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PERCEPTIONS OF LEADERSHIP ATTRIBUTES OF SOUTH CAROLINA TECHNICAL COLLEGE PRESIDENTS

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PERCEPTIONS OF LEADERSHIP ATTRIBUTES OF SOUTH CAROLINA TECHNICAL COLLEGE PRESIDENTS

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
Career and Technology Education

by
Kevin Michael McKenzie
May 2010

Accepted by:
Dr. William D. Paige, Committee Chair
Dr. Thomas R. Dobbins
Dr. Cheryl E. Poston
Dr. Curtis D. White Sr.
ABSTRACT

This study examined the leadership attributes perceived to be possessed by the presidents in South Carolina’s Technical College System. The participants consisted of 16 presidents and 80 subordinates that were selected by the presidents. All participants were asked to complete the Leader Attribute Inventory. Additionally, each participant was requested to identify and rank attributes needed for future leadership at their institution. Demographic data were also gathered about the participants and summarized. The survey responses were collected via United States Postal Service, transposed into spreadsheets and analyzed to determine what relationships existed between the presidents’ self perception and the subordinates observed perception of the presidents possessed leader attributes. Descriptive statistics and t-tests were computed to examine and analyze the data. The findings from the study indicated that no significant differences exist between the self perception and observed perception of leader attributes possessed by SC Technical College presidents. When clustered into groups, presidents and subordinate observers both perceived that the presidents possessed attributes highest in the Personal Skills group and least in the Managerial Skills. Comparing the identification and ranking of future needed leaders attributes of college presidents, the president and subordinate observers agreed that Ethical, Visionary and Personal Integrity are common attributes needed by future leadership. Overall, the data suggested that the self perceptions held by the presidents were supported by similar perceptions of those in observational roles as subordinates.
DEDICATION

This dissertation is dedicated to my family. First being my parents, who have always been there, supported me, and continue to support me in anything that I want to do. They have always believed that continuing my education will only continue to open doors for me and pay additional dividends in the end.

Second being my wife Heather and my daughter Ryleigh who have been nothing short of dedicated to supporting me in the completion of my education. When I have needed the individual time to read, concentrate, or type away on the computer they have given me my space. They have shared in my successes and listened when I have been frustrated. I am sure at times Heather felt like a single parent as I became obsessed with completing just one more section, and for that willingness to pull double duty I am grateful. Ryleigh, even though you are too young to understand right now, you were very patient with me and allowed me to work. Any misspellings or incomplete thoughts I might have missed I will credit to you and when you were sitting in my lap, because you do love to bang away on a keyboard.

Third, to my family that might be. Should I be blessed enough to have additional children, I am doing all this work now to express to you all how important finishing what you start is, how important your education will be, and to provide you with even more opportunities than I have received.

Finally, remember that regardless of what happens in your life, your education is something that no one can ever take away and that you should always continue to learn.
ACKNOWLEDGMENTS

First and foremost, let the glory be to God, that with him all things are possible, and that without Him and the continued support of my family and friends, none of this would have ever come to fruition. My appreciation goes to all my family and friends who have continued to support me through the years that it has taken to develop and complete this dissertation. It has been a long grueling process that at times seemed stagnant. I was beginning to think that the day would never come that I would have been able to consider it complete and finished, but that too has now passed. The support of those close to me and my inner desire to complete what I had started is what kept me working.

I would also like to take the time to thank those faculty and staff members of Clemson University that have guided me through this process as well as those students of the classes that I have taught who have given me a greater appreciation for education. I would also like to extend a special thanks to those members of my dissertation committee who have helped me complete this journey: Dr William Paige, Committee Chair, Dr. Thomas R. Dobbins, Dr. Cheryl E. Poston, and Dr. Curtis D. White, Sr. Their continual willingness to serve on my committee is an illustration of their educational support they provide to the students of Clemson University. Dr. Paige as my chair, spent countless hours of office time, phone calls, morning meetings and individual time away from the office in efforts to help me complete this endeavor, and for that I am truly thankful.
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CHAPTER ONE
INTRODUCTION

Leadership, and what it takes to be a great leader, has long been the subject of many studies. “Leadership is one of social science’s most examined phenomena” (Antonakis, Cianciolo & Sternberg, 2004, p. 4). Bass (1990) notes that “the understanding of leadership has figured strongly in the quest for knowledge” and that “purposeful stories have been told through the generations about leaders’ competencies, ambitions and shortcomings” (p. 3). Institutions of higher learning also have a leadership structure in place that is worthy of continued study. The highest position of leadership within a college or university is typically titled or labeled the president.

The 16 technical colleges of the state of South Carolina fulfill the needs of the state by addressing the local needs of each community. Those needs are typically broad and ever changing. Technical and/or community colleges are often asked to be economic stimulants for the areas they serve. Leadership at the college level, specifically the presidential leadership, has many responsibilities placed upon the position. “The skills required for the presidents of modern technical colleges are different than when the system was created. The mission of two-year institutions has become more focused on becoming a driver of economic development, not merely remedial job training.” (S.C. Technical, 2004) It is that presidential leadership, specifically the attributes possessed by the presidents, that this research effort is intended to study. This study reports on the research conducted concerning the perceptions of leadership attributes possessed by the presidents of the South Carolina Technical Colleges; specifically as to how those
leadership attributes are perceived by the presidents themselves, contrasted with the perceptions of their leadership by their subordinate observers. This study will also identify and rank which attributes each group, the presidents and the subordinate observers, deemed most important for future leadership within the South Carolina Technical College System. In studies conducted by Fisher et al. they “assert that many of the leadership behaviors associated with effective presidents can be learned” and that “an astute president is capable of improving his or her performance” (Fisher & Koch, 1996 p. 64). This is further supported by Kouzes and Posner (2003) when they stated that “it’s far healthier to assume that everyone can learn to lead” and that “effective leaders are constantly learning” (p. 98). It is this effective presidential leadership that is needed to help guide these institutions through troubled times when variations in the economy have a direct influence in the college operations.

The economic outlook is constantly changing. According to a National Bureau of Economic Research report, it was “determined that a peak in economic activity occurred in the U.S. economy in December 2007. The peak marks the end of the expansion that began in November 2001 and the beginning of a recession” (Determination of the December 2007 peak in economic activity, 2008). During the calendar year of 2008, the Dow Jones Industrial Average which is used to measure the financial health of the stock market, had lost nearly a third of its value (Dow Jones Averages, 2009) and unemployment rates have almost doubled (United States, Department of Labor, Bureau of Labor Statistics, 2007-2009). Many investors who were dependent on income from their investments have had to return to the work force in order to cover their living
expenses. “The number of people who were already retired and now are back out in the labor market looking for jobs has roughly doubled in a year” (Stern, 2009, p. 1). All of these events have had a ripple effect down throughout our society and undermine its economic stability. Now, more than ever, we need effective leadership. Given the state of the economy and the current level of unemployment, many individuals have returned to school to enhance their education and prepare for new or different employment.

South Carolina’s more prominent version of community colleges are the 16 Technical Schools distributed geographically around the state. The South Carolina Technical School system serves the local county communities on a geographically segmented basis, with ability to adapt to the local needs of both the students and surrounding business sectors. The technical schools are directly responsible for working with local industry to serve their training needs and to provide a quality education for the students that attend these colleges. Additionally, the Technical College System supports academic transfer programs to send graduates on to more traditional four-year universities to complete their bachelor education. The technical schools are smaller than typical universities and have a smaller set of those administrative and educational leadership positions within the organizations. Leadership decisions can be made at the local level since each unit can, and in some cases, are expected to serve a different segment of industry for their area than schools located in another region.

The 16 technical colleges within the state of South Carolina have also seen significant increases of student enrollment as compared to previous years as people look to increase their skills during this economic slowdown. According to the statistical data
reports from the Commission of Higher Education in South Carolina (Charbonneau, ed., 2009), beginning in 1999 through the year 2008, there has been a student enrollment increase of 36.7% and just between the 2007 and 2008 years a 6.2% student enrollment increase. Nationally, enrollments are expected to be higher at all colleges. National estimates by the Department of Education have college enrollments increasing nearly 20 percent between 1999 and 2011, going from 14.4 million students to an estimated 17.7 million students (Gerald & Husser, 2001).

The position of community college president is usually the highest leadership position within the college’s organizational structure. The responsibilities of the college president are not the same as when colleges were originally established. So much more responsibility is placed upon the presidency than in years past. The position has become more than just leading the college in the academic and operational aspects of the college. “Contemporary community college presidents are being challenged ‘to be visionaries, fundraisers, managers, mentors, arbitrators, economic developers, and, above all, public servants’” (Kubala, 1999, p. 183). The leadership displayed by the president is perceived by individuals who are both internal and external to the colleges. This perception has an effect on those who are asked to be a follower internally, and those externally who are seeking to be a partner with the college itself, like an industry related partner. Other administrators, faculty, staff and even students are directly affected by the leadership capabilities of the president and the decisions they make. Local businesses, industry and the general public are external constituents influenced by the president’s leadership decisions and the direction of the college. An effective leader in the president’s position
has the ability to directly shape and influence the quality of education at the college, provide for the long term stability of the institution, and serve the public needs of the local community that the college is charged with supporting. A problem concerning the role of the president has been attrition. Between 2001 and 2011, survey studies conducted by Weisman and Vaughan (2002) show the attrition rate due to retirement alone of community college presidents is expected to be 79%. In further support, nationally by the year 2007, “700 new community college presidents, 1,800 new upper-level administrators...will be needed” and specifically in South Carolina between 2004 and 2009, “11 presidents, 30 vice presidents...will retire” (“S.C. technical college system faces leadership overhaul,” 2004). Given the expected turnover rate of presidents, aspiring presidents can use this information to mold their skills and abilities to those that are perceived to be needed in the future for these institutions highest office. This study hopes to allow presidents or future presidents in that by identification of the differences in one’s self perception with attribute needs of future leadership that those in presidential roles can work towards enhancing those attributes in which they do not currently possess. Leadership development opportunities can be selected based upon one’s possession of current attributes with the attributes they need to acquire.

Some scholars believe that leadership is based on perception and that each follower will have a different perception of those who are their leaders. “The effectiveness of leadership is determined by the amount of influence a leader can exert on the members of his group or organization. His potential for exerting that influence, in turn, depends on how his subordinates perceive him and his actions” (Olmstead, 2000, p.
 Outsiders to the organization will also have different perceptions of one’s ability to lead. Leaders will be perceived as either effective or ineffective, and that perception of leadership will directly influence one’s willingness to follow those leaders. “Most leadership scholars would agree, in principle, that leadership can be defined as the nature of the influencing process – and its resultant outcomes – that occurs between a leader and followers and how this influencing process is explained by the leaders dispositional characteristics and behaviors, follower perceptions and attributions of the leader” (Antonakis, Cianciolo, & Sternberg, 2004, p. 5).

Leadership positions can be obtained in different ways. A position of power within an organization can force someone into a leadership role, while others might obtain leader status through a predetermined organizational or social structure. Forces outside the control of such individuals may propel someone into a position of leadership even without their desire to assume it. There are extenuating circumstances surrounding a situation that may invoke someone’s natural ability that is normally suppressed into that of a leader. “Some are born leaders, some achieve leadership, and some have leadership thrust upon them.” (Alexander, 2008, p. 30) The problem is that not all persons who hold leadership positions are capable of being or even becoming an effective leader. Some people lack the necessary abilities or attributes of an effective leader for the role they hold within the organization. Likewise, others have all the skills but never find the following or support to be effective with it. Either situation can make the organization itself become ineffective and stagnant in its ability to move forward or accomplish its objectives. It is those leadership skills and abilities, often referred to as attributes, that
this study will focus. An effective leader must be able to motivate and coerce the followers to an achieved result regardless of their level of personal skill. College presidents must have the following of their subordinates to position the college and its students in the best possible situation and structure.

Higher education institutions typically have a very defined structured. Administration typically refers to those possessing administrative leadership roles in the university. These are individuals who are typically not teaching in the classroom on a regular recurring basis, but are much more focused on the operational and business needs of the university. Titles such as president, vice-president, and provost are those positions most typically associated with administration. Additionally, deans, directors and department heads are titles that report directly to their associated vice-president or president. The deans, directors and department heads are more closely related to the academic needs of the university to providing the education of the students and are closely associated with or as administration. Those positions interact with the public much more than any other positions within the university. When industry is looking to locate within the state, more specifically within a geographical region served by the technical school, individuals holding these positions are most likely to be addressing their educational needs.

Higher education administrators that hold position levels of president or vice president are looked to as leaders of the organization that will be expected to make the command decisions on behalf of their institution. Higher education administrators are the public facing representations of the institution, they represent the culture and values of
the institution and the decisions they make will forever change the direction of the institution. An administrator’s decision or action can be publically damaging or can garner public admiration. On a daily basis administrators are expected to lead the organization while maintaining a positive relationship with the constituents they serve in the public. This is very much evident in the Technical School System of South Carolina where those administrators are deeply involved in the local community. Technical schools typically serve the local industry and therefore the relationship that those administrators have with the leaders of industry is key in moving the technical school forward.

Purpose of the Study

The purpose of this study has four components: 1) examine the self perceptions of possessed leadership attributes by the South Carolina Technical College presidents as it pertains to Moss’s 37 attributes identified in his Leadership Attribute Inventory (LAI), 2) examine the observed perceptions of possessed leadership attributes by the South Carolina Technical College presidents as viewed by the selected subordinate observers in relation to Moss’s 37 attributes identified in his Leadership Attribute Inventory (LAI), 3) examine, through statistical analyses, any similarities or differences that might exist between the president’s self perceptions and the selected subordinates observed perceptions of the presidents, and 4) determine the top 10 leadership attributes needed for the future presidential leadership at the technical colleges as perceived by both the presidents and their chosen subordinate observers. The subordinate observers used in this
study hold a direct reporting position to the president and therefore should be a reliable
and accurate observer of the possessed leadership attributes of the president.

Through statistical analysis, this study examined whether there is a mean
difference in perceived leadership attributes of the president and with leadership
attributes perceived by those who directly report to the president. Presidents work
closely with the vice-presidents, deans, directors, and department heads, especially in
smaller technical schools, that the subordinates should have a good working
understanding of the possessed leadership attributes of the higher ranking officer within
their institution. Respondents were asked to rank each of the thirty seven attributes on a
6 degree Likert type scale ranging from ‘undescriptive’ to ‘very descriptive’.
Additionally, this study examined the perceptions of what attributes are the most
important to respondents for the future needs of these technical college institutions.
Respondents were asked to rank the top 10 attributes they believe will be needed to
advance their institution for the future in ascending order.

Research Questions

The rationale and design of this study was to identify, if any perceived, differences in
perception of possessed leader attributes of South Carolina Technical College presidents
between self perceptions by technical college presidents and perceptions held by their
chosen subordinates. Identification and ranking of needed future leadership attributes
was to help guide future leadership development opportunities to better prepare the
person in leadership. To provide those in technical college presidential positions or those
aspiring to ascend the ranks of academia to the position of technical college president, this study addressed the following 8 questions of primary research.

1) To what degree do the SC Technical College presidents perceive they possess each attribute of leadership using Moss’ 37 different attributes contained on the Leader Attribute Inventory Self Rating form?

2) To what degree do the subordinate observers perceive that the SC Technical College presidents possess each attribute of leadership when using Moss’ 37 different attributes on the Leader Attribute Inventory Observer Rating form?

3) Are the technical college president’s self perceptions of their leadership attributes consistent with the perceptions of those attributes by the subordinate observers? What are the mean differences between the two perceptions?

4) What are the mean differences between the self and observer perceptions of SC Technical College president’s using Moss’s Leadership Attribute Inventory when clustered into the groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’?

5) Using the Leadership Effectiveness responses, what is the perceived leadership effectiveness of the SC Technical College presidents by their chosen observers/subordinates?

6) Using Moss’s 37 attributes, what were the top 10 selections of leadership skills needed in future leadership of South Carolina Technical College presidents as perceived by current presidents?
7) Using Moss’s 37 attributes, what were the top 10 selections of leadership skills needed in future leadership of South Carolina Technical College presidents as perceived by selected observers/subordinates?

8) What are the differences between future leadership attribute needs as reported by the rankings of both the presidents and chosen observers? How do the two rankings compare to one another in future presidential attribute needs?

**Hypothesis**

This study hypothesizes that there exists a statistically significant difference between the presidents self perceived leadership attributes and the subordinate observer perceived leadership attributes possessed by the South Carolina Technical College presidents. By testing the statistical null hypothesis of $H_0: \mu_p = \mu_o$ with $\alpha=.05$ and where $\mu_p$ is the mean of the presidents responses and $\mu_o$ is the mean of the subordinate observers responses; this study will either conclude there is not enough evidence to reject the null hypothesis and therefore support that the means of the attributes are statistically the same with this particular set of data, or that there is indeed sufficient evidence to reject the null hypothesis and conclude that there exists a significant difference between leadership attribute perceptions between the presidents and the observers.

**Theoretical Perspective and Framework**

This study was founded in the use of the National Center for Research in Vocational Education’s (NCRVE) vision of a leaders role to include the following: 1) Inspires a
shared vision and establishes standards that help the organization achieve its next stage of
development, 2) Fosters unity, collaboration, and ownership, and recognizes individual
and team contributions, 3) Exercises power effectively and empowers others to act, 4) Exerts influence outside the organization in order to set the right context for the
organization, 5) Establishes and environment conducive to learning, and 6) Satisfies the
job related needs of members of the organization individuals (Moss et al., 1994, p. 6). It
is believed that through certain possessed attributes that support and influence a leader’s
behavior, differing degrees of these 6 roles of a leader can be achieved, developed and
enhanced (Moss et al., 1994, p. 10). Moss (1994), after reviewing the previous works of
Bass, which consisted of 124 studies along with 215 more studies since Bass, developed a
list of 35 attributes that are “hypothesized to predispose the behaviors that will achieve
the six broad tasks of leaders of vocational education” (Moss et al., 1994, p. 10). Later,
the list of 35 attributes was expanded by 2 attributes with the splitting of one attribute and
the addition of one more. These 37 attributes identified by Moss et al. are:

1. Energetic with Stamina
2. Insightful
3. Adaptable, open to change
4. Visionary
5. Tolerant of ambiguity and complexity
6. Achievement oriented
7. Accountable
8. Initiating
9. Confident, accepting of self
10. Willing to accept responsibility
11. Persistent
12. Enthusiastic, optimistic
13. Tolerant of frustration
14. Dependable, reliable
15. Courageous, risk taker
16. Even disposition
17. Committed to the common good
18. Personal Integrity
19. Intelligent with practical judgment
20. Ethical
21. Communication
22. Sensitivity and respect
23. Motivating others
24. Networking
25. Planning
26. Delegating
27. Organizing
28. Team building
29. Coaching
30. Conflict management
31. Time management
32. Stress management
33. Appropriate use of leadership styles
34. Ideological beliefs are appropriate to the group
35. Decision making
36. Problem solving
37. Information management

Using these 37 attributes accompanied with a positive statement of example, Moss developed the Leader Attribute Inventory (LAI) in 1989 which was later revised by Moss et al. in 1994. The Leader Attribute Inventory (LAI) Self-Rating form (Appendices A & A) instrument asks a person to rate themselves as to how they perceive they possess each of the 37 attributes on a 6-point Likert Type scale. Likewise, the Observer-Rating form (Appendix B) asks an observer to rate to what degree, using the same 6-point Likert Type scale, the one being observed possess the same 37 attributes. Additionally, using the 6 roles of leadership as the basis, Moss et al. developed the Leader Effectiveness Index. This index asks the observers only on the Observer-Rating form, 7 questions designed to rate the overall leadership effectiveness of the person being observed. To perform preferential ranking, a list of all 37 attributes (Appendix c) was supplied and both those
being observed and the observers were asked to identify and rank only the top 10 needed attributes for the future. Analysis of data collected from both sets of forms and the attribute rankings was performed. The use of descriptive and inferential statistics was done to make empirically supported conclusions about the data. Relating and correlating information received from both these forms which were completed independently of each will identify if there are differences in perceptions about the leader attributes possessed by the presidents.

Definition of Terms

*Commission on Higher Education (CHE)* – Governing body for institutions of higher education in the state of South Carolina

*Leader Attribute Inventory (LAI)* – A 37 item instrument contained on two independent forms (Self and Observer) consisting of positively phrased statements of leadership abilities as developed by Moss et al. Each attribute is rated on a six point Likert scale as perceived to be possessed by the person being rated.

*Leader Effectiveness Index (LEI)* – A survey instrument included as part of the Leader Attribute Inventory (LAI) Observer-Form where the observer is asked to rank the overall leadership effectiveness of the one being rated.

*Observer-Rating Form* – one half of the Leader Attribute Inventory (LAI) survey instrument only administered to the persons designated as an observer of the one being rated.

*Self-Rating Form* – one half of the Leader Attribute Inventory (LAI) survey instrument only administered to the persons designated as the one being rated or observed.
Subordinate(s) – are the selected observers of the president who occupies a position that is direct reporting in organizational structure to the president’s position and based on that position should be a good witness to the president’s leadership abilities to evaluate the possessed leadership attributes to be examined within this study.

