Transformational Leadership and its Correlation to the Effective Placement of Completers of Area Career Centers in the State of Missouri

A Dissertation
presented to
the Faculty of the Graduate School
University of Missouri-Columbia

In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

by
OSCAR E. CARTER

Dr. Barbara Martin, Dissertation Supervisor

May 2008
DEDICATION

I dedicate this work to my wife. It is by her sacrifice that I have been able to complete this work. She is the force in my life that gives me the confidence and security to continue to take risks to improve my understanding of the educational world and more importantly of life.
ACKNOWLEDGEMENTS

I could not have completed this study without the support of many great leaders whom I admire and try to immolate. The strongest force in my life has always been my family. I thank my Mom and Dad for encouraging me to continue to grow educationally though they never had a chance for a high school education. I acknowledge my lovely wife for her long hours of proofing and keeping me on track to complete this work. I thank my son for calling me Dr. Dad long before I reached the point of completion of this paper.

I wish to thank the ELPA IV cohorts of both West Plains and Columbia, Missouri. I had the fortune to work with both groups of outstanding leaders. I wish to thank my committee for helping me to grow and to understand what it means to be able to complete a true research project. I appreciate my Advisor Dr. Barbara Martin for her patience and guidance during this journey.

Lastly, I thank Connie O'Brien and other Department of Elementary and Secondary staff for their support of this research project. In addition, I thank Dr. Mark Ehlert of the University of Missouri for helping me to see the world of statistics from a practical perspective.
# TABLE OF CONTENTS

DEDICATION.........................................................................................i

ACKNOWLEDGEMENTS........................................................................... ii

TABLE OF CONTENTS..............................................................................iii

LIST OF TABLES AND FIGURES..........................................................vi

ABSTRACT............................................................................................... vii

Chapter 1

1. INTRODUCTION ...................................................................................1

   Background..........................................................................................1

   Conceptual Underpinnings of the Study...............................................4

   Leadership...........................................................................................4

   Leadership Styles................................................................................5

   Career Center Leadership...................................................................6

   Statement of the Problem....................................................................7

   Purpose of the Study............................................................................9

   Research Questions & Null Hypotheses.............................................10

   Limitations and Assumptions............................................................11

   Design Controls..................................................................................13

   Definition of Key Terms.....................................................................15

   Summary............................................................................................19

Chapter 2

2. LITERATURE REVIEW .........................................................................20

   Introduction.........................................................................................20
Leadership in Public Education .................................................................................22
Importance of Career and Technical Education .....................................................25
Federal Impact of Career and Technical .................................................................26
State Impact of Career and Technical Education ..................................................29
Leadership Development in Career Education ......................................................32
Summary ....................................................................................................................38

Chapter 3

3. RESEARCH DESIGN AND METHODOLOGY .....................................................41
   Problem and Purpose Overview ............................................................................41
   Research Design ....................................................................................................42
   Research Questions and Null Hypotheses ............................................................43
   Population and Sample ........................................................................................44
   Data Instrumentation ............................................................................................49
   Data Collection ....................................................................................................52
   Data Analysis .......................................................................................................56
   Summary ................................................................................................................59

Chapter 4

4. PRESENTATION AND ANALYSIS OF DATA ....................................................61
   Introduction ..........................................................................................................61
   Findings for Research Question One ....................................................................64
   Research Hypothesis Number One .................................................................65
   Findings for Research Question Two ...................................................................66
   Research Hypothesis Number Two ....................................................................68
LIST OF TABLES AND FIGURES

Tables

Table 1 Responses and School Characteristics.................................................................46
Table 2 Survey Scale Reliability.........................................................................................51
Table 3 Independent-samples t test for Leadership Style and Placement .........................65
Table 4 Leadership Style of Director by Rater Social Position.........................................67
Table 5 Correlation of Leadership Style to Placement....................................................68
Table 6 Correlation of Transformational Sub-scale Scores to Placement..........................76

Figures

Figure 1 Frequency Response by Raters for Transformational Leadership Style of Director....61
Figure 2 Frequency Response by Raters for Transactional Leadership Style of Director......62
Figure 3 Frequency Response by Raters for Laissez-faire Leadership Style of Director .......63
Figure 4 Rater’s Response on Inspirational Motivation....................................................71
Figure 5 Rater’s response on Idealized Influence Behavior.............................................72
Figure 6 Rater’s response on Idealized Influence Attributed...........................................73
Figure 7 Rater’s Response on Individualized Consideration............................................74
Figure 8 Rater’s response on intellectual stimulation......................................................75
Transformational Leadership and its Correlation to the Effective Placement of Completers of Area Career Centers in the State of Missouri

Oscar Carter
Dr. Barbara N. Martin, Dissertation Supervisor

ABSTRACT

The purpose of this research was to determine if there was a correlation between the leadership style of the director of area career centers in the state of Missouri and the placement of career education completers. The survey instrument was the Multifactor Leadership Questionnaire version 5X, short form that consisted of 45 selected response questions and three open-ended questions that placed the responses on a five point Likert scale that determined the director’s major leadership style. The administration of the survey was online utilizing a leader webpage, developed by Mind Garden Inc. and career center directors, their supervisors, and their staff completed the survey to a 360-degree view of leadership style of the director. The 57 area career centers within one Midwest state were placed on a continuum from high to low based on student placement. The top and bottom 10 schools were selected for the purposeful sample. The research did not discover any correlation between leadership style and the placement of career center graduates. The researcher did discover that the predominant leadership style of the director was transformational which both the supervisor and the staff of the leader validated. The researcher called for further studies into the leadership style of the director utilizing the Multifactor Leadership Questionnaire (5X) and other Perkins student performance indicators.
CHAPTER ONE
INTRODUCTION TO THE STUDY

Background

Career education, which has evolved from vocational education, is a vital and often misunderstood part of the secondary education system within American public schools. The conceptualization of vocational education has its roots in colonial times with artisans passing down their trade to later generations. These efforts to develop a skilled workforce were finally formalized in 1917 with the passage of the Smith-Hughes Act that established federal funds for vocational programs in secondary schools (Wenrich & Wenrich, 1974). However, since the 1980’s this earlier mission has changed from the development of successful workplace skills upon graduation to include a firm foundation in math, science, language arts, and leadership. This new mission will allow students to transition easily into a postsecondary institution or to be successful in the modern workplace (Association for Career and Technical Education, 2006a; Techniques: Making Education & Career Connections, 1997; U.S. Department of Education, 2004).

In fact, career education is a part of the curriculum for over 16,000 schools in the nation with its own unique federal funding sources. Career education includes approximately 1,000 area career centers across the United States dedicated to instructing secondary and post-secondary students in career education (Association for Career and Technical Education, 2006b). These career centers are staffed with many teachers who are alternatively certified with Missouri requiring at least 4,000 hours of related work experience within the last 10 years (Educator Certification, 2006). These alternatively certified teachers bring a wealth of practical knowledge into the career centers.
Career centers’ personnel serve a diverse population of students from their home district as well as surrounding high schools, which transport students to the area career center. These high school students participate in high technology specialized courses that include agriculture, nursing, auto mechanics, building trades, computer programming, network administration and many others, some of which are only available at the career center. These programs of study are guided by the direct input of community stakeholders through a required advisory council that must meet a minimum of twice per year to provide input on such elements as curriculum, equipment, and facility development (Association for Career and Technical Education, 2006a; Nelson, 1974; Reese, 2004; The State Plan Review Committee, 1977).

Additionally, due to the requirements of federal funding from Perkins III and IV, career center students are held accountable for Missouri Assessment Program (MAP) scores, but for other performance factors as well (Department of Elementary and Secondary Education, 2004, 2006). There are four core indicators of performance for each career center located in the state of Missouri: mastery of essential skills; completion of a secondary diploma or equivalent; placement and retention; and participation in and completion of nontraditional careers (DESE 2004, 2006). Specifically, in compliance with DESE (2004, 2006) career students must maintain at least 80% mastery of essential skills. In addition, the number of career students who complete a secondary diploma or equivalent is a part of the accountability for career education students (DESE, 2004, 2006). Furthermore, career centers must analyze career education students concerning placement and retention in their chosen career field by a 180-day follow-up (DESE 2004, 2006). In addition, all career programs must pass an evaluation of the total number of students who complete a non-traditional career program such as males in a nursing program or females in auto-technology (DESE, 2004, 2006). These accountability measures are in place to
insure that the Perkins III federal funds provide a quality program of instruction (DESE 2004, 2006).

Pressure from the legislature, parents, and other stake holders has forced career leaders to begin to change in regard to the mission of career education (Association for Career and Technical Education, 2006a). Now leaders in career education must not only be successful at instilling the technical expertise in secondary students needed for the modern workforce, but must make sure that students have the academic skills needed to seek further education in the post secondary arena (Association for Career and Technical Education, 2006a).

These changes in the mission of career education has forced career education leaders to become more than just managers of career education centers, but leaders in an era of change (Wonacott, 2001). Authors have argued that career center leaders who are effective during change have identified the structures and processes necessary for the change (Retallick & Fink, 2002). Furthermore, transformational leadership in educational literature was one leadership style that is extremely effective in leading an organization through change (Bass & Avolio, 1994; Finch, Gregson, & Faulkner, 1991; Siegrist, 1999).

Thus, this investigation attempted to determine if the transformational leadership style would be the most effective leadership style for leaders of career centers in the state of Missouri. The researcher utilized the performance indicator of placement to rank area career centers according to their percentage placement of students. Placement of graduates has a long history as one measure of the effectiveness of a career center (Reinhart, 1979; Stone, Kowske, & Alfeld, 2004; Task Force 1990, 1997; The 1984 Vocational Study Committee, 1984; The State Plan Review Committee, 1977; Wenrich & Wenrich, 1974; Wenrich, Wenrich, & Galloway, 1988). In this study, the researcher categorized the 57 area career centers on their effective placement of
2005 graduates. The Career Education Department of the Department of Elementary and Secondary Education provided the placement data.

*Conceptual Underpinnings for the Study*

Three constructs informed this inquiry of leadership in career education. Lynch (2002) argued that a vital part of public education and career education is the leadership of its director and understanding the style of leaders of effective career centers is essential. Secondly, to understand that leadership, one must understand the uniqueness of career education (Association for Career and Technical Education, 2006a; Missouri Career Education, 2006)). Lastly, the changing environment of career education warrants an investigation into a comprehensive model of leadership in response to those changes (Reinhart, 1979; Shumer, 2001; Stone et al., 2004; Wenrich & Wenrich, 1974; Wenrich et al., 1988; Wonacott, 2001; Zirkle & Cotton, 2001). For years, researchers have struggled to identify what separates successful leaders from unsuccessful ones (McEwan, 2003). Thus, “how leaders influence their organizations is still a compelling question” (George, 2000, p. 1028).

*Leadership*

Leadership is a concept that has eluded a definition over the last few decades as researchers have striven to unravel its secrets (Bass, 1990; Lunenburg & Ornstein, 1996; Yukl, 2006). This lack of consensus of one leadership definition has continued to be a controversy for educators. Most researchers support the concept that effective leadership is necessary to the successful creation of an effective organization (Furman, 2003; Schein, 2000; Yukl, 2006). One common thread pertaining to leadership that researchers have essentially agreed on is that leadership is the process of a leader exerting power or influence over followers to guide them to some organizational goal (Bass, 1990; Lunenburg & Ornstein, 1996; Yukl, 2006).
Specifically, Yukl (2006) classified the leadership research into four approaches that focused research over time: the trait approach, the behavior approach, the power influence approach, and the integrative approach. Early attempts at defining leadership based on traits did not account for other intervening variables and thus were not successful at predicting leadership success in correlation to leadership attributes (Yukl, 2006). Thus, researchers turned to the behavior approach during the 1950’s. These studies analyzed either how the managers spent their time or tried to identify effective leadership behaviors of managers (Yukl, 2006). These theories focused more on the activities of the leader rather than traits or skills (Conger & Kanango, 1998). In the 1980’s the research turned to power and influence studies to look at the utilization of power by a leader in organizations (Yukl, 2006). Then, researchers took a situational approach on the theory that certain leadership attributes of a leader will be more effective in certain types of environments (Yukl, 2006). Currently, researchers have been more integrative in their approach and have concurrently examined two or more leadership approaches to understand the phenomena of leadership (Yukl, 2006).

Leadership Styles

Avolio and Bass (2002) proposed that leadership styles exist on a continuum from laissez-faire, to transactional, to transformational leadership. The researcher utilized this full range of leadership styles in this inquiry. The first leadership style is laissez-faire (Avolio & Bass, 2002; Bass & Avolio, 1994) and is essentially considered to be a lack of leadership and is perceived as the least effective of the three leadership styles. The next leadership style identified by Avolio and Bass (2002) and Bass and Avolio (1994) is transactional that is based on the utilization of power with contingent rewards to coerce followers into compliance with the leader. This style involved an exchange process that may result in followers’ compliance with leader
requests but is not likely to generate commitment to goals (Yukl, 2006, p. 253). While this leadership style is somewhat effective, it is limited by the fact that followers, while compliant will not be committed to the vision of the leader (Bass & Avolio, 1994). The most effective leadership style proposed by Bass and Avolio (1994) is transformational leadership. Transformational leadership is composed of the following four components; idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1994). These four components make transformational leaders very effective in motivating and moving followers to a full commitment to the vision of the leader (Bass & Avolio, 1994). Under the transformational leadership model, “followers feel trust, admiration, loyalty, and respect toward the leader, and are motivated to do more than they originally expected to do (Yukl, 2006, p.254). Therefore, transformation leadership is a part of the full range of leadership theory that looks at lassie-faire, transactional, and transformational to describe a myriad of leadership styles (Bass & Avolio, 1994). Also, transformational leadership has been found to be viewed as very effective in various settings for organizations that are facing change (Bass & Avolio, 1994; Kenneth Leithwood, Jantzi, & Steinbach, 2000b).

In conclusion, a myriad of researchers agreed that transformational leadership was effective in the moving of followers from simple compliance to an active participant in the leader’s vision (Avolio & Bass, 2002; Bass & Avolio, 1994; Bass & Riggio, 2006). This allows a leader to move an organization confidently into the white water of change (Fullan, 1996).

Career Center Leadership

Since career education is facing a changing and more challenging environment (Shumer, 2001; Stone, Kowske, & Alfeld, 2004) the need for effective leaders is essential. In addition, due to the dual mission of career skill preparation and strong core subject preparation of students in
career education the environment requires a teaching staff and leaders who are comfortable in both the academic and career worlds. The Association for Career and Technical Education, a national organization, suggested the following three-fold purpose for career education in a secondary high school.

“Support students in the acquisition of rigorous core knowledge, skills, habits and attitudes needed for success in post-secondary education and in the high-skilled workplace. Engage students in specific career-related learning experiences that equip them to make well-informed decisions about further education and training and employment opportunities; and, prepare students who may choose to enter the workforce directly after high school with levels of skills and knowledge in a particular career area that will be valued in the marketplace” (Association for Career and Technical Education, 2006a, p. 4).

As revealed by the literature an investigation into the phenomena of career director leadership was necessary. A study into the specialized realm of the director of an area career center will further validate if transformational leadership is the most effective leadership style. This information could be very important for career education in the establishment of in-service training for established leaders and for mentorship programs and leadership preparation programs for new leaders of area career centers.

Statement of the Problem

Research on leadership indicated that there are a myriad of definitions and behaviors of effective leaders (Schwahn & Spady, 1998; Yukl, 2006). Research has revealed that while there are numerous inquiries on the leadership of principals, the investigations into the leadership of career directors was limited (Zirkle & Cotton, 2001). In addition, with the changing mission of
the career center from that of skill training only, but to include achievement in core subjects and
the increased accountability by government (Brodhead, 1991; Kerka, 2000) the need to
investigate a new type of career education leader emerged. Additionally, since transformational
leadership has been found to be viewed as effective in various settings for organizations that are
facing change (Bass & Avolio, 1994; Kenneth Leithwood et al., 2000b) the need to examine
career director’s leadership through the lens of transformational leadership was important. The
literature revealed that the leader is essential to any organization’s development of a clear vision
and plan for the future (Bass, 1990; Schwahn & Spady, 1998; Yukl, 2006). There has been little
attention given in the literature to the unique leadership needs of directors in area career centers
with the exception of a few authors (Wonacott, 2001; Zirkle & Cotton, 2001). In addition, career
centers must maintain higher educational standards; therefore, the need to examine these unique
leadership positions through the lens of effective leadership styles is important and timely. By
examining the leadership style of directors in effective career centers, effective leadership
behaviors identified and perhaps appropriate leadership strategies discovered to enhance the
leadership of all career directors. Due to the changing expectations of career centers and
ultimately the career center leader (Association for Career and Technical Education, 2006a;
Brodhead, 1991; Catri, 1998), there is a need to improve area career centers if they are to be
effective into the new millennium. Thus, it is time to look at the leadership style of directors of
career centers and determine if the transformational leadership style is the most effective for
successful career center leaders. Through examination of the leadership styles used by effective
career center directors, findings may identify which leadership style is the most effective in this
unique setting.
Purpose of the Study

Career education is vital to the success of over 283,483 high school students and adults (Missouri Career Education, 2006) in the state of Missouri. In addition, employers are requiring the same skills and core subject knowledge in the labor market as colleges are requiring (Brodhead, 1991; Kerka, 2000; Lynch, 2002). Sequentially, for a career education center to survive there is a need to provide a culture that includes a curriculum that is rigorous and relevant with a strong high tech component (Association for Career and Technical Education, 2006a, 2006b; Catri, 1998; Levesque et al., 2000; Office of Vocational and Adult Education, 2003). In order to meet these expectations, the need for a new type of career education leader has emerged. Thus the purpose of this study was to determine which leadership style is used in effective career centers as perceived by directors, their followers, and their supervisors. This study will provide guidance to institutions that are currently establishing mentor training for new directors of career centers and establishing in-service for established directors of career centers. This study could also be the impetus to drive the development of new leadership programs for aspiring career center directors.

