Supervise</td>
<td># of Direct Reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Appendix E

Backwards Stepwise Regressions for Individual and Institutional Characteristics across the Four Behavioral Complexity Quadrants (only significant results shown):

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>R Square</th>
<th>T-Value</th>
<th>F Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Characteristics 1)Southern Region</td>
<td>Relating to People</td>
<td>.01</td>
<td>2.42</td>
<td>1,479 = 5.84</td>
<td>.000</td>
</tr>
<tr>
<td>Individual Characteristics 1)Gender 2)Business Majors</td>
<td>Managing Processes Total Mean Score</td>
<td>.042</td>
<td>1)3.53  2)2.43</td>
<td>3, 474 = 6.86</td>
<td>1).000  2).02</td>
</tr>
<tr>
<td>Individual Characteristics 1)Total yrs of experience in the field 2)Yrs of experience in current position</td>
<td>Leading Change Total Mean Score</td>
<td>.038</td>
<td>1)3.75  2)-2.18</td>
<td>3, 474 = 6.30</td>
<td>1).000  2).03</td>
</tr>
<tr>
<td>Institutional Characteristics 1)FTE</td>
<td>Leading Change Total Mean Score</td>
<td>.03</td>
<td>1)4.04</td>
<td>1, 479 = 16.28</td>
<td>.000</td>
</tr>
<tr>
<td>Individual Characteristics 1)Gender 2)Hard Majors</td>
<td>Producing Results Total Mean Score</td>
<td>.048</td>
<td>1)4.25  2)-2.09</td>
<td>2, 475 = 11.96</td>
<td>1).000  2).04</td>
</tr>
<tr>
<td>Institutional Characteristics 1)Private For Profit 2)Public 4yr 3)Southern Region 4)Public 2yr 5)Private 4y</td>
<td>Producing Results Mean Score</td>
<td>.028</td>
<td>1)2.74  2)2.56  3)2.30  4)2.30  5)2.30</td>
<td>5, 475= 2.752</td>
<td>1).000  2).01  3).02  4).02  5).02</td>
</tr>
</tbody>
</table>
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Curriculum Vitae

Katherine J. Humphreys

Education
- Master of Science in Sports Management, University of Tennessee, 2000
- Bachelor of Arts in Sociology, Oregon State University, 1999

Work Experience
University of Nevada, Las Vegas – Las Vegas, Nevada


Associate Registrar
- Responsible for the daily operations and supervision of the Records and Graduation Units which includes registration, grades, transcripts, petitions, degree processing, and degree conferral.
- Serve as administrator for office websites and external communication.
- Operate as point-of-contact for campus FERPA issues, questions, and concerns; spear-heading a number of efforts related to FERPA enforcement (including a campus task-force to clean-up and revise the 3rd Party Authorization Process as well as conducting trainings for new staff orientations and numerous individual offices).

Interim Registrar
- Responsible for the day-to-day operations and strategic goals of the Office of the Registrar including: oversight of degree audit systems, curriculum and scheduling, academic records, graduation, and student information systems.

Assistant Registrar
- Responsible for the daily operations and supervision of the Admissions, Residency, Records, Enrollment Services, and Graduation Units overseeing the processing of approximately 20,000 admission applications (degree and non-degree) and 5,000 residency applications annually and ensuring positive interactions occurred with prospective, new, and continuing students along with faculty and alumni.

University of Nevada, Las Vegas – Las Vegas, Nevada

PeopleSoft – iNtegrate Implementation Project


- Held responsibility for assigning and approving student records security access and providing leadership and key decision-making for student records module.
- Trained and provided written training guides for Records and Graduation Teams.
• Responsible for all dual maintenance efforts across a broad range of constituents that utilized the SIS system for daily operations.
• Operated as bridge between old and new systems; conducted a large amount of data clean-up and day-to-day data entry.
• Worked with small team to create an extensive Student Records Training plan for the UNLV campus. This included the identification of appropriate end-users and the development of a detailed training matrix as well as the conducting of training, security approvals, and post-training follow-up/customer service.