Delimitations

The Leader Attribute Inventory (LAI) model, while attempting to be inclusive and broad, cannot necessarily provide all the possible attributes that a leader may need to possess to be deemed effective. The bounds of this study are limited to the instrumentation of the Leader Attribute Inventory (LAI) and the subsequent importance ranking of the attributes contained within the Leader Attribute Inventory (LAI). The Leader Attribute Inventory (LAI) instrument was developed during a six year study funded by the National Center for Research in Vocational Education (NCRVE). The intent was to make a “diagnostic assessment of 37 attributes – characteristics, knowledge, skills and values possessed by individuals- that predispose successful performance as a leader in vocational education.”(Moss et al, 1994, p. 1)

Limitations and Assumptions of the Study

This study was limited to only the 16 two-year colleges within the Technical College System in the state of South Carolina. These colleges are multi-faceted in that they offer and grant degrees, certification programs, transfer programs, continuing education, and work place or job skill training. Each college has its own leadership
hierarchy that follows a president/vice-president model commonly found within traditional academia. Additionally, this study is limited to leadership attributes perceived to be possessed and displayed by only those individuals in the position of president at those institutions during this study. Observations are limited to those individuals that are direct reporting to the president in subordinate positions and chosen as an observer by the president to participate in this study.

Assumptions are that each respondent, either in the role of self rater or observer, was candid and truthful in all their answers or comprehended the instructions delivered via cover letter (Appendices H & I) and survey instrumentation in the same manner. Confidentiality has been assured and the expectation is that all responses were an accurate reflection of each respondent’s feelings about what is being asked of them. Presidents were to choose the individuals to provide the observer portion of the ratings and while selection bias could play a role, the assumption is that each respondent chosen was honest and fair in their assessment. Since this study is limited to 16 two-year technical colleges within the state of South Carolina, any and all generalizations derived at the conclusion of this study will be limited directly to the South Carolina Technical Colleges for applicability, but may have broader reaching applications in some situations. Each respondent is asked to rate attributes for future leadership needs and for reasons of this study, the assumption is that each school has the same goal as outlined by the mission statement of the South Carolina Technical College System, “The South Carolina Technical College System provides learning opportunities that promote the economic and
human resource development of the state” ("SC technical college system vision, mission ," 2009).

Significance of the Study

Leader’s attributes that govern their ability to motivate and lead others can be learned and acquired over time through careful examination of one’s self with how one is perceived. On executive leadership, Olmstead (2000) stated “Sound leadership is not a matter of hunch or native ability; its fundamentals can be analyzed, organized systematically, and learned by most individuals with normal abilities” and that “executives can improve their performance as leaders through the acquisition of organized knowledge and systematic analysis of their own leadership behavior” (p. 229).

The significance of this study has far reaching implications to those currently holding or aspiring to ascend to the position of president within the South Carolina Technical College System. Data collected and its subsequent analysis may provide relevant data about current perceptions of leader attributes and the overall effectiveness of their leadership abilities as perceived by their subordinates. Moving forward, a list of desired attributes ranked by preference of future need may be derived which will allow those individuals or those aspiring to be president to evaluate their strengths and weaknesses against those preferred attributes.
Summary

Leadership is a central focus point for any organization and to be effective, the leader must have proper followership of subordinates throughout the organization. A leader must have the perception of leadership abilities by those asked to follow. All decisions made by the organization, South Carolina Technical Colleges in this study, ultimately are the responsibility of each school’s Chief Executive Office, the president. The role of the president has changed and expanded since the schools inception and the growth of responsibilities can be overwhelming and dilute even the best president’s focus and attention to specific details. By identifying, comparing and contrasting the differences in perceptions of a leader’s attributes that directly affect their leadership behavior with their subordinate’s perceptions, a growth and change opportunity will exist. This identification will allow for someone to change their attributes to be more in line with what is perceived to be needed by the position.

This study will follow a 5 chapter organization. Chapter 1 introduces the study and presents the purpose and introductory information to support the study. Chapter 2 will include a review of significant related material. Chapter 3 will outline the methodology of the research used during this study which will include the design, population sample and population, instrumentation, data collection and data analysis methods. Findings and any analysis of collected data will be presented in chapter 4. Chapter 5 will provide the relevant assessment of findings, conclusions or recommendations drawn from the study and any recommend future topics for further investigation.
CHAPTER TWO

REVIEW OF LITERATURE

Introduction

The purpose of this study has four components: 1) examine the self perceptions of possessed leadership attributes by the South Carolina Technical College presidents as it pertains to Moss’s 37 attributes identified in his Leader Attribute Inventory (LAI),

2) examine the observed perceptions of possessed leadership attributes by the South Carolina Technical College presidents as viewed by the selected subordinate observers in relation to Moss’s 37 attributes identified in his Leadership Attribute Inventory (LAI),

3) examine through statistical analyses any similarities or differences that might exist between the president’s self perceptions and the selected subordinates observed perceptions of the presidents, and 4) determine the top 10 leadership attributes needed for the future presidential leadership at the technical colleges as perceived by both the presidents and their chosen subordinate observers. The review of related literature presented in this chapter is organized and presented in the following manner: 1) defining the broad conceptual idea of leadership, 2) review of relevant historical leadership theories, 3) review of the position of college president, its intricacy’s, position of power and leadership demands and 4) review of leadership attributes and development of the Leadership Attribute Inventory (LAI).
South Carolina Technical Colleges

There are 16 technical colleges distributed throughout the state of South Carolina that collectively comprise the South Carolina Technical College System. These colleges are designed to provide technical education to learn a skill, trade, or offer a degree transfer program to allow students to continue on in their educational pursuit at a more traditional 4 year institution. Starting with the opening of the first institution in Greenville, SC. in 1962, the establishment of all 16 campuses’ was conceptualized between 1961 and 1973. In 1964, the collection of technical colleges and technical education centers took on the title of the ‘South Carolina Technical College System’ and that title remains today.

Originally, in response to less than average income levels as compared to national income averages and the states dependency on agriculture as an economic resource, the colleges were envisioned to provide technical training to the residents of the state in attempts to provide a more technically competent workforce and to attract outside industry to the state (Duffy, 1997). Ernest Hollings was the governor at the time and commissioned a legislative committee to study the economic situation. The results and findings of this committee led to the establishment of the South Carolina Technical College System. Initially the colleges, or Technical Education Centers as some were referred to then, offered only technical training or certification for industry based needs. It was not until 1972, with the passage of Act 1268, that the usefulness of adding college transfer ‘credit’ instruction, known as 1st and 2nd year parallel instruction, became a part of the technical college’s offerings. Additionally, Act 1268 established the governing
body of the South Carolina Board for Technical and Comprehensive Education which
governs all 2-year educational institutions. State Act 654, passed in 1976, further defined
the State Technical College System and made all employees of the college system ‘state
employees’. It also allowed the individual colleges to become more locally regulated by
the creation of local area commissions. The area commissions were delegated much
operational power and control over each institution. Additionally, the area commissions
were to hire a chief administrative officer titled today as the president of each institution.

Today, based on 2005-2006 academic year statistics as reported on the South
Carolina Technical College Systems’ website ("SC technical college system vision,
mission"), the Technical College System serves approximately 114,000 credit seeking
students and approximately 128,000 continuing education students across the 16 college
campuses. This makes the South Carolina Technical College System the largest
undergraduate educational organization in the state of South Carolina (Charbonneau, ed.,
2009). Demographics of the students show that about 96% of students attending the 16
colleges are South Carolina residents and considered in-state students. In the past
decade, enrollments have increased nearly 30% ("Goals and achievements – By the
numbers;", 2009).

Defining Leadership

“There are as many different definitions of leadership as there are persons who
have attempted to define the concept” (Bass, 1990, p. 11). Definitions are further
convoluted when differentiated among leadership types. Stogdill (1974) stated that as
early as Plato’s *The Republic* was the identification of three leadership types: philosopher-statesmen, military commander, and businessman. Classical definitions attempt to simplify and define leadership essentially to one’s ability to influence others in order to obtain the desired outputs. French and Raven (1959) describe leadership as the ability one to get another to do something that the other might not have otherwise done.

A definition by Campbell (1956) states that “leadership may be defined as the contribution of a given individual to group effectiveness, mediated through the direct efforts of others rather than self” (p. 1). These statements attempt to simplify the definition of leadership in that it is a measure of the influential nature of a relationship that exists between two or more individuals. Other researchers cannot narrow the definition of leadership to something that simple and have a harder time finitely defining leadership. When Antonakis, Cianciolo & Sternberg (2004) reviewed other research on leadership, they pointed out that Yukl had nine different definitions in 2002 and noted that in Bass identified 12 definitions in 1990 in his handbook. The nine definitions that Yukl identified in 2002 was an increase from the original seven he first identified in 1989 (Yukl, 1989). These types of changes and updates to the definition of leadership further support that it is an evolving topic. During Moss et al. research, they noted that regardless of the amount of attention leadership has received, there still does not exist a “consensus on a specific definition of leadership” (Moss et al., 1994, p. 2). Defining leadership appears to be an evolving subject.

Leaders and leadership have been studied since nearly the beginning of time. “The study of leadership rivals in age the emergence of civilization, which shaped its
leaders as much as it was shaped by them” (Bass, 1990, p. 3). Someone had to make the decision while others evaluated the decision that was made and either chose to follow, do something different, or do nothing at all. In its purest form, leadership could be thought of as a “relationship between those who aspire to lead, and those who choose to follow” (Kouzes & Posner, 2003, p. 2). Bennis (1989) suggests that what defines a leader and leadership has long been debatable and is subject to one’s perception when he stated that “leadership is like beauty, it’s hard to define, but you know it when you see it” (p. 1). This is further supported by Bass (1990) in that “the search for the one and only proper and true definition of leadership seems to be fruitless, since the appropriate choice of definition should depend on the methodological and substantive aspects of leadership in which one is interested” (p. 18). The premise is that true leadership is a hard topic to define, but a matter of an influential relationship that exists between a leader and a follower.

Leadership Theories

There are numerous theories, ideas, and suppositions that contribute to the large amount of historical literature of leadership that lends itself to shaping most modern leadership philosophies. “Nearly all leadership research can be classified into one of the following four approaches: (1) Power-Influence approach, (2) behavior approach, (3) trait approach, (4) situational approach” (Yukl, 1989, p. 7). Based on these approaches, this section will discuss some of the theories that have contributed to leadership’s evolution: Great Man, Trait, Behavioral, Situational, Contingency, Transactional, and
Transformational. Individually, each theory has contributed significantly to the entire body of work surrounding leadership. Each theory had a period of time in which it was heavily studied and followed, and many are still in practice today in the evaluation of current leaders and leadership effectiveness.

The idea that leaders are born into roles as leaders is the fundamental principle of the ‘Great Man’ theory. The simplest example of this theory is in the monarchical governmental system where the people are ruled by those of royalty. Bass (1981) and Outcult, Farris, and McMahon (2001) all point out that “the Great Man theory contains a thread of belief in Darwinism and the notion that leadership ability is passed from generation to generation genetically”, and “if leadership was inherited it would be only natural that kings would be born of kings.” Essentially, if you were born within the family, you were expected to be leadership material and ascend to your rightful position of leadership. This belief led to further place a wedge in and between the classes since those in the lower classes seldom had an opportunity to be in leadership positions. Twentieth century research by Dowd (1936) found that “there is no such thing as leadership by the masses. The individuals in every society possess different degrees of intelligence, energy, and moral force, and in whatever direction the masses may be influenced to go, they are always led by the superior few.”

Another premise of the great man theory is that when there is a need for leadership, a ‘great man’ will surface from the masses and assume the position. Likewise, there is no mention of a ‘great woman’, and one might be led to believe that woman were not capable of leadership. This was a reflection of the status during those
times where most women and the majority of men were not expected or allowed into positions of power or leadership. There have been women who were historically considered great, but their accomplishments have either been ignored by history or overshadowed by historical men.

Trait theory expands upon the basic premise of the ‘Great Man’ theory. Not discounting the idea that some leadership qualities can be passed genetically, there are other characteristics or traits that leaders may also have regardless of heredity. “The trait theory of leadership makes the assumption that distinctive physical and psychological characteristics account for leadership effectiveness” (Manning, 2003, p. 16). Trait theories are founded on the premise that leaders possess certain identifiable traits that differentiate themselves from those of their followers. “Leaders were seen to be different in various attributes and tested personality traits than were non leaders” (Bass, 1990, p. 38). During two separate reviews of previous research conducted between the dates of 1904 to 1947 and 1948 to 1970, Stogdill (1974) was first lead to conclude that the situation and not personality factors of the leader had more to do with their leadership ability, therefore minimizing the effect that personality factors were contributors to one’s leadership. However, during his second survey, he upheld the notion of situation, but found through a more balanced approach that personality factors of the leader indeed had an influence on their leadership ability (Northouse, 2010). Bass, in reference to Stogdill’s research, supports this when he stated that “the similarities of results make it reasonable to conclude that personality traits differentiate leaders from followers, successful from unsuccessful leaders, and high-level from low-level leaders” (p. 86). The
shortcoming of trait theory is the transferability of leadership from one situation to another. Just because one had certain traits and was considered to be a good leader in one situation did not necessarily lend itself to transferring that ability to a different situation. Researchers tried to identify these common traits of leadership as they appeared. Research conducted by Ghiselli (1963, 1971) identified 6 common characteristics to leadership; need for achievement, intelligence, decisiveness, self-confidence, initiative, and supervisory ability. Research conducted by Gardner (1989) identified 14 traits that were common to leadership regardless of any other factors: physical vitality and stamina, intelligence and action-oriented judgment, eagerness to accept responsibility, task competence, understanding of followers and their needs, skill in dealing with people, need for achievement, capacity to motivate people, courage and resolution, trustworthiness, decisiveness, self-confidence, assertiveness, and adaptability or flexibility. Again, a later study that supported the notion that leaders possessed traits that differentiated themselves from that of others, Kirkpatrick and Locke (1991) identified drive, motivation, integrity, confidence, cognitive ability and task knowledge as basic common traits among most leaders.

Following trait theory, behavioral theories became the topic of research in the 1950s and 60s. Theories supporting that people were predisposed to being a great leader were giving way to theories of studying the actual actions of leaders and not their genetics. Early ideas were that a leader’s actions will be more deterministic of their leadership ability than their pedigree, intelligence, or any acquired traits. This was a shift in belief from who you are to what you can do. Sperry (2002) stated that, “focusing on
what the leaders does, not on the traits that individual possesses, the behavioral complexity model emphasizes the leader’s ability to manage various organizational orientations or roles that specify different, and possibly competing behaviors.” (p. 27). Behavioral theory is founded in the assumption that leaders can be taught to lead, instead of being born to lead. Studying the previous leaders behaviors, particularly those behaviors that resulted in success, can lead to the formulation of a leadership plan in which others can be taught leadership. Essentially, take what was successful and apply it while discarding behaviors that have led to failures. Additionally, behavioral theory is based upon a causal affect relationship between a leader and subordinate. Leadership studies conducted at the Ohio State University during the 1950s by Hemphill, whose data was later factor analyzed by researchers Halpin, Winer, and Fleishman concluded that leadership behavior could be represented in two dimensions: initiating structure and consideration (Bass, 1990; Hersey, Blanchard, & Johnson 2001) and mentioned again when as those studies “identified two dimensions of leadership generally referred to as consideration and initiating structure” (Antonakis, Cianciolo, & Sternberg, 2004, p. 7). Consideration is the relationship established between the leader and subordinate as to how much concern the leader has for the needs of the subordinate. The initiating structure is how the roles within the relationship or work group are defined in addition to the definition of the task to be accomplished. The leader’s role is to try and control the output for a given situation by providing an input to the subordinate. The subordinate will then in turn have a responsive action and the leader is to then either accept or reject the subsequent response by the subordinate. The leader would then encourage those
actions deemed appropriate or wanted and discourage the other responses. “The leader’s behavior is a cue to evoke the subordinate’s task behavior” (Bass, 1990, p. 48). Then subsequent leadership in the relationship can be successful based upon previous learned behaviors. It is the leader’s behavior that is generating the desired response.

Situational leadership is different from other theories, especially trait theory, in that the situation presented, along with all the demands and circumstances surrounding the situation, will determine who will rise to be the leader (Bass, 1990). The leader will become a product derived out of the situation. According to Hersey, Blanchard and Johnson (2001) situational leadership is not universal, “there is no one best way to influence people” (p. 173). Vasu (1998) suggests that situational leadership is similar to behavioral theory and was derived from the same initial Ohio State University studies. The two concepts of task and relationship behavior that those earlier studies referred to as ‘initiating structure’ and ‘consideration’ were apparent in situational theory. Based on Blake and Mouton’s managerial grid model and Reddin’s 3-D management style, a new model used to illustrate situational theory was developed by Hersey, Blanchard and Johnson (2001). Hersey, Blanchard and Johnson contend that there is no single way for a leader to handle every situation encountered and that the situation itself will drive the leader’s actions. The way a leader will handle issues will be determined by the leader’s style paired with the maturity level of the follower. The leader must invoke the proper combination of task and relationship behaviors along with the follower’s willingness to follow the leader in order to achieve success. The follower is first to act in this relationship and it is the leader’s reaction along with the followers willingness to follow
that will derive the type of response from the leader in situational theory (Hersey, Blanchard & Johnson 2001). Hersey and Blanchard characterized both the style of the leader and maturity of the follower into 4 categories. Leaders were S1-Telling/Directing, S2- Selling/Coaching, S3-Participative/Supportive, S4-Delegating while followers were R1- Low competence/high commitment, R2- some competence/low commitment, R3- High competence/variable commitment, and R4- High competence/high commitment.

After evaluating the maturity level of the follower, the leader could then respond with the appropriate corresponding style. The situation the leader is presented will shape their response. Hersey(2001) contends that “any leader behavior may be more or less effective depending on the readiness level of the person you are attempting to influence” (p. 188).

Contingency theory is derived from a behavioral approach, but must include the dynamics of the situation and matching the appropriate leadership style for that situation (Sperry, 2002). Therefore many references in literature about contingency theory will group contingency into a situational discussion. Contingency theory accounts for the subordinate, the task at hand, and any group variables. In his research, Fiedler (1967) identifies that there are three situational variables favorable to leaders. Those are leader-member relations, task structure, and the position or the authority of power the leader possesses. Fiedler contends that “the leader who is liked and accepted by his group (or feels liked and accepted), who has high position power, and who has a clear-cut task, has everything in his favor” (pp. 142-143). Hersey, Blanchard and Johnson (2001), when reviewing the research of Fiedler stated “the most favorable situation for leaders to influence their groups is one in which they are well liked by the members (good leader-
member relations), have a powerful position (strong position power), and are directing a well-defined job (high task structure)” (p. 110). Fiedler’s model is facilitated by completing the Least Preferred Co-Worker (LPC) questionnaire, in which the leader is to identify their least preferred co-worker and complete the questionnaire based on that co-worker. A high score on the questionnaire is indicative of a leader who was more relationship oriented and a low score is that of a leader who was more task oriented. The premise is that a leader will still have a positive opinion of their least preferred co-worker if they are relationship oriented. A favorable situation is when the leader is well perceived by the group, has power based upon their position and the task is high in structure, clarity and relatively simple then a task oriented leader is favorable. A task oriented leader is more successful when there are highly favorable or highly unfavorable situations, where as the relationship oriented leader is better suited for those situations in between the extremes (Bass, 1990). By identifying the situations favorableness, it is proposed you select the right corresponding leader to be effective.

Another contingency model that has been developed and received much acceptance has been from the work of Vroom and Yetton (1973). In their model, group members are asked a series of diagnostic questions based upon the problems attributes. Once all the questions in the decision process have been addressed as based upon the problem attributes, one of the five corresponding managerial styles is selected and applied (Vroom & Yetton, 1973). Their model determines that the situation which interacts with the personal attributes of the leader will shape the leader’s resulting behavior. Furnham (2005) and Hersey, Blanchard and Johnson (2001) both support that
Vroom and Yetten’s approach is important for three reasons; widely respected, leaders can vary their style to the situation, and leaders can be developed.

Transactional and transformational leadership is most notably conceptualized by researcher James Burns (1978). Transactional leadership is achieved when there is an exchange of something valued by the follower with the organizational needs of the leader. The leader has something of value to the follower, whether it is monetary payment, promotion opportunity, or job security. There is a need that the follower has and the leader can fulfill that need in exchange for the desired job completion. Transactional leadership emphasizes a transaction between a leader and follower and that in exchange the leader will specify under what conditions the negotiated reward will be granted (Bass & Avolio, 1994). Researchers such as Burns have also argued that this relationship is more of a contract and the leadership displayed in a transactional setting is more supervision or management, not pure leadership (Burns, 1978). The follower is motivated by the rewards of this contract not the leadership abilities of those he is to follow. To be effective, transactional leaders need to “1) recognize the actions that subordinates must take to achieve organizational goals; 2) specify the actions; 3) recognize the subordinates’ needs; and 4) clarify the connection between subordinates’ actions and needs” (Sperry, 2002, p. 31).