Effective career centers for the purpose of this research was based on Perkins III accountability data (Missouri Department of Elementary and Secondary Education, 2006). The state of Missouri established four core indicators of accountability in compliance with the passage of the Carl D. Perkins Vocational Act of 1998 (Missouri State Board of Education, 1996). The four core indicators are attainment, completion, placement and retention, and participation in non-traditional programs (Missouri Department of Elementary and Secondary Education, 2006). Attainment is further subdivided into secondary academic attainment based on MAP achievement levels and Secondary Vocational & Technical Skills Attainment based on
attainment of 80% on career center programs’ identified essential skills (Missouri Department of Elementary and Secondary Education, 2006). Completion is based on the successful graduation of a student or attainment of an approved GED diploma (Missouri Department of Elementary and Secondary Education, 2006). The third core indicator of placement is the number of completers of career education classes that are employed, joined the military, or continued into a post-secondary education (Missouri Department of Elementary and Secondary Education, 2006). The researcher selected this indicator as the measurement of the effectiveness of the career center for placement of students. The last core indicator is participation in and completion of non-traditional students and is defined as a student who is enrolled in a program that is identified by the U. S. Department of Education as a non-traditional role based on gender (Missouri Department of Elementary and Secondary Education, 2006). For example, nursing is predominantly a female occupation, so a male would be a non-traditional member of that class.

**Research Questions and Null Hypotheses**

The researcher utilized the following research questions and null hypotheses in this inquiry:

*RQ1:* Is there a difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors? And if so in what way?

*Ho1:* There is no statistically significant difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors.

*RQ2:* Is there a difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers and supervisors?
Ho2: There is no statistically significant difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers.

RQ3: Is there a relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center.

Ho3: There is no relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

RQ4: Is there a relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership? If so, which component has the most effect on the successful placement of graduates?

Ho4: There is no relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership.

Limitations and Assumptions

Authors postulated that there are limitations involved with all investigations, thus the limitations of this study consisted of the sample for the study, the methodology of the study, the time limitations of the study, and the use of technology for survey delivery (Heppner & Heppner, 2004). Geographically, the population of this study was limited to Missouri and consisted of the current directors, followers, and superintendents from each of the career centers in that state. Of these 57 career centers, a purposeful sample of the top ten and the bottom ten career centers based on the percentage of positively placed graduates from the spring 2005 follow up data. The
Vocational Department of the Department of Elementary and Secondary Education in Missouri ranked the career centers based on their placement percentage. This sample was identified using only the placement data of graduates and thus will not account for centers that were successful in the other accountability factors as identified by DESE. While Missouri is a typical state in the delivery of career education, the results of this study does not generalize to other states and their career education system because the sample selected is not representative of those populations.

This study was a quantitative study utilizing descriptive statistics gathered by an on-line survey. There are limitations to the use of surveys due to the threat of validity of the instrumentation process (Fraenkel & Wallen, 2003). This researcher was aware of these limitations and therefore utilized a standardized instrument, the Multifactor Leadership Questionnaire. Other issues that result from the use of survey data is the lack of participation. Fraenkel and Wallen (2003) argued that this lack of participation seems to be “increasing over the recent years “(p.407).

The use of technology to administer the Multifactor Leadership Questionnaire was both a strength and a weakness to the study. It allowed for a more timely development of the data received, but it limited the subjects to utilizing a computer to answer the questions. Subjects completed the questionnaire at school or at home that, allowed for a more private and potentially thoughtful completion, participants might have felt uncomfortable with the technology. Another challenge was that the company administering the survey utilized the email address of the subjects then contacted the subjects with instructions on how to log on and complete the survey. This may have resulted in some participants not responding, since they would not want to share their email information. Another challenge in utilizing the on-line survey was that some schools had a fire wall that prevented Mind Garden Inc. from contacting them by email to instruct the
subjects on where and how to complete the survey. This resulted in an extremely long survey completion time of over two months. In addition, it forced the researcher to do a few surveys by paper and then to record the answers manually into the database.

The fourth limitation involved time; this study only reflected the data of the 2003-2004 school year and did not represent any changes in placement rates over time. Another time limitation was that staff may have changed since the 2003-2004 school year and the survey may not reflect the complete picture of the leadership style of the leader. As mentioned before, the survey time for completion was extremely lengthy.

*Design Controls*

This study was descriptive by design. The researcher utilized descriptive research to describe and better understand the current situation (Pan, 2004). The researcher conducted this quantitative research utilizing a survey instrument. Survey instruments have been found to be very effective at describing the characteristics of a population (Fraenkel & Wallen, 2003). The researcher utilized a survey to describe the leadership characteristics of the leaders of area career centers. Then the researcher selected a purposeful sample from the 57 current area career centers based on clearly delineated criterion of the effective placement of 2003-2004 career center graduates in accordance with Perkins III accountability standards.

The survey instrument, *Multifactor Leadership Questionnaire (MLQ(5X))* is a closed-ended question type that was developed by Mind Garden and based on the work of Bass and Avolio on the full range of leadership (Avolio & Bass, 2004). In addition, the survey had three open-ended questions that looked at what the leader needed to consider for improvement, for the effectiveness of the leader, and the satisfaction of the rater with the leader's performance. The researcher did not utilize any of these open-ended questions.
The research instrument had been tested and retested to ensure validity and reliability. Validity describes the degree to which an instrument measures the intended characteristics. Reliability refers to the consistency of the results obtained by the test over time (Patten, 2004). The researcher selected the MLQ (5X) as the survey due to the long history of the instrument and the strong validity and reliability of the instrument (Avolio & Bass, 2004). Avolio and Bass (2004) championed the MLQ (5X) to have both external validity and to have construct validity as well. As noted by Avolio and Bass (2004, p. 35),”Research, development and practical applications in the 25 years since Burns’ (1978) significant publication on transforming leaders, has shown that transformational leadership generally generates greater follower effectiveness and satisfaction than does transactional leadership, although effective leaders certainly perform using the full range of styles”. The strong external validity of this instrument coupled with the fact that the MLQ (5X) has been utilized in nearly 300 research programs, doctoral dissertations, and masters theses around the globe, made it and easy choice for the researcher (Avolio & Bass, 2004). Critics have attacked the earlier version MLQ (5R) instrument in regard to construct validity (Avolio & Bass, 2004). The main criticism of the MLQ (5R) was that in the area of transformational leadership the factors were highly correlated and did not have strong differential relationships with outcome variables (Avolio & Bass, 2004). In response Avolio and Bass (2004) added items to the survey to reflect new research. In the area of transformational leadership two items were added to look at the difference between idealized influence that is a behavior of the leader or that is attributed to the leader by the rater (Avolio & Bass, 2004). Avolio and Bass (2004) added two additional questions to analyze management by exception in relation to either active or passive behaviors by the leader. These increased factors greatly increased the construct validation of the MLQ (5X) survey (Avolio & Bass, 2004).
The survey identified the leadership style of the Director and collected additional qualitative data on the perception of the followers to the leaders characteristics of Extra Effort, Effectiveness, and their Satisfaction with the present leadership (Avolio & Bass, 2004). The survey is completed by the leader and raters who identify themselves as either a supervisor, a subordinate, a peer, or other. For this research, the raters were superintendents or others who had direct supervision of the director and/or teachers and other staff supervised by the director.

*Definitions of Key Terms*

The researcher provided the following definitions of key terms used in this inquiry to offer clarity to the reader.

*Area Career Center*- These specialized schools were established by the provisions of the 1963 Vocational Education Act that provided grants for states to develop a career center that would serve the needs of the surrounding comprehensive high schools with vocational training for secondary students (Linhardt, 2002).

*Career Education*- Career Education is the new term that replaces vocational education and reflects the new vision for vocational education of providing not only for skill training for an occupation, but for a firm foundation in core subjects to prepare a student for advanced educational opportunities (Office of Vocational and Adult Education, 2003).

*Director*- The primary leader of the area career center who is responsible for program development, funding, and facilities (Wonacott, 2001).

*Follower*- A follower is a teacher who is directly subject to the director of the career center.

*Career Education Participant*- A student enrolled in at least one approve Career education course (Department of Elementary and Secondary Education, 2006).
Career Education Concentrator- A Career education participant earning two or more units of occupational Career education credit (Department of Elementary and Secondary Education, 2006).

Career Education Completer- A Career education concentrator who graduates from high school or earns a G.E.D. during the reporting year (Department of Elementary and Secondary Education, 2006).

Secondary Placement- Measures the percent of secondary Career education completers who were placed in employment, military, or continuing education (Department of Elementary and Secondary Education, 2006).

Secondary Placement Percentage- Is the difference in percent of all of the successfully placed completers divided by total completers (Department of Elementary and Secondary Education, 2006).

Effective Career Center- For this study an effective career center was one that ranked in the top ten in secondary placement percentage of graduates based on 2005 follow up for Perkins III reporting.

Ineffective Career Center- For this study an ineffective career center was one that ranked in the bottom ten in terms of secondary placement percentage of graduates based on 2005 follow up for Perkins III reporting.

Perkins III- Federal legislation that provides funds for career education to local states (Department of Elementary and Secondary Education, 2006).

Transformational Leadership- “Transformational leadership is a process of influencing in which leaders change their associates awareness of what is important, and move them to see themselves and the opportunities and challenges of their environment in a new way” (Avolio & Bass, 2004,
Transformational leadership is composed of the following four attributes, with Avolio and Bass (2004) breaking down idealized influence into two subcategories.

**Idealized Influence**—“Followers identify with and want to emulate their leaders” (Avolio & Bass, 2004, p.97). Idealized influence is composed of the following attributes and behaviors.

**Idealized Attributes:** Examples include, “instill pride in others for being associated with me, go beyond self-interest for the good of the group, act in ways that build others’ respect in me, display a sense of power and confidence” (Avolio & Bass, 2004, p. 97).

**Idealized Behaviors:** Examples include, “talk about my most important values and beliefs, specify the importance of having a strong sense of purpose, consider the moral and ethical consequence of decisions, emphasize the importance of having a collective sense of mission” (Avolio & Bass, 2004, p.97).

**Inspirational Motivation**—“These leaders behave in ways that motivate those around them by providing meaning and challenge to their follower’s work” (Avolio & Bass, 2004, p.97).

**Intellectual Stimulation**—“These leaders stimulate their followers’ efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways” (Avolio & Bass, 2004, p.98).

**Individualized Consideration**—“These leaders pay attention to each individual’s need for achievement and growth by acting as a coach or mentor” (Avolio & Bass, 2004, p.98).

**Transactional Leadership**—“Transactional leaders display behaviors associated with constructive and corrective transactions” (Avolio & Bass, 2004, p.98). Transactional leadership is composed

*Contingent Rewards*- “Contingent reward leadership involves the leader assigning or obtaining follower agreement on what needs to be done with promised or actual rewards offered in exchange for satisfactorily carrying out the assignment” (Bass & Riggio, 2006, p.8).

*Management-by-Exception (MBE)*- This is the more negative form of contingent rewards and may be either active or passive in nature (Avolio & Bass, 2004; Bass & Riggio, 2006).

*Management-by-Exception Active (MBE-A)*- “In active MBE, the leader arranges to actively monitor deviances from standards, mistakes, and errors in the follower’s assignments and to take corrective action as necessary” (Bass & Riggio, 2006, p.8).

*Management-by-Exception Passive (MBE-P)*- “MBE-P implies waiting passively for deviance, mistakes, and errors to occur and then taking corrective action” (Bass & Riggio, 2006, p.8).

*Laissez-Faire Leadership*- “As mentioned, laissez-faire leadership is the avoidance or absence of leadership and is, by definition, most inactive, as well as most ineffective according to all research on leadership style” (Bass & Riggio, 2006, p.8).

*Mind Garden*- Publisher of psychological instruments located at Menlo Park, CA and at www.mindgarden.com.

*360 Degree Evaluation*- An evaluation that contains raters from superiors, subordinates, and peers (Avolio & Bass, 2005).
Summary

Career education is at a point where there is an urgent need to examine leadership of career directors (Zirkle & Cotton, 2001). Therefore, this study investigated the leadership style of 2004-2005 directors of area career centers in the state of Missouri and examined which leadership style was correlated to be the most effective, in relation to the placement of graduates of the 2004-2005 school year.

In this chapter the research questions with null hypothesis were presented, along with the limitations and design controls for the study. In Chapter Two, a synthesis of related literature will be presented that provided the theoretical and conceptual underpinnings of the study. In Chapter Three, a description of the research design and methodology utilized in this study will be provided. Chapter Four will contain the research analysis and findings. In Chapter Five, the results of the study, conclusions, implications, and recommendations for further research will be presented.
CHAPTER TWO

LITERATURE REVIEW

Introduction

The current school environment of high stakes accountability, increased criticism of the educational system, and the demand for real academic results for students are challenging school leaders to become a, “new breed of school leaders with skills and knowledge far greater than those expected of school managers in the past” (G. Bottoms & O’Neil, 2001, p.7). Today, effective educational leaders must draw from a variety of leadership theories to utilize elements from each theory that are the most appropriate to bring about the necessary change (Walters & Grubb, 2004). One such leadership theory that has captured the imagination of many educational leaders is transformational leadership. Transformational leadership is a part of the full range of leadership theory that is composed of laissez-faire, to transactional, to transformational (Avolio, 1999). In addition, “Transformational leaders motivate others to do more than they originally intended and often more than they thought possible”(Bass & Avolio, 1994). It is evident from many authors that educational leaders must accomplish more than simple compliance from followers in order to lead educational organizations through the many challenges that currently are facing schools (Fullan, 1996, 2001; Kenneth Leithwood, Jantzi, & Steinbach, 1999).

Concurrently, this challenge drives career education across the nation. Since the 1980’s, career education has come under tremendous pressure by stakeholders to not only provide students with the expertise to acquire a job, but to equip students with a strong academic education to prepare for the world of higher education (Reinhart, 1979). This twofold mission has challenged the leaders of career education to revisit and revise the mission and purpose of career education (Association for Career and Technical Education, 2006a). Therefore, the purpose of this study
was to determine if the transformational leadership style would be the most effective leadership style for leaders of career centers in the state of Missouri.

The literature is limited concerning leadership in career education and is almost nonexistent in the realm of the specialized needs of the leader of an area career center. This lack of research into the leadership needs of directors of area career centers is discerning, especially when evaluated in a ambiance of concern for the appropriate development of future leaders of area career centers (Zirkle & Cotton, 2001). Zirkle and Cotton expressed concerns about the future of experienced career educational leaders based on three developments in career education; the current certification of leaders with no vocational background, the increasing age of the current leadership force in career education, and the demands and limited rewards for leadership positions in career education.

Furthermore, Zirkle and Cotton (2001) proposed that there was a definite need for leaders in career education to have work experiences outside of the field of education in order to relate to career centers’ staff that must have real work experience in order to be certified. This conclusion by Zirkle and Cotton (2001) reminded educators that career education is a specialized field of secondary education that demands a teaching force that has real life experience in their field of work. An aging workforce coupled with the high demands and relatively low rewards for leadership positions in career education threatens the further development of a strong leadership base in career education (Zirkle & Cotton, 2001).

The review of the literature revealed that while the literature was lacking concerning leadership styles of the directors of career centers, three themes in relation to leadership in career education emerged. First, that leadership is a vital part of public education and career education (Association for Career and Technical Education, 2006a; Lynch, 2002; Office of Vocational and
Adult Education, 2003; U.S. Department of Education, 2004). Second, that career education is a unique and vital component of public education at both the national and state level (Association for Career and Technical Education, 2006a; Missouri Career Education, 2006). Third, that research involving leadership in career education, though limited, has followed the same development as leadership in public education. The literature exemplified a research focus from leadership trait analysis to a more integrative approach to leadership research. This research trend is in response to the changing philosophy about how leadership influences an organization (Reinhart, 1979; Shumer, 2001; Stone et al., 2004; Wenrich & Wenrich, 1974; Wenrich et al., 1988; Wonacott, 2001; Zirkle & Cotton, 2001). Each of these themes will now be examined in depth.