**Portal Lead**
- Responsible for drafting and approval of relevant messages.
- Developed multiple iterations of portal design culminating in a long-term vision.

**Campus Community lead**
- Took part in IDP sessions.
- Responsible for assigning and approving campus community security access and key decision making.

**Admissions Lead**
- Documented all pre-implementation processes to ensure a smooth transfer to the new system.
- Provided background information on UNLV policies and procedures to staff of consultants.
- Attended daily IDP sessions making key decisions related to the construction of the new system.
- Developed plan to roll-out/introduce system to new users including the conceptualization of First Peek sessions and “Did You Know” emails and the arrangement of initial training opportunities.
- Provided leadership to admissions module resulting in a successful on-time launch and the initial use of a new application and new system for application processing and management.

**ERP Functional Review Team**
- Integral part of exploring potential vendors for new student information system.
- Participated in on-site visits with the objective of ensuring practical use of system would meet and exceed UNLV and NSHE needs.
- Orchestrated pre-implementation planning and clean-up of data.
- Met with AACRAO consultants to develop staffing and resource plans.

**Oregon State University** – Corvallis, Oregon

**Admissions Manager (2003-2006)**
- Responsible for all aspects of customer service delivery and the supervision of the client services and recruit processing teams.
- Managed customer inquiry volume and response times and oversaw functions related to recruit prospect communications; including maintaining databases, generating mailings, and managing inventory.
- Facilitated the non-cognitive admissions review system (Insight Resume).

**Bonell Good Samaritan** – Greeley, Colorado
- Oversaw the daily operation of non-profit activity department servicing retirement and nursing home residents.
- Supervised 7 full-time Activity Coordinators, a Music Therapist, and numerous part-time Activity Assistants.
- Developed and produced new programming initiatives, planned and executed special events, recruited and monitored volunteers, secured monetary gift funds, and evaluated/audited the overall effectiveness of programs.

University of Denver – Denver, Colorado
Sports & Recreation Coordinator (2000-2001)
- Facilitated the University’s community-based adult sports program
- Oversaw the daily operations of all student athletic and recreation programs, worked with youth programs, special events, and sports camps.
- Supervised and trained intramural graduate assistant, club sports coordinator, and approximately 25 part-time staff.
- Assisted in the management of a $1.5 million dollar budget, created and administered marketing plans for all areas, solicited sponsors, coordinated numerous facility schedules, and initiated the development of further revenue-generating ventures.

Student Experience
- Graduate Assistantship-University of Tennessee, Department of Recreation.
- Internship – Lady Volunteers Athletic Department.
- Operations Supervisor – Oregon State University, Department of Recreation.

Professional Associations

Committee Participation
- Tuition & Fee Appeal Committee.
- Student Issues Committee
- Commencement Committee.
- Faculty Senate Academic Standards Committee.
- Academic Advising Council.
- First Year Experience Committee and Subcommittees.
- SOAR Advisory Committee.
- High Ability Student Task-Force.

Academic Research Activities and Interests
- Dissertation Proposal – Managerial Behavior Complexity and the Collegiate Registrar, expected December 2013.
- Leadership/Management.
- The Community College Baccalaureate Degree.
- Academic Governance.
- Change Management (organizational change).
- Customer Service/Service Culture in Higher Education.
- Job Placement for Sports Management Majors.

**Conference Presentations**

- The Impact of Organizational Culture on Student Success
- Strengthening Internal Culture as a Student Success Strategy Best Practices in Course and Class Permission Granting
- Handling Registration Restrictions in Different Student Information Systems
- Go-Live or Go-Home: Taking Reluctant End-Users Through a System Implementation.
- Go-Live or Go-Home: Communicating a System Launch to the University Community.
- FERPA in Real Life
- "But I turned that in already" Streamlining the Authorization to Release Confidential Information to 3rd Parties.