Transformational leadership is different in that it attempts to get the follower to trade short term immediate personal rewards for long term organizational goals and personal leadership growth and empowerment. “Transformational leaders, on the other hand, are those who stimulate and inspire followers to both achieve extraordinary
outcomes and, in the process, develop their own leadership capacity” (Bass & Riggio, 2006, p. 3). Individual goals are replaced and realigned with the larger more complex goals of the organization. Burns states that a transformation leader “looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower” and that this will lead to “a relationship of mutual stimulation and elevation that converts followers into leaders” (Burns, 1978, p. 4). The relationship that will exist between the leader and follower will be more than a superficial hierarchal arrangement. Bass and Avolio (1994) contend that leaders will employ one of the 4-I’s of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration in order to achieve superior results in a transformational relationship.

Fisher and Koch (1996) concluded that transformational leaders will provide vision, instill pride, inspire confidence and trust, express important goals in simple ways, promote intelligence and will treat everyone as equals.

The College President

The concept of a college presidency was not started in the United States but is based on the administrative model of the English universities of Oxford and Cambridge (Cowley, 1980). The presidency is a unique position requiring a very capable individual to perform all its many functions. A review of literature about the position of president indicates that there is minimal amount of relevant information available. In Kamm’s (1982) research, he states that “there is not an abundance of truly relevant and helpful
literature in the area of presidential leadership—at least not in the thinking of those who are (or who have been) on the ‘firing line’ as presidents” (p. 24).

The president in this study is defined as the highest ranking person of leadership within the college or university. Many will have autonomy over most decisions, many will report to some governing board for accountability. The 16 technical schools within South Carolina all have presidents designated as their senior member of leadership and were hired by their respective area commission. This role of president at two-year technical or community colleges can be very different than the role of a president at traditional four-year institutions. “Community college presidents, while charged with many of the administrative duties faced by their four-year colleagues, have a greater obligation to see that the college responds to local educational needs than their four-year counterparts” (Vaughan, 1989, p. 18).

In reference to educational institutions, Bass (1990) stated that leadership is often regarded as the single most critical factor in the success or failure of institutions” (p. 8). Long term growth and overall success of the college or university will be a direct reflection of the leadership within those institutions. “Particularly as institutions face greater stress due to a declining market, and thus face increasing competition and financial concerns, the leadership of the president will become an even more vital factor in determining the success of the institution” (Karol & Ginsburg, 1980, p. 107). Some opinions external to the university “view leading a major university as a prestigious and significant assignment, comparable to a corporate chief executive or a senior public official, such as a governor” (Duderstadt, 2007, p. xi). Researchers Karol and Ginsburg
(1980) also note that the role of the president is diverse and that many will have to find ways to distribute their time between academic matters, financial matters, external relations, student affairs, and the overall general administrative needs of their college.

Colleges have evolved into more than just educational institutions of higher learning and today’s college president will serve a different role than their predecessor. “Colleges are a complex system composed of a series of subsystems: a lay governing board, a professional faculty sub divided into departments according to specialties, students, administrators, librarians, athletic coaches, and service personnel (Dodds, 1962). The president’s responsibilities have been changed and expanded. In the past, it used to be that the college president was an educator first and foremost. The president is now asked not only to be responsible for the academic affairs of their institution, but they are now expected to run what amounts to a business, delegating the educational needs have been relegated to subordinates such as vice presidents or deans. College presidents must have a full set of abilities but Duderstadt (2007) contends their ability range is not large enough. Duderstadt states that university leadership is composed of “executive leadership and management, academic leadership, political leadership, moral leadership and strategic leadership” and that “no leader has a range of attributes and skills to span the full range of leadership needed for a university” (p. 38). In a study conducted by Fisher on effective college presidency concluded that “The effective college president is a strong, caring, action-oriented visionary who acts out of educated intuition. He or she is transformational rather than transactional and less collegial and more willing to take risks than the usual president” (Fisher & Koch, 1996, p. 57). Further analysis by Fisher
illustrates that effective presidents are open and respect the ideas of others through support of creativity, encourage risk taking among subordinates, are stout decision makers, and most importantly assert that effective leadership and the behaviors associated with it can be learned (Fisher & Koch, 1996).

Leadership Attributes and the Leadership Attribute Inventory (LAI)

“The trend in the last decade for individuals wanting to be or build more effective leaders has been to identify and upgrade leadership attributes; that is the inner or personal qualities that constitute effective leadership” (Ulrich, 1999, p. 4). Ulrich goes on to further identify attributes to be “habits, traits, competencies, behaviors, styles, motives, values, skills and character” (p. 4). Supporting the idea that the term attributes is a broad term for a collection of personal abilities, Sperry (2002) defines attributes as an “umbrella term that includes traits, skills, styles, abilities and capabilities” (p. 22). Theories and research leading up to now all identify broadly defined attributes that are associated with the specific theory. Based on these definitions, traits and behaviors will ultimately be perceived as a person’s attributes. Great man and trait theory refer to characteristics that individuals are born already possessing. Situations and contingencies depending on what they are will shape the perception of one’s motives, values and character. Transactional and transformational leadership will also further define the attributes of a given leader in relation to the perception of the follower and how that relationship evolves. After reviewing the research of Brown, Hosking, Kuhnert and Lewis, Moss stated that
“Attributes determine the tendency of an individual to use either transactional or transformational behaviors” (Moss & Liang, 1990, p. 11).

Each previously discussed theory has a direct correlation to a leader’s perceived possessed attributes as other researchers have attempted to broadly defined attributes. Identified in the leadership theories of behavioral, situational, contingency, transactional and transformational are the use of characteristics, knowledge, skills and values as descriptions of possessed attributes of leadership within the context of each of those theorems. In terms of measuring the effective leadership, possession alone of a particular attribute may not lend itself to making one an effective leader but that the possessed attributes will shape the behavior of leaders. Attributes that remain constant regardless of the presented situation, will have a predefined and consistent affect on a person’s behavior across varying scenarios (Lord, DeVader, & Alliger, 1986).

By stipulation of federal law, the National Center for Research in Vocational Education (NCRVE) was required to provide leadership development services to those educators in vocational education. NCRVE followed the conceptualization of Jago (1982) in defining leadership as both a ‘process’ and a ‘property’ (Moss & Liang, 1990). The process is using non-coercive influence over a group to accomplish the desired objectives. In terms of leadership being a ‘property’, Jago states that “leadership is a set of qualities or characteristics attributed to those who are perceived to successfully employ such characteristics” (Jago, 1982, p. 315). Continuing to build upon the definition of leadership by Jago that was adopted by NCRVE and the lack of available leadership material, led to Moss’s research and subsequent publication of the Leader Attribute
Inventory (LAI) in 1990 (Moss & Liang, 1990). Continuing the idea that attributes are the foundation of leaders and defined as leader possessed in most leadership theorems, Moss developed the Leader Attribute Inventory (LAI) and for purposes of his research defined leadership attributes as a collection of “characteristics, knowledge, skills and values possessed by individuals” (Moss et al., 1994, p. 1). Moss contends that “it can be presumed that there are some attributes, which, if possessed in adequate amounts, will increase the likelihood that desirable leadership behaviors will occur in a wide variety of situations” (Moss et al., 1994, p. 10). Moss also contends that many of these attributes can be learned over time or experience and that through proper leadership development these attributes can be enhanced by those in leadership positions. “It seems appropriate to think of ‘learning to lead’ as a career long developmental process; that is, attributes gained or improved at one stage prepare an individual for the next stage” (Moss & Liang, 1990, p. 12). Also due to the stability of some attributes to neither be improved nor degrade, it is those other attributes that can be variable for an individual that development can make a difference in altering (Moss & Liang, 1990).

The 37 attributes comprising the Leader Attribute Inventory (LAI) is a collection of attributes in attempt to list the more prominent characteristics, knowledge, skills and values of leaders. After reviewing the works of many researchers in the field of leadership, Moss noted the most common consistencies of attributes and included those in his Leader Attribute Inventory (LAI) instrumentation. In review of research, Moss noted that this “list presents the attributes they hypothesis are most likely to predispose desirable leadership behaviors” (Moss & Liang, 1990, p. 12). Moss believes that
knowledge learned from the use of the Leader Attribute Inventory (LAI) can help a leader develop additional attributes that the leader might be perceived to be lacking by the leaders followers. The following are all of Moss’s 37 leader attributes accompanied by a positive statement associated with them as presented by Moss.

1. *Energetic with stamina* - Approaches tasks with great energy and works long hours when necessary

2. *Insightful* - Reflects on the relationship among events and grasps the meaning of complex issues quickly

3. *Adaptable, open to change* - Encourages and accepts suggestions and constructive criticism for co-workers, and is willing to modify plans

4. *Visionary* - Looks to the future and creates new ways in which the organization can prosper

5. *Tolerant of ambiguity and complexity* - Comfortably handles vague and difficult situations where there is no simple answer or no prescribed method of proceeding

6. *Achievement oriented* - Shows commitment to achieving goals and strives to keep improving performance

7. *Accountable* - Holds self answerable for work and willingly admits mistakes

8. *Initiating* - Frequently introduces new ideas

9. *Confident, accepting of self* - Appears secure about abilities and recognizes personal shortcomings
10. **Willing to accept responsibility** - Willingly assumes higher level duties and functions within the organization

11. **Persistent** - Continues to act on beliefs despite unexpected difficulties

12. **Enthusiastic, optimistic** - Thinks positively, approaches new tasks with excitement and deals with challenges as opportunities

13. **Tolerant of frustration** - Acts calmly and patiently even when things don't go as planned

14. **Dependable, reliable** - Can be counted on to follow through to get the job done

15. **Courageous, risk-taker** - Willingly tries out new ideas in spite of possible loss or failure

16. **Even disposition** - Displays a sense of humor and a stable temperament even in stressful situations

17. **Committed to the common good** - Works to benefit the entire organization, not just self

18. **Personal integrity** - Speaks frankly and honestly and practices espoused values

19. **Intelligent with practical judgment** - Learns quickly, and knows how and when to apply knowledge

20. **Ethical** - Acts consistently with principles of fairness and right or good conduct that can stand the test of close public scrutiny

21. **Communication (listening, oral, written)** - Listens closely to people at work, and organizes and clearly presents information both orally and in writing
22. Sensitivity and respect - shows genuine concern for the feelings of others and regard for them as individuals

23. Motivating others - Creates an environment in which people want to do their best

24. Networking - Develops cooperative relationships within and outside of the organization

25. Planning - In collaboration with others, develops tactics and strategies for achieving organizational objectives

26. Delegating - Appropriately and effectively assigns responsibilities and authority

27. Organizing - Establishes effective and efficient procedures for getting work done in an orderly manner

28. Team building - Facilitates the development of cohesiveness and cooperation among the people at work

29. Coaching - Helps people to develop knowledge and skills for their work assignment

30. Conflict management - Brings conflict into the open and uses it to arrive at constructive solutions

31. Time management - Schedules own work activities so that deadlines are met and work goals are accomplished in a timely manner

32. Stress Management - Effectively deals with the tension of high pressure work situations

33. Appropriate use of leadership styles - Uses a variety of approaches to influence and lead others
34. Ideological beliefs are appropriate to the group - Models and demonstrates belief in the basic values of the organization

35. Decision making - Makes timely decisions that are in the best interest of the organization by analyzing all available information, distilling key points, and drawing relevant conclusions

36. Problem solving - Effectively identifies, analyzes, and resolves difficulties and uncertainties at work

37. Information management - Identifies, collects, organizes, and analyzes the essential information needed by the organization.

A review of recent research found three relevant studies that used the Leader Attribute Inventory (LAI) instrumentation. Chief Academic Officer’s in Public Community Colleges: An Analysis of Leadership Attribute (Fons, 2004) found 6 of the 37 leadership attributes having significant differences between the chief academic officer and their chosen observers. Those attributes were accountability, dependability and reliability, team building, conflict management, coaching, and decision making. When comparing all 37 of the attributes as a collective group, no significant differences among mean responses were found. All responses by the chosen observers found that each of Moss’s 37 attributes were at minimal ‘somewhat descriptive’ of the chief academic officers. Fons reported that the chief academic officers rated themselves highest on ‘commitment to the common good’, ‘dependable and reliable’, and ‘personal integrity’ while rating themselves lowest on ‘tolerant of frustration’, ‘stress management’, and
‘delegating’. The observers while ranking the attributes possessed by the chief academic officers rated ‘willing to accept responsibility’, ‘committed to the common good’, and ‘personal integrity’ highest while ranking attributes ‘conflict management’, ‘coaching’, and ‘team building’ the lowest attributes possessed by the chief academic officers.

In Best’s (1998) research titled *Leadership Attributes of Deans of Education as Perceived by Deans of Education*, each dean was asked to rate themselves on the Leader Attribute Inventory (LAI) and then rank the 5 most essential and 5 least essential leadership attributes needed by the position of dean of education. Best states, that in the domain of public colleges, the deans ranked themselves highest on the attributes of ‘ethical’, ‘personal integrity’, ‘insightful’, ‘committed to the common good’, ‘dependable and reliable’, and ‘communication’. In term of what attributes were the most essential to the position, the deans identified and ranked ‘ethical’, ‘visionary’, ‘personal integrity’, ‘energetic’, and ‘tolerant of ambiguity’. In terms of what attributes were least essential to the position of dean of education, the deans identified and ranked ‘coaching’, ‘initiating’, ‘information management’, ‘ideological beliefs’ and ‘even disposition’.

Gregg (1997), in her study titled *Leader Attributes of Female Administrators in Georgia Technical Institutes*, found that all female administrators and their chosen observers rated the female administrators at least ‘somewhat descriptive’ of all 37 of Moss’s leader attributes. The female administrators ranked themselves the strongest in ‘dependability and reliability’, ‘achievement oriented’, ‘personal integrity’ and ‘committed to the common good’. The faculty rated the female administrators highest on ‘energetic with stamina’, ‘willing to accept responsibility’, ‘achievement oriented’,

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‘dependable and reliable’, and ‘personal integrity’ while ranking them lowest in the attributes ‘risk taking’, ‘coaching’, ‘acceptable use of leadership styles’, ‘conflict management’, and ‘tolerant of frustration’. When comparing all results from the self rating form of the female administrators with those on the observer rating form of the faculty observers, there were no significant differences between mean attribute scores.

Summary

This chapter presented a review of selected literature as it relates to the following: defining leadership, a review of several historical theories of leadership, the development of Moss’s Leader Attribute Inventory (LAI), a discussion of the college presidency and a review of recent research and their findings that have been completed using Moss’s Leader Attribute Inventory (LAI).

As previously discussed, leadership is a perception that is best defined by the person who fills the role of the follower. Researchers such as French and Raven (1959), in addition to Campbell (1956) all broadly define leadership as one’s ability to influence another to achieve a desired result or output from the follower. Theories evolved from the ‘Great Man’ where leaders were born into existence all the way to theories that stipulate that leadership can be taught and learned. Trait theory where attributes, referred to as traits, were based upon genetics and heredity. Situational theories where the relationship between the leader and follower are examined for the proper course of action lasted up till transactional and then transformational leadership.
evolved where the leader attempts to get the follower to rise above their own short term needs for the long term growth of themselves and the organization.

Literature also revealed that the role of the president is complex and ever changing. The president is much more than an academic leader. They are expected to be representatives of the college in community efforts, fund raising, and economic developmental issues. The leadership skills will need to be vast and diverse to adapt to all the needs of their job.

Moss’s Leader Attribute Inventory (LAI) instrument was developed by using the research findings of others in addition to his own research to narrow a list of commonly identified attributes that were determined to be illustrations of good leadership. Using that list, Moss contends that with a self examination of one’s own possessed attribute inventory compared with those who would be considered observers of one’s possessed attributes would indicate either similarities or deficiencies in the perception of one’s effective leadership ability. Using either those identified similarities of deficiencies, one could then seek leadership development in the area of deficiency in order to increase their effectiveness.
CHAPTER 3
RESEARCH METHODOLOGY

The purpose of this study has four components: 1) examine the self perceptions of possessed leadership attributes by the South Carolina Technical College presidents as it pertains to Moss’s 37 attributes identified in his Leader Attribute Inventory (LAI), 2) examine the observed perceptions of possessed leadership attributes by the South Carolina Technical College presidents as viewed by the selected subordinate observers in relation to Moss’s 37 attributes identified in his Leader Attribute Inventory (LAI), 3) examine through statistical analyses any similarities or differences that might exist between the president’s self perceptions and the selected subordinates observed perceptions of the presidents, and 4) determine the top 10 leadership attributes needed for the future presidential leadership at the technical colleges as perceived by both the presidents and their chosen subordinate observers. The specific intent is to determine if there are differences between the self perceptions of the leadership of the college presidents and those perceptions held by their immediate subordinates. Additionally, each of the presidents and subordinates were asked to identify and rank the top 10 attributes that would be needed by future leadership within their respective colleges. To facilitate this study, an already proven reliable and validated survey titled the Leader Attribute Inventory (LAI) developed by Moss et al. was used to assess and score the perceived leadership attributes possessed by the college president’s from college president’s point of view and from the observer’s point of view. “The Leader Attribute’s
Inventory (LAI) has been designed to make a diagnostic assessment of 37 attributes-characteristics, knowledge, skills and values possessed by individuals – that predispose successful performance as a leader in vocational education” (Moss et al., 1994, p. 1). This chapter will describe the design, survey instrumentation, survey participants, and research methods used to collect, analyze and present the data in this study.

Research Design

This study was designed around the use of a survey to collect any and all data needed to complete and answer the proposed research questions. The survey used for this study is both quantitative and descriptive in nature. It is quantitative in that each question asked requires only one answer that is numerically represented on a Likert Type scale. “Quantitative survey means that the survey is designed to produce numerical data, and proceeds by measuring variables” (Punch, 2003, p. 3). The survey is descriptive in that it represents a snapshot of data about a population and its perceived attributes at a specific point in time, therefore being a cross-sectional study. “Descriptive surveys are those common forms of survey in which the aim is simply to establish the features of a particular group – to provide a description of the group in relation to some specific characteristics which it possesses” (Dyer, 1995, p. 90). This study is also cross-sectional given there was only one survey instrumentation administered and no follow-up was performed for comparison as in a longitudinal design, the data can only reflect what is occurring at the time of survey administration. “A cross sectional study involves
observations of a sample, or cross section, of a population of phenomenon concerning one point in time” (Babbie & Benaquisto, 2010, p. 98).

Participants

This study focuses on the perceptions of leadership of the South Carolina Technical College System presidents. There are 16 technical colleges geographically located throughout the state of South Carolina. All 16 technical college presidents listed by the South Carolina Commission of Higher Education at the time of this study, served as the population and will be completing the self perception portion. In addition to completing the self perception portion, the presidents were asked to select the 80 subordinates to be the observers. The presidents were instructed to select executive level subordinates who reported directly to them and who would have a good understanding of their leadership attributes to serve as observers.

Instrumentation

The instrument selected for this study was the Leader Attribute Inventory (LAI) survey developed by Moss et al. in 1989 and presented as the Leader Attribute Questionnaire. It was then later revised and updated by Moss et al in 1994. “There are two major reasons to using the LAI. It can be used to secure an assessment of leader attributes at a point in time, or it can be used to measure change in leader attributes over time.”(Moss et al., 1994, p. 12) As previously stated, this study sought to do a point in time assessment of leader attribute perception, a cross-sectional study. Therefore,
permission was sought and subsequently granted by Jerome Moss to use this survey on
February 2, 2009 via email correspondence (Appendix D).

The Leader Attribute Inventory (LAI) instrument consists of two separate surveys
depending on who is to complete the survey. If you were the one being observed, you
were asked to complete the Leader Attribute Inventory (LAI) Self Rating form and for
purposes of this study the presidents were asked complete this portion. If you are
selected to serve as an observer, you were asked to complete the Leader Attribute
Inventory (LAI) Observer Rating form and for purposes of this study the president’s
chosen subordinate observers completed the Observer Rating form. The Self and
Observer forms are different by the perspective of view, in that the Self form is worded in
1st person and the Observer form is written in 3rd person. The observer form also
contains the Leadership Effectiveness Index section not found on the Self Rating form.
Both forms requested basic demographic data of the respondent. Self rating forms collect
the following demographic data: Gender, Ethnicity, Age, Years of Experience in Higher
Education, Years of Experience in Current Role as President or CEO, and what Position
was held prior to becoming President. Observer rating forms collect the following
demographic data: Gender, Ethnicity, Age, Years of Experience in Higher Education,
Years of Experience in Current Role, Position Currently Held, and How Long they have
known the current president. Following the demographics, both forms contain 37
positively phrased attribute statements where the respondent is asked to rate either
themselves or the one being observed in relation to perceptions of the individual
leadership attributes. Ratings are done based upon a 6-point Likert Type response format
from ‘very undescriptive’, ‘undescriptive’, ‘somewhat undescriptive’, ‘somewhat
descriptive’, ‘descriptive’ and ‘very descriptive’. Observers were then asked to complete
the Leadership Effectiveness Index consists of 7 questions concerning overall leadership
effectiveness of the one being observed. The Leadership Effectiveness Index is also
measured on a 6-point Likert Type scale with responses from ‘not applicable’, ‘not
effective’, ‘slightly effective’, ‘somewhat effective’, ‘effective’, and ‘very effective’.
Both groups of respondents were then supplied with an additional sheet containing all 37
attributes that was appended to the end of Moss’s Leader Attribute Inventory (LAI)
instrument and asked to identify and rank the top 10 attributes needed by future
presidential leadership.