**Leadership and Public Education**

First, the literature indicated that understanding leadership is an important part of the changing context of education. Although a significant amount of the research on leadership involves the realm of business (Bennis & Nanus, 2003; Wenrich et al., 1988; Yukl, 2006), the importance of leadership affects education and specifically center directors (Konto, 1986; Moss & Jensrud, 1995; Reese, 2002; Ruby, 1975; Shumer, 2001; Wenrich et al., 1988).

Historically, the idea of preparing leaders is a relatively new concept. Scientific research on the nature of leadership did not occur until the beginning of the twentieth century (Lunenburg & Ornstein, 1996; Yukl, 2006). It is just recently that investigators have tried to study and unlock the secrets of how a person becomes an effective leader (Lunenburg & Ornstein, 1996; Yukl, 2006).

As a scientific community, researchers have difficulty defining the term leadership; this complicated the investigation of leadership by this researcher. According to Yukl (2006) this
confusion has been aggravated by the fact that leadership has been used synonymously with such
terms as power, authority, management, administration, or control.

From more than 3,000 empirical investigations of leadership, researchers have created
more than 350 different definitions of leadership (Lunenburg & Ornstein, 1996). These myriad
of definitions are not just for academic debate, but reflects the definitive differences in the
perception of leadership and the leadership process (Bennis & Nanus, 2003; Kenneth Leithwood,
Jantzi, & Steinbach, 2000a; Lunenburg & Ornstein, 1996; Yukl, 2006).

Thus, researchers would argue that in order to understand a complicated concept like
leadership one must understand that the concept does not lend itself to one simple definition
(Kennith Leithwood & Duke, 1999). Rather, Leithwood and Duke explained, “As complexity
rises, precise statements lose meaning and meaningful statements lose precision” (p. 46).
Therefore, if researchers are to continue to study the vital concept of leadership in organizations
educators must accept the fact that one definition will not fit the complicated, multi-faceted,
experience of leadership. While a single definition of leadership would seem to be evasive, it is
enough to know that leadership is an important facet of any successful organization (Lunenburg
& Ornstein, 1996; Sergiovanni, 2000; Yukl, 2006). In fact, effective leaders need a repertoire of
different skills and the ability to choose the leadership style that meets the needs of the people
within the specific organization (Seashore-Louis, Toole, & Hargraves, 1999). The full range of
leadership model proposed Avolio (2002) fits this need, allowing a leader to recognize and to
become comfortable with different styles of leadership. More importantly, it allows a leader to be
able to evaluate a leadership challenge and select the appropriate leadership style that will be the
most effective in that environment. The ability to look at leadership through a lens of
understanding and to be able to adapt the leader’s strategy to the demands of the situation is
extremely important for the successful implementation of any leadership strategy (Bass, 1990; Bolman & Deal, 1997; Kennith Leithwood & Duke, 1999; Marzano, Waters, & McNulty, 2005).

Generally, researchers agree there are two common themes that occur in all of the definitions of leadership: that leadership is a social process involving more than one individual, and that leadership involves the affect of one person or group over another (Lunenburg & Ornstein, 1996; Yukl, 2002, 2006). As further postulated by Yukl (2006), “Leadership is the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objective” (p. 7).

Additionally, it is important to note that many current researchers make a distinction between a leader and a manager. The contrast between these two social concepts was articulated by Lunenburg and Ornstein (1996, p. 25), “A manager does the thing right; a leader does the right thing”. However, currently researchers are now noting that strong leadership is not enough. Just as important in schools today is the ability of the leader to know which leadership strategies need emphasis during the change processes (Walters & Grubb, 2004). In addition, many authors have agreed that leaders focus their efforts on establishing a clear collective vision for the direction of the organization, while managers deal with the day-to-day drama of organizational life (Lunenburg & Ornstein, 1996; Schwahn & Spady, 1998; Yukl, 2006). It is this emphasis on the future vision of the organization that promotes some individuals to become a guiding force for their organizations (Lunenburg & Ornstein, 1996).

Additionally, effective leaders are those that can chart the course of the organization through these turbulent times (Fullan, 1996, 2001; Kenneth Leithwood et al., 1999; Schlechty, 2000). Currently, leaders are being asked to manage change on a daily basis and that change is
much more dramatic than it has been in the past (Friedman, 2005). Friedman (2005) maintained that these business and technological change forces have flattened the barriers that have kept countries apart for the last millennium. The result of these flattening events is that now, more than ever, the world market can change rapidly with very little warning (Friedman, 2005). These external factors present new challenges to educators as pressure is being placed on all stakeholders (students, teachers, principals) and student performances are being tied more directly to the school leader’s performance (Leithwood & Riehl, 2003).

Consequently, educational leaders, like business leaders have to cope with change at an ever-increasing rate. In fact, the literature is rich with the need for educational leaders to face the challenges of change (Fullan, 1996; Kenneth Leithwood et al., 1999) and for the need of leaders to set a clear vision to motivate the school system to change (Davis, 2003; Fullan, 2001; Schlechty, 2000; Schwahn & Spady, 1998). However, most of the literature on educational leadership is focused on the role of the principal of schools and does not address the specific needs of the director of an area career and/or technical center (Zirkle & Cotton, 2001). Since, career and technical education is a vital part of the secondary system at both the state and national level, this lack of investigation into the phenomenon is significant and warrants further investigation (Missouri Career Education, 2006; Office of Vocational and Adult Education, 2003; Reinhart, 1979; Zirkle & Cotton, 2001).

Importance of Career and Technical Education

The literature revealed that society has always recognized the vital link between education and work (Hull, 2005; Ries, 1997; Wenrich & Wenrich, 1974; Wenrich et al., 1988). In addition, the literature indicated that society has always supported vocational/career education. Career education is a vital component of the secondary school system and the success

Beginning with the efforts of Benjamin Franklin in 1759 to establish a public academy, the historical importance of career and technical education has been established (Reinhart, 1979). Other federal commissions and national advisory groups have continued to demand career education be a part of the secondary and post-secondary educational system by passage of legislation in 1944, 1961, 1966, 1968, and this trend continues through today (Reinhart, 1979; U.S. Department of Education, 2004).

**Federal Impact of Career and Technical Education**

The Federal government has always shown its support for the funding of career education starting with the Smith Hughes Act, established in 1917, that set aside federal dollars to fund Vocational Agriculture Programs (Reinhart, 1979; Wenrich & Wenrich, 1974; Wenrich et al., 1988). The Morrill Act of 1862, designated that public lands be set aside for the establishment of vocational agricultural and mechanical colleges (Reinhart, 1979). This act was then followed by the George-Reed Act of 1929, George-Ellzey Act of 1934, George-Dean Act of 1937, and the George-Barden Act of 1946 that continued to expand the scope and funding for career education at the national level (Reinhart, 1979). The National Defense Education Act which added a counseling and guidance component to career education and the Vocational Education Act of 1963, and its Amendments of 1968, began to lay the foundation for a shift from true vocational education to career education (Reinhart, 1979). In addition, society was not satisfied with the traditional high school curriculum and called for an education that would provide students with
the ability to enter the workforce. In the 1960’s an increase of activity at the federal level with the passage of the Area Redemption Act of 1961, Manpower Development and Training Act of 1962 and the Economic Opportunity Act of 1964, all of which focused on meeting the needs of employers (Reinhart, 1979). Furthermore, with the passage of the 1968 Amendments to the Vocational Education Act, the leadership for career education was transferred from the federal government to local state leadership which drastically increased the control by local educational agencies (Wenrich et al., 1988). In the 1970’s the federal government through the passage of the Educational Amendments of 1972, the Comprehensive Employment and Training Act of 1973, and the Educational Amendments of 1974 and 1976, established for the first time an Office of Career Education. This established a director that reported to the Commissioner of Education and a National Advisory Council for Career Education (Reinhart, 1979). Since that date, there has not been a time that the federal government did not set aside federal dollars in the national budget for career education. Recently the funding source has been from the Carl D. Perkins Act III passed in October of 1998 and the government is currently preparing for Perkins IV Act (U.S. Department of Education, 2004). In the report to congress about Perkins III the task force articulated these key findings:

Vocational education has important short- and medium-run earnings benefits for most students at both the secondary and postsecondary levels, and that these benefits extend to those who are economically disadvantaged. Over the past decade of academic reforms, secondary students who participate in vocational programs have increased their academic course taking and achievement, making them better prepared for both college and careers than were their peers in the past. In fact, students who take both a strong academic curriculum and a vocational program of study (still only 13% of high school graduates) may have better outcomes that those who pursue one or the other. While positive change is certainly happening at the high school level, secondary vocational education itself is not likely to be a widely effective strategy for improving academic achievement or college attendance without substantial modifications to policy, curriculum, and teacher training. The current legislative approach of encouraging “integration” as a way to move secondary vocational
education toward supporting academics has been slow to produce significant reforms. (U.S. Department of Education, 2004, p. 1-2).

Vocational education is vital to the success of students at the secondary level in the state of Missouri as well. In the 2004-05 school year 283,483 high school students and adults were enrolled in career and technical education classes (Missouri Career Education, 2006). These students were part of a system of instruction that included a total of 536 local education agencies which include 456 comprehensive high school districts (52 with area career centers), 12 community college districts (four with area career centers), eight four-year institutions, and two state agencies (Missouri Career Education, 2006). The importance of career and technical education to Missouri as stated by the Department of Elementary and Secondary Education (DESE):

Between 2002 and 2012, projections show Missouri’s economy will need to fill over one million new job openings due to growth or replacements. Of these total openings, only some 20 percent will require a bachelor’s degree or higher. Nearly 80 percent will require an associate degree, postsecondary career education training, work experience, or on-the-job training (Missouri Career Education, 2006, p.1).

In addition, DESE has reported that of the 2004 graduates of Career and Technical education 84 percent were placed in employment, continued their education, or enlisted in military service with 73 percent choosing employment, education, or military service that was directly related to their career and technical education training (Missouri Career Education, 2006). The total allocation of dollars spent on Career and Technical education of state funds, federal funds, and local funds rose from over 150 million dollars in the 1994-95 school year to a little over 206 million dollars in the 2004-05 school year (Missouri Career Education, 2006).

State Impact of Career and Technical Education
In the state of Missouri the development of career education occurred in three phases (Task Force 1990, 1997). The first phase occurred during the time of World War I with the passage of the Smith-Hughes Act of 1917. This act established vocational agriculture programs to train farmers in scientific techniques to prove for a stable food supply in America (Reinhart, 1979; Task Force 1990, 1997; Wenrich & Wenrich, 1974; Wenrich et al., 1988). The next phase of support and development of career education in Missouri was during World War II and the passage of the George-Barden Act that broadened vocational education to include guidance, distributive education and others (Task Force 1990, 1997). The last and significant phase for career education in Missouri was in response to the passage of the Vocational Education Act of 1963 at the federal level that established formula grants to states for developing new vocational education programs paving the way for the establishment of area vocational-technical centers (Task Force 1990, 1997). This established 54 area vocational-technical schools, most of which were built during the 1970’s which would provide for the needs of vocational students for area comprehensive high schools (Task Force 1990, 1997).

These area vocational-technical centers were a new type of local educational agency with a different mission than the traditional high schools (The State Plan Review Committee, 1977). The myriad of purposes of these vocational-technical centers were to provide for the training of students who would be entering the labor market immediately after high school. Furthermore, for those students who had dropped out, adults who needed new vocational training, or for students at the junior college level who were seeking placement in a vocation without the necessity of a baccalaureate degree (The State Plan Review Committee, 1977).

With the establishment of and the utilization of funds for the directors of these schools, a new type of leader was established (The State Plan Review Committee, 1977). Prior to 1968 and
the amendments to the Vocational Education Act the federal government had been in charge of the delivery of vocational education (Wenrich et al., 1988). But with the establishment of funds for a director and after 45 years of no control by the local districts, local school district personnel were given the responsibility to not only build vocational centers, but to establish leadership for these centers (Wenrich et al., 1988). Furthermore, districts with vocational-technical centers had to submit a plan to the state in order to justify the utilization of state and federal vocational dollars (Wenrich et al., 1988). The local district could even appeal decisions by the State Board for Vocational Education regarding the allocation of funds and take legal action as well (Wenrich et al., 1988). The directors of vocational-technical career centers were responsible for not only the establishment of programs, but had to be involved in the political and legal process of vocational education as well. Early writers called for leaders that, “…have conceptual, technical, administrative, and human relations skills needed to develop dynamic vocational education programs which will serve the needs of individuals and society” (Wenrich et al., 1988, p. 15). However, now the role of the leader has changed with the enactment of high stake accountability systems (McLeod, D’Amico, & Protheroe, 2003). School leaders must lead differently in order to influence the outcomes of schooling and meet these standards of higher accountability (Leithwood & Riehl, 2003).

At one time, career and technical education programs had an emphasis on students graduating from high school and entering the work force. By the end of the 1990’s articles began to refer to Vocational Education as Career and Technical Education and included a new focus on post secondary goals for most students (Kerka, 2000; Ries, 1997; Stone et al., 2004; Techniques: Making Education & Career Connections, 1997; U.S. Department of Education, 2004). This movement to change the focus from Vocational Education to Career Education can be traced
back to a U.S. Commissioner of Education who first coined the phrase “career education” in a speech on January 23, 1971 (Reinhart, 1979, p.1-2). The Commissioner called for “(1) the need for reform of vocational education, (2) the irrelevance of general education, (3) the false dichotomy between things academic and things vocational, (4) the need for true and complete reform of the high school”(Reinhart, 1979, p. 1&2). “By the fall of 1974, ten state legislatures had enacted career education legislation, eight were considering it, and nineteen were planning it”, (Reinhart, 1979, p. 16). Missouri was no exception with the establishment of a state vocational education department and the establishment of vocational centers throughout the state.

The main mission for these centers was to train students for skilled jobs that did not require a bachelors degree (Nelson, 1974; The State Plan Review Committee, 1977). Beginning with the 21st Century the mission began to change as employers were requiring the same educational skills as colleges (Brodhead, 1991; Kerka, 2000; Lynch, 2002). Lynch (2002) further argued for not only more rigorous and relevant basic education for career education graduates, but also a greater emphasis on “soft skills”. These skills identified by Lynch (2002) included knowing how to learn, how to work in teams, how to problem solve, and included such characteristics as good ethical behavior, adaptability, flexibility and personal management. Thus, if career education was to survive and flourish there was a need to provide a culture in a career center that had a rigorous and relevant curriculum that provided opportunities for students to develop these new skills (Association for Career and Technical Education, 2006a, 2006b; Catri, 1998; Levesque et al., 2000; Office of Vocational and Adult Education, 2003). Furthermore, Lynch (2002) argued that public perception was that all students would go on to college. Coupling this perception with the fact that more and more jobs were requiring not only a strong skill level, but additional post-
secondary training (Lynch, 2002; Office of Vocational and Adult Education, 2003), the need for a new type of career education leader emerged.

Leadership Development in Career Education

Leadership development in career and technical education has evolved from the model of task-oriented (Goetsch & Szuch, 1985; Wenrich & Wenrich, 1974; Wenrich et al., 1988) and human behaviors (Finch et al., 1991) to one of a model for transformational leadership (Daughtry & Finch, 1997b; Wonacott, 2001). This new type of a leader for career education must be able to exist in a professional learning community and to set the course for a career center through the turbulent times of change which is a constant in today’s educational environment (Fullan, 2001; Kenneth Leithwood et al., 1999). These times call for a leader who has a transformational leadership style (Kenneth Leithwood et al., 2000b; Siegrist, 1999) with a renewed emphasis on collective commitment and mutual purpose (Yukl, 2006). Siegrist (1999) called for a move away from managerial to a visionary type of leader who could transform organizations. Leithwood, Jantzi, and Steinbach (2000) argued for a need for transformational leadership where there would be a shift from the traditional “power over” to a “power-as-relationship”. “Transformational leaders make followers more aware of the importance and value of the work and induce followers to transcend self interest for the sake of the organization” (Yukl, 2006, p. 267). Thus, the key to transformational leadership is that it moves an organization beyond the ordinary day-to-day efforts to one of extraordinary accomplishments by each of its members (Bass & Avolio, 1994; Kenneth Leithwood et al., 2000b; Yukl, 2006). Consequently, a transformational leader is committed to the growth of not only the organization, but to each of its members (Bass & Avolio, 1994; Yukl, 2006). Through empowerment, the capacities of the members are improved (Davis, 2003). Other authors have argued that an effective transformational leader serves a
deeper, more powerful and more durable role when they are models and catalysts for such values as excellence, caring, justice and faith (Bolman & Deal, 2001). Earlier, authors postulated that effective leadership is greatly responsible for overall school success and student outcomes (Hallinger & Heck, 1999). In addition, as Leithwood, Jantzi, and Steinbach (2000 b) acknowledged, “Transformational leadership is a powerful stimulant to improvement” (p. 37). Furthermore, according to Yukl (2006), there are differences between transforming leadership and transactional leadership. He argued that transformational leadership appeals to the moral values of followers in an attempt to raise their consciousness about ethical issues and to mobilize their energy and resources to reform institutions. By contrast, transactional leadership motivates by appealing to self-interests. Therefore, as noted by Yukl (2006) “transformational leadership style increases follower motivation and performance more than transactional leadership, and the effective leader uses a combination of both types of leadership” (p. 254). An effective leader must understand the full range of leadership and be able to utilize different leadership styles when the circumstances demand an effective shift by a leader (Avolio & Bass, 2002).

