LEADERSHIP ORIENTATIONS OF SENIOR ADMINISTRATORS
AT AMERICAN METROPOLITAN UNIVERSITIES

by

DIANE H. TREES
B.S. Clarion State University, 1975
B.S. University of Central Florida, 1992
M.S. University of Central Florida, 1996

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Major Professor: Rosemarye Taylor
ABSTRACT

Universities in the United States continue to evolve far beyond traditional concepts. While problems of an academic, economic, governmental, and educational nature beset any university, the metropolitan institution must grapple with these issues not as an individual entity but as a partner in a group of many players. Educational leadership for the American metropolitan university necessitates distinct and unique skills. This study sought to explore leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership (1991).

Using Bolman and Deal’s (1990) Leadership Orientations Survey (Self) instrument with an additional Respondent Information section, 407 surveys were sent to senior administrators at 74 institutions identified as members of the Coalition of Urban and Metropolitan Universities. Of the 245 who replied, 25 of these individuals declined to participate. Thus, the total number of useable surveys for data input in this study was 220 (54.1%) representing a total of 71 out of 74 institutions in the response data. Descriptive statistics and analysis of variance were used to analyze data.

Senior administrators in this study indicated that the human resource frame (76.9%) dominated all other frame choices. The structural frame emerged as second choice (57.2%) with the symbolic frame (55.4%) and the political frame (52.2%) in close proximity. Nearly half of the administrators (49.5%) reported multiple frame usage with the most frequent combination consisting of the human resource, political, and symbolic frames. Two personal characteristics, age and gender, influenced utilization of the frames. Younger administrators showed statistically significant higher mean scores than older administrators for both the structural and political
frames. Female administrators showed statistically significant higher mean scores than male administrators for the political and symbolic frames. Job title, years as an administrator, size of campus, and location of campus in proximity to city limits did not influence utilization of frame usage for administrators in this study.
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CHAPTER 1

RATIONALE

Introduction

Leadership, an intangible and ambiguous concept, has been defined through countless theories over thousands of years. However, the complexity of our economy and the rapid changes made possible by new technologies and research create an even more challenging environment for leaders in any genre today.

While corporate entities struggle with issues of identity and change, other organizations are undergoing similar transformations. Heimovics, Herman and Jurkiewicz Coughlin (1993) discussed the changing role of nonprofit agencies in terms of the external environment and their traditional resource dependent mode of operation. “Like businesses, they must rely on voluntary exchanges to obtain revenues, and like governments, they usually provide services with public good characteristics” (p. 425). Just as nonprofit organizations must adjust to new roles, institutions of higher education face similar adaptations. In particular, senior administrators at American metropolitan universities require unique and multi-faceted leadership skills. These universities are not the isolated academic institutions of the past. Instead they actively partner with business, local government, and other community organizations for research, student experiences, and economic development for the region. “Many urban campuses are tearing down the literal and metaphorical walls isolating them from the community and becoming an integral, almost seamless part of the city landscape” (Guilford, 1999, para.10).

As a result, leadership for these institutions encompasses far more elements than the traditional educational model. Senior administrators at metropolitan universities must share
resources with the community, seek non-academic partnerships and account for the impact of
growth both physically and economically for the local area in which they reside. Effective
leadership of metropolitan institutions influences not only the university but the surrounding
community as well. It is imperative that senior administrators who guide institutions of higher
education possess skills equal to the task of managing an increasingly complex environment.

**Purpose of the Study**

Lee Bolman and Terrence Deal proposed that not one approach can sufficiently guide
contended that multiple schools of thought must be considered and utilized by leaders dependent
upon the situation at hand. No single theory is correct in each case or all of the time. This study
sought to explore leadership behaviors of senior administrators at American metropolitan
universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership (1991).
Senior administrators included the president, vice president, chancellor, vice chancellor and
provost.

**Statement of the Problem**

Using Bolman and Deal’s (1990) Leadership Orientations Survey (Self) instrument with
an additional Respondent Information section, this study addressed the following: 1) whether
there is a dominant leadership orientation used by senior administrators at American
metropolitan universities; 2) whether these administrators use single, paired, or multiple frames;
3) whether there are degrees of difference between frame usage and selected personal,
professional, and institutional variables among these administrators; and 4) whether self-
perception of leadership effectiveness and management effectiveness differs in senior administrators at American metropolitan universities.

**Definition of Terms**

The following terms have been defined to clarify expressions, organizations, and theoretical concepts referenced in this study.

**Coalition of Urban and Metropolitan Universities (CUMU):** The Coalition represents institutions of higher education that serve urban and metropolitan regions. Principles for subscription are outlined in the Declaration of Metropolitan Universities and in CUMU bylaws (Coalition of Metropolitan Universities, 2005). It is an international organization. This study involved only those CUMU member institutions located in the United States.

**Frames:** Bolman and Deal (2003) consolidated numerous leadership theories into four perspectives which they labeled frames. The four frames which include structural, human resource, political, and symbolic frames represent distinct ways of viewing a situation.

**Human Resource Frame:** The human resource frame focuses on the relationship between individuals and organizations. The key to its effectiveness is recognizing the symbiotic relationship that exists between people and organizations and then aligning the organizational form to enable and empower people to do their jobs (Bolman & Deal, 2003).

**Leadership Effectiveness:** This term as used in Bolman and Deal’s (1990) Leadership Orientation Survey (LOS) instrument emphasizes the link between leadership and symbols and culture.
Leadership Orientations Survey (Self): This survey instrument (Appendix A) was developed by Bolman and Deal to measure leadership behavior and styles utilizing the four organizational frames. It was used with permission (Appendix B) in this study.

Management Effectiveness: This term as used in Bolman and Deal’s (1990) LOS instrument emphasizes the components of rationality and organizational structure.

Metropolitan Universities: Ernest Lynton (Johnson & Bell, 1995) stated that a metropolitan university is an institution that serves the broad spectrum of needs of the regional population. It provides programs to traditional students but also serves those non-traditional students by making higher education accessible in a multitude of ways. Proximity to an urban population and partnerships with the community are integral components.

Multi-Frame Thinking: Applying more than one frame to a situation opens a wider perspective of leadership options in an organization. Bolman and Deal (2003) state that reframing or multi-frame thinking enhances understanding of the situation at hand.

Political Frame: Individuals within an organization compete to achieve their own interests through power and influence. Bolman and Deal (2003) contend that organizational change and effectiveness depend upon the leader’s ability to use political skills as they carry out