Reliability of the Leader Attribute Survey (LAI) had previously been established
through testing. The authors of the LAI provided testing data to support three forms of
reliability: test-retest, internal consistency, and interrater. Test-retest will measure the
consistency of responses by the responders over time. “Typically, the test-retest
coefficients should be at least .40, with .69 to .70 considered quite high” (Velsor &
Leslie, 1991). All but 10 of the attributes received at least a .70 coefficient to receive the
quite high designation, and none were below the .40 floor. The range of these correlation
coefficients was .47 to .89. “Internal consistency indicates the extent to which the items
making up a scale or the complete instrument are measuring the same thing. Cronbach’s
alpha is the statistic most widely used to assess internal consistency” (Moss et al., 1994,
p. 24). During two separate studies; one involving graduate students in vocational
education who were asked to rate administrators in vocational education and the other
where the average of three to five observer ratings of a large sample (n=551) was used, the Cronbach alpha obtained was .97 and .98 respectively. Generally, a coefficient of .70 or higher is considered acceptable (Nunnally & Bernstein 1994). Interrater reliability is a measure of how well groups of raters agree with each other. During studies consisting of vocational administrators and vocational teacher leaders, interrater reliabilities of the individual attributes for the two groups ranged from .75 to .84; the coefficients for the average score of the 37 attributes were .91 for both groups. Five different aspects of validity have been addressed by Moss et al (1994).

“First, face and content validity ask the following questions: Do the items make sense to the respondents, and do leaders actually behave in ways that utilize the attributes measured be the instrument? Second, concurrent validity seeks to determine the extent to which the instrument explains the variance in other indicators of concurrent performance as a leader. Third, the factor structure of the instrument indicates the manner and degree to which the items can be grouped for diagnostic for instructional purposes. Fourth, the sensitivity if item scores indicates the usefulness of the instrument to assess the effectiveness of leadership training programs and the growth of leader qualities. Fifth, drawing upon the evidence of all the forgoing aspects of validity, a judgment can be made about the instruments’ construct validity; that is, does it measure NCRVE’s conceptualization of leadership?” (p. 26)

Through studies conducted by Moss during the development of the Leader Attribute Inventory (LAI), face and content validity were also addressed. “There have
been no respondents who have said that any attribute was irrelevant to their concept of leadership”, and that “many respondents have commented on the importance of all the attributes to leader performance” (Moss et al., 1994, p. 26). Additional studies carried out in 1992 by Warlaw, Swanson and Migler show that “the 37 attributes in the LAI are actually used by vocational educators who are engaged in successful leadership activities” (Moss et al., 1994, p. 26). Content validity was affirmed again in studies conducted by Benson in 1994, in which Benson concluded and confirmed “the importance of all 37 attributes to leaders in industrial technology/technology education” (Moss et al., 1994, p. 29). Concurrent validity was addressed by correlating the observer ratings of the Leader Attribute Inventory (LAI) to those of the same observers on the Leader Effectiveness Index (LEI) and with ratings on the Multifactor Leadership Questionnaire (MLQ). The six tasks identified on the Leadership Effectiveness Index are the performance criteria of a leader and represent the conceptualization of NCRVE’s definition of effective leadership (Moss et al., 1994). “Studies have also shown that these six tasks are those that vocational educators actually use to judge leader effectiveness, and the LEI measures the tasks reliably” (Moss et al. 1994, p. 9). Correlations were computed between the same persons completing the Observer Form of the Leader Attribute Inventory (LAI) and the Multi-Factor Leadership Questionnaire (MLQ). It is those correlation coefficients that will “indicate the extent to which the LAI and MLQ ratings are measuring the same concept.” (Moss et al., 1994, p. 29) Correlation coefficients between the Leader Attribute Inventory (LAI) and Leader Effectiveness Index (LEI) in those studies revealed “r=.35 to .87; the mean of the 37 coefficients was
For instructional purposes and through studies on factor analysis, Liang in 1990 decided to group the leader attributes into three categories. Those categories were, ‘social skills and characteristics’, ‘personal characteristics’, and ‘management skills’. The result was a high degree of correlation with $r=.97$ and determined that “it is better to conceive of the Leader Attribute Inventory (LAI) as a one factor instrument –that factor being “leadership” (Moss & Liang, 1990, p. 37). In respect to training sensitivity, the Leader Attribute Inventory (LAI) can be used to measure pre and post training results of perception of leader attributes. While some attributes are inherent to an individual’s own knowledge and ability and therefore hard to learn, others skills such as those found most commonly associated with ‘management skills’ can be taught. “The LAI has been shown to be capable of measuring changes in participants’ perspectives of their attributes as the result of instruction” (Moss et al., 1994, p. 39).

Construct validity as it pertains to the measurement of NCRVE’s conceptualization of leadership had been addressed in many ways. Supporting the Leader Attribute Inventory’s (LAI) construct validity are: high correlations to the already established 6 leadership tasks that define NCRVE’s concept of leadership, a real use of those tasks to evaluate leadership performance and the fact that additional training can support and change the attributes.

Addressing the reliability and validity of the Leader Effectiveness Index is important as the LEI is an important criterion measure used to estimate the validity of the LAI. (Moss, et al. 1994, p. 67) In a study consisting of two groups of graduate students, one with 37 students and one with 38 students revealed correlation coefficients of $r=.94$
and .93 on the average score of the six tasks. Item 7 which measures the overall leadership effectiveness performance of the one being observed, had test-retest coefficients of correlation of r=.95 and r=.92. When comparing the correlation coefficients of the average scores of the six tasks with those coefficients of item 7 yielded r=.91 and r=.92. The average difference between the mean score of items 1-6 and item 7 was only .054. (Moss et al., 1994, pp. 72-73)

Survey Distribution and Data Collection

A research proposal request consisting of a description of study, process of this study, purpose of study, population to be involved and any effects this study will have on human subjects and their rights and protection was submitted to the Institutional Review Board of Clemson University. The protocol was subsequently approved on March 17, 2009 (Appendix E) and approved on March 30, 2009 (Appendix F) as amended.

A single mailed survey was chosen as the instrument for this study. Contact information containing both physical addresses and email addresses for all South Carolina Technical College presidents was obtained from the Commission on Higher Education’s website ("South Carolina Colleges and Universities," 2009). Prior to mailing the packets to the presidents, an email outlining the study and soliciting their support and participation was emailed on April 6th, 2009 (Appendix G). On April 10th, 2009 tracked packages containing 6 packets were mailed via United States Postal Service to each of the 16 presidents with each containing instructions on how and to whom to distribute the enclosed observer packets. The 6 included packets were 1 presidential packet, and 5
observer packets. Additionally, each packet labeled leader contained 1 Leader Attribute Inventory (LAI) Self Rating survey with an attribute ranking sheet for the president to complete, and 5 observer packets containing 1 Leader Attribute Inventory (LAI) Observer Rating form and an attribute ranking sheet for the subordinate to complete. Every respondent was provided a cover letter containing instructions, a thank you notice for their participation and pre-addressed stamped envelopes to allow for a direct response from all respondents. Presidents were asked to select and distribute the packets to their chosen observers in their instructions; they were not to collect the responses. Through tracking capability of the USPS, a second email was sent to all presidents on April 29th, 2009 informing the presidents that confirmation had been received that their packages had been delivered. Many packages were sent to an office and therefore confirmation of delivery to the presidents directly was desired.

Data Analysis

Each survey was examined for usability for this study. One self rating survey of the 16 self rating surveys mailed to the presidents was determined to be unusable due to the fact that the respondent did not clearly follow the directions as provided. Therefore there were only 10 president surveys that were determined to be usable for this study. All observer surveys received were determined to be usable. Data was then transferred from the response surveys into spreadsheet format for compilation by this researcher.

Statistical analysis of the data was both descriptive and inferential. Descriptive statistics were: mean, standard deviation, maximum, minimum, range, frequency and
percentile. Additional descriptive statistics of weighted sum and frequency distributions were used to compare the rankings of desirable attributes. Specific tests of inferential statistics consisting of t-tests for independent samples were performed to make comparisons between the means of corresponding groups and to perform any hypothesis testing. Part I of the Leader Attribute Inventory (LAI) requested demographic data requiring the respondent to either fill in a blank or check the appropriate box while Part II of the Leader Attribute Inventory (LAI) was in Likert Type format on a 6-point Likert scale. Subordinate observers have the additional Leader Effectiveness Inventory (LEI) which is represented by a 6-point Likert Type scale. All surveys contained the attribute identification and ranking sheet and were measured by an ordered rank in descending order from 1 to 10, where the respondent was asked to rank the attributes with 1 being the most needed and 10 being the 10th most needed attribute.

Computations were completed using the following mathematical processes. Demographic data was categorized by frequency and then presented with percentiles for each corresponding question and category. Questions 1 and 2 used computed means, range, maximum and minimum. Questions 3 and 4 built on the means computed in questions 1 and 2 and then needed t-tests to complete hypothesis testing between the means of the individual attributes and the grouped clusters of attributes. Computed means, standard deviations and frequency distributions were used to answer question 5. Questions 6, 7, 8 were answered using frequency distributions and weighted sums to make any summaries and subsequent comparisons of the ranking of attributes.
Summary

This chapter presents the research design, selected population, chosen instrumentation and statistical methods used to comprise the methodology in order to complete this study. Data analysis used both descriptive and inferential statistics to analyze the data and to make inferences about the responses collected. There were two groups used in this study, one predetermined and known as the South Carolina Technical College presidents and the other was unknown and chosen by the presidents to serve as subordinate observers. Instrumentation selected was the Leader Attribute Inventory (LAI) developed by Moss et al. containing 37 attributes of leadership. Additionally, a sheet containing all 37 attributes was supplied for ratings. Instruments were mailed to both populations, collected and analyzed.
CHAPTER FOUR
RESEARCH FINDINGS

This chapter presents an analysis of the data collected during a statewide study into the perception of leadership attributes possessed by South Carolina Technical College’s presidents. This study was conducted by survey instrumentation and administered to all 16 presidents of the South Carolina Technical College System. Additionally, there were 5 subordinates chosen by each president for a total of 80 who will serve as subordinate observers at each institution. This study determined the self perceptions of possessed leadership attributes held by the presidents and compared those perceptions with the subordinate observed perceptions of the president’s leadership attributes. The instrument chosen to collect the perception data was the 37 Leadership Attribute Inventory (LAI) questionnaire developed by Moss, et al (1994).

Once survey instrumentation was completed by both the presidents and subordinate observers, results from each group were compared to determine if each group’s perceptions of possessed presidential leadership attributes at the Technical Colleges in the state of South Carolina were similar. Data collected from each group, presidents and subordinate observers, were statistically summarized for further analysis and inference. Attribute data received were also clustered into the groups of ‘Management Skills’, ‘Personal Skills’, and ‘Social Skills and Characteristics’ for statistical analysis (Moss and Liang, 1990; Moss et al., 1994). Additional questions were asked of the subordinate observers to assess the overall effectiveness of their institutions
president by means of the companion to the Observer- Rating Leadership Attribute Inventory (LAI), known as the Leader Effective Index (LEI). An additional survey instrument provided to both groups, presidents and subordinates alike, asking them to identify and rank numerically from 1-10 the most important leadership attributes they felt were necessary for future presidential leaders. A rank of 1 was the most important needed future attribute and 10 being the 10th most important. Twenty-seven attributes will go unranked. Results were compiled, analyzed and comparisons were made between survey groups.

Review of Stated Research Questions

1) To what degree do the SC Technical College presidents perceive they possess each attribute of leadership using Moss’ 37 different attributes contained on the Leader Attribute Inventory Self Rating form?

2) To what degree do the subordinate observers perceive that the SC Technical College presidents possess each attribute of leadership when using Moss’ 37 different attributes on the Leader Attribute Inventory Observer Rating form?

3) Are the technical college president’s self perceptions of their leadership attributes consistent with the perceptions of those attributes by the subordinate observers? What are the mean differences between the two perceptions?

4) What are the mean differences between the self and observer perceptions of SC Technical College president’s using Moss’s Leadership Attribute Inventory when
clustered into the groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’?

5) Using the Leader Effectiveness Index (LEI) responses, what is the perceived leadership effectiveness of the SC Technical College presidents by their chosen subordinate observers?

6) Using Moss’s 37 attributes, what are the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by current presidents?

7) Using Moss’s 37 attributes, what are the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by selected subordinate observers?

8) What are the differences between future leadership attribute needs as reported by the rankings of both the presidents and chosen observers? How do the two rankings compare to one another in future presidential attribute needs?

Instrument

The Leadership Attribute Inventory (LAI) Self-Rating form was distributed to each of the 16 South Carolina Technical College presidents. The self rating form uses a six point Likert Type scale rating method in which the respondent is asked to rate themselves as they perceive themselves to possess each of the 37 leadership attributes from a low of score 1 to a high of 6. The ratings were ranked and identified as being (1) very undescriptive, (2) undescriptive, (3) somewhat undescriptive, (4) somewhat
descriptive, (5) descriptive, (6) very descriptive. Supplemental instrumentation was provided for each of the self-raters to identify and rank the top 10 attributes, not of themselves, but what they feel the institution needs in presidential leadership in the future. This was to be done by ranking them from highest score of 1 to the lowest of 10 and leaving the remaining 27 unranked and blank.

The Leadership Attribute Inventory (LAI) Observer-Rating was distributed to 5 subordinates of each of the 16 South Carolina Technical College presidents. The presidents were free to choose anyone who directly reported to them holding an executive position within their institution and who would know the leadership characteristics of the president. The Leadership Attribute Inventory (LAI) Observer-Rating form was similar to the Self-Rating in that the questions were identical with just a change of perspective, going from 1st person to 3rd person. Observers were also provided the supplemental list of attributes to identify and rank the top 10 attributes from 1 to 10 of presidential leadership needed at their institution in the future. Different from the self rating form, observers were also asked to complete a 7 question measure of effectiveness of their president’s leadership contained in the LAI’s Leader Effectiveness Index (LEI). This index was measured by the observer answering 1-6 on a Likert scale with (1) not applicable, (2) not effective, (3) slightly effective, (4) effective, (5) very effective, (6) extremely effective.

Both rating forms, self for the president and observer for the subordinate observers, collected demographic data pertaining to age, gender, length of current
position, and years of experience in higher education and how long the subordinate has
known the president at their institution.

Completed surveys were received starting on April 15th, 2009 and continued to
June 3rd, 2009. Survey collection was ended on June 10th, 2009 and no more were
received or collected. Of the 16 self rating packets sent out, 11 presidents responded.
One of the respondent’s instruments was found to be not usable for a total resulting
usable response count of 10, or 62.5%. Of the 80 subordinate observer packets that were
distributed, 39 were returned for a 48.75% response rate. No further follow-up was
provided to the respondents.

Study Population

The population for this study required two groups, one to be the self raters and
one to be the observer raters. The first population being the South Carolina Technical
College presidents at the time of this study as identified by the Commission on Higher
Education for South Carolina to serve as the self raters. The second group contains
selected subordinates holding an executive position reporting directly to the presidents of
these institutions, typically these are but not limited to positions with titles of vice-
president, dean, directors or department heads. These subordinates will serve as the
subordinate observers, or observer raters. For this study, all 16 South Carolina Technical
College Presidents were chosen and are represented as the entire population. Presidents
were instructed to each select five subordinates to serve as subordinate observers for a
total of 80 subordinate observers. The total number of subordinates for each individual
president is unknown. Each president received a packet containing the Leader Attribute Inventory (LAI) Self Rating survey instrumentation, a leadership attribute ranking sheet along with 5 subordinate packets that contained the Leader Attribute Inventory (LAI) Observer Rating with Leader Effectiveness Index (LEI), and the leadership attribute ranking sheet. Instructions were given as to how and to whom to distribute the Leader Attribute Inventory (LAI) Observer Rating packets.

Demographic Data

Presidents were requested to complete Section A of the Leader Attribute Inventory (LAI) Self Rating form which collected their personal demographic information. Presidents were asked to provide Gender, Ethnicity, Age, Years of Experience in Higher Education, Years of Experience in Current Role as President or CEO, and what Position was held prior to becoming President. These results are contained in Table 4.1.
Table 4.1 – Demographic Data Responses of South Carolina Technical College presidents

<table>
<thead>
<tr>
<th>Category</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>9</td>
<td>90%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Africa American</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
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<td>0%</td>
</tr>
<tr>
<td>Age</td>
<td>20-29</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>70+</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Years Exp in Higher Ed.</td>
<td>0-3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>7-9</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>10-12</td>
<td>1</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>13-15</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>16-18</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>19-21</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>22-24</td>
<td>1</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>25-27</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>28+</td>
<td>7</td>
<td>78%</td>
</tr>
<tr>
<td>Experience at Current Position</td>
<td>0-1</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
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<td>10%</td>
</tr>
<tr>
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<td>6-7</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
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<td>0%</td>
</tr>
<tr>
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<td>10-11</td>
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<td>0%</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>17+</td>
<td>2</td>
<td>20%</td>
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<tr>
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<td>Vice-President</td>
<td>8</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Vice-Chancellor</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Assoc/Asst President</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Dean</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Department Head</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other Internal Position</td>
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<td>10%</td>
</tr>
<tr>
<td></td>
<td>Other External Position</td>
<td>1</td>
<td>10%</td>
</tr>
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</table>
Demographic data contained in Table 4.1 is a summary of the data from the 10 usable responses provided by the presidents on the Leader Attribute Inventory (LAI) Self Rating form. The data indicate that 90% (n=9) of the respondents were male to only 10% (n=1) was female. All responses to Ethnicity were for Caucasian. Age was evenly distributed between the two age categories of 50-59 (n=5) and 60-69 (n=5). 78% (n=7) of responding presidents had experience in higher education of 28 or more years. Comprising the remaining 22% were the categories of 10-12 years with 11% (n=1) and 22-24 years with 11% (n=1). 60% (n=6) of presidents have been in their current position as president for 7 years or less, while 30% (n=3) of respondents reported having served in their current capacity for 16 or more years. Prior to becoming president of their institution, 80% (n=8) of respondents indicated the prior position they held was that of vice-president, with the remaining 20% (n=2) coming from other internal or external executive positions not affiliated with higher education executive rank structure.

Subordinate observers were also requested to complete Section A of the Leader Attribute Inventory (LAI) Observer Rating form which collected their personal demographic information. Observers were asked to provide Gender, Ethnicity, Age, Years of Experience in Higher Education, Years of Experience in Current Role, Position Currently Held, and How Long they have known the current president. These results are contained in Table 4.2.
Table 4.2 – Demographic Data Responses for Subordinate/Observer of the South Carolina Technical College presidents

<table>
<thead>
<tr>
<th>Category</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
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</thead>
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</tr>
<tr>
<td></td>
<td>Female</td>
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<td>50%</td>
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<tr>
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<td>Male</td>
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<td>50%</td>
</tr>
<tr>
<td>Ethnicity</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Africa American</td>
<td>9</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>30</td>
<td>77%</td>
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<tr>
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<td>Hispanic</td>
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<td>0%</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-29</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
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<td>50-59</td>
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<td>51%</td>
</tr>
<tr>
<td></td>
<td>60-69</td>
<td>11</td>
<td>28%</td>
</tr>
<tr>
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<td>70+</td>
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<td>0%</td>
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<tr>
<td>Years Exp in Higher Ed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-3</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>7-9</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>10-12</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>13-15</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>16-18</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>19-21</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>22-24</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>25-27</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>28+</td>
<td>8</td>
<td>21%</td>
</tr>
<tr>
<td>Experience at Current Position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-1</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
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<td>2-3</td>
<td>9</td>
<td>24%</td>
</tr>
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<td></td>
<td>4-5</td>
<td>4</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>6-7</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>8-9</td>
<td>2</td>
<td>5%</td>
</tr>
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<td>10-11</td>
<td>5</td>
<td>13%</td>
</tr>
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<td></td>
<td>12-13</td>
<td>1</td>
<td>3%</td>
</tr>
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<td></td>
<td>14-15</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
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<td>0%</td>
</tr>
<tr>
<td></td>
<td>17+</td>
<td>6</td>
<td>16%</td>
</tr>
<tr>
<td>Previous Position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vice-President</td>
<td>26</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>Vice-Chancellor</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Assoc/Asst President</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Dean</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>6</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Department Head</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td>Years of Knowing Current President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-1</td>
<td>12</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>2-3</td>
<td>7</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>6-7</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>8-9</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>10-11</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>12-13</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>14-15</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>16-17</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>17+</td>
<td>4</td>
<td>11%</td>
</tr>
</tbody>
</table>
Demographic data contained in Table 4.2 is a summary of the data from the 39 usable responses provided by the subordinate observers on the Leader Attribute Inventory (LAI) Observer Rating form. The responses indicate that gender was evenly split at 50% (n=19) for both Male and Female subordinates. Responding to Ethnicity, Caucasian responses totaled 77% (n=30), while the remaining 23% (n=9) were African American. Age was dominated by the range of 50-59 with 51% (n=20) of subordinate observers. The second largest age range reported was 60-69 years with a response rate of 23% (n=11). More than 50% (n=20) of the subordinate observers reported having more than 22 years of experience. Subordinate observers also reported that 29% (n=11) had less than 10 years of experience in higher education. Prior to filling their current subordinate position, 68% (n=26) of respondents indicated they held the position of vice-president. The second largest response indicated a previous position of director at 16% (n=6). All responses (n=39) show previous position held was within the academic rank structure of higher education. Experience at current position was nearly evenly distributed between more and less than 10 years in current position. Those with less than 10 years experience totaled 55% (n=21) of the responses to 45% (n=17) with 10 or more years of experience. Responses of 76% (n=29) indicate that those who knew their president have known him/her for less than 10 years. Those with knowledge of their president for more than 17 years totaled 11% (n=4).
Response to Research Questions

The research questions listed below were answered using 1) descriptive statistics to summarize and analyze the response data and 2) inferential statistics in t-test’s to compare means. Leader attribute identifications and rankings were compiled using a weighted average method in which each response was scored with weighted scores to show preference as well as frequency of choice.