In fact, transformational leadership is just one of three leadership styles proposed by Bass and Avolio, (1994). They maintained that there is a full range of leadership styles that are utilized by effective leaders. These three leadership styles developed by Bass and Avolio (1994) over decades of research and are laissez-faire, transactional, and transformational.

The first leadership style is laissez-faire. Laissez-faire is associated with a lack of leadership as perceived by the followers. Laissez-faire is an ineffective leadership style according to many authors (Avolio & Bass, 2002; Bass & Riggio, 2006; Finch et al., 1991). While transactional, as the name implies, is the utilization of power in the form of contingent reward to entice followers to comply with the wishes of the leader (Bass & Avolio, 1994). Many
researchers in leadership documented the utilization of contingency rewards (Bolman & Deal, 2002; Lunenburg & Ornstein, 1996; Yukl, 2006). Contingency rewards are one of the sources of power over which a leader can utilize to persuade followers to comply with their wishes (Blanchard, Lacinak, Tompkins, & Ballard, 2002; Hackman & Johnson, 2000). A leader, due to positional power has the power to control rewards (Bolman & Deal, 1997; Lunenburg & Ornstein, 1996; Yukl, 2006). This ability to control rewards fuels the process of transactional leadership (Bass & Avolio, 1994). Reward power is effective for a leader, but will only result in compliance and usually not commitment by followers (Bass & Avolio, 1994; Yukl, 2006). The negative side of the reward process is the withholding of rewards (Bolman & Deal, 1997; Yukl, 2006) which leads to the other aspect of transactional leadership of management-by-exception (Bass & Avolio, 1994).

Management-by-exception is the process of the withholding of rewards to followers who are not complying with the wishes of the leader (Bass & Avolio, 1994). This process can be either active or passive in nature (Bass & Avolio, 1994). In management-by-exception-active the leader sets up a system to actively monitor the actions of the followers and if they are not up to the standards or if they are in conflict with the policies of the leader, the leader withholds rewards or actively punishes the follower (Bass & Avolio, 1994). In the process of management-by-exception-passive the leader waits and when the follower makes a mistake the leader responds with either a denial of reward or a punishment (Bass & Avolio, 1994). The use of reward power is the major component of transactional leadership and is effective in some circumstances, such as in the day-to-day management of an organization (Bass & Avolio, 1994; Yukl, 2006). It is definitely more effective in organizations than laissez-faire leadership (Bass & Avolio, 1994). The major problems with transactional leadership are the same as the problems
associated with the use of reward power (Bass & Avolio, 1994; Yukl, 2006). Transactional leadership style is somewhat effective in managing an organization. A leader may utilize transactional leadership early in their leadership development and then grow into a more transformational leader (Bass & Avolio, 1994). In conclusion, the transactional leader will usually only be successful at establishing compliance from their followers. To be able to move followers from compliance to commitment to the vision of a leader, the leadership style of choice is transformational (Bass & Avolio, 1994).

The contrast between transactional leadership, that is based on power over individuals, and transformational leadership, that is based on empowering of followers, was at first thought to be a function of charisma (Avolio & Bass, 2004; Prater, 2004). However, as research on transformational leadership continued to develop, charisma could not account for all of the characteristics that were attributed to transformational leaders (Avolio & Bass, 2004; Prater, 2004). In addition, charisma was considered as an innate ability and could not be affected by training (Avolio, 2005b). Authors agreed that leadership training could improve upon a person’s natural leadership abilities (Avolio, 1999, 2005b; Avolio & Luthans, 2006; J. R. Davis, 2003; Marzano et al., 2005; Reese, 2004; Siegrist, 1999; Wonacott, 2001). Therefore, the research into leadership moved from a study of charisma and began to concentrate upon ways that the leader could influence the follower (Avolio, 1999, 2005b; Avolio & Luthans, 2006).

Over time researchers have found that, transformational leadership includes four behavioral components; idealized influence, inspirational leadership, intellectual stimulation, and individualized consideration (Daughtry & Finch, 1997a; Kenneth Leithwood et al., 2000b). Some authors deem idealized influence as charisma (Daughtry & Finch, 1997a; Kenneth Leithwood et al., 2000b). In fact, idolized influence is the motivation that encourages more than
just compliance from followers. According to Bass and Avolio (1994), the members will admire the leader and wish to emulate the characteristics of fairness and empowerment that the leader demonstrates on a daily basis. Furthermore, Yukl (2006) prefers the term referent power to idolized influence, when describing a situation where the follower has affection, admiration, and loyalty to the leader. Some authors refer to idealized influence as either behaviors that the leader has that influences the follower or influence that is attributed to the leader by the followers themselves (Avolio, 1999, 2005b; Avolio & Luthans, 2006).

The next component of transformational leadership is inspirational motivation which involves the establishment of a common vision that is shared and championed by the followers (Bass & Avolio, 1994). This idea of establishing a vision for the organization and attracting followers to that vision is important for all educational organizations according to numerous investigators (Bolman & Deal, 1997; High School Reform Study Group, 2006; Marzano et al., 2005; McLeod, D’Amico, & Protheroe, 2003; National Association of Secondary School Principals, 2004; Schwahn & Spady, 1998).

Intellectual stimulation is the next important component of the transformational leadership model. Followers are encouraged through the example of their leader to try new solutions for old problems and to be comfortable with the risks associated with the establishment of new procedures and processes (Bass & Avolio, 1994). This component of transformational leadership enhances the establishment of new knowledge for an organization (Nanaka & Takeuchi, 1995). According to Nonaka and Takeuchi, the challenge for any organization is to take the tacit knowledge and understanding available about a challenge and generate new explicit knowledge that can be utilized to literally think outside the box in providing for a unique and new method to handle challenges. This process involves communication of the tacit knowledge...
of the leader often expressed as a vision statement into the explicit knowledge of how to complete the task at hand (Nanaka & Takeuchi, 1995).

The last component of transformational leadership is individual consideration. The need for individuals to grow and to mature within the organization is welcomed and even groomed by the leader (Bass & Avolio, 1994). The leader takes on the persona of a coach or mentor instead of a boss and the leadership potential of the organization multiplies exponentially. This leader according to Bass and Avolio (1994) utilizes delegation to develop assignment of staff to tasks that are crucial to their developmental needs and the needs of the organization.

Authors such as Daughtry and Finch (1997) began to call for a move from transactional leadership, which maintains the status quo by a barter system to a transformational leadership style that would raise the productivity of everyone in the organization and establish a strong vision for the career center. Therefore, transformational leadership generates a culture of continuous improvement and empowerment of all stakeholders in the institution and is critical for the continued development of career and technical centers (Bass & Avolio, 1994; Daughtry & Finch, 1997a; Kenneth Leithwood et al., 2000b; Siegrist, 1999). Furthermore, transformational leadership moved staff from simple compliance to a wholehearted commitment to improve the organization based on the vision of the leader (Wonacott, 2001).

There has never been a more critical time to study leadership of directors of career and technical centers. Since one of the greatest challenges facing educational leaders today is to create conditions that will enhance the way schools do business as a result of the school reform initiatives (Hill, 2003). The change that must occur in career centers must be meaningful and in incremental steps so that change occurs effectively throughout the organization (Davis, 2003). Additionally, the fact that the vision and focus of the career centers have changed calls for an
investigation into the type of leadership style necessary for those changes to be acculturated. The factors of high stake accountability, the changing focus in career education, and the changes in student outcomes all combine to emphasize the need for a study of the leadership styles of directors of area career centers.

Summary

In conclusion, the literature revealed that leadership is an important component of the field of education and the specific needs of directors of career centers. Career education has changed significantly from emphasizing a mission of preparing students upon graduation from high school with a vocation. Now career education must preparing students to enter the world with complicated and demanding key core knowledge and skills needed by both the work force and institutions of higher education (Brodhead, 1991; Catri, 1998; Hull, 2005; Kerka, 2000; Levesque et al., 2000). Additionally, the need for changing leadership styles has occurred with the change in the mission for career education. Researchers in career and technical education are demanding that leaders go beyond management to a utilization of the transformational leadership model (Wonacott, 2001).

In addition, drawn from the literature concerning leadership in career education are the following conclusions. First, leadership is a vital part of all educational institutions. It is vital for educational leaders to provide for the increasing needs of students, and leadership development is a vital part of meeting that challenge (Hallinger & Heck, 1999; Leithwood & Riehl, 2003; Kenneth Leithwood et al., 1999; Lunenburg & Ornstein, 1996; Marzano et al., 2005; Prater, 2004; Reese, 2004). Second, it appears that career education is a vital part of the educational arena at the local, state, and even national levels (Catri, 1998; Department of Elementary and Secondary Education, 1983; Kerka, 2000; Levesque et al., 2000; Reinhart, 1979; Stone et al., 2000).
2004; Task Force 1990, 1997; The State Plan Review Committee, 1977; U.S. Department of Education, 2004). Finally, perhaps the most important, that leadership in career education, as in regular education, needs leaders who can effectively select and utilize the most effective leadership style as needed with transformational being the style that is the most effective at moving organizations forward (Avolio & Bass, 2002; Bass & Riggio, 2006; Kenneth Leithwood et al., 2000b; Prater, 2004; Siegrist, 1999). Thus, this study examined the leadership style of directors in the career centers in Missouri to see if the transformational leadership style would be the most effective for the success of the career center graduates. The measure of student success for this inquiry was the percentage placement of career center graduates.

Finally, the lack of literature investigating the effective leadership styles for directors of career centers articulates the need for this type of a research project. In addition, the culture of the area career center is a unique educational environment that has escaped the eye of researchers. Thus, the purpose of this investigation was to examine the leadership styles of effective leaders of area career centers and to determine which leadership style is the most effective style for a director of a career center. Furthermore, the data from this inquiry attempted to validate if transformational leadership (Bass & Avolio, 1994) would be perceived as the most effective leadership style by leaders and followers in career centers. This information would be valuable in filling the gaps revealed in the body of knowledge regarding career education and the leadership style of career directors.

Discussed in Chapter Three will be the methods and research design of the study. Contained in Chapter Four are the analyses of the data. Lastly, in Chapter Five this researcher will discuss the results of the study along with the conclusions and implications for practice. This
investigation will be of value in validating which leadership style is the most effective for the
directors of career centers, their followers, and their superintendents.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

Problem and Purpose Overview

There is growing concern in career education that the future of the discipline will be decided by the ability to find effective leaders (Wonacott, 2001; Zirkle, 1998). According to Zirkle (1998) career education is facing a serious shortage of leaders due to three main factors. First, the number of teacher preparation programs in career and technical education has been steadily decreasing over the last 20 years (Zirkle & Cotton, 2001). Second, the certification process for leaders in career and technical education has been changing to reflect growing requirements for advanced degrees for certification (Zirkle & Cotton, 2001). Lastly, many individuals do not desire to attempt the career field due to the long hours, high stress level, and questionable rewards (Wonacott, 2001; Zirkle & Cotton, 2001). In addition, many directors of career and technical centers started their careers in the 1960’s and 1970’s when Missouri was establishing its infrastructure of area career centers and soon will be retiring (Task Force 1990, 1997; Zirkle, 1998).

The literature is compelling that the transformational model of leadership is the most promising model for effective school leaders in career education. Transformational leadership is very effective in times of change for organizations (Bass & Avolio, 1994; Kenneth Leithwood et al., 2000b; Siegrist, 1999; Wilmore & Thomas, 2001). Though limited, career education research has authors that are calling for the transformational model to guide institutions into a future ripe with change (Daughtry & Finch, 1997a; Wonacott, 2001). The major purpose for this study was to determine if the transformational model of leadership would be the most effective model for leadership of current leaders of career and technical centers. A 360-degree survey of the director
by the superintendent, by the director, and the teaching staff of the career center documented the leadership style.

Research Design

This inquiry examined the extent to which the leadership style of career center directors would affect the successful placement of career education completers. An ex post facto design, or causal-compartative design (Fraenkel & Wallen, 2003; Wiersma, 2000) was selected to show if there is a correlation between the leadership style of the director and the placement of career education completers. A 360 degree completion of the survey by the superintendent and staff at the school will be utilized to develop a clear view of the leadership style of the director (Avolio & Bass, 2004). According to Wiersma (2000) ex post facto design is, “Research in which the independent variable or variables have already occurred and in which the researcher begins with the observations on a dependent variable, followed by a retrospective study of possible relationships and effects” (p. 457). In the interest of feasibility, the study utilized a cross-sectional design (Fraenkel & Wallen, 2003; Wiersma, 2000) to allow for a specific view at one point in time. Thus, this inquiry was a descriptive study of the leadership styles of directors of area career centers that examined if that leadership style affected the placement of area career education completers (Fraenkel & Wallen, 2003; Wiersma, 2000). According to some authors, this design is useful to gather information that may be relevant for improvement or justification of an existing phenomenon (Dalen, 1966; Fraenkel & Wallen, 2003; Wiersma, 2000). The purpose of this kind of research is to “discover relationships between variables” (Borg & Gall, 1989, p. 573) and identify comparisons between groups. This resulted in a quantitative methodology with the collection of data through questionnaires.
Research Questions and Null Hypotheses

The researcher used the following research questions and null hypotheses to drive this inquiry:

*RQ1:* Is there a difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors? And if so in what way?

*Ho1:* There is no statistically significant difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors.

*RQ2:* Is there a difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers and supervisors?

*Ho2:* There is no statistically significant difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers.

*RQ3:* Is there a relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

*Ho3:* There is no relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

*RQ4:* Is there a relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership? If so, which component has the most effect on the successful placement of graduates?
Ho4: There is no relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership.

Population and Sample

The population for this investigation involved all the career centers located in the state of Missouri as identified from the Career Education department of the Department of Elementary and Secondary Education for the spring of 2005. A purposeful sample drawn from this population of the current leaders of career centers in the state of Missouri was utilized. Specifically, this group consisted of 57 directors of area career centers, their superintendents, and their teaching staff. The researcher divided this group of 57 career centers into two subgroups: a top ten group and a bottom ten group based on the percentage of graduates who were positively placed utilizing Perkins III accountability data. The most effective placement group was a group of ten career centers with a placement of above 75%, with the highest achieving a rate of 86.62%. The least effective subgroup was a group of ten schools whose placement percentage was 48.78% to 58.60%. If a school elected not to participate in the study, the researcher invited the next school in ranking to join the study. Two of the schools in the low group did not submit data, thus, the sample of for this inquiry was 18 career centers, the response from 16 directors, 11 superintendents and 58 staff resulting in 85 participants.

The demographic data related to this research reflected career education in the state of Missouri during the 2004-2005 school years. The information collected reflects career education in area career centers including the placement of secondary students. Each career center surveys students 180 days after their graduation. The career center then reports their placement to the Department of Elementary and Secondary Education. This reporting was in response to the
demands of Perkins III that was the active legislation affecting career centers in 2005 (Department of Elementary and Secondary Education, 2006). To understand the demographics of this research one must look at both the educational environment and the research subjects. First, it is important to note that area career centers are not traditional high schools. Area career centers were developed in the 1970’s in response to the need by federal legislation to develop specialized schools for career education (Linhardt, 2002). These career centers serve several surrounding high schools, usually junior and senior students attend the career center to take specialized career education classes. (Linhardt, 2002). Career centers through Perkins funds are able to provide students with specialized equipment that would be very expensive for a traditional high school to provide. In addition, some instructors have been alternatively certified and have at least 4000 hours of experience in their career field but are not required to hold a bachelors degree in education (Educator Certification, 2006). Students who are bused into a career center pay tuition to the home school in order to have their students participate in career education opportunities (Linhardt, 2002). In addition, these home schools must complete 180 day follow up on all their career education graduates and report that data to the area career center (Linhardt, 2002). The total placement of the sending school completers for career education and the completers of the area career center equals the total percentage placement for the career center (Department of Elementary and Secondary Education, 2006).

These eighteen schools had the following demographics based on Department of Elementary and Secondary Education information (Department of Elementary and Secondary Education, 2007). The schools with the lowest placement rate for 2005 graduates had a mean school size of 1007.6 (see Table 1). The low placement schools had directors with a mean experience of 14.9 (see Table 1). The mean experiences for the superintendents in these schools
were 9.3 with a standard deviation of 7.4 (see Table 1). The directors in these schools were responsible for a total staff with a mean of 27.4 and a standard deviation of 2.4 (see Table 1). It would appear that the high and low placement schools had very similar demographics (see Table 1).

The top ten schools for placement had a mean student body of 832.9 (see Table 1). The directors’ experience was a mean of 17.7 years with a standard deviation of 1.06 years (see Table 1). In looking at the experience of the superintendent the mean experience for these top placement schools was 11.2 with a standard deviation of 9.0 (see Table 1). The number of teachers that the director supervised was a mean of 22.2 with a standard deviation of 1.7 (see Table 1). It would appear that the high and low placement schools had very similar demographics.

Table 1

*Responses and School Characteristics*

<table>
<thead>
<tr>
<th>Items</th>
<th>Low Placement</th>
<th>High Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Schools</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Staff Responses</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Director Responses</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Superintendent Responses</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Mean Total School Enrollment</td>
<td>1007.6</td>
<td>832.9</td>
</tr>
<tr>
<td>Mean Career Center Teachers</td>
<td>27.4</td>
<td>22.2</td>
</tr>
<tr>
<td>Mean Director Total Experience</td>
<td>14.9</td>
<td>17.7</td>
</tr>
<tr>
<td>Mean Superintendent Total Exp.</td>
<td>9.3</td>
<td>11.2</td>
</tr>
</tbody>
</table>
There were three main groups of subjects of this research. These three groups were the directors of area career centers, the superintendents of those school systems, and the teachers who report directly to the director.

The primary group was composed of directors of area career centers in the state of Missouri. These directors work in a unique educational environment. Unlike a traditional high school these schools have a variety of students that are from other schools and usually attend starting their Junior year of secondary education (Hull, 2005). The students participate in a curriculum that is affected directly by state mandated advisory councils. The purpose of area career centers are not only to prepare students for post secondary opportunities, but to insure that they have practical skills that are needed by employers (Hull, 2005). In addition, these schools not only are accountable to the mandates of federal and state regulations, but since they receive specific funds from Perkins legislation they must keep data on all graduates including the successful placement of those graduates (Department of Elementary and Secondary Education, 2006). Therefore, the directors of Area Career Centers lead in a challenging environment and transformational leadership has proven effective in such environments (Avolio, 1999; Avolio & Bass, 2002; Avolio & Luthans, 2006).

Twenty directors from the fifty-seven directors of Area Career Centers in the state of Missouri in 2004-2005 school years, based on the criteria of their placement rate for their 2005 graduates composed the primary research sample. This purposeful sample resulted in a final response from 18 schools, with a sub-sample of 8 schools with low placement and 10 schools with high placement. Out of the 20 possible career centers, 16 directors completed the self-
survey on leadership styles for a completion rate of 80% and 18 schools completed the survey for a completion rate for schools of 90%.

The next group of participants to examine was the superintendents of these schools. A total 11 superintendents completed the survey for a percentage of 61%. The superintendents had a mean experience of 11.2 years with a standard deviation of 1.02 for the career centers with high placement of graduates (see Table 1). The lower placement group of schools had superintendents who had 9.3 years of average total experience (see Table 1). It was interesting that these superintendents with the least amount of experience were located at the larger schools that had the lower placement rate of career center graduates (see Table 1).

The third group to discuss in this study was the career education teachers who worked in relation to the director to train and help place the graduates. It is interesting to note that 29 staff responded to the surveys from both the high and low placement schools (see Table 1). The mean number of teachers working in the area career centers that had successful placement was 22.2 (see Table 1). In the area career centers with a lower placement of graduates, the mean number of teaching staff was 27.4 (see Table 1). It would appear that the schools with the top placement of graduates had slightly fewer staff.

In conclusion, three groups of subjects were a part of this research. The sample schools were scattered throughout all regions of the state and represented career education programs from many diverse socio-economic and cultural environments. The demographics for all schools in the study were very similar, yet the results of placement were different.

Data Instrumentation

The specific survey instrument utilized will be the MLQ (5X short) version that contains 45 key leadership and effectiveness behaviors which have been shown to be strongly linked with
individual and organizational success (Avolio & Bass, 2004). The instrument is a five point Likert scale with a rating of 0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often, 4 = frequently, if not always. The instrument has been utilized in a variety of business and educational settings and has been found to be valid when raters equal at least three (Avolio & Bass, 2004). Recently, the MLQ was the subject of a large meta analysis to determine if it was valid for the measuring of the full range of leadership styles and was found to be very valid in a study involving a sample of 1,394 subjects (Antonakis, Avolio, & Sivasubramaniam, 2003).

The MLQ instrumentation measures leadership effectiveness and three leadership constructs: transformational, transactional, and laissez-faire (Avolio & Bass, 2005). These three constructs are comprised of nine behavioral sub-scales and three outcome scales (Rowold, 2005). According to Rowold (2005) the transformational sub-scales are inspirational motivation, idealized influence (attributed to the leader by the followers), idealized influence (behavior) that includes a collective sense of mission and values and how the leader acts upon those values, and individualized consideration of the followers by the leader. In the area of transactional, the sub-scales are contingent rewards where the leader rewards the followers for compliance. Contingent reward is further divided into two sub-scales the first being active management-by-exception, where the leader watches for any deviation from the rules of the organization, and may enact discipline for these infringements. The last component of contingent reward is management-by-exception passive, where the leader intervenes only after the followers have failed to comply with the wishes of management (Rowold, 2005). The last and least aggressive leadership style according to Rowold (2005) is the passive laissez-faire subscale that indicates a lack of any leadership on the part of the leader.
The three outcomes measured by the *Multifactor Leadership Questionnaire* version 5X short form are followers extra effort, effectiveness of leader’s behavior, and followers satisfaction with their leader (Avolio & Bass, 2004). These outcomes are collected by three open-ended questions that the leader and rater complete (Avolio & Bass, 2005). That portion of the survey was not used in this inquiry. These sub-scales and outcomes measure a full range of leadership (Avolio & Bass, 2004). The MLQ (5X) short form has been found to be very effective in determining the leadership style of many leaders in various environments (Avolio & Bass, 2004).

Avolio and Bass (2004) have over 25 years of development in the MLQ survey. The MLQ is a valid instrument in the measurement of the full range of leadership styles by Antonakis et al. (2003). According to their study, they utilized a homogenous business sample of 2,279-pooled male and 1,089-pooled female raters who evaluated same-gender leaders and discovered that the instrument was valid for the establishment of a rating of the effectiveness of a leader over the full range of leadership styles.

The MLQ has been utilized by all managerial levels in Fortune 500 and 1000 firms and a variety of government, not-for-profit agencies, smaller firms, in the United States and around the globe (Avolio & Bass, 2004). Raters have varied in age, sex, career stage, and educational and cultural backgrounds according to Avolio & Bass (2004). The MLQ was reliable in over 30 countries, across all types of educational institutions and businesses. Furthermore, the instrument has been effective when utilized by supervisors, colleagues, peers, or in self-evaluation surveys (Avolio & Bass, 2004).

The researcher conducted a scale analysis to determine if the scales for each of the leadership styles were reliable. An analysis of scale reliability is an accepted way to check for
the reliability of a survey (Fraenkel & Wallen, 2003; Wiersma, 2000). The results of the analysis revealed that the sub-scales were reliable (see Table 2).

Table 2

Survey Scale Reliability

<table>
<thead>
<tr>
<th>Scale Name</th>
<th>Number of Items</th>
<th>Coefficient Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laissez-faire</td>
<td>4</td>
<td>.795</td>
</tr>
<tr>
<td>Transactional</td>
<td>12</td>
<td>.634</td>
</tr>
<tr>
<td>Transformational</td>
<td>20</td>
<td>.930</td>
</tr>
<tr>
<td>Idealized Influence (Behavior)</td>
<td>4</td>
<td>.602</td>
</tr>
<tr>
<td>Idealized Influence (Attributed)</td>
<td>4</td>
<td>.759</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>4</td>
<td>.819</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>4</td>
<td>.871</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>4</td>
<td>.780</td>
</tr>
</tbody>
</table>

Note. Reliability determined at .500

The reliability of the major leadership scales and sub-scales were reliable. All items had a score of above .600 with most of the items scoring above .700. Therefore, the researcher utilized the leadership scales and sub-scales in the research.
Data Collection

The researcher contacted the superintendents of the school districts in which the area career centers were located by phone prior to the study utilizing a solicitation script (see Appendix A) and received written consent for participation (see Appendix B). In addition, the director and staff at the career centers had to complete an informed consent to be included in the study (see Appendixes C and D). After the receipt of the director’s informed consent and upon receiving permission by the Institutional Review Board of Missouri (see Appendix E), the researcher set up the web page for each director with Mind Garden Inc. After setting up the director’s Leader webpage, then the researcher could activate the link that would send an informational email to each director and rater inviting him or her to follow the enclosed web link to complete the online survey. The email explained that responses would be completely confidential and that the results will only be analyzed and printed in aggregate. This procedure allowed for a 360-degree evaluation of the leadership style of the director composed of their superintendent and their teaching staff.

Data collection was via email utilizing a survey-questionnaire. The directors of the career centers completed a self-rating of their leadership style and then the staff and the superintendents of the schools completed a reflective survey concerning the leadership style of the director. This allowed the researcher to obtain both a self-analysis of the director and a 360-degree feedback by both the followers of the director and their direct supervisor at the school. This type of research has been found to be very effective at determining the leadership style of the leader (Avolio & Bass, 2004; Bass & Riggio, 2006).

Mind Garden Inc. collected the responses over the internet and then Mind Garden Inc. mailed the data electronically in a Excel format for utilization by SPSS statistical software to the
researcher. This allowed for a more timely analysis of the data provided by the subjects and decreased the possibility of input errors. SPSS software is a leading software package for the analysis of data from research (Green & Salkind, 2003). The researched did not share any individual survey results with the leader, their supervisor, or the followers of the subject schools. This protected the well-being of the research subjects in accordance with proper research ethics (The National Commission for the Protection of Human Subjects of Biomedical Research, 1979) and provided for a more honest survey by the subjects.

The researcher verified the true leadership style of the leader by a 360-degree evaluation. The 360-degree survey has been very effective in identifying the leadership style and is used by Mind Garden in leadership professional development program design (Avolio & Bass, 2004). A simple definition of the 360 degree evaluation of an leader is that the MLQ can be administered to the supervisor and followers of the leader and provide a more accurate assessment of their leadership style then accomplished by a self-analysis (Avolio & Bass, 2004). Therefore, the MLQ has a Leader Form that is completed by the leader and a Rater Form that can be completed by the supervisor and followers of the leader (Avolio & Bass, 2004). The only limitation is that at least three raters have to complete the survey instrument for the results to be valid.

The survey selected was the *Multifactor Leadership Questionnaire* (5X short version) developed by Bass and Avolio (2004) to determine the leadership style of the leader. Mind Garden Inc. administered the survey in October 2007, which consisted of 45 questions on a 0-4 Likert scale and three open-ended questions concerning the effectiveness of the leader. One survey was completed by each of the directors ($N = 16$) of career centers as a self-survey of their leadership style, while other rater forms were completed by the teachers they supervised ($N =$ 53).
57), and their current superintendent ($N = 11$). This allowed for a complete 360-degree reflection of the leadership style of the director by their supervisor and their teaching staff.

The survey was designed to place the leader on a continuum from laissez-faire or no leadership, to transformational leadership (Bass & Riggio, 2006). The researcher was looking for a correlation between the type of leadership style of the director and the successful placement of career center graduates. The survey consisted of an online survey of 45 selected response questions. The selected response questions consisted of a Likert scale of zero to four, with zero equal to a response of “not at all”, one equal to “once in a while”, two equal to a response of “sometimes”, three equal to a response of “fairly often”, and the last category of four equal to a response of “frequently, if not always”.

Participants completed one of two surveys. The leader, or in this study, the director completed the Leader Form (see Appendix F) while the Rater Form (see Appendix F) was administered to the superintendent and the staff of the director’s school. Participants’ identified themselves in relation to their organizational position by the participant marking a zero for self, a 1 for a supervisor, a 2 for a peer, a three for subordinate, or a four for other. The results were collected by Mind Garden Inc. and then emailed as an Excel file to the researcher. The researcher then transferred the file into SPSS Graduate software for analysis. Then the researcher set up the data for analysis in the SPSS software.

The questions did not require reverse scoring, but there was a need to develop sub-scales to identify survey results based on different styles of leadership and their individual components. The researcher developed the following sub-scales utilizing the SPSS software and the scoring key provided by Mind Garden from the MLQ 5X manual (Avolio & Bass, 2004). The researcher developed sub-scales to reflect the leadership styles of laissez-faire, Transactional, and
Transformational leadership and their components. For laissez-faire leadership the subscale consisted of questions, (Q5, Q7, Q28, and Q33). Laissez-faire leadership had no further subscales.

The next major subscale was transactional leadership. Transactional leadership was composed of the sub-scales of contingent reward (Q1, Q11, Q16, and Q35), management by exception passive (Q3, Q12, Q17, and Q20), and finally management by exception active (Q4, Q22, Q24, and Q27).

The last major leadership subscale was transformational leadership. Transformational leadership was composed of idealized influence based on behavior (Q6, Q14, Q23, and Q34), idealized influence attributed by the rater (Q10, Q18, Q21, and Q25), intellectual stimulation (Q2, Q8, Q30, and Q32), inspirational motivation (Q9, Q13, Q26, and Q36), and individual consideration of the leader for the rater (Q15, Q19, Q29, and Q31). The researcher utilized these leadership style sub-scales and transformational component sub-scales to analyze the data provided by the subjects. The researcher analyzed the survey results with the intent of answering four research questions and four null hypotheses.

Data Analysis

The researcher analyzed the data of the completed survey’s to get a clear view of the leadership styles utilized by the directors selected in the study. The survey data was received as an Excel file and had to have the heading converted to clear and precise headings for loading into the SPSS software. In addition, the responses had to be organized into scales and sub-scales to reflect the leadership style categories. The researcher utilized the key provided by Mind Garden Inc. to determine these scales and sub-scales (Avolio & Bass, 2004). After the data was prepared
and uploaded into the SPSS software the researcher utilized the appropriate statistical strategies to answer the research questions and address the null hypothesis associated with each one.

Research question one was:

**RQ1**: Is there a difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors? And if so in what way?

**Ho1**: There is no statistically significant difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors.

The researcher utilized descriptive statistics to describe the leadership style of the directors (Fraenkel & Wallen, 2003; Green & Salkind, 2003; Wiersma, 2000). Then, the differences in mean between the high and low placement groups were statistically tested utilizing an independent-samples *t* test (Fraenkel & Wallen, 2003; Green & Salkind, 2003). A significance of 0.05 2-tailed or less would be considered significant for this study (Fraenkel & Wallen, 2003; Green & Salkind, 2003; Wiersma, 2000).

The next research question and null hypotheses address the question of the social status of the rater and their perception of the leadership style of the director.

**RQ2**: Is there a difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers and supervisors?

**Ho2**: There is no statistically significant difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers.

An independent-samples *t* test was utilized to look for significant differences in the leadership score between the director, their superintendent, and their staff. The utilization of the
360 degree survey of the director allowed for an more accurate view of their real leadership style (Avolio & Bass, 2004). A significance of 0.05 or less 2-tailed will be considered significant for this study (Fraenkel & Wallen, 2003; Green & Salkind, 2003; Wiersma, 2000).

The next research question number three examined for statistical correlations between the leadership style of the director and the successful placement of career education completers. Research question number three and the null hypothesis was:

**RQ3:** Is there a relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

**Ho3:** There is no relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

The researcher selected the cases based on high placement, low placement, and all cases, in order to analyze for any correlation of placement to different groups of subjects. In order to look for correlations the researcher chose to utilize a Pearson correlation to evaluate the strength of the correlation and to look for significance for each of the leadership styles and the placement of career education completers (Fraenkel & Wallen, 2003; Green & Salkind, 2003). To determine significance a $p$ of less than 0.05 was required for significance. A correlation of .10 would be considered weak, one of .30 would be considered medium, and a correlation of equal to or greater than .50 would be considered strong in the realm of behavioral sciences (Green & Salkind, 2003).
The last research question and null hypothesis analyzed for any combination of transformational factors and their correlation to the placement of career education completers. Questions number four and the null hypothesis was as follows:

**RQ4:** Is there a relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership? If so, which component has the most effect on the successful placement of graduates?

**Ho4:** There is no relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership.

The researched sorted the cases based on high placement, low placement and then all cases in order to determine correlations within subject groups. Then, the researcher utilized a Pearson correlation to analyze if any of the components of transformational leadership correlated to placement of career center graduates. A correlation of .10 would be considered weak, one of .30 would be considered medium, and a correlation of equal to or greater than .50 would be considered strong in the realm of behavioral sciences (Fraenkel & Wallen, 2003; Green & Salkind, 2003; Wiersma, 2000).

**Summary**

In conclusion, this study consisted of an on-line survey of a purposeful sampling of the directors of area career centers in the state of Missouri for the spring of 2005. The research subdivided the sample into a top and bottom group of ten based on the Perkins III placement data obtained from the Department of Elementary and Secondary Education (Department of Elementary and Secondary Education, 2007). The subjects surveyed were the supervisor
(superintendent), the director (leader) and the followers (teaching staff) of the career center. The purpose of the study was to determine if transformational leadership correlated to the placement of career education completers. In addition, the study attempted to identify if any of the four characteristics of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration) are more highly correlated to successful placement of career center students. The researcher selected cases based on high placement, low placement and then all cases. The data were analyzed using descriptive statistics, independent-samples t tests, and person correlations.