Question 1

To what degree do the SC Technical College presidents perceive they possess each attribute of leadership using Moss’ 37 different attributes contained on the Leader Attribute Inventory Self Rating form?

‘Decision Making’. All responses were categorized as either ‘somewhat descriptive’ or ‘descriptive’. In total, all attributes received a combined mean of 5.06 which is ‘descriptive’ with a standard deviation of 0.86. Means and standard deviations for each of the 37 individual attributes are presented in table 4.3.

**Question 2**

To what degree do the subordinate observers perceive that the SC Technical College presidents possess each attribute of leadership when using Moss’ 37 different attributes on the Leader Attribute Inventory Observer Rating form?

Responses received by the immediate subordinates/observers ranged from a high score of 5.46 on attribute 24 for ‘Networking’ to the lowest mean score of 4.62 that was reported on attribute 30 for ‘Conflict Management’. All 39 respondents indicated they believe that the presidents are at minimal level of ‘somewhat descriptive’ of each of the 37 attributes, with 64.86% (n=24) attributes having been rated as ‘descriptive’ of the presidents. No single attribute received a designation of ‘very descriptive’ or less than ‘somewhat descriptive’. In total, all attributes received a combined mean of 5.07 which is ‘descriptive’ with a standard deviation of 1.17. Means and standard deviations for each of the 37 individual attributes are presented in table 4.3. Attributes receiving the mean score of descriptive are: ‘Energetic with Stamina’, ‘Insightful’, ‘Visionary’, ‘Achievement Oriented’, ‘Accountable’, ‘Initiating’, ‘Confident’, ‘Willing to Accept Responsibility’, ‘Persistent’, ‘Enthusiastic/Optimistic’, ‘Dependable/Reliable’, ‘Courageous/Risk-Taker’, ‘Committed to the Common Good’, ‘Personal Integrity’, ‘Intelligent with Practical Judgment’, ‘Ethical’, ‘Communication’, ‘Sensitivity and
Table 4.3 – Individual Attribute Means and Standard Deviations for both the Self and Observer Rating Forms.

<table>
<thead>
<tr>
<th>Q#</th>
<th>Leader Attribute</th>
<th>President Mean</th>
<th>President Std. Dev</th>
<th>Subordinate Mean</th>
<th>Subordinate Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Energetic with Stamina</td>
<td>4.90</td>
<td>1.60</td>
<td>5.33</td>
<td>0.98</td>
</tr>
<tr>
<td>Q2</td>
<td>Insightful</td>
<td>4.90</td>
<td>0.74</td>
<td>5.21</td>
<td>1.15</td>
</tr>
<tr>
<td>Q3</td>
<td>Adaptable, Open to Change</td>
<td>4.80</td>
<td>0.92</td>
<td>4.68</td>
<td>1.27</td>
</tr>
<tr>
<td>Q4</td>
<td>Visionary</td>
<td>5.40</td>
<td>0.70</td>
<td>5.33</td>
<td>1.11</td>
</tr>
<tr>
<td>Q5</td>
<td>Tolerant of Ambiguity and Complexity</td>
<td>4.90</td>
<td>0.99</td>
<td>4.69</td>
<td>1.24</td>
</tr>
<tr>
<td>Q6</td>
<td>Achievement Oriented</td>
<td>5.50</td>
<td>0.71</td>
<td>5.39</td>
<td>0.97</td>
</tr>
<tr>
<td>Q7</td>
<td>Accountable</td>
<td>5.40</td>
<td>0.70</td>
<td>5.05</td>
<td>1.19</td>
</tr>
<tr>
<td>Q8</td>
<td>Initiating</td>
<td>5.30</td>
<td>0.82</td>
<td>5.03</td>
<td>1.06</td>
</tr>
<tr>
<td>Q9</td>
<td>Confident</td>
<td>5.00</td>
<td>0.47</td>
<td>5.28</td>
<td>1.05</td>
</tr>
<tr>
<td>Q10</td>
<td>Willing to Accept Responsibility</td>
<td>5.70</td>
<td>0.48</td>
<td>5.38</td>
<td>1.04</td>
</tr>
<tr>
<td>Q11</td>
<td>Persistent</td>
<td>5.70</td>
<td>0.48</td>
<td>5.38</td>
<td>0.96</td>
</tr>
<tr>
<td>Q12</td>
<td>Enthusiastic, Optimistic</td>
<td>5.40</td>
<td>0.70</td>
<td>5.23</td>
<td>1.04</td>
</tr>
<tr>
<td>Q13</td>
<td>Tolerant of Frustration</td>
<td>4.50</td>
<td>0.71</td>
<td>4.97</td>
<td>1.40</td>
</tr>
<tr>
<td>Q14</td>
<td>Dependable, Reliable</td>
<td>5.20</td>
<td>0.79</td>
<td>5.18</td>
<td>1.02</td>
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<tr>
<td>Q15</td>
<td>Courageous, Risk-taker</td>
<td>5.00</td>
<td>0.47</td>
<td>5.18</td>
<td>1.07</td>
</tr>
<tr>
<td>Q16</td>
<td>Even Disposition</td>
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<td>0.79</td>
<td>5.15</td>
<td>1.18</td>
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<tr>
<td>Q17</td>
<td>Committed to the Common Good</td>
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<td>0.52</td>
<td>5.38</td>
<td>1.16</td>
</tr>
<tr>
<td>Q18</td>
<td>Personal Integrity</td>
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<td>0.82</td>
<td>5.38</td>
<td>0.99</td>
</tr>
<tr>
<td>Q19</td>
<td>Intelligent with Practical Judgment</td>
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<td>0.70</td>
<td>5.33</td>
<td>1.11</td>
</tr>
<tr>
<td>Q20</td>
<td>Ethical</td>
<td>5.50</td>
<td>0.53</td>
<td>5.33</td>
<td>1.11</td>
</tr>
<tr>
<td>Q21</td>
<td>Communication (listening, oral, written)</td>
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<td>0.88</td>
<td>5.05</td>
<td>1.12</td>
</tr>
<tr>
<td>Q22</td>
<td>Sensitivity and Respect</td>
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<td>0.74</td>
<td>5.03</td>
<td>1.18</td>
</tr>
<tr>
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<td>Motivating Others</td>
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<td>0.63</td>
<td>5.03</td>
<td>1.25</td>
</tr>
<tr>
<td>Q24</td>
<td>Networking</td>
<td>5.10</td>
<td>0.99</td>
<td>5.46</td>
<td>1.12</td>
</tr>
<tr>
<td>Q25</td>
<td>Planning</td>
<td>4.60</td>
<td>1.17</td>
<td>4.79</td>
<td>1.20</td>
</tr>
<tr>
<td>Q26</td>
<td>Delegating</td>
<td>4.80</td>
<td>1.14</td>
<td>4.97</td>
<td>1.11</td>
</tr>
<tr>
<td>Q27</td>
<td>Organizing</td>
<td>4.40</td>
<td>0.97</td>
<td>4.67</td>
<td>1.13</td>
</tr>
<tr>
<td>Q28</td>
<td>Team Building</td>
<td>5.30</td>
<td>0.82</td>
<td>4.79</td>
<td>1.24</td>
</tr>
<tr>
<td>Q29</td>
<td>Coaching</td>
<td>4.70</td>
<td>0.82</td>
<td>4.64</td>
<td>1.46</td>
</tr>
<tr>
<td>Q30</td>
<td>Conflict Management</td>
<td>5.00</td>
<td>0.94</td>
<td>4.62</td>
<td>1.39</td>
</tr>
<tr>
<td>Q31</td>
<td>Time Management</td>
<td>4.60</td>
<td>0.84</td>
<td>5.00</td>
<td>1.12</td>
</tr>
<tr>
<td>Q32</td>
<td>Stress Management</td>
<td>5.00</td>
<td>1.05</td>
<td>5.05</td>
<td>1.12</td>
</tr>
<tr>
<td>Q33</td>
<td>Appropriate Use of Leadership Styles</td>
<td>4.90</td>
<td>0.99</td>
<td>4.74</td>
<td>1.19</td>
</tr>
<tr>
<td>Q34</td>
<td>Ideological Beliefs are Appropriate to the Group</td>
<td>5.50</td>
<td>0.53</td>
<td>5.31</td>
<td>1.13</td>
</tr>
<tr>
<td>Q35</td>
<td>Decision Making</td>
<td>5.00</td>
<td>0.82</td>
<td>5.00</td>
<td>1.21</td>
</tr>
<tr>
<td>Q36</td>
<td>Problem Solving</td>
<td>4.80</td>
<td>0.42</td>
<td>4.82</td>
<td>1.30</td>
</tr>
<tr>
<td>Q37</td>
<td>Information Management</td>
<td>4.50</td>
<td>0.71</td>
<td>4.77</td>
<td>1.22</td>
</tr>
</tbody>
</table>
Question 3

Are the technical college president’s self perceptions of their leadership attributes consistent with the perceptions of those attributes by the subordinate observers? What are the mean differences between the two perceptions?

This question directly addresses whether or not there are significant differences in the individual means of each of the 37 attributes responded to by both the self rater and observer rater. Using t-test’s for independent means and comparing each of the means reported by the president’s responses to the subordinate observer responses will illustrate if there are differences between the means of the responses. Setting the significance level of alpha to a value of .05, individual t-test’s for independent means were conducted for each of the 37 leadership attributes. Probability values (p-values) were calculated for each leadership attribute as illustrated in Table 4.4. No p-values were calculated to be less than the chosen significance level of alpha=.05 in the comparing corresponding attribute means between the president and the subordinate observer responses. Since all computed p-values were found to be greater than alpha, it can be inferred that there is not enough evidence to reject the null hypothesis. By failing to reject the null hypothesis that the means are equal any apparent differences between the means of each leadership attribute occurs by chance and is not statistically significant. Therefore, the data as provided by the respondents does not indicate that there are statistically significant differences in perceptions of possessed leadership attributes held by the SC Technical College presidents when comparing the self perceptions of the presidents to the observed perceptions of the subordinate observers.
Table 4.4 – President Mean, Subordinate Mean, Calculated t-statistic and Probability (p-value).

<table>
<thead>
<tr>
<th>Q#</th>
<th>Leader Attribute</th>
<th>President Mean</th>
<th>Subordinate Mean</th>
<th>t statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Energetic with Stamina</td>
<td>4.90</td>
<td>5.33</td>
<td>-1.085</td>
<td>0.283</td>
</tr>
<tr>
<td>Q2</td>
<td>Insightful</td>
<td>4.90</td>
<td>5.21</td>
<td>-0.294</td>
<td>0.431</td>
</tr>
<tr>
<td>Q3</td>
<td>Adaptable, Open to Change</td>
<td>4.80</td>
<td>4.68</td>
<td>0.083</td>
<td>0.774</td>
</tr>
<tr>
<td>Q4</td>
<td>Visionary</td>
<td>5.40</td>
<td>5.33</td>
<td>0.033</td>
<td>0.856</td>
</tr>
<tr>
<td>Q5</td>
<td>Tolerant of Ambiguity and Complexity</td>
<td>4.90</td>
<td>4.69</td>
<td>0.240</td>
<td>0.626</td>
</tr>
<tr>
<td>Q6</td>
<td>Achievement Oriented</td>
<td>5.50</td>
<td>5.39</td>
<td>0.102</td>
<td>0.751</td>
</tr>
<tr>
<td>Q7</td>
<td>Accountable</td>
<td>5.40</td>
<td>5.05</td>
<td>0.780</td>
<td>0.382</td>
</tr>
<tr>
<td>Q8</td>
<td>Initiating</td>
<td>5.30</td>
<td>5.03</td>
<td>0.573</td>
<td>0.453</td>
</tr>
<tr>
<td>Q9</td>
<td>Confident</td>
<td>5.00</td>
<td>5.28</td>
<td>-0.823</td>
<td>0.414</td>
</tr>
<tr>
<td>Q10</td>
<td>Willing to Accept Responsibility</td>
<td>5.70</td>
<td>5.38</td>
<td>0.858</td>
<td>0.359</td>
</tr>
<tr>
<td>Q11</td>
<td>Persistent</td>
<td>5.70</td>
<td>5.38</td>
<td>0.996</td>
<td>0.323</td>
</tr>
<tr>
<td>Q12</td>
<td>Enthusiastic, Optimistic</td>
<td>5.40</td>
<td>5.23</td>
<td>0.236</td>
<td>0.629</td>
</tr>
<tr>
<td>Q13</td>
<td>Tolerant of Frustration</td>
<td>4.50</td>
<td>4.97</td>
<td>-1.029</td>
<td>0.300</td>
</tr>
<tr>
<td>Q14</td>
<td>Dependable, Reliable</td>
<td>5.20</td>
<td>5.18</td>
<td>0.003</td>
<td>0.953</td>
</tr>
<tr>
<td>Q15</td>
<td>Courageous, Risk-taker</td>
<td>5.00</td>
<td>5.18</td>
<td>-0.513</td>
<td>0.610</td>
</tr>
<tr>
<td>Q16</td>
<td>Even Disposition</td>
<td>5.20</td>
<td>5.15</td>
<td>0.014</td>
<td>0.908</td>
</tr>
<tr>
<td>Q17</td>
<td>Committed to the Common Good</td>
<td>5.60</td>
<td>5.38</td>
<td>0.323</td>
<td>0.572</td>
</tr>
<tr>
<td>Q18</td>
<td>Personal Integrity</td>
<td>5.30</td>
<td>5.28</td>
<td>-0.249</td>
<td>0.805</td>
</tr>
<tr>
<td>Q19</td>
<td>Intelligent with Practical Judgment</td>
<td>4.60</td>
<td>5.33</td>
<td>-1.583</td>
<td>0.053</td>
</tr>
<tr>
<td>Q20</td>
<td>Ethical</td>
<td>5.50</td>
<td>5.33</td>
<td>0.211</td>
<td>0.648</td>
</tr>
<tr>
<td>Q21</td>
<td>Communication (listening, oral, written)</td>
<td>4.90</td>
<td>5.05</td>
<td>-0.395</td>
<td>0.694</td>
</tr>
<tr>
<td>Q22</td>
<td>Sensitivity and Respect</td>
<td>5.10</td>
<td>5.03</td>
<td>0.036</td>
<td>0.851</td>
</tr>
<tr>
<td>Q23</td>
<td>Motivating Others</td>
<td>5.20</td>
<td>5.03</td>
<td>0.182</td>
<td>0.672</td>
</tr>
<tr>
<td>Q24</td>
<td>Networking</td>
<td>5.10</td>
<td>5.46</td>
<td>-0.929</td>
<td>0.357</td>
</tr>
<tr>
<td>Q25</td>
<td>Planning</td>
<td>4.60</td>
<td>4.79</td>
<td>-0.461</td>
<td>0.647</td>
</tr>
<tr>
<td>Q26</td>
<td>Delegating</td>
<td>4.80</td>
<td>4.97</td>
<td>-0.441</td>
<td>0.662</td>
</tr>
<tr>
<td>Q27</td>
<td>Organizing</td>
<td>4.40</td>
<td>4.67</td>
<td>-0.683</td>
<td>0.498</td>
</tr>
<tr>
<td>Q28</td>
<td>Team Building</td>
<td>5.30</td>
<td>4.79</td>
<td>1.479</td>
<td>0.230</td>
</tr>
<tr>
<td>Q29</td>
<td>Coaching</td>
<td>4.70</td>
<td>4.64</td>
<td>0.015</td>
<td>0.903</td>
</tr>
<tr>
<td>Q30</td>
<td>Conflict Management</td>
<td>5.00</td>
<td>4.62</td>
<td>0.681</td>
<td>0.413</td>
</tr>
<tr>
<td>Q31</td>
<td>Time Management</td>
<td>4.60</td>
<td>5.00</td>
<td>-1.048</td>
<td>0.300</td>
</tr>
<tr>
<td>Q32</td>
<td>Stress Management</td>
<td>5.00</td>
<td>5.05</td>
<td>-0.130</td>
<td>0.897</td>
</tr>
<tr>
<td>Q33</td>
<td>Appropriate Use of Leadership Styles</td>
<td>4.90</td>
<td>4.74</td>
<td>0.147</td>
<td>0.703</td>
</tr>
<tr>
<td>Q34</td>
<td>Ideological Beliefs are Appropriate to the</td>
<td>5.50</td>
<td>5.31</td>
<td>0.272</td>
<td>0.604</td>
</tr>
<tr>
<td>Q35</td>
<td>Decision Making</td>
<td>5.00</td>
<td>5.00</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Q36</td>
<td>Problem Solving</td>
<td>4.80</td>
<td>4.82</td>
<td>-0.049</td>
<td>0.961</td>
</tr>
<tr>
<td>Q37</td>
<td>Information Management</td>
<td>4.50</td>
<td>4.77</td>
<td>-0.664</td>
<td>0.510</td>
</tr>
</tbody>
</table>
Question 4

What are the mean differences between the self and observer perceptions of SC Technical College president’s using Moss’s Leadership Attribute Inventories clustered into the groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’?


T-test’s for independent means, with each of the clustered groups’ means, was used to determine if there were differences between the means of the clustered groups. Setting the significance level of alpha to a value of .05, individual t-test’s for independent means were conducted on each group of attributes. Probability values (p-values) were calculated for each group of attributes as illustrated in Table 4.5. Comparing means of the clustered groups with their corresponding calculated p-value’s indicated that no p-value’s were calculated to be less than the significance level of alpha=.05. Since all computed p-values were found to be greater than alpha, it can be inferred that there is not enough evidence to reject the null hypothesis. By failing to reject the null hypothesis that the means are equal any apparent differences between the means of each leadership attribute occurs by chance and is not statistically significant. Therefore, the data as provided by the respondents does not indicate that there are statistically significant differences in perceptions of possessed leadership attributes when clustered into the three identified groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’.
Table 4.5 Probability Values of Clustered Attribute Groups

<table>
<thead>
<tr>
<th>Clusters</th>
<th>PM</th>
<th>SOM</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills and Characteristics</td>
<td>5.053</td>
<td>5.035</td>
<td>0.184</td>
<td>0.475</td>
</tr>
<tr>
<td>Personal Skills</td>
<td>5.267</td>
<td>5.233</td>
<td>0.319</td>
<td>0.409</td>
</tr>
<tr>
<td>Management Skills</td>
<td>4.763</td>
<td>4.910</td>
<td>-1.033</td>
<td>0.302</td>
</tr>
</tbody>
</table>

Question 5

Using the Leader Effectiveness Index (LEI) responses, what is the perceived leadership effectiveness of the SC Technical College presidents by their chosen subordinate observers?

Subordinate observers were asked to complete the section titled Leader Effectiveness Index (LEI) part of the Leader Attribute Inventory (LAI). Only the Observer Rating Form for the subordinate observers contained this Leader Effectiveness Index (LEI), the presidents were not asked to complete this additional item. Responses by the subordinate observers ranged from a high score of 5.33 contained on Effectiveness Category 4 for ‘Exerts influence outside of the organization in order to set the right context for the organization’ to the lowest mean score of 4.82 reported on Effectiveness Categories 2 and 5 for ‘Fosters unity, collaboration and ownership, and recognizes individual and team contribution’ and ‘establishes an environment conductive to learning’ respectively. No effectiveness question received a mean designation of ‘Slightly Effective (3)’ or less. In total, all responses to the Leader Effectiveness Index (LEI) received a combined mean of 4.98 with a standard deviation of 1.10. All statistical means and standard deviations for each of the 7 individual effectiveness categories were calculated and are presented in table 4.6. All 39 responding subordinate observers
indicated they believed that the presidents are at minimal ‘Effective (4)’ within each of the 7 effectiveness categories. Accounting for all 7 questions with all 39 respondents, 41% (n=113) of the overall possible responses (n=273) rated the presidents as ‘Extremely Effective (6)’. Table 4.7 contains the complete representation of percentages for each rating level for the 7 Effectiveness questions.

Table 4.6 - Mean and Standard Deviation for Subordinate Observer’s in response to the Leadership Effectiveness Index of the LAI.