Chapter Four will contain the results of the analysis for each research question and related hypothesis. The research will analyze the results from the surveys completed by the directors, the superintendents, and the staff of the area career centers. The researcher developed tables and figures to help in the communication of the statistical analysis of the survey data.

In Chapter Five the researcher will draw conclusions in regard to the findings presented in chapter four. Then, the researcher will present recommendations for further study based on the current body of knowledge of leadership styles and this research project. In addition, the researcher will propose implications for practice to help improve the leadership development and future improvement in area career centers.
CHAPTER FOUR
PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to determine if there was a relationship between the leadership style of the directors of the area career centers in the state of Missouri and the successful placement of career education completers. The researcher utilized descriptive characteristics and a histogram to reveal the leadership style of the directors. This revealed the score of the overall leadership style of the director based on the total score given by all the participants for transformational, transactional, and laissez-faire leadership.

The data had a sample size of 85 participants with each identifying himself or herself as a supervisor, a subordinate, or as self. In this research, peers did not complete the survey. The researcher conducted a frequency analysis of the responses and the sub-scales of transformational, transactional, and laissez-faire to analyze for the frequency of responses to the survey. The researcher utilized the MLQ (5X) key to identify the items that composed these sub-scales (Avolio & Bass, 2004). Transformational had a mean score of 3.07 with a median of 3.2 and a standard deviation of 0.65. Transactional leadership style had a mean of 1.93 with a median of 1.91 and a standard deviation of 0.49. Laissez-faire had a mean of 0.64 with a median of 0.50 and a standard deviation of 0.80. These scores were based on a 5 point Likert scale that reflected a response of: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, and 4 = Frequently, if not always (Avolio & Bass, 2004).
The responses of the raters for transformational, transactional, and laissez-faire as revealed on a histogram suggested that the majority of raters perceived that the director was a transformational leader (see Figure 1).

Figure 1. Frequency of response by raters for transformational leadership style of the Director.

Most of the raters scored the director at or above 3.0, which would equate to response of, “fairly often”. The mode for transformational was 3.20 and the mean was 3.07, therefore the
director was considered by all respondents including himself/herself to demonstrate characteristics of a transformational leader often.

In Figure 2 the perceptions of the participants regarding the transactional leadership style of the career director are illustrated.

Figure 2. Frequency of response by raters for the transactional leadership style of the director.

The mode for transactional leadership was a score of 2.0 that would equate to a response of, “sometimes”. The histogram revealed the variation in the responses for transactional, but overall the raters felt the director was transactional, “sometimes”, on the average (see Figure 3).
Discovered in Figure 3 are the perceptions of the participants regarding the laissez-faire leadership style of the career director.

Figure 3. Frequency of response by raters for laissez-faire leadership style of the director.

Laissez-faire had a mode score of 0.0, with a mean of 0.65 (see Figure 3). This indicates that most raters felt the director was never a laissez-faire type of leader. A few respondents placed the director at a score of two indicating they felt the leader was laissez-faire, “fairly often” (see Figure 3).
After a careful analysis of the rater’s responses and a descriptive look at the leadership styles of the directors, the researcher began to analyze the data based on each of the research questions.

Findings for Research Question One

The researcher utilized the research questions as a guiding lens for the analysis of the data. The first research question was:

\textit{RQ1: Is there a difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors? And if so in what way?}

The researcher analyzed the variables of transformational, transactional, and laissez-faire for differences in mean based on the placement level score of the career center. The researcher utilized independent-samples $t$ test to look for variance of mean between the high and low placement. An independent-samples $t$ test is a valid statistical method if the variable is normally distributed in the population and are independent of each other (Fraenkel & Wallen, 2003; Green & Salkind, 2003; Wiersma, 2000).

The statistics revealed that the mean for leadership styles were essentially the same for both high and low placement schools. Transformational leadership had a mean of 3.0674 for low schools and 3.0671 for high placement schools. Transactional leadership had a mean of 1.9590 for low schools and 1.9068 for high schools. Laissez-faire had a mean of 0.7012 for low schools and 0.6004 for high schools. The researcher conducted an independent-samples $t$ test for the three leadership style sub-scales with the grouping variable of High and Low placement. The scores for the independent-samples $t$ test for transformational leadership was, $t(83) = .002, p =$
The independent-samples \( t \) test for transactional leadership was, \( t (83) = .488, p = .627 \). The independent-samples \( t \) test for laissez-faire revealed a \( t (83) = .579, p = .564 \) (see Table 3).

Table 3

**Independent-samples \( t \) test for Leadership Style and Placement**

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>Low</th>
<th>High</th>
<th>( t )</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>3.0674</td>
<td>3.0671</td>
<td>.002</td>
<td>83</td>
<td>.988</td>
</tr>
<tr>
<td>Transactional</td>
<td>1.9590</td>
<td>1.9068</td>
<td>.488</td>
<td>83</td>
<td>.627</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>.7012</td>
<td>.6004</td>
<td>.579</td>
<td>83</td>
<td>.564</td>
</tr>
</tbody>
</table>

*Note. A \( p \) = .05 or less would be significant*

Though there were no significance in the leadership styles for low verses high placement schools, it is noted that the \( t \) test for transformational was the lowest and laissez-faire was the highest (see Table 3). In addition, the mean for all leadership styles were slightly lower for the high placement schools. It would appear that the raters scored the director the same for leadership style regardless of the placement of students.

**Research Hypothesis Number One**

The first hypothesis that was tested was hypothesis number one.

**Ho1: There is no statistically significant difference between the leadership style of directors in ineffective career centers vs. directors in effective career centers as perceived by self, followers, and supervisors.**
Based on the analysis and the data presented in Table 3, the first hypothesis was accepted by the researcher. The independent-samples t test revealed no significance difference in the mean of either high or low placement group for the three leadership styles, of transformational, transactional, or laissez-faire.

Findings for Research Question Two

Next, the researcher analyzed the data to answer research question two. Research question two was:

RQ2: *Is there a difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers and supervisors?*

In response to this research question, the researcher analyzed the responses of the survey by rater type. The researcher conducted an independent-samples t test for the three leadership styles using director and superintendent as the grouping variable. The independent-samples t test results were, $t (26) = -0.825, p = .417$ for director and superintendent and transformational leadership. Then director and superintendent for the variable of transactional leadership revealed a $t (26) = -0.616, p = .543$. Lastly the results of director and superintendent for laissez-faire leadership revealed a $t (26) = 0.661, p = .514$ (see Table 4).

Next, the researcher utilized the grouping variable of director compared to teacher and discovered the following relationships between the variables of the three leadership styles of transformational, transactional, and laissez-faire. The difference for transformational leadership for director and teacher was $t (71) = 0.657, p = .513$. Then director and teacher scores for transactional leadership the results were $t (71) = -0.053, p = .616$. Lastly, for laissez-faire
leadership, comparing the director to the teacher, the results were $t(71) = -1.146$, $p = .513$. In all cases, there was no significant relationship at the $p = .05$ or less level (see Table 4).

Table 4

*Leadership Style of Director by Rater Social Position*

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>Rater</th>
<th>N</th>
<th>Mean</th>
<th>Diff</th>
<th>$t$</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>Director</td>
<td>16</td>
<td>3.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superintendent</td>
<td>11</td>
<td>3.27</td>
<td>-.14</td>
<td>-.825</td>
<td>26</td>
<td>.417</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>58</td>
<td>3.01</td>
<td>.12</td>
<td>.657</td>
<td>71</td>
<td>.513</td>
</tr>
<tr>
<td>Transactional</td>
<td>Director</td>
<td>16</td>
<td>1.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superintendent</td>
<td>11</td>
<td>1.99</td>
<td>-.12</td>
<td>-.616</td>
<td>26</td>
<td>.543</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>58</td>
<td>1.94</td>
<td>-.07</td>
<td>-.503</td>
<td>71</td>
<td>.616</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>Director</td>
<td>16</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superintendent</td>
<td>11</td>
<td>0.32</td>
<td>.16</td>
<td>.661</td>
<td>26</td>
<td>.514</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>58</td>
<td>0.77</td>
<td>-.29</td>
<td>-1.246</td>
<td>71</td>
<td>.513</td>
</tr>
</tbody>
</table>

*Note.* A $p = .05$ or less would be significant

There were no significant differences in the mean for the different raters, but there were minor differences in the mean (see Table 4). In both of the positive leadership styles of transformational and transactional, the superintendent rated the director higher than their self-evaluation of their leadership style (see Table 4). In the area of laissez-faire the superintendent, rated the director higher then they scored themselves (see Table 4). When analyzing the scores
for the director compared to their staff, the staff rated the director lower on transformational, and higher on both transactional and laissez-faire leadership styles (see Table 4).

Research Hypothesis Number Two

The second research hypothesis was as follows:

Ho2: There is no statistically significant difference between the perceived leadership style of directors and the perceived leadership style of the directors by their followers.

Based on the analysis of the data presented in Table 4 the researcher accepted this hypothesis. The independent-samples t test revealed that there was no significant difference in the mean between the director, superintendent, and teacher for each of the leadership styles at the level of significance of .05 or lower 2-tailed.

Findings for Research Question Three

The third research question that the researcher focused on was:

RQ3: Is there a relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?

The researcher conducted a series of Pearson correlations after selecting cases by high placement, low placement, and then all cases (see Table 5).

Table 5

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>High Placement</th>
<th>Low Placement</th>
<th>All Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r   p</td>
<td>r   p</td>
<td>r   p</td>
</tr>
<tr>
<td>Transformational</td>
<td>-.23 .14</td>
<td>-.25 .11</td>
<td>-.07 .54</td>
</tr>
</tbody>
</table>
The correlation between transactional scores for raters from high placement schools was significant with an independent-samples \( t \) test of \( t(42) = -.35, p = .02 \) (see Table 5). The other significant correlation was between laissez-faire leadership and raters from low placement schools with a \( t \) test of \( t(39) = .48, p = .00 \) (see Table 4). There was no significant correlation found for all cases compared to placement of students (see Table 5).

*Research Hypothesis Number Three*

The third research hypothesis that was tested by this study was as follows:

\( H_03: \text{There is no relationship between the leadership style of the career center director (laissez-faire, transactional, or transformational) and the percentage of students placed from the career center?} \)

Based on the analysis of the data presented in Table 5 this hypothesis was rejected. There were two significant correlations discovered at the level of .05 or less 2-tailed. Transactional leadership was found to be negatively correlated to the high placement cases and laissez-faire leadership was positively correlated to the low placement cases.

*Findings for Research Question Four*

The final research question was:

\( RQ4: \text{Is there a relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and} \)
individualized consideration) of transformational leadership? If so, which component has the strongest relationship with the successful placement of graduates?

First, the researcher utilized descriptive statistics and a histogram to analyze which of the transformational components had the higher score by all participants. The subscale with the highest response score was for inspirational motivation with a mean response of 3.32 (see Figure 4). The next highest score was idealized influence (behavior) with a mean response of 3.08 (see Figure 5). The next score in importance was idealized influence (attributed) with a mean response of 3.02 (see Figure 6). The next highest score was for individual consideration with a score of 2.98 (see Figure 7). Lastly, the subscale with the lowest score was intellectual stimulation with a score of 2.94 (see Figure 8).
Inspirational motivation was the highest mean score with a mode score of 3.5. The scores are varied as they reach 3.0 and higher with two outliers who scored the director a .50 (see Figure 4).

Figure 4. Rater’s response on inspirational motivation.
Figure 5. Rater’s response on idealized influence behavior.

Idealized influence for behavior had a mode score of 3.0 and the histogram reveals gaps in scores, the average rating for this subscale was 3.08 (see Figure 5).
Figure 6. Rater’s response on idealized influence attributed.

The mode score for idealized influence attributed was 3.75. This reveals that several raters placed the director higher on this component than the average.
Individual consideration had a mode score of 3.0. As the histogram demonstrated, the mean reflected the responses by a few raters who placed the director at 1.0 or below.
The scores for inspirational motivation did place the directors above the 60 %tile of the 27,285 leaders who have been rated in the United States (Avolio & Bass, 2004). The scores on idealized influence both behavior and attributed placed the directors on the 50 %tile and they ranked on the 60 %tile for individual consideration and on the 50 %tile for intellectual stimulation (Avolio & Bass, 2004). Therefore, they ranked higher than the average leaders for inspirational motivation and individual consideration.

Next, the researcher selected the cases based on raters from high placement schools, low placement schools, and then from all cases. In each analysis, a Pearson correlation was utilized to
determine which components of transformational leadership were more highly correlated to placement.

Table 6

_Correlation of Transformational Sub-scales to Placement_

<table>
<thead>
<tr>
<th>Transformational Sub-scales</th>
<th>High Placement</th>
<th>Low Placement</th>
<th>All Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
<td>r</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>-.25</td>
<td>.10</td>
<td>-.34*</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>-.13</td>
<td>.39</td>
<td>-.32*</td>
</tr>
<tr>
<td>Idealized Influence Attributed</td>
<td>-.25</td>
<td>.11</td>
<td>-.26</td>
</tr>
<tr>
<td>Idealized Influence Behavior</td>
<td>-.19</td>
<td>.22</td>
<td>.13</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>-.19</td>
<td>.21</td>
<td>-.22</td>
</tr>
</tbody>
</table>

*Note.* *Correlation is significant at the 0.05 level.*

Two significant correlations were discovered within the raters from the low placement schools. Intellectual stimulation had a Pearson correlation score of \( r (39) = -.34, p = .02 \) and individual consideration had a score of \( r (39) = -.32, p = .04 \) (see Table 6). Many other correlations, though not significant, had one thing in common; they were slightly negative to placement (see Table 6).
Research Hypothesis Number Four

The final research hypothesis that was tested by this study was as follows:

Ho4: There is no relationship between the placement of the graduates from the career center to the four components (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) of transformational leadership.

Based on the analysis and data presented in table 6 this hypothesis was rejected at the .05 level of significance. Both intellectual stimulation and individual consideration were significantly negatively correlated to percentage placement when the cases were selected based on low placement.

Summary

In summary, this study involved the researchers’ desire to discover if the leadership style of a director of a career center correlated to the area career education completers. The research population consisted of 57 area career centers from the state of Missouri and the researcher ranked them on placement of career education completers based on the 2005 graduate follow-up data.

The researcher first conducted a frequency analysis on all the responses from the survey and found that the average leadership score was 3.07, which placed them in the transformational leadership style, “fairly often”. Transactional leadership received a average score of 1.93 that placed it in the category of, “sometimes”. Finally, the score for laissez-faire was an average of 0.65 that placed these responses in the category of slightly less then, “once in a while”.

Next, in response to research question number one the researcher analyzed the mean of the responses to identify if there were any differences in the responses from raters from high placement or low placement schools. The researcher found essentially no difference in the mean
for surveys’ from raters from high and low placement schools. An independent-samples \( t \) test revealed that there was no statistical difference between the responses for raters from high and low schools for placement compared to leadership style.

Research question number two called for an analysis of any difference between the mean of rater based on their relationship to the director. The raters could indicate if they were self (director), the supervisor (superintendent), or the subordinate (teacher) on the survey. The researcher utilized an independent-samples \( t \) test for leadership style using the rater social position and found no significance difference. The researcher noted that though not significant, the superintendent rated the director slightly stronger on all leadership scales than did the director. In addition, though not significant the teachers rated the director slightly weaker than did the director.

Research question number three called for the researcher to analyze for any correlation between the leadership styles of transformational, transactional, and laissez-faire, and the placement of career center students. The researcher selected the cases based on high placement, low placement and then all cases. The researcher then utilized a Pearson Correlation Coefficient to analyze for any correlation between the leadership style of the director and the placement of graduates. There were two significant correlations discovered with transactional leadership negatively correlated to placement in high placement schools and laissez-faire being positively correlated in low placement schools. All cases revealed no significant correlation to any leadership style. Though not significant, all cases were slightly negatively correlated to transformational leadership.

The last research question number four called for an analysis of the correlation of the components of transformational leadership and the placement of career center graduates. Once
again, the researcher utilized a descriptive analysis and a histogram to look for the mean scores for all responders for each of the components of transformational leadership. The mean for the components of transformational leadership from greatest to least were: inspirational motivation 3.32, idealized influence behavior 3.08, idealized influence attributed 3.02, individual consideration 2.98, and lastly, intellectual stimulation 2.94 (see Figure 4, 5, 6, 7, 8). A score of 3.0 was equivalent to a response by all raters of, “fairly often”.

Lastly, the researcher analyzed the dependent variable of placement compared to the independent variables of the four major sub-scales of transformational leadership. The cases were organized by high placement, low placement, and all cases and then a Pearson correlation was calculated in response to the placement of graduates. Two significant negative correlations were discovered for intellectual stimulation and individual consideration to placement (see Table 5). In no cases, was there a significant correlation between the components of transformational leadership and all cases. Once again, though not significant, many other correlations were slightly negative.