<table>
<thead>
<tr>
<th>Effectiveness Category</th>
<th>Mean</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Inspires a shared vision and establishes standards that help the organization achieve its nest stage of development.</td>
<td>5.05</td>
<td>1.146</td>
</tr>
<tr>
<td>2 Fosters unity, collaboration and ownership, and recognizes individual and team contribution.</td>
<td>4.82</td>
<td>1.121</td>
</tr>
<tr>
<td>3 Exercises power effectively and empowers other to act.</td>
<td>4.87</td>
<td>1.189</td>
</tr>
<tr>
<td>4 Exerts influence outside of the organization in order to set the right context for the organization.</td>
<td>5.33</td>
<td>0.927</td>
</tr>
<tr>
<td>5 Establishes an environment conductive to learning.</td>
<td>4.82</td>
<td>1.097</td>
</tr>
<tr>
<td>6 Satisfies the job-related needs of the members or the organization as individuals.</td>
<td>4.90</td>
<td>1.046</td>
</tr>
<tr>
<td>7 Overall, how effective is the leadership performance of the person you are rating.</td>
<td>5.08</td>
<td>1.133</td>
</tr>
</tbody>
</table>
Table 4.7 – Response frequency of Subordinate Observer’s in response to the Leader Effectiveness Index (LEI) of the LAI. Not Applicable (N/A), Not Effective (NE), Slightly Effective (SE), Effective (E), Very Effective (VE), Extremely Effective (EE).

<table>
<thead>
<tr>
<th>Effectiveness Category</th>
<th>N/A</th>
<th>NE</th>
<th>SE</th>
<th>E</th>
<th>VE</th>
<th>EE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Inspires a shared vision and establishes standards that help the organization achieve its next stage of development.</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>2 Fosters unity, collaboration and ownership, and recognizes individual and team contribution.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>3 Exercises power effectively and empowers other to act.</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>11</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>4 Exerts influence outside of the organization in order to set the right context for the organization.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>5 Establishes an environment conducive to learning.</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>6 Satisfies the job-related needs of the members or the organization as individuals.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>7 Overall, how effective is the leadership performance of the person you are rating.</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>10</td>
<td>18</td>
<td>52</td>
<td>79</td>
<td>113</td>
</tr>
<tr>
<td>Percentages</td>
<td>0</td>
<td>4%</td>
<td>7%</td>
<td>19%</td>
<td>29%</td>
<td>41%</td>
</tr>
</tbody>
</table>
Question 6

Using Moss’s 37 attributes, what are the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by current presidents?

The top 10 leadership attribute responses were calculated with two different methods. One method was to count the frequency of the responses and rank order the sum of each frequency against all 37 attributes. Once all 37 attributes were ranked based upon frequency the top 10 including any ties can be identified. This illustrates what responses were more frequently selected as one of the top 10 attributes with no indication as to the attributes level of significance or how important the attribute is in comparison to other frequently selected attributes. The second method was to do a weighted sum of each of the attributes based upon how the respondent scored the attribute. A descending weighted score was assigned to each ranked response. The following weights were applied to each ranking: 1(10 points), 2(9 points), 3(8 points), 4(7 points), 5(6 points), 6(5 points), 7(4 points), 8(3 points), 9(2 points), 10(1 point). Any attribute not rated and therefore not in the top 10 selected attribute was assigned a weight of 0 points. Once all weights were assigned, each attribute was then summed and a rank in descending order was computed including ties. Computing the top 10 in both methods can illustrate both what is important and how significant is that importance. Ten items were consistent in making the list of top 10 attributes selected by both frequency and the weighted sum methods. Frequency contained more than 10 attributes due to ties. Attributes common to both methods presented in no particular order are: ‘Visionary’, ‘Ethical’, ‘Team
Building’, ‘Personal Integrity’, ‘Decision Making’, ‘Communication’, ‘Courageous/Risk-Taker’, ‘Energetic with Stamina’, ‘Enthusiastic/Optimistic’, and ‘Accountable’. Other attributes that were selected with more frequency but did not score high enough on the basis of significance when their weighted sums were calculated included ‘Motivating Others’, ‘Committed to the Common Good’, and ‘Achievement Oriented’. Table 4.8 contains both the frequencies and weighted sums of how the attributes scored for the presidents.
Table 4.8 - Frequency and Weighted Sum (Weighted) of LAI Attributes by responses of
the Presidents (n=10).

<table>
<thead>
<tr>
<th>Q#</th>
<th>Leader Attribute</th>
<th>Frequency</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q20</td>
<td>Ethical</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>Q4</td>
<td>Visionary</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>Q15</td>
<td>Courageous, Risk-taker</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>Q18</td>
<td>Personal Integrity</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>Q7</td>
<td>Accountable</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Q28</td>
<td>Team Building</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Q12</td>
<td>Enthusiastic, Optimistic</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Q21</td>
<td>Communication (listening, oral, written)</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Q1</td>
<td>Energetic with Stamina</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Q6</td>
<td>Achievement Oriented</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Q17</td>
<td>Committed to the Common Good</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Q23</td>
<td>Motivating Others</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Q35</td>
<td>Decision Making</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Presidents Top Ten - By Frequency

Presidents Top Ten - By Weighted Sum
Question 7

Using Moss’s 37 attributes, what are the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by selected subordinate observers?

Again, the top 10 leadership attribute responses were calculated with two different methods. One method was to count the frequency of the responses and rank order the sum of each frequency against all 37 attributes. Once all 37 attributes are ranked based upon frequency the top 10 including any ties could be identified. This illustrates what responses were more frequently selected as one of the top 10 attributes with no indication as to the attributes level of significance or how important the attribute is in comparison to other frequently selected attributes. The second method is to do a weighted sum of each of the attributes based upon how the respondent scored the attribute. A descending weighted score was assigned to each ranked response. The following weights were applied to each ranking: 1(10 points), 2(9 points), 3(8 points), 4(7 points), 5(6 points), 6(5 points), 7(4 points), 8(3 points), 9(2 points), 10(1 point). Any attribute not rated and therefore not in the top 10 selected attribute was assigned a weight of 0 points. Once all weights were assigned, each attribute was then summed and a rank in descending order was computed including ties. Computing the top 10 in both methods can illustrate both what is important and how significant is that importance. Across both methods, 10 items including any ties were consistent in making the top 10 attributes selected. Those are in no order: ‘Visionary’, ‘Ethical’, ‘Personal Integrity’, ‘Intelligent with Practical Judgment’, ‘Adaptable/Open to Change’, ‘Decision Making’, ‘Communication’,

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'Motivating Others’, ‘Accountable and Problem Solving’. Attributes that were all selected with more frequency but did not score high enough on the basis of significance when their weighted sums were calculated were ‘Committed to the ‘Common Good’ and ‘Energetic with Stamina’. Table 4.9 contains both the frequencies and weighted sums of how the attributes scored for the subordinates.
Table 4.9 - Frequency and Weighted Sum (Weighted) of LAI Attributes by responses of the subordinate observers (n=39).

<table>
<thead>
<tr>
<th>Q#</th>
<th>Leader Attribute</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4</td>
<td>Visionary</td>
<td>30</td>
</tr>
<tr>
<td>Q20</td>
<td>Ethical</td>
<td>29</td>
</tr>
<tr>
<td>Q21</td>
<td>Communication (listening, oral, written)</td>
<td>28</td>
</tr>
<tr>
<td>Q18</td>
<td>Personal Integrity</td>
<td>27</td>
</tr>
<tr>
<td>Q19</td>
<td>Intelligent with Practical Judgment</td>
<td>22</td>
</tr>
<tr>
<td>Q23</td>
<td>Motivating Others</td>
<td>18</td>
</tr>
<tr>
<td>Q3</td>
<td>Adaptable, Open to Change</td>
<td>16</td>
</tr>
<tr>
<td>Q7</td>
<td>Accountable</td>
<td>16</td>
</tr>
<tr>
<td>Q35</td>
<td>Decision Making</td>
<td>16</td>
</tr>
<tr>
<td>Q1</td>
<td>Energetic with Stamina</td>
<td>13</td>
</tr>
<tr>
<td>Q17</td>
<td>Committed to the Common Good</td>
<td>13</td>
</tr>
<tr>
<td>Q36</td>
<td>Problem Solving</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q#</th>
<th>Leader Attribute</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q20</td>
<td>Ethical</td>
<td>239</td>
</tr>
<tr>
<td>Q18</td>
<td>Personal Integrity</td>
<td>221</td>
</tr>
<tr>
<td>Q4</td>
<td>Visionary</td>
<td>206</td>
</tr>
<tr>
<td>Q19</td>
<td>Intelligent with Practical Judgment</td>
<td>152</td>
</tr>
<tr>
<td>Q21</td>
<td>Communication (listening, oral, written)</td>
<td>149</td>
</tr>
<tr>
<td>Q3</td>
<td>Adaptable, Open to Change</td>
<td>97</td>
</tr>
<tr>
<td>Q7</td>
<td>Accountable</td>
<td>83</td>
</tr>
<tr>
<td>Q23</td>
<td>Motivating Others</td>
<td>79</td>
</tr>
<tr>
<td>Q35</td>
<td>Decision Making</td>
<td>71</td>
</tr>
<tr>
<td>Q36</td>
<td>Problem Solving</td>
<td>71</td>
</tr>
</tbody>
</table>
Question 8

What are the differences between future leadership attribute needs as reported by the rankings of both the presidents and chosen observers? How do the two rankings compare to one another in future presidential attribute needs?

Using the methods that are outlined in questions 6 and 7 as to how frequency and weighted sums were computed; attributes selected by the presidents and the subordinate observers therefore can be compared. Based on rating frequency, attributes that were common for both presidents and subordinate observers were: ‘Ethical’, ‘Visionary’, ‘Communication’, ‘Personal Integrity’, ‘Motivating Others’, ‘Accountable’, ‘Decision Making’, ‘Energetic with Stamina’, and ‘Committed to the Common Good’. In selection frequency, the presidents rated ‘Ethics’ first and being a ‘Visionary’ second while the subordinate observers reversed that order. Attributes making the top 10 for presidents and not for subordinate observers are: ‘Courageous/Risk Taker’, ‘Team Building’, ‘Enthusiastic/Optimistic’, and ‘Achievement Oriented’. Items frequently selected by the subordinate observers but not by the presidents were: ‘Intelligent with Practical Judgment’, ‘Adaptable/Open to Change’, and ‘Problem Solving’. Attributes identified by the frequency method occurring at a rate of 50% or greater and common between the presidents and subordinate observer’s lists of future attribute needs were: ‘Communication (listening, oral, written)’, ‘Personal Integrity’, ‘Visionary and Ethical’. Half or more of both groups believe these four attributes are within the top 10 needed attributes of future presidential leadership. The attributes of ‘Decision Making’, ‘Energetic with Stamina’, and ‘Committed to the Common Good’ were common
between each groups rankings at a rate less than 50% frequency within each group respectively.

Based on the weighed sum method with the maximum possible points for subordinate observers being 390 and maximum possible points for presidents being 100, attributes that were common were: ‘Ethical’, ‘Personal Integrity’, ‘Visionary’, ‘Communication’, ‘Accountable’, and ‘Decision Making’. Attributes making the top 10 for presidents and not for subordinates were: ‘Team Building’, ‘Energetic with Stamina’, ‘Courageous/Risk-Taking’, and ‘Enthusiastic/Optimistic’. Subordinate observers placed more significance than the presidents on ‘Intelligence with Practical Judgment’, ‘Adaptable/Open to Change’, ‘Motivating Others and Problem Solving’. Attributes identified by the weighted sum method occurring at a rate of 50% or greater and common between the presidents and subordinate observer’s lists of future attribute needs were ‘Ethical’ and ‘Personal Integrity’. The attribute ‘Visionary’ was the next closest common attribute rated at 49% by the presidents and 52% by subordinate observers. The attributes of ‘Communication’, and ‘Decision Making’ occurred at a common rate of 40% or less between the presidents and subordinate observers. No other attributes were common between the two lists.

Summary

This chapter reported the results of analyses of the data received from the Leader Attribute Inventory (LAI) survey instrumentation completed during this study of perceived leadership attributes of presidents of South Carolinas Technical Colleges.
Moss’s 37 attribute survey titled Leader Attribute Inventory (LAI) was distributed to each of the 16 Technical Colleges, with one self reporting survey to the presidents of each institution and a packet of 5 subordinate observer surveys to be distributed and completed by 5 direct reporting subordinates chosen by the presidents.

Moss’s Leaders Attribute Inventory (LAI), both in the Self Rating form for the presidents and the Observer Rating form for each chosen subordinate observers, was used to gather data on the perception of leadership attributes possessed by the current presidents from both the self perceived and subordinate observer point of view. Additionally, each respondent was asked to identify and rank the attributes they deemed most important of future leadership at their technical college. Collection and analysis of the data was conducted to determine: the self perception of possessed attributes by the presidents, the observed perceptions of leadership attributes held by the presidents as observed by selected subordinate observers, any commonalities or differences between those two perceptions, the overall leadership effectiveness of the presidents as observed by the subordinates using the Leader Effectiveness Index (LEI) portion of the Leader Attribute Inventory (LAI) Observer Rating, a top 10 ranking of the most important attributes by the presidents and subordinate observers, and a comparison of the top 10 most important attributes selected by the presidents and subordinate observers.

Usable survey responses were 10 of 16 or 62.5% of presidents and 39 of possible 80 subordinate observers for a 48.75% response rate. Demographic data collected from the survey revealed that only male (male=10) responses were collected from the presidents, and there was equal distribution in gender responses for the observer rating
form at 50% (male=19, female=19) each for male and female with 1 respondent not reporting gender. Almost all presidents (n=8, or 80%) held the academic title of vice-president before becoming president, while almost all subordinate observers currently hold the title of vice-president (68% or n=26). All presidents (100% or n=10) were over the age of 50 years of age and nearly all of the observers (79% of n=22) were over 50 years of age as well.

Data analysis was conducted using both descriptive and inferential statistics. Analysis of the data when comparing means between self perceptions and subordinate observer perceptions revealed that there was no statistically significant difference between the perceptions of leadership attributes possessed by the presidents. Further examination of the data when clustered in the groups of ‘Social Skills and Characteristics’, ‘Personal Characteristics’, and ‘Management Skills’, indicated that there were no statistically significant differences between the perceptions of leadership attributes possessed by the presidents in these groups. Complete results are on Table 4.5.

Subordinate observers were the only group of respondents requested to complete the Leader Effectiveness Index (LEI). The Self Rating form presented to the presidents did not contain this portion of the instrument. Subordinate observers when completing the Leader Effectiveness Index (LEI) scored all 7 categories as ‘effective (4)’ or better with 3 of the 7 questions receiving a rating of ‘very effective (5)’. Complete results are on Tables 4.6 and 4.7.

When identifying and ranking the attributes for needed future leadership, two methods were used to report results, frequency and weighted sum. Regardless of method
or type of respondent whether president or subordinate, three attributes continued to remain common between all responses. ‘Visionary’, ‘Ethical’, and ‘Personal Integrity’ were both frequently chosen and with high significance. Complete results are contained on Tables 4.8 and 4.9.
CHAPTER FIVE
DISCUSSION, CONCLUSIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

Study Summary

This chapter presents a summary of the major findings discovered by this studies research at the conclusion of this study, any findings or implications of significance discovered during the study, assessment and analysis of the findings results and recommendations or suggestions for future research.

The purpose of this study had four components: 1) examine the self perceptions of possessed leadership attributes by the South Carolina Technical College presidents as it pertains to Moss’s 37 attributes identified in his Leader Attribute Inventory (LAI), 2) examine the observed perceptions of possessed leadership attributes by the South Carolina Technical College presidents as viewed by the selected subordinate observers in relation to Moss’s 37 attributes identified in his Leadership Attribute Inventor (LAI), 3) examine through statistical analyses any similarities or differences that might exist between the president’s self perceptions and the selected subordinates observed perceptions of the presidents, and 4) determine the top 10 leadership attributes needed for the future presidential leadership at the technical colleges as perceived by both the presidents and their chosen subordinate observers.

Survey instrumentation was used to complete this study. A Leader Attribute Inventory (LAI), originally developed by Moss in 1989 and later revised and updated by Moss et al in 1994, was sent to each of the 16 current presidents as of the spring 2008 academic semester and as listed on the Commission of Higher Education’s website
This survey consisted of 37 leader attributes accompanied by short positive statements of each attribute. Using a 6-point Likert Type scale, which ranged from a low of ‘very undescriptive’ to a high of ‘very descriptive’, each president was asked to rank their self perception on how well they possess each attribute.

Presidents were also sent 5 additional survey packets titled Observer-Rating survey that were to be distributed to 5 subordinate observers holding a position reporting directly to the president. These surveys rated the same 37 attributes, except this time the subordinate observers were rating their perception of how the presidents possessed each of leadership attributes. The same Likert Type scale was used for the Observer Rating form as was the Self-Rating survey completed by the presidents. Additionally, the Observer Rating survey contained 7 measurements of leader effectiveness and was titled the Leader Effectiveness Index (LEI), with a 6-point Likert Type scale with a low of ‘not applicable’ to a high of ‘extremely effective’. Both the packets provided to the presidents and the subordinate observers contained an additional sheet listing all 37 attributes, and asked for the respondent to identify and rank the top 10, using a 1-10 ranking system, attributes of needed future leadership in presidents at the Technical Colleges.

To facilitate collection of the surveys, initial emails were sent to all presidents informing them of the study itself and soon to be delivered survey packets. Survey packets consisting of 1 self rating packet and 5 subordinate observer packets were delivered via USPS to each president. The population for purposes of this study consisted of 16 presidents and 80 direct reporting subordinate observers. Response rates
included 10 of 16 Self-Reporting or president packets and 39 of 80 subordinate observer packets.

Literature reviewed during this study indicates that leadership at the higher education level can consist of many different attributes whether displayed as a trait, characteristic or ability, and that to be effective a good leader will possess a blend of multiple attributes. This study will be examine the self perceptions of the current presidents of the South Carolina Technical College System and how those perceptions compare and contrast with the perceptions of those who are in positions to observe the leadership attributes of those presidents and how does each group rank the needed attributes moving forward.

The 8 questions for research were:

1) To what degree do the SC Technical College presidents perceive they possess each attribute of leadership using Moss’ 37 different attributes contained on the Leader Attribute Inventory Self Rating form?

2) To what degree do the subordinate observers perceive that the SC Technical College presidents possess each attribute of leadership when using Moss’ 37 different attributes on the Leader Attribute Inventory Observer Rating form?

3) Are the technical college president’s self perceptions of their leadership attributes consistent with the perceptions of those attributes by the subordinate observers? What are the mean differences between the two perceptions?

4) What are the mean differences between the self and observer perceptions of SC Technical College president’s using Moss’s Leadership Attribute Inventory when
clustered into the groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’?

5) Using the Leader Effectiveness Index (LEI) responses, what is the perceived leadership effectiveness of the SC Technical College presidents by their chosen subordinate observer?

6) Using Moss’s 37 attributes, what were the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by current presidents?

7) Using Moss’s 37 attributes, what were the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by selected observers/subordinates?

8) What are the differences between future leadership attribute needs as reported by the rankings of both the presidents and chosen observers? How do the two rankings compare to one another in future presidential attribute needs?

These 8 questions were quantifiably addressed and answered. Descriptive statistics such as means, frequency, standard deviation, and percentages were computed for each attribute and survey question. T-tests were used to generate the t-statistic and probability values were used to draw conclusions about any correlations between answers provided by the presidents and subordinate observers, or any select group of answers provided by either respondent.
Analysis and Findings

Demographic responses for presidents showed that 90% \((n=9)\) responses were Caucasian males with 10% \((n=1)\) being Caucasian female. All respondents were over 50 years of age. All but one president responded that they had more than 22 years of experience in higher education with the other having 10-12 years of experience in higher education. Experience as the current sitting president was reported in a very unevenly distributed fashion, with the majority of respondents possessing the extremities of either being either low or high in experience. In the current position as president, 60% \((n=6)\) have less than 8 years of experience, while 30% \((n=3)\) had more than 16 years experience as the current president. Ascension through the ranks of academia appears to be the career path that most respondents have taken, with 80% \((n=9)\) having held the position of vice-president prior to being named president. Demographics among the selected subordinate observers reported very similar results in a number of categories and this was to be expected given the high number of presidents that were chosen having previously held a subordinate position in academia themselves. Subordinate observers were evenly distributed on gender at 50% \((\text{male}=19, \text{female}=19)\). Caucasian responses totaled 77% \((n=30)\) while African-American responses were the other 23% \((n=9)\). The majority, or 79% \((n=33)\), of the subordinate observers were over the age of 50. Years of experience in higher education reported was evenly distributed with a slight skew with 29% \((n=11)\) having less than 10 years of experience, 21% \((n=8)\) having 10 to 21 years of experience and the majority, or 51% \((n=20)\) having 22 or more years of experience. Years in current position for subordinate observers was almost evenly split at 10 years, with 56% \((n=21)\)
having 10 or less years, and 45% (n=17) having more than 10 years of experience in current position. Chosen subordinate observers overwhelming reported, 68% (n=26), they were a current vice-president.

Analysis of the data illustrates that there was not enough evidence to reject the null hypothesis. Therefore, it is concluded that no statistically significant differences exists between the perceptions of possessed leadership attributes between the presidents’ self reported perceptions and the subordinate observers’ perceptions for the 37 Leader Attribute Inventory (LAI) attributes. The attributes possessing the largest (> .45) differences in means were ‘Energetic with Stamina’, ‘Tolerant of Frustration’, ‘Intelligent with Practical Judgment’ and ‘Team Building’. Based on these four attributes, ‘Team Building’ was the only attribute where the subordinate observer’s perceptions rated higher than the self perceptions by the presidents. This might be attributed to a person’s own modesty about their personal abilities. The attributes with the smallest (< .05) amount of difference between mean perceptions were ‘Even Disposition’, ‘Problem Solving’ and ‘Dependable/Reliable’.

Examination of the three clustered groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’ revealed that there was not enough evidence to reject the null hypothesis of equality because there were no statistically significant difference between the means. The largest difference in mean was in the category of Managerial Skills with a difference of .148, the other two categories had mean differences less than .05. Evaluation of the Leader Effectiveness Index (LEI) which was only completed by the observer’s, shows that the subordinate observers rated
the presidents at an overall 4.982 of effectiveness, which is categorized as nearly ‘Very Effective’. The highest rating occurred on Effectiveness Category 4 for ‘Exerts influence outside of the organization in order to set the right context for the organization’. The lowest mean rating was a tie and reported in Effectiveness Categories 2 and 5 for ‘Fosters unity, collaboration and ownership, and recognizes individual and team contribution’ and ‘Establishes an environment conductive to learning’ respectively.

Using a ranking system, both groups were asked to rank the top 10 attributes they felt were needed attributes of presidents at the technical college moving forward. In doing this ranking from both perspectives, conceptually it will derive what is the perception of future needs from persons in the position and from an observers perception. The observer in this study may be a person who either has to support the current president and feels that the president is lacking that particular attribute, or may be seeking to obtain the president’s position at some point in their own career. Whichever method is selected to summarize the data, either by frequency of selection or by weighted sum, both the presidents and the subordinate observers choose ‘Visionary’ and ‘Ethical’ as the two of the top three common attributes of future leadership. All commonalities chosen based on frequency choice are ‘Ethical’, ‘Visionary’, ‘Communication’, ‘Personal Integrity’, ‘Motivating Others’, ‘Accountable’, ‘Decision Making’, ‘Energetic with Stamina’, and ‘Committed to the Common Good’. Commonalities chosen by weighted sum are ‘Ethical’, ‘Personal Integrity’, ‘Visionary’, ‘Communication’, ‘Accountable’, and ‘Decision Making’.
Research Questions Summary

1) To what degree do the SC Technical College presidents perceive they possess each attribute of leadership using Moss’ 37 different attributes contained on the Leader Attribute Inventory Self Rating form?

Presidents rated themselves overall with a mean of 5.06 which is the low end of ‘Descriptive’. The highest mean was on the attributes of ‘Willing to Accept Responsibility’ and ‘Persistent’. The lowest mean was on the attribute of ‘Organizing’. All presidents believe they are at least ‘somewhat descriptive’ with 59.46% reporting as a mean of ‘descriptive’ of each attribute.

2) To what degree do the subordinate observers perceive that the SC Technical College presidents possess each attribute of leadership when using Moss’ 37 different attributes on the Leader Attribute Inventory Observer Rating form?

Subordinate observers rated the presidents overall with a mean of 5.07, which is the low end of ‘Descriptive’ for the attributes. The highest mean was on ‘Networking’ with a mean of 5.46 and the lowest was on ‘Conflict Management’ with a mean of 4.62. All subordinate observers believe the presidents are at least ‘somewhat descriptive’ with 67.57% reporting as a mean of ‘descriptive’ of each attribute.

3) Are the technical college president’s self perceptions of their leadership attributes consistent with the perceptions of those attributes by the subordinate observers? What are the mean differences between the two perceptions?
Statistical analysis of the data supports that there was not sufficient evidence to reject the null hypothesis. Therefore, it was concluded that no statistically significant differences exist between the perceptions of possessed leadership attributes between the presidents’ self reported perceptions and the subordinate observers’ perceptions for the 37 Leader Attribute Inventory (LAI) attributes. The overall means are likewise as close with presidents reporting an overall mean of 5.06 with a standard deviation of .85 and the subordinate observers reporting a 5.07 mean with a standard deviation of 1.17 overall for all attributes. While the presidents had greater agreement among answers, the difference between the subordinate observers and the presidents were merely due to chance and negligible.

4) What are the mean differences between the self and observer perceptions of SC Technical College president’s using Moss’s Leadership Attribute Inventory when clustered into the groups of ‘Management Skills’, ‘Personal Characteristics’ and ‘Social Skills and Characteristics’?

Statistical analysis of the data supports that there was not sufficient evidence to reject the null hypothesis of equality. Therefore, it was concluded no statistically significant differences exist between the perceptions of possessed leadership attributes between the presidents’ self reported perceptions and the subordinate observers’ perceptions for the three clustered groups of leadership attributes. ‘Social Skills and Characteristics’ had mean differences of 0.018 and ‘Personal
Skills’ had a mean difference of 0.034. The largest difference in means was found in the ‘Management Skills’ with an absolute mean difference of 0.147.

5) Using the Leader Effectiveness Index (LEI) responses, what is the perceived leadership effectiveness of the SC Technical College presidents by their chosen subordinate observers?

All responses by the subordinate observers indicated they believe that the presidents are at minimal ‘Effective’ within each of the 7 Effectiveness Categories, with 41% of the responses having been rated as ‘Extremely Effective’ to the presidents. The highest mean was reported in ‘Exerts influence outside of the organization in order to set the right context for the organization’ with a mean of 5.33. The lowest mean was reported equally on ‘Fosters unity, collaboration and ownership, and recognizes individual and team contribution’ and ‘Establishes an environment conductive to learning’ with mean of 4.82.

6) Using Moss’s 37 attributes, what were the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by current presidents?

Using frequency of choice as the measurement in ranked order the selections were: Ethical(8), Visionary (7), Courageous/Risk-Taker (7), Personal Integrity (7), Accountable (6), Team Building (6), Enthusiastic/Optimistic (5), Communication (5), Energetic with Stamina (4), Achievement Oriented (4), Committed to the Common Good (4), Motivating Others (4), and Decision Making (4). Using a ranked sum method to add significance, in ranked order the
selections were: Ethical (67), Personal Integrity (65), Visionary (49), Team Building (42), Communication (29), Energetic with Stamina (27), Decision Making (27), Courageous, Risk Taker (24), Enthusiastic, Optimistic (24), and Accountable (19).

7) Using Moss’s 37 attributes, what were the top 10 selections of leadership attributes needed in future leadership of South Carolina Technical College presidents as perceived by selected subordinate observers?

Using frequency of choice as the measurement in ranked order the selections were: Visionary(30), Ethical(29), Communication(28), Personal Integrity(27), Intelligent with Practical Judgment(22), Motivating Others(18), Adaptable/Open to Change(16), Accountable(16), Decision Making(16), Energetic with Stamina(13), Committed to the Common Good(13), and Problem Solving(13). Using a ranked sum method to add significance, in ranked order the selections were: Ethical(239), Personal Integrity(221), Visionary(206), Intelligent with Practical Judgment(152), Communication(149), Adaptable/Open to Change(97), Accountable(83), Motivating Others(79), Decision Making(71) and Problem Solving(71).

8) What are the differences between future leadership attribute needs as reported by the rankings of both the presidents and chosen observers? How do the two rankings compare to one another in future presidential attribute needs?

Using the frequency of choice method including any ties, presidents and subordinate observers had 9 attributes in common when indentifying and ranking

Discussions and Conclusions

This study was selected to help improve the future leadership of the technical colleges that are geographically distributed throughout the state of South Carolina. The president’s position and corresponding expectations have changed over the past several decades and the presidents are no longer isolated leaders within their own institutions. The technical college presidents are expected to not only be the internal leader of their organizations, but they hold growing external responsibilities. Many presidents are expected to be representatives of their institutions with the additional responsibilities of external fund raising and aid in the economic development of their communities. In order to achieve the necessary results, presidents must possess the right leadership attributes in order to motivate and lead those at their institution to achieve these requirements. This study was designed to show the presidents self perception of possessed leadership attributes compared to the observed perceptions that others have of them and then to identify what is perceived to be important for future leadership needs.
Current presidents and anyone aspiring to be president of these institutions can use the findings of this research to help strengthen any weaknesses they feel they might possess as compared with those attributes that is identified as expected to be needed of future leadership.

This study was selected due to the ever changing demands that are being placed on the South Carolina Technical College System. The technical colleges are used as a stimulant for economic development and they receive a significant amount of funding to provide an educated work force for local business and industry needs. The technical colleges are also used as a marketing tool or incentive for many businesses looking to relocate as a provider of a pool of educated work force. Providing a specialized work force is not the only output of the technical colleges either, many offer programs that allow students to transfer through agreements with traditional four-year colleges into a bachelor degree program or provide certification process for those entering into a trade or profession.

Based on the collected demographics a large portion of current leadership is or will be nearing retirement age and there needs to be sufficient replacements identified within the system that are ready to take over and guide these institutions moving forward. The findings from this study can help guide those potential up and coming new presidents as to what leadership attributes are needed to fulfill the job. Conclusions drawn from this study were:

1) Current presidents have overwhelming come through the ranks of academia and ascended from the title of vice-president. Most presidents are white males greater
than 50 years of age, having most of their experience (28+ years) in higher education and have held the position of president either for some length of time or have been recently appointed. A minimal amount of presidents possess the middle range of experience equaling between 7 years and 16 years.

2) The subordinate observers chosen were mostly those holding the title of vice-president and their gender was split evenly. African-Americans make up nearly 25% of subordinate observers, and like the presidents, subordinate observers were more likely to be in excess of 50 years of age. The majority have been in higher education for more than 19 years.

3) Both presidents and subordinate observers should find it interesting that in this study there was no statistically significant difference between the means of perceptions of presidential leadership attributes held by the presidents and those of their subordinate observers. Any perceived large range between compared means of the individual attributes is only by statistical chance. Statistically the two compared means show that the presidents and subordinate observers agree on the perception of attributes held by the presidents.

4) Presidents need to feel some sense of accomplishment in that overall, the subordinate observers feel that their leadership is effective as indicated by responses contained from the Leader Effectiveness Index (LEI).

5) Using the Leader Attribute Factors clustered groups, it was clear that when both groups identified and ranked future needed leadership by the presidents the emphasis was placed on attributes contained in the ‘Personal Characteristics’ and
those in the ‘Social Skills and Characteristics’ groups. The least emphasized area
was in ‘Management Skills’, where presidents chose ‘Team Building’ and the
subordinate observers chose ‘Problem Solving’ as needed attributes. This clearly
indicates that presidents need to be less concerned with attributes in activities of
‘Management Skills’ and focus more on core personal and interpersonal skills.
When comparing the attributes, ‘Management Skills’ was the only cluster that the
subordinate observers rated the president higher than the presidents rated
themselves. Either the presidents do not feel they possess good management
skills, or have humbleness about their own ability to manage as compared to the
subordinates observations. This could be due to the less structured workplace
found in academia and sense of academic autonomy found in many higher
educational institutions.

6) Presidents can use findings contained in this study to improve their current
leadership style and ability as identified through the top 10 attribute rankings for
needed future presidents. Using the commonalities of responses found between
the top 10 rankings of needed attributes for future presidents by both the current
presidents and the subordinate observers comparisons can be made to the
perceived possessed attributes already obtained by the presidents. Using the 9
commonly identified attributes by the frequency of choice method, only
‘Visionary’, ‘Ethical’, ‘Personal Integrity’, ‘Energetic with Stamina’, and
‘Committed to the Common Good’ were attributes ranked in the top 10 statistical
means by both the presidents and the subordinate observers. This leaves
‘Communication’, ‘Motivating Others’, ‘Accountable’, and ‘Decision Making’ as attributes deemed important but not possessed within the top 10 attributes of current presidents. Using the 6 attributes commonly identified in the weighted sum method, only ‘Ethical’, ‘Personal Integrity’, ‘Visionary’, and ‘Accountable’ were attributes ranked in the top 10 statistical means perceived by both the presidents and subordinate observers. This leaves ‘Communication’ and ‘Decision Making’ as attributes deemed important but not perceived to be possessed within the top 10 attributes of current presidents. It is clear that presidents or aspiring presidents will need to address the attributes of ‘Communication’ and ‘Decision Making’ moving forward in order to better serve their colleges and subordinate needs.

Recommendations

1. Replicate this study with different subgroups as the observers than those immediately reporting to the president. Use staff further removed from the president, or faculty to evaluate the presidential leadership and evaluate any gaps or loss of leadership between groups throughout the organization.

2. Replicate this study with individuals outside of the organization such as those found in industry as the observers. Choose those industry leaders who have close enough interaction with the president to evaluate their leadership attributes.

3. Examine if there are any correlations between time in current position for the President and what leadership attributes scored higher or lower to see if any
pattern may exist for more or less experience in position or if the perception of particular attributes have changed over time.

4. Given the expected turn-over that will be occurring in leadership at the South Carolina Technical Colleges, replicate this study sometime in the future and then compare results to similarities or differences.

5. Perform a more in-depth study of the leader effectiveness at these institutions, focusing less on individual attributes and focusing on overall effectiveness of the President leading the school.

6. Evaluate the perception of the presidents leadership attributes as compared and measured against student achievement regardless of academic goal, transfer, certification, or job placement.

Summary

This study was chosen to help current or future presidents of the South Carolina Technical College System to become better and ultimately more effective leaders to those in which they are charged to lead. Hopefully, results of this study will be useful in guiding future training or professional development needs of those in the president’s position or to those desiring to become president.

The resulting findings of this study show that by in-large, the perceptions held by the presidents about their possessed leadership attributes as outline by the Moss’ Leadership Attribute Inventory (LAI) are supported by corresponding similar perceptions of those subordinate observers that report directly to the president. There was no single
attribute perceived to be possessed by the presidents that the two groups of presidents and subordinate observers could identify as having non-congruent perceptions. When clustered into the three main groups of ‘Managerial Skills’, ‘Social Skills and Characteristics’ and ‘Personal Characteristics’ there were no statistical differences reported.

When asked to identify and rank the 10 most important attributes of future leadership, both groups chose ‘Ethics’ and ‘Visionary’ as two of the top three choices, and agreed with a majority of other similarities with differing orders. What was apparent though is when you compared the identified top 10 needs of future leadership attributes to the attribute scores of the 37 individual attributes currently possessed by the presidents there were some deficiencies in the areas of ‘Communication’ and ‘Decision Making’ abilities. These identified shortcomings are attributes that current presidents can continue to work on moving forward.
Appendix A
Leader Attribute Inventory – Self Rating Form

LEADER ATTRIBUTE INVENTORY
Self-Rating Form

Jerome Moss, Jr.
with the assistance of
Qetler Jensrud, Barry Johansen, Hallie Preskill
(LAI Q1-Q37)

SECTION A

Please provide the following information about yourself:

1) Today’s Date ____________________________
   Day – Month – Year

2) Your Gender ______ Female ______ Male

3) Your Ethnic Group:
   ___ African American
   ___ Asian
   ___ Caucasian
   ___ Hispanic
   ___ Native American
   ___ Other

4) Your Age:
   ___ 20-29
   ___ 30-39
   ___ 40-49
   ___ 50-59
   ___ 60-69
   ___ 70 +

5) Years of experience working in Higher Educ.:
   ___ 0-3 ___ 16-18
   ___ 4-6 ___ 19-21
   ___ 7-9 ___ 22-24
   ___ 10-12 ___ 25-27
   ___ 13-15 ___ 28 +

SECTION B

You have been asked to rate your individual leadership characteristics (attributes). Please answer the questions as they relate to you with candor and honesty. The objective of this study is to provide an increased knowledge base which can be used to improve leader behavior. Please reflect carefully about each statement. Rate your characteristics on each statement using the following scale:

1 Very Undescriptive 4 Somewhat Descriptive
2 Undescriptive 5 Descriptive
3 Somewhat Undescriptive 6 Very Descriptive

For each of the statements, please circle the number which best describes yourself.

Attributes

1. Energetic with stamina - Approaches tasks with great energy and works long hours when necessary

   …………………………………………………………………………………….. 1 2 3 4 5 6
2. Insightful - Reflects on the relationship among events and grasps the meaning of complex issues quickly .............................................................. 2 3 4 5 6

3. Adaptable, open to change - Encourages and accepts suggestions and constructive criticism for co-workers, and is willing to modify plans ........................................ 2 3 4 5 6

4. Visionary - Looks to the future and creates new ways in which the organization can prosper .................................................................................. 2 3 4 5 6

5. Tolerant of ambiguity and complexity - Comfortably handles vague and difficult situations where there is no simple answer or no prescribed method of proceeding ........................................ 2 3 4 5 6

6. Achievement-oriented - Shows commitment to achieving goals and strives to keep improving performance ................................................................................. 2 3 4 5 6

7. Accountable - Holds self answerable for work and willingly admits mistakes ........................................................................................................ 2 3 4 5 6

8. Initiating - Frequently introduces new ideas ................................................................. 2 3 4 5 6

9. Confident, accepting of self - Appears secure about abilities and recognizes personal shortcomings .......................................................................................... 2 3 4 5 6

10. Willing to accept responsibility - Willingly assumes higher level duties and functions within the organization .......................................................... 2 3 4 5 6

11. Persistent - Continues to act on beliefs despite unexpected difficulties ...................... 2 3 4 5 6

12. Enthusiastic, optimistic - Thinks positively, approaches new tasks with excitement and deals with challenges as opportunities ........................................ 2 3 4 5 6

13. Tolerant of frustration - Acts calmly and patiently even when things don't go as planned ........................................................................................................... 2 3 4 5 6

14. Dependable, reliable - Can be counted on to follow through to get the job done ............ 2 3 4 5 6

15. Courageous, risk-taker - Willingly tries out new ideas in spite of possible loss or failure .................................................................................................................. 2 3 4 5 6

16. Even disposition - Displays a sense of humor and a stable temperament even in stressful situations .................................................................................. 2 3 4 5 6

17. Committed to the common good - Works to benefit the entire organization, not just self ................................................................................................................... 2 3 4 5 6

18. Personal integrity - Speaks frankly and honestly and practices espoused values .................. 2 3 4 5 6

19. Intelligent with practical judgment - Learns quickly, and knows how and when to apply knowledge .......................................................................................... 2 3 4 5 6

20. Ethical - Acts consistently with principles of fairness and right or good conduct that can stand the test of close public scrutiny ............................................................................................................ 2 3 4 5 6

21. Communication (listening, oral, written) - Listens closely to people at work, and organizes and clearly presents information both orally and in writing ........................................................................................................ 2 3 4 5 6
22. Sensitivity and respect - shows genuine concern for the feelings of others and regard for them as individuals
23. Motivating others - Creates an environment in which people want to do their best
24. Networking - Develops cooperative relationships within and outside of the organization
25. Planning - In collaboration with others, develops tactics and strategies for achieving organizational objectives
26. Delegating - Appropriately and effectively assigns responsibilities and authority
27. Organizing - Establishes effective and efficient procedures for getting work done in an orderly manner
28. Team building - Facilitates the development of cohesiveness and cooperation among the people at work
29. Coaching - Helps people to develop knowledge and skills for their work assignment
30. Conflict management - Brings conflict into the open and uses it to arrive at constructive solutions
31. Time management - Schedules own work activities so that deadlines are met and work goals are accomplished in a timely manner
32. Stress Management - Effectively deals with the tension of high pressure work situations
33. Appropriate use of leadership styles - Uses a variety of approaches to influence and lead others
34. Ideological beliefs are appropriate to the group - Models and demonstrates belief in the basic values of the organization
35. Decision making - Makes timely decisions that are in the best interest of the organization by analyzing all available information, distilling key points, and drawing relevant conclusions
36. Problem solving - Effectively identifies, analyzes, and resolves difficulties and uncertainties at work
37. Information management - Identifies, collects, organizes, and analyzes the essential information needed by the organization
Appendix B
Leader Attribute Inventory – Observer Rating Form

LEADER ATTRIBUTE INVENTORY
Observer Rating Form

Jerome Moss, Jr.
with the assistance of
Qetler Jensrud, Barry Johansen, Hallie Freeskill
(LAI Q1-Q37)

SECTION A

Please provide the following information about yourself:

1) Today’s Date ______________ Day – Month - Year
2) Your Gender ____ Female _____ Male
3) Your Ethnic Group: ____ African American
               ____ Asian
               ____ Caucasian
               ____ Hispanic
               ____ Native American
               ____ Other
4) Your Age: ____ 20-29
               ____ 30-39
               ____ 40-49
               ____ 50-59
               ____ 60-69
               ____ 70 +
5) Years of experience working in Higher Ed.: ____ 0-3
               ____ 4-6
               ____ 7-9
               ____ 10-12
               ____ 13-15
               ____ 16-18
               ____ 19-21
               ____ 22-24
               ____ 25-27
               ____ 28 +
6) Years of experience in current role
               ____ 0-1
               ____ 2-3
               ____ 4-5
               ____ 6-7
               ____ 8-9
               ____ 10-11
               ____ 12-13
               ____ 14-15
               ____ 16-17
               ____ 17 +
7) Position you hold now:
               ____ Vice-President
               ____ Vice-Chancellor
               ____ Assoc/Asst. President
               ____ Dean
               ____ Director
               ____ Department Head
               ____ Other (must be a direct report)
8) How long have you known your institution’s president?
               ____ 0-1
               ____ 2-3
               ____ 4-5
               ____ 6-7
               ____ 8-9
               ____ 10-11
               ____ 12-13
               ____ 14-15
               ____ 16-17
               ____ 17 +

SECTION B

You have been asked to rate the leadership characteristics (attributes) of another person. In this case, your institution’s chief executive officer, most commonly referred to as your institution’s president. The purpose is to assist in improving the leadership capabilities of these individuals by identifying the relevant strengths and development needs of their leader attributes. You will return this form directly to the lead researcher yourself with the self addressed envelope, so the person you are rating will not be able to identify/view your responses. All feedback will be statistically represented most commonly in the form of averages. I urge you to reflect carefully about each statement. Then rate the person on each statement using the following scale:

1 Very Undescriptive 4 Somewhat Descriptive
2 Undescriptive 5 Descriptive
3 Somewhat Undescriptive 6 Very Descriptive
For each of the statements, please circle the number which best describes the person you are rating.

Attributes

1. Energetic with stamina - Approaches tasks with great energy and works long hours when necessary .............................................. 1 2 3 4 5 6

2. Insightful - Reflects on the relationship among events and grasps the meaning of complex issues quickly .............................................. 1 2 3 4 5 6

3. Adaptable, open to change - Encourages and accepts suggestions and constructive criticism for co-workers, and is willing to modify plans .............................................. 1 2 3 4 5 6

4. Visionary - Looks to the future and creates new ways in which the organization can prosper .............................................. 1 2 3 4 5 6

5. Tolerant of ambiguity and complexity - Comfortably handles vague and difficult situations where there is no simple answer or no prescribed method of proceeding .............................................. 1 2 3 4 5 6

6. Achievement oriented - Shows commitment to achieving goals and strives to keep improving performance .............................................. 1 2 3 4 5 6

7. Accountable - Holds self accountable for work and willingly admits mistakes .............................................. 1 2 3 4 5 6

8. Initiating - Frequently introduces new ideas .............................................. 1 2 3 4 5 6

9. Confident, accepting of self - Appears secure about abilities and recognizes personal shortcomings .............................................. 1 2 3 4 5 6

10. Willing to accept responsibility - Willingly assumes higher level duties and functions within the organization .............................................. 1 2 3 4 5 6

11. Persistent - Continues to act on beliefs despite unexpected difficulties .............................................. 1 2 3 4 5 6

12. Enthusiastic, optimistic - Thinks positively, approaches new tasks with excitement and deals with challenges as opportunities .............................................. 1 2 3 4 5 6

13. Tolerant of frustration - Acts calmly and patiently even when things don't go as planned .............................................. 1 2 3 4 5 6

14. Dependable, reliable - Can be counted on to follow through to get the job done .............................................. 1 2 3 4 5 6

15. Courageous, risk-taker - Willingly tries out new ideas in spite of possible loss or failure .............................................. 1 2 3 4 5 6

16. Even disposition - Displays a sense of humor and a stable temperament even in stressful situations .............................................. 1 2 3 4 5 6

17. Committed to the common good - Works to benefit the entire organization, not just self .............................................. 1 2 3 4 5 6

18. Personal integrity - Speaks frankly and honestly and practices espoused values .............................................. 1 2 3 4 5 6

19. Intelligent with practical judgment - Learns quickly, and knows how and when to apply knowledge .............................................. 1 2 3 4 5 6
20. Ethical - Acts consistently with principles of fairness and right or good conduct that can stand the test of close public scrutiny ......................................................... 1 2 3 4 5 6

21. Communication (listening, oral, written) - Listens closely to people at work and organizes and clearly presents information both orally and in writing ........................................ 1 2 3 4 5 6

22. Sensitivity and respect - Shows genuine concern for the feelings of others and regard for them as individuals ........................................................................................................... 1 2 3 4 5 6

23. Motivating others - Creates an environment in which people want to do their best .................................................................................................................. 1 2 3 4 5 6

24. Networking - Develops cooperative relationships within and outside of the Organization .......................................................... 1 2 3 4 5 6

25. Planning - In collaboration with others, develops tactics and strategies for achieving organizational objectives .......................................................................................... 1 2 3 4 5 6

26. Delegating - Appropriately and effectively assigns responsibilities and authority .............................................................................................................. 1 2 3 4 5 6

27. Organizing - Establishes effective and efficient procedures for getting work done in an orderly manner .............................................................................................................. 1 2 3 4 5 6

28. Team building - Facilitates the development of cohesiveness and cooperation among the people at work .............................................................................................................. 1 2 3 4 5 6

29. Coaching - Helps people to develop knowledge and skills for their work assignments .............................................................................................................. 1 2 3 4 5 6

30. Conflict management - Brings conflict into the open and uses it to arrive at constructive solutions .............................................................................................................. 1 2 3 4 5 6

31. Time management - Schedules own work activities so that deadlines are met and work goals are accomplished in a timely manner .............................................................................................................. 1 2 3 4 5 6

32. Stress Management - Effectively deals with the tension of high-pressure work situations .............................................................................................................. 1 2 3 4 5 6

33. Appropriate use of leadership styles - Uses a variety of approaches to influence and lead others .............................................................................................................. 1 2 3 4 5 6

34. Ideological beliefs are appropriate to the group - Models and demonstrates belief in the basic values of the organization .............................................................................................................. 1 2 3 4 5 6

35. Decision making - Makes timely decisions that are in the best interest of the organization by analyzing all available information, distilling key points, and drawing relevant conclusions .............................................................................................................. 1 2 3 4 5 6

36. Problem solving - Effectively identifies, analyzes, and resolves difficulties and uncertainties at work .............................................................................................................. 1 2 3 4 5 6

37. Information management - Identifies, collects, organizes, and analyzes the essential information needed by the organization .............................................................................................................. 1 2 3 4 5 6
Leader Effectiveness Index
For the
Leadership Attributes Inventory (LAI)

Observer-Rating Form
This leader effectiveness index is a companion to the Leader Attribute Inventory. We are seeking your opinion about how effectively your president is performing as a leader. You are returning this survey directly to the investigator, so the person you are rating will not be able to identify your responses. Therefore, we urge you to reflect carefully about each statement and select the rating that best describes this person. Rate the person using the following scale:

1. Not applicable  4. Effective
2. Not Effective    5. Very Effective
3. Slightly Effective  6. Extremely Effective

For each of the statements, please circle the number which best describes the person you are rating

1. Inspires a shared vision and establishes standards that help the organization achieve its next stage of development. For example, creates a sense of purpose, defines reality in the larger context, instills shared values and beliefs .........................................................1 2 3 4 5 6

2. Fosters unity, collaboration and ownership, and recognizes individual and team contributions. For example, creates a climate of community, builds morale, sets a positive tone, resolves disagreements ..............................................................................................................1 2 3 4 5 6

3. Exercises power effectively and empowers others to act. For example, facilitates change, shares authority, nurtures the skills of group members .........................................................................................................................1 2 3 4 5 6

4. Extends influence outside of the organization in order to set the right context for the organization. For example, serves as a symbol for the group, secures resources, builds coalitions, acts as an advocate .............................................................................................................................................1 2 3 4 5 6

5. Establishes an environment conducive to learning. For example, provides intellectual stimulation, creates a supportive climate for learners, facilitates the professional development of staff .............................................................................................................................................1 2 3 4 5 6

6. Satisfies the job-related needs of the members of the organization as individuals, for example, respects, trusts, and has confidence in members, adapts leadership style to the situation, creates a satisfying work environment ..............................................................................................................................................1 2 3 4 5 6

7. Overall, how effective is the leadership performance of the person you are rating? .................................................................1 2 3 4 5 6
Appendix C
Attribute Identification and Ranking Sheet

Part II

Listed below are all 37 Leader Attributes in the survey and you may refer to the survey for explanation of each attribute. Based on your leadership experience in higher education please rank the top ten (10) attributes that you think are needed to be an effective leader as a college president. You are not to rank the attributes of your current leadership as you have already done that in the survey, but rather what attributes you think are most important to fulfill the mission of your institution. You should only rank 10 items with the number 1 being the most important, and the number 10 being the 10th most important attribute. Please place the numbers 1, 2, 3...10 in the columns to the right of each corresponding attribute. 27 attributes should remain blank once completed, no ties please.

<table>
<thead>
<tr>
<th>Energetic with Stamina</th>
<th>Ethical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insightful</td>
<td>Communication</td>
</tr>
<tr>
<td>Adaptable, open to Change</td>
<td>Sensitivity and respect</td>
</tr>
<tr>
<td>Visionary</td>
<td>Motivating Others</td>
</tr>
<tr>
<td>Tolerant of ambiguity and complexity</td>
<td>Networking</td>
</tr>
<tr>
<td>Achievement oriented</td>
<td>Planning</td>
</tr>
<tr>
<td>Accountable</td>
<td>Delegating</td>
</tr>
<tr>
<td>Initiating</td>
<td>Organizing</td>
</tr>
<tr>
<td>Confident, acceptance of self</td>
<td>Team Building</td>
</tr>
<tr>
<td>Willing to accept responsibility</td>
<td>Coaching</td>
</tr>
<tr>
<td>Persistent</td>
<td>Conflict Management</td>
</tr>
<tr>
<td>Enthusiastic, optimistic</td>
<td>Time Management</td>
</tr>
<tr>
<td>Tolerant of frustration</td>
<td>Stress Management</td>
</tr>
<tr>
<td>Dependable, reliable</td>
<td>Appropriate use of leadership styles</td>
</tr>
<tr>
<td>Courageous, risk taker</td>
<td>Ideological beliefs are appropriate to the group</td>
</tr>
<tr>
<td>Even disposition</td>
<td>Decision Making</td>
</tr>
<tr>
<td>Committed to the common good</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>Personal Integrity</td>
<td>Information Management</td>
</tr>
<tr>
<td>Intelligent with practical judgment</td>
<td></td>
</tr>
</tbody>
</table>

Thank You, please use the provided self addresses stamp envelope to submit your survey.
Appendix D
Leader Attribute Inventory (LAI) Permission Letter

-----Original Message-----
From: Jerome Moss [mailto:mossj001@umn.edu]
Sent: Monday, February 02, 2009 10:28 AM
To: Kevin Mckenzie
Subject: Re: permission to use instrument

Mr. Mckenzie,
You have my permission to use the LAI for your doctoral dissertation as long as you do not change the instrument in any way.
Good luck with the dissertation.

Jerome Moss

----- Original Message ----- 
From: "Kevin Mckenzie" <PAPPY@exchange.clemson.edu>
To: <mossj001@umn.edu>
Sent: Monday, February 02, 2009 8:11 AM
Subject: permission to use instrument

Dr. Moss,

I have passed my comprehensive exams and I am in the dissertation phase of my doctoral program at Clemson University and working with Dr. William (Bill) Paige as my committee chair. I am working towards my EdD in Career and Technology Education, and I was looking to use your LAI survey instrument to complete a study with it in the Technical College System here in South Carolina.

I have searched high and low as to how to receive information on obtaining permission to use the survey and have researched many other studies that have incorporated it but have not seen one where permission was asked. If permission is not needed please excuse me taking up your time, but if indeed permission is needed to use you and your colleagues survey instrument I would kindly like to receive permission to use it in my study.

If there is a more formal way or process of obtaining permission please let me know and I will follow the process.

Looking forward to hearing from you,

Kevin Mckenzie
Clemson University
864.656.7131
Appendix E
Institutional Review Board (IRB) Approval Letter

From: Laura Moll
Sent: Tuesday, March 17, 2009 10:29 AM
To: William Paige (wpaeve@clemson.edu); Kevin Mckenzie
Subject: Your IRB protocol # IRB2009-065, entitled "Leadership Perceptions of South Carolina Technical College Presidents"

Dear Dr. Paige and Kevin,

The Clemson University IRB (Institutional Review Board) / ORC (Office of Research Compliance) validated the protocol identified above using Exempt review procedures and a determination was made on March 17, 2009 that the proposed activities involving human participants qualify as Exempt from continuing review under Category B2, based on the Federal Regulations (45 CFR 46). You may begin this study.

Please remember that no change in this research protocol can be initiated without prior review by the IRB / ORC. Any unanticipated problems involving risks to subjects, complications, and/or any adverse events must be reported to the IRB / ORC immediately. You are requested to notify the ORC when your study is completed or terminated.

Attached are documents developed by Clemson University regarding the responsibilities of Principal Investigators and Research Team Members. Please be sure these are distributed to all appropriate parties.

Good luck with your study and please feel free to contact us if you have any questions. Please use the IRB number and title in all communications regarding this study.

Best,

Laura :)

P.S. Happy St. Patrick's Day!

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Laura A. Moll, M.A., CIP
IRB Administrator
Office of Research Compliance
223 Brackett Hall
Clemson University
Clemson, SC 29634-5704
lmoll@clemson.edu
Phone: 864-656-6460
Fax: 864-656-4475
www.clemson.edu/research/compliance/irb/
Appendix F
Institutional Review Board (IRB) Amended Approval Letter

From: Rebecca Alley
Sent: Monday, March 30, 2009 8:55 AM
To: William Paige; kmckenz@clemson.edu
Subject: Your Amendment to IRB protocol # IRB2009-065, entitled “Leadership Perceptions of South Carolina Technical College Presidents”

Dear Dr. Paige and Kevin,

The Clemson University Institutional Review Board (IRB) / Office of Research Compliance (ORC) reviewed your proposed amendment submitted on March 23, 2009 to the protocol identified above using Exempt review procedures. A determination was made on March 30, 2009, that the proposed activities involving human participants continue to qualify as Exempt from continuing review based on the Federal Regulations (45 CFR 46). You may begin to implement this amendment.

Please remember that no change in this research protocol can be initiated without prior review by the IRB. Any unanticipated problems involving risks to subjects, complications, and/or any adverse events must be reported to the ORC immediately. Please notify the ORC when your study is completed or terminated.

Good luck with your study and please feel free to contact us if you have any questions. Please use the IRB number and title in all communications regarding this study.

Sincerely,
Becca

Rebecca L. Alley, J.D.
IRB Coordinator
Office of Research Compliance
Clemson University
223 Brackett Hall
Clemson, SC 29634-5704
ralley@clemson.edu
Office Phone: 864-656-0636
Fax: 864-656-4475
Appendix G
Pre-Study Email to Self Raters

Dear (name – Presidents Name of Each Institution):

Good day and I hope all is well at your institution. I must first point out that I too share a love of academia and that is why I am reaching out to you to complete my education at Clemson University. This email is designed to inform you of a research study that you are going to be asked to participate in the coming weeks.

I am a Career and Technology Education doctoral student at Clemson University and I am currently working on completing my dissertation under the direction of Dr. William Paige. Over the next 7-10 days you will receive a packet of information via regular ground mail containing a survey instrument that is being used to complete my research. Included in these packets are instructions on how to complete the surveys, rationale for the study, pre-paid postage return envelopes and to whom to distribute the remaining packets to.

I am using survey research to examine the leadership perceptions of the South Carolina Technical College’s presidents and those individuals who hold subordinate executive positions as related to select leader attributes. The objective of this research is to determine whether or not there is a correlation either positive or negative between the self perceptions of technical college presidents/CEO’s and of those subordinates who report directly to the president which can be generalized to the population of technical college presidents. No one school’s responses can be individually identified; all responses will be presented in statistical summation format as a whole.

I must point out that your participation in this study is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are entitled, and likewise you may discontinue your participation in this study at any time without penalty or loss of benefits. There are no foreseeable risks to your participation in this study as all information will remain non-identifiable and confidential. If you have any questions, please contact me using either my e-mail [kmckenz@clemson.edu] or I can be reached by calling my office (864) 656-7131. You may also contact Clemson University’s Office of Research Compliance at lmoll@clemson.edu, (864) 656-6450, toll free at 866-297-3071 or the principal investigator Dr. William Paige at (864) 656-7647 or by email at wpaige@clemson.edu.

Again you should receive your packet of information, instructions and return envelope shortly. I would graciously appreciate approximately 20 minutes of your time for participation in completing the survey and distributing the others via the instructions.

Sincerely,

Kevin McKenzie, Doctoral Candidate
Dr. William Paige, Chair and Principal Investigator
Appendix H
Cover Letter to Self Raters

April 10, 2009

Name
Address
City, State, Zip

Dear (name):

I am a Career and Technology Education doctoral student at Clemson University and I am currently working on completing my dissertation under the direction of Dr. William Paige. I am using survey research to examine the leadership perceptions of the South Carolina Technical College’s presidents and those individuals who hold subordinate executive positions as related to select leader attributes. The objective of this research is to determine whether or not there is a correlation either positive or negative between the self perceptions of technical college presidents/CEO’s and of those subordinates who report directly to the president which can be generalized to the population of technical college presidents. No one school’s responses can be individually identified; all responses will be presented in statistical summation format as a whole.

I am asking you to complete the enclosed survey titled “Leader Attribute Inventory: Self-Rating Form” and if you will grant permission for the collection of surveys titled “Leader Attribute Inventory: Observer Rating Form” of five subordinates. If you agree, I respectfully ask that you please distribute the five enclosed observer survey packets to five individuals who hold subordinate executive positions and report directly to you. Please ask them to complete the surveys, and let them know you’re comfortable with them being entirely candid in their survey responses. A high response rate is vital to my research. For this study subordinates may hold titles of vice-president, vice-chancellor, dean, department head, or similar executive designation.

You can be absolutely assured that any information provided will be confidential. Only members of the investigative team will be privy to information in non-redacted non-summarized format. Since respondent names or institutional names are not collected, no data will be correlated to any school or participant individually either during or upon conclusion of this study. Responses will only be published in summarized or some other statistically manipulated format. The Leader Attribute Inventory and Ranking should take approximately 20 minutes to complete and a self-addressed postage-paid return envelope is attached for its return.

Thank you for your participation and assistance. I must point out that your participation in this study is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are entitled, and likewise you may discontinue your participation in this study at any time without penalty or loss of benefits. There are no foreseeable risks to your participation in this study as all information will remain non-identifiable and confidential.

If you have any questions, please contact me using either my e-mail [kmuchenz@clemson.edu] or I can be reached by calling my office (864) 656-7131. You may also contact Clemson University’s Office of Research Compliance at lmoll@clemson.edu. (864) 656-6450, toll free at 866-297-3071 or the principal investigator Dr. William Paige at (864) 656-7647 or by email at wpaige@clemson.edu.

I would kindly like to have all responses returned by Month Day, 2009.

Respectfully,

Kevin McKenzie
Doctoral Candidate

Dr. William Paige
Chair and Principal Investigator
Appendix I
Cover Letter to Observer Raters

April 10th, 2009

Dear Sir or Madam:

I am a Career and Technology Education doctoral student at Clemson University and I am currently working on completing my dissertation under the direction of Dr. William Paige. I am using survey research to examine the leadership perceptions of the South Carolina Technical College’s presidents and those individuals who hold subordinate executive positions as related to select leader attributes. The objective of this research is to determine whether or not there is a correlation either positive or negative between the self perceptions of technical college presidents and of those subordinates who report directly to the president which can be generalized to the population of technical college presidents. No one school’s responses can be individually identified; all responses will be presented statistical summation format as a whole.

You have received these surveys because you hold an executive level position that reports directly to the president of your institution. Your college president has been asked to distribute the observer-rating Leader Attribute Inventory and Ranking surveys to five individuals who hold executive level positions. You should be in a position that directly reports to the president. This is a state wide study limited to South Carolina and therefore, a high return rate is essential in making valid inferences from the results. Your participation is important and highly valued.

You can be absolutely assured that all information provided is strictly confidential. Your institution’s president has been informed and agreed that your survey responses will be completely confidential and individual responses will never be revealed to them or made public, nor will theirs be revealed. All responses will be statistically summarized with all 16 colleges for reporting purposes. Since respondent names or institutional names are not collected, no data will be correlated to any school or participant individually either during or upon conclusion of this study. Responses will only be published in summarized or other statistically manipulated format. The Leader Attribute Inventory and Ranking should take approximately 20 minutes to complete and a self-addressed postage-paid return envelope is attached for its return.

Thank you for your participation and assistance. I must point out that your participation in this study is voluntary; refusal to participate will involve no penalty or loss of benefits to which you are entitled, and likewise you may discontinue your participation in this study at any time without penalty or loss of benefits. There are no foreseeable risks to your participation in this study as all information will remain non-identifiable and confidential.

If you have any questions, please contact me using either my e-mail [kmckenzie@clemson.edu] or I can be reached by calling my office (864) 656-7131. You may also contact Clemson University’s Office of Research Compliance at Inball@clemson.edu, (864) 656-6400, toll free at 866-297-3071 or the principal investigator Dr. William Paige at (864) 656-7647 or by email at wpaige@clemson.edu.

I would kindly like to have all responses returned by May 1st, 2009.

Respectfully,

Kevin McKenzie
Doctoral Candidate

Dr. William Paige
Chair and Principal Investigator
REFERENCES