In Chapter Four the researcher presented the results of the survey data in light of the research questions. In Chapter Five the results of the analysis of the data will be presented in an effort to draw conclusions based on our limited knowledge of leadership styles. The findings will be discussed and implications for practice given. Finally, recommendations for future research will be suggested.
CHAPTER FIVE

FINDINGS, RECOMMENDATIONS, CONCLUSIONS

Introduction

In this chapter, the research findings, conclusions, implications for current practice, and recommendations for future research, are discussed. The primary purpose of this research was to determine if there was a correlation between the leadership style of directors of area career centers and the successful placement of career education completers. The research involved the utilization of an online-survey that rated the directors of career center on their leadership style based on the full range of leadership model (Avolio & Bass, 2004). The leadership styles were laissez-faire, transactional, and transformational. Transformational leadership was of particular interest for this study and the sub-scales were investigated as well for a correlation to placement of career education completers.

Transformational leadership is highly correlated to successful leadership of a myriad of organizations according to many authors (Avolio & Bass, 2002; Bass & Avolio, 1994; Bass & Riggio, 2006; Day, 2000; Kenneth Leithwood et al., 2000b; Prater, 2004; Siegrist, 1999; Wilmore & Thomas, 2001). Furthermore, it has been argued that transformational leadership is very effective because it moves followers from compliance to an active commitment to the vision of the leader (Avolio & Bass, 2002; Bass & Avolio, 1994; Bass & Riggio, 2006). Therefore, this researcher analyzed the correlation between the leadership style of the director and the effective placement of career center graduates for all of the leadership styles and the sub-scales of transformational.
Summary of the Findings

The data received from the sample of 18 of the 57 area career centers in the state of Missouri were interesting in shedding light on a group of leaders that have received very little recognition in the leadership research. This purposeful sample of directors proved to be very homogenous, with approximately the same number of staff supervised, director experience, and superintendent experience (see Table 1).

The research did not reveal that there were any significant differences in mean between the leadership style of the director and the placement of career education completers. The mean of the surveys for high and low schools for each of the leadership styles were very similar regardless of the placement of the completers. The descriptive statistics did indicate that the predominant leadership style of the director was transformational when all raters were considered.

Therefore, the score by all raters indicated that the director was considered a transformational leader, “fairly often”. While there was no significant correlation between the leadership style of the director and the placement of career education completers, it is important to note that the leadership style for the directors was definitely strongest in the area of transformational. Since transformational leadership is a style that is highly effective for many types of organizations (Avolio & Bass, 2002, 2004; Bass & Avolio, 1994; Bass & Riggio, 2006; Day, 2000; Finch et al., 1991; Kenneth Leithwood et al., 2000b; Prater, 2004; Siegrist, 1999; Wilmore & Thomas, 2001; Wonacott, 2001) this finding is noteworthy. Consequently, transformational leadership is a strong leadership style because it moves followers from mere compliance, to a strong commitment based on the vision of the leader. Transformational leadership has been identified in the literature (Finch et al., 1991; Prater, 2004; Siegrist, 1999;
Wonacott, 2001) as a predominant style for many effective principals and in this study it was discovered that it was the strongest leadership style of directors of career centers.

The data also indicated that the director, their supervisor, and their staff perceived the director’s leadership style congruently since there was no significant difference between the responses for the leadership style of the director by these three raters. In fact, the results were not significant between directors to followers or directors to supervisors. Therefore, all of the participants had a consistent perception of the director’s leadership style compared to the self-survey of the director.

This data set revealed that the directors of area career centers demonstrate their leadership styles consistently to both the teachers they supervise and to their leaders, the superintendents that they follow. Overall, one possible reason for this is that this was a very experienced group of leaders who have honed their leadership skills over time. Moreover, this is supported by the literature, that postulates that it takes time for a leader to develop their leadership skills and it takes time to establish a clear vision and mission for an organization (Avolio & Bass, 2002; Bass & Riggio, 2006; Gene Bottoms, 2006; Brodhead, 1991; Finch et al., 1991; Lambert, 2003; Marzano, 2003; Marzano et al., 2005; Siegrist, 1999; Wonacott, 2001; Zmuda, Kuklis, & Kline, 2004). In addition, there is not a significant amount of turnover in the leadership of directors of career centers and therefore leaders can grow, mature, and develop to their strongest potential. Another factor that could explain this clarity of leadership style is that the career centers operate with a clear mandated mission and purpose.

Additionally, as indicated in Chapter Two of this paper, the mission for career education is mandated by the federal government to prepare students for entry into a career field or college. The state plan for Missouri reflects this federal mandate and therefore the directors are held
accountable for the funds they utilize and to the mission. This clearly articulated mission perhaps creates an environment in the career centers that allows transformational leadership style to be utilized. Another factor that enhances the use for a clear collective vision for career centers is the federal requirement of an advisory council to help develop the programs at the local level.

The advisory councils at both building level and the program level affect the mission of the center, by providing local expertise from industry to insure that the school equips students with the skills needed to excel in a career field or in college (Department of Elementary and Secondary Education, 2004; Goldman & Newman, 1998; Nelson, 1974; Reese, 2004). This local influence of an advisory council has forced directors to work collaboratively with community leaders, business leaders, and other stakeholders to establish a clear vision for the area career center. In such a culture, the leader would have to practice transformational leadership behavior to be effective. Conversely, a transactional or laissez-faire leader would not be able to maintain the collaborative atmosphere needed to maintain this collective vision. In addition, through the years the directors may have learned to be responsive to the needs of their followers. As the research (Avolio & Bass, 2002; Bass & Avolio, 1994; Bass & Riggio, 2006) revealed, transformational leaders build support from their followers by being attentive to individual needs of their followers. Thus the findings of this research supports the conclusion that transformational leadership occurs when there is a clear mission and vision and when leaders have time to grow beyond transactional to the more effective transformational leadership style.

The next investigation within this study was to analyze for correlations between the leadership styles of laissez-faire, transactional, and transformational to the placement of career educational completers. When examining the correlation between the leadership styles and all cases there was no statistical significance for the leadership style of the director and the
placement of career center graduates. However, through deeper analysis of the leaders from high placement schools the leadership style of transactional significantly negatively correlated to the percentage placement of graduates. Which suggest that when the leader demonstrated transactional leadership behavior the placement of the students would be affected in a less than positive way. So while transactional leadership is a necessary component of the day to day management of an organization (Avolio & Bass, 2002; Bass & Avolio, 1994), the leader in order to positively affect the outcomes of their organization should strive to demonstrate transformational behaviors.

Furthermore, transactional leaders often utilize contingent rewards and active or passive management-by-exception techniques to coerce their followers to perform (Avolio & Bass, 2002; Bass & Riggio, 2006). Thus, one further explanation for the negative correlation of transactional leadership to placement would be that as leaders become more controlling and authoritarian this naturally results in lower performance from their followers. Consequently, in many schools, the teachers are the primary locator of their past students; therefore, the teachers might choose to perform poorly on follow-up of their graduates.

The next statistically significant finding occurred when cases were selected based on low placement of graduates. Revealed in this analysis was a strong positive correlation between laissez-faire leadership style and placement of graduates. Avolio and Bass (2002), along with others (Bass & Avolio, 1994; Bass & Riggio, 2006) argued that laissez-faire is essentially a lack of leadership by a leader in an organization and is considered to be a negative leadership style. However, in this data set a caveat exists with the low placement group, the placement of students increased when the leader utilized a less active leadership style. Since the demographics for this inquiry revealed that there were highly experienced teachers in these low placement schools
perhaps the use of laissez-faire leadership style revealed because these experienced teachers were stronger leaders in their setting than the directors. However, it is important to note that the score for a laissez-faire leadership was essentially zero for all raters, supporting the fact that laissez-faire leadership was not a strong component of this set of directors of career centers, when considered in totality.

Next, the researcher analyzed the sub-scales of transformational leadership to reveal any correlations between the leadership sub-scales and placement of career educational completers. There was no significant correlation to the overall sub-scales of transformational leadership and placement of career education completers when all cases were analyzed. However, there was a significant negative correlation between the sub-scales of intellectual stimulation and individual consideration in the cases from the low placement schools.

First, in relation to intellectual stimulation, it would appear that in the low placement schools the attribute of transformational leadership was not a part of the successful placement of students. A leader who encourages new ideas and solutions for challenging problems evidences intellectual stimulation (Bass & Avolio, 1994; Bass & Riggio, 2006). Perhaps in the low placement schools, the teachers and others who may be completing the work of collecting data on student placement do not respond positively to the leaders efforts to stimulate them to discover new solutions.

The next sub-scale that was negatively correlated to placement in the cases from the low placement group was individual consideration. One explanation for this discovery would be the unique culture of a career center. The demographic data revealed these schools had a relatively low number of staff, but these teachers are usually the only member in their educational department. Thus, it would be easy for staff to become isolated and get the impression that the
director was not considerate of their individual needs, especially if they were pushing for more successful placement of graduates.

Furthermore, both intellectual stimulation and individual consideration were scored slightly lower for all directors in the study of the components of transformational leadership. Therefore, it is important to note that all sub-scales had a score of 3.0 that placed the directors in the 60th percentile for all raters in the US based on 27,285 raters (Avolio & Bass, 2004). Once again, this reemphasizes that the directors as a total group were perceived as demonstrating transformational leadership behaviors.

Moreover, this data set revealed that the component of inspirational motivation was the strongest component of transformational leadership, which is supported in the research that argued that inspirational motivation is a strong component of a successful organization (Avolio & Bass, 2002; Bass & Riggio, 2006; Prater, 2004). Inspirational motivation is the ability to sell a vision to followers, and is essential in motivating them to perform their very best to insure that the future the vision for the organization is realized (Avolio & Bass, 2002; Bass & Avolio, 1994; Bass & Riggio, 2006; Prater, 2004). Consequently, a strong vision is a major component of the successful leadership of many leaders in education today (Association for Career and Technical Education, 2006b; Finch et al., 1991; Gabriel, 2005; Goldman & Newman, 1998; Lambert, 2003; Marzano, 2003; Marzano et al., 2005; McLeod et al., 2003; Reeves, 2006; Siegrist, 1999; Wonacott, 2001; Zmuda et al., 2004).

Conclusions

From the data set, there are four major conclusions that can be drawn. First, the leadership style of the director is not different for schools that have a high or low placement of career education completers. Regardless of the placement, the directors were rated strongly
transformational by all raters. So while transformational leadership style has been found to be related to successful businesses and educational systems by many researchers (Bass & Avolio, 1994; Bass & Riggio, 2006; Finch et al., 1991; Prater, 2004) the findings of this study did not support this reality.

Second, it can be concluded from this data set that the leadership style of the directors was clearly demonstrated to both their superintendents and staff perhaps due to the long tenure of the director or to the clear vision of the centers. This conclusion is supported in the literature by researchers (Avolio, 1999; Campbell, 2003; Finch et al., 1991; Leithwood & Riehl, 2003; Marzano et al., 2005) who argue for leaders in education to be clear in their leadership personas and free from hypocrisy. These directors appear to be leaders who exhibited transformational leadership styles to both their supervisors and to their followers.

The third conclusion from the research was that transactional leadership if used too often might negatively affect the placement of students. Strong transactional leadership might well lead to a lower placement of career education completers. In addition, if the leader demonstrates laissez-faire leadership behaviors others might assume the leadership role regarding accomplishment of student outcomes, in this case student placement.

The last analysis within this study revealed that transformational though the highest rated leadership style for all directors had two sub-scales that were negatively correlated to placement in the low placement cases. Perhaps it can be suggested from this data set that intellectual stimulation and individualized consideration would both decrease as the percentage placement increased thus indicating that these two components of transformational leadership style are not as important as the other sub-scales to the placement of students.
Implications for Practice

Successful leadership of area career centers will continue to be a necessary component of career education at the secondary level in Missouri. In addition, the full range of leadership is a viable model with a valid and reliable survey instrument administered by the internet to provide timely feedback to directors (Avolio & Bass, 2002, 2004; Bass & Riggio, 2006). By a careful analysis of the responses of their staff, their supervisors, and colleagues, a director could objectively analyze their strengths and weaknesses in the full range of leadership model. This would allow them to enhance their personal professional development to address their weaknesses and to accent their strengths. As this research revealed, any analysis of the leadership styles by the MLQ (5X) has to be conducted at the sub-scale level for each of the leadership styles to reveal significant relationships.

The use of such a tool as the MLQ (5X) could also be valuable for the staff of an area career center. Many authors are calling for the growth of teacher leaders to fill the ranks of an ever-aging population of leaders in career education (Reese, 2002; Wonacott, 2001; Zirkle & Cotton, 2001). Through these analyses the teachers and directors could work together to develop professional development activities that would allow the aspiring administrator to understand the behaviors necessary to be a transformational leader and to develop a personal plan of action to strive toward developing those behaviors.

Consequently, Universities that are preparing classes for leaders in career education could use the full range of leadership as an evaluative tool, to identify their students’ leadership style and develop class activities, to develop their strengths, and to address their weaknesses in leadership. Furthermore, the full range of leadership would be a possible lens to view leadership research and to develop leadership curriculum. Therefore, the full range of leadership and the use
of the MLQ (5X) would be a viable instrument for all leaders in career education as it provides for a common leadership model to analyze and implement leadership in career education.

**Recommendations for Future Research**

The need to look at the leadership style of directors of area career centers continues to be of importance to the education of secondary students. Researchers should continue to focus their efforts in this important educational arena because career education is a vital economic and educational force in education (Catri, 1998; Gray, 2004; Hull, 2005; Lynch, 2002; Office of Vocational and Adult Education, 2003). While there have been many studies conducted regarding the leadership of principals in secondary high schools, there remain few studies that examine the unique challenges of directors of secondary area career centers. Thus examining career centers across the nation continues to be a viable recommendation.

Moreover, the leadership style with the full range of leadership model is a valid variable for any study into the leadership of an educational agency (Avolio, 2005a; Avolio & Bass, 2002; Bass & Avolio, 1994). It allows a researcher to analyze leadership with a clear lens of these three types of leadership, laissez-fair, transactional, and transformational. And since the important link between leadership of the director and student performance continues to be important in the view of many stakeholders, the challenge will continue to be how to measure that relationship (Department of Elementary and Secondary Education, 2005; High School Reform Study Group, 2006).

In addition, the need to continue to look at the sub-scales of both transactional and transformational will continue to be important. Indeed, though beyond the scope of this research, a careful analysis of the sub-scales of transactional leadership compared to cases for high and low placement, might enlighten researchers on this leadership style. Furthermore, research into
all the sub-scales and their correlation to student success, could be a valuable part of any future research projects.

Lastly, further research should be conducted into the culture of the area career center. Transformational leadership was a strong component of this purposeful sample of directors. A qualitative study to determine the culture of the career center and the possible correlation to the leadership style of the director could yield valuable data pertaining to this area of career education. This qualitative component could be the analysis of the open-ended questions on the MLQ (5X) that would be coded for the subscale of the leadership styles and allow for a richer description of the leadership style of the director. Since a unique culture exists in the field of career education, it could lead to rich landscape for further research efforts.

**Summary**

The purpose of this research was to determine if there was a correlation between the leadership style of the director and the success of graduates based on their success placement upon graduation. While no correlation was revealed in this data set, the researcher did discover that transformational leadership style was demonstrated among the sampled directors. It is suggested that the full range of leadership model and the MLQ (5X) instrument has a definite place in career education. The ability to look at leadership on a continuum within a leadership style or sub-scale is practical and effective research. In addition, the ability to have a common terminology for leadership discussions could influence and perhaps enhance career education at the state and local level. While it is discerning to discover that directors are drawing close to the end of their careers as a group it was revealed in this research that this group of leaders need to be further investigated. Furthermore, this research revealed that it would be critical for the leadership of career education to develop new leaders who have strong transformational
leadership strategies. Only then, will these leaders be able to guide career centers into the ever-changing landscape of the 21st Century.
Hello Mr. /Mrs. (Superintendent or Director) my name is Oscar Carter and I am the Assistant Director at the Columbia Area Career Center. My telephone number is 573-214-3800 ext. 29401 and my advisor is Dr. Barbara Martin and her telephone number is 660-543- 8823.

I am conducting a research project into the leadership style of the Directors for career centers in the state of Missouri and it’s correlation to the effective placement of completers of the area career center graduates.

The study will involve an online survey of you, your director, and your career education staff, conducted by Mind Garden Inc. All participants will sign a consent form and then Mind Garden Inc. will contact them with a location, a log on, and instructions on how to complete the online survey. The survey will take approximately 15 minutes to complete.

I would like to send you an informed consent letter that will explain the process in more detail and all information from this survey is confidential. The researcher will not share any data collected with any other agencies or researchers. All data is destroyed after five years.

Any subjects are free to withdraw from the study at any time, even after the surveys are completed.

If you have any questions after receiving the informed consent letter, please contact me immediately.

I will fax you the form and you can read, sign, and then please fax it back to me as soon as possible. The study is scheduled to start this spring after all informed consent letters are received from your school.

This research will be a strong addition to our knowledge of the leadership style of directors in our state.

What are your questions?
Thank you for your time and do not hesitate to call if you need more information.
My contact information is on the informed consent letter.
Appendix B- Superintendent’s Informed Consent

Informed Consent Form

Dear Superintendent:

Thank you for considering participation in my study on leadership styles of effective directors of career centers. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The information gathered will be useful in the leadership development of directors of area career centers.

For the study, area career centers were ranked on placement scores of 2005 completers. The study will involve a two tier analysis of the area career centers in Missouri. From the selected schools, each director and their teachers will be included in the study. All participants must be over 21 years of age and their participation will take approximately 15 minutes to complete the 45 item Multifactor Leadership Questionnaire (5X short) that was developed by Mind Garden from leadership developmental research by Bruce J. Avolio and Bernard M. Bass. The survey will be completed by the superintendent, the director, and the teaching staff at the career center to establish a 360 degree sample of the leadership style of the director. The subjects will be contacted by Mind Garden by email with a request to participate and instructions on a web site to access and their personal password. In addition each director and teacher will sign an informed consent form. Participants who do not respond will be contacted a week after the survey date with a reminder letter.

Due to the fact that Mind Garden will be utilizing email to contact and instruct the participants, I will need access to the email address of the superintendent, director, and teaching staff for the career center. Your signing of this consent form will indicate to the Department of Elementary and Secondary Education that they can release the email address of the participants to me and Mind Garden for this study. These emails will only be utilized for my research and they will not be released to any other entity. They will be destroyed at the end of the completion of the survey. In addition, no subject will be contacted if they did not sign an informed consent form.

Before you make a final decision about your district’s participation, I need to explain how your rights as participants will be protected:

1. Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of completing the survey or after it is completed. Any participants consent to participate or refusal to participate will not affect their employment in any way. Any participant may also decline to answer any questions that they feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 573-356-8438 during the day and 660-882-8712 in the evening. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations “45 CFR 46” will be upheld. This statement is not to be construed as an admission of liability.

2. Each participant’s identity and their building’s identity will be protected in reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.
Confidentiality. Participants’ answers will remain confidential, and separate from any identifying information. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after completion of this study. Participants’ identity and district or school affiliation will not be published. Data will be aggregated for statistical analysis and summarized for reporting, protecting participants’ confidentiality at all times.

This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants’ rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Oscar Carter Assistant Director Columbia Area Career Center at (573) 356-8438, by fax at (573) 882-8712, or by email at oscar573@yahoo.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

If you have questions regarding your rights or the rights of your directors’ or teachers’ as a participant in this research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

If at this point you are still interested in participating, please fill out the consent form below, and fax it to Oscar Carter at 573-214-3801. Keep this copy of this letter for future reference. Thank you for your time and consideration.

Sincerely,

Oscar E. Carter
Assistant Director Columbia Career Center

By signing the informed consent you approve for researcher Oscar Carter to contact the director of your area career center within your district along with the career center teachers. The director and career center teachers will be asked to complete the Multifactor Leadership Questionnaire. In addition, this consent form allows the Department of Elementary and Secondary Education to release the email address of the participants for purposes of administration of the online survey. Should you sign the informed consent and allow your district to participate in the study, you understand that the following safeguards are in place to protect you and your district:

1. Responses will be used for dissertation research and potential future publications.
2. Participation is voluntary, and may be withdrawn at any point during the study.
3. Your identity will be protected in all reports of the research.
4. Consent or refusal to participate in this study will not affect your employment in any way.
5. These forms will be stored with the researcher for three years.
6. All data collected will be stored with the researcher for three years.

If you agree to participate in this study, please fax this informed consent document with your name, district, area career center title, signature and date to Oscar Carter at 573-214-3801.

I, (Name ___________________), (District___________________________), (Area Career Center ________________________________), consent to participate in this research.

Signature Superintendent  Date: _______________
Progression of the Study

The following is a list of events that detail what will happen should you choose to participate in the director leadership style study.

1. Receive Superintendent’s informational letter and informed consent form for district.
2. Receive Director’s and area career center teacher’s informational letter describing the survey process and a consent form for the research project.
3. All participants will be contacted by Mind Garden and sent an invitation and directions for completing the online survey through email.
4. Participants who do not respond will receive a reminder letter within one week of the deadline for the survey.
5. Survey and interview data will be tabulated by Mind Garden and sent to the researcher in an Excel spreadsheet for analysis.
6. Data included in study will contain no personal or school names and will contain only aggregate information.
7. Study will be completed.
8. Thank you letters will be sent to participants.
Appendix C- Director’s Informed Consent

Informed Consent Form

Dear Director:

Thank you for considering participation in my study on leadership styles of effective directors of career centers. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The information gathered will be useful in the leadership development of directors of area career centers.

For the study, area career centers were ranked on placement scores of 2005 completers. The study will involve a two tier analysis of the area career centers in Missouri. From the selected schools, each director and their teachers will be included in the study. All participants must be over 21 years of age and their participation will take approximately 15 minutes to complete the 45 item Multifactor Leadership Questionnaire (5X short) that was developed by Mind Garden from leadership developmental research by Bruce J. Avolio and Bernard M. Bass. The survey will be completed by the superintendent, the director, and the teaching staff at the career center to establish a 360 degree sample of the leadership style of the director. The subjects will be contacted by Mind Garden by email with a request to participate and instructions on a web site to access and their personal password. In addition each teacher will sign an informed consent form. Participants who do not respond will be contacted a week after the survey date with a reminder letter.

Due to the fact that Mind Garden will be utilizing email to contact and instruct the participants, I will need access to your current email address. Please neatly print your current email address:

_________________________________________________________

Before you make a final decision about your area career center’s participation, I need to explain how the rights of participants will be protected:

3. Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of completing the survey or after it is completed. Any participants consent to participate or refusal to participate will not affect their employment in any way. Any participant may also decline to answer any questions that they feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 573-356-8438 during the day and 660-882-8712 in the evening. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

4. Each participant’s identity and their building’s identity will be protected in reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations ‘45 CFR 46’ will be upheld. This statement is not to be construed as an admission of liability.
This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants’ rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Oscar Carter Assistant Director Columbia Area Career Center at (573) 356-8438, by fax at (573) 882-8712, or by email at oscar573@yahoo.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

If you have questions regarding your rights or your teachers’ rights as a participant in research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

If at this point you are still interested in participating, please fill out the consent form below, and fax it to Oscar Carter at 573-214-3801. Keep this copy of this letter for future reference. Thank you for your time and consideration.

Sincerely,

Oscar E. Carter
Assistant Director Columbia Career Center

By signing the informed consent you approve for researcher Oscar Carter to contact your career center teachers. The career center teachers will be asked to complete the Multifactor Leadership Questionnaire. Should you sign the informed consent and allow your area career center to participate in the study, you understand that the following safeguards are in place to protect you and your district:

1. Responses will be used for dissertation research and potential future publications.
2. Participation is voluntary, and may be withdrawn at any point during the study.
3. Your identity will be protected in all reports of the research.
4. Consent or refusal to participate in this study will not affect your employment in any way.
5. These forms will be stored with the researcher for three years.
6. All data will be stored with the researcher for three years.

If you agree to participate in this study, please fax this informed consent document with your name, district, area career center title, signature and date to Oscar Carter at 573-214-3801.

I, (Name ___________________), (District___________________________), (Area Career Center _______________________________), consent to participate in this research.

___________________________                     Date: _______________
Signature Director
Progression of the Study

The following is a list of events that detail what will happen should you choose to participate in the director leadership style study.

9. Receive Superintendent’s informational letter and informed consent form for district.
10. Receive Director’s and area career center teacher’s informational letter describing the survey process and a consent form for the research project.
11. All participants will be contacted by Mind Garden and sent an invitation and directions for completing the online survey through email.
12. Participants who do not respond will receive a reminder letter within one week of the deadline for the survey.
13. Survey and interview data will be tabulated by Mind Garden and sent to the researcher in an Excel spread sheet for analysis.
14. Data included in study will contain no personal or school names and will contain only aggregate information.
15. Study will be completed.
16. Thank you letters will be sent to participants.
Appendix D - Teacher’s Informed Consent

Informed Consent Form

Dear Career Center Teacher:

Thank you for considering participation in my study on leadership styles of effective directors of career centers. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The information gathered should be useful in the field of leadership development.

For the study, area career centers were ranked on placement scores of 2005 graduates. The study will involve a two-tier analysis of the area career centers in Missouri. From the selected schools, each director and their teachers will be included in the study. All participants must be over 21 years of age and their participation will take approximately 15 minutes to complete the 45 item Multifactor Leadership Questionnaire (5X short) that was developed by Mind Garden from leadership developmental research by Bruce J. Avolio and Bernard M. Bass. The survey will be completed by the superintendent, the director, and the teaching staff at the career center to establish a 360 degree sample of the leadership style of the director. The subjects will be contacted by Mind Garden by email with a request to participate and instructions on a web site to access and their personal password. In addition, each superintendent, director, and teacher will sign an informed consent letter.

Due to the fact that Mind Garden will be utilizing email to contact and instruct the participants, I will need access to your current email. Please neatly print your current email address:

_________________________________________________

Before you make a final decision about your participation, I need to explain how your rights as a participant will be protected:

5. Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of completing the survey or after it is completed. Your consent to participate or refusal to participate will not affect your employment in any way. You may also decline to answer any questions that you feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 573-356-8438 during the day and 660-882-8712 in the evening. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations “45 CFR 46” will be upheld. This statement is not to be construed as an admission of liability.

6. Each participant’s identity and their building’s identity will be protected in reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

● Confidentiality: Participants’ answers will remain confidential, and separate from any identifying information. Only the
researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after completion of this study. Participants’ identity and district or school affiliation will not be published. Data will be aggregated for statistical analysis and summarized for reporting, protecting participants’ confidentiality at all times.

This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants’ rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Oscar Carter Assistant Director Columbia Area Career Center at (573) 356-8438, by fax at (573) 882-8712, or by email at oscar573@yahoo.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

If you have questions regarding your rights as a participant in research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

If at this point you are still interested in participating, please fill out the consent form below, and fax it to Oscar Carter at 573-214-3801. Keep this copy of this letter for future reference. Thank you for your time and consideration.

Sincerely,

Oscar E. Carter
Assistant Director Columbia Career Center

By signing the informed consent you approve for Mind Garden to contact you by email to participate in the on-line survey. You will be asked to complete the Multifactor Leadership Questionnaire. Should you sign the informed consent and agree to participate in the study, you understand that the following safeguards are in place to protect your rights.

1. Responses will be used for dissertation research and potential future publications.
2. Participation is voluntary, and may be withdrawn at any point during the study.
3. Your identity will be protected in all reports of the research.
4. Consent or refusal to participate in this study will not affect your employment in any way.
5. These forms will be stored with the researcher for three years.
6. All data collected will be stored with the researcher for three years.

If you agree to participate in this study, please fax this informed consent document with your name, district, area career center title, signatures and date to Oscar Carter at 573-214-3801.

I, (Name ___________________), (District___________________________), (Area Career Center ____________________________), consent to participate in this research.

___________________________
Signature of Teacher      Date: _______________
Progression of the Study

The following is a list of events that detail what will happen should you choose to participate in the director leadership style study.

17. Receive Superintendent/ Director informational letter and informed consent form for district.
18. Area career center teachers will be sent an informational letter describing the survey process and a consent form for the research project.
19. All participants will be contacted by Mind Garden and sent an invitation and directions for completing the online survey through email.
20. Survey and interview data will be tabulated by Mind Garden and sent to the researcher in an Excel spread sheet for analysis.
21. Data included in study will contain no personal or school names and will contain only aggregate information.
22. Study will be completed.
23. Thank you letters will be sent to participants.
Appendix E - Approval Form

Campus Institutional Review Board

University of Missouri-Columbia

Project Number: 1081517

Project Title: Transformational Leadership and its Correlation to the Effective Placement of Completers of Area Career Centers in the State of Missouri

Approval Date: 09-28-2007

Expiration Date: 09-28-2008

Investigator(s): Carter, Oscar Ernest
               Martin, Barbara Nell

Level Granted: Expedited

CAMPUS INSTITUTIONAL REVIEW BOARD APPROVAL FORM
UNIVERSITY OF MISSOURI-COLUMBIA

This is to certify that your research proposal involving human subject participants has been reviewed by the Campus IRB. This approval is based upon the assurance that you will protect the rights and welfare of the research participants, employ approved methods of securing informed consent from these individuals, and not involve undue risk to the human subjects in light of potential benefits that can be derived from participation.

Approval of this research is contingent upon your agreement to:

(1) Adhere to all UMC Policies and Procedures Relating to Human Subjects, as written in accordance with the Code of Federal Regulations (45 CFR 46).

(2) Maintain copies of all pertinent information related to the study, included but not limited to, video and audio tapes, instruments, copies of written informed consent agreements, and any other supportive documents for a period of three (3) years from the date of completion of your research.

(3) Report potentially serious events to the Campus IRB (573-882-9585) by the most expeditious mean and complete the eIRB "Campus Adverse Event Report". This may be accessed through the following website: http://irb.missouri.edu/eirb/.
(4) IRB approval is contingent upon the investigator implementing the research activities as proposed. Campus IRB policies require an investigator to report any deviations from an approved project directly to the Campus IRB by the most expeditious means. All human subject research deviations must have prior IRB approval, except to protect the welfare and safety of human subject participants. If an investigator must deviate from the previously approved research activities, the principal investigator or team members must:
   a. Immediately contact the Campus IRB at 882-9585.
   b. Assure that the research project has provisions in place for the adequate protection of the rights and welfare of human subjects, and are in compliance with federal laws, University of Missouri-Columbia's FWA, and Campus IRB policies/procedures.
   c. Complete the "Campus IRB Deviation Report". This may be accessed through the following website: http://irb.missouri.edu/eirb/.

(5) Submit an Amendment form to the Campus IRB for any proposed changes from the previously approved project. Changes may not be initiated without prior IRB review and approval except where necessary to eliminate apparent and immediate dangers to the subjects. The investigator must complete the Amendment form for any changes at http://irb.missouri.edu/eirb/.

(6) Federal regulations and Campus IRB policies require continuing review of research projects involving human subjects. Campus IRB approval will expire one (1) year from the date of approval unless otherwise indicated. Before the one (1) year expiration date, you must submit Campus IRB Continuing Review Report to the Campus IRB. Any unexpected events are to be reported at that time. The Campus IRB reserves the right to inspect your records to ensure compliance with federal regulations at any point during your project period and three (3) years from the date of completion of your research.
Appendix F-MLQ (5X) Sample Items

Leader Form

1. I provide others with assistance in exchange for their efforts.

2. I re-examine critical assumptions to question whether they are appropriate.

3. I fail to interfere until problems become serious.

Rater Form

1. Provides me with assistance in exchange for my efforts.

2. Re-examines critical assumptions to question whether they are appropriate.

Included with Permission from Mind Garden Inc.

www.mindgarden.com
References


Department of Elementary and Secondary Education. (2005, June 8). *Breaking ranks, moving ahead: Missouri leaders face the 21st century*, Lenoir Center, Columbia, Mo.


VITA

Oscar Carter was born March 27, 1958 at Fort Leonard Wood Missouri. He is the oldest of six sons of Vearn and Freda Carter. Oscar attended a small rural elementary school in his home town of Success, Missouri and was influenced by his fourth grade teacher Mrs. Casebeer who showed him that education could open up a much greater world than he knew existed. He continued to learn and grow under the influence of his Agriculture teacher, Mr. Fraley in Houston, Missouri and enrolled in the Agriculture Education program at the University of Missouri in Columbia, Missouri in the fall of 1976.

Upon graduation in May of 1980, he married his wife Christina and started a career as an agriculture instructor in Richland, Missouri. After two years, he left education for one year to work in the timber industry in Florida with his Father and brothers. He returned to teaching one year later to take a position at Rolla Missouri, where he taught for one year, before accepting a position at Mtn. Grove, Missouri. In his 18-year tenure at Mountain Grove, he had several state competing teams in FFA with one National Competing Soils team and three National Competing Dairy teams.

Oscar finished his Masters in Practical Arts and Vocational Technical Education from the University of Missouri in 1987. He and his wife adopted an eight-year-old son Jessie in May of 2003 to complete their family. Soon after, he enrolled in the West Plains Cohort IV of Educational Leadership and Policy Analysis in the summer of 2003. He moved and accepted a position as an assistant director at the Columbia Area Career Center in the summer of 2004, at that time he began working with the Columbia ELPA IV cohort.

Oscar and his family now reside at Boonville, Missouri. He enjoys the challenges of being an assistant director at a career center that serves over 2,000 students. His plans are to
retire someday. At that time, he will look to become an instructor at the college level and instruct in the field of educational leadership. As always, he will continue to be a lifelong learner, to look for new challenges, and to spend more time with his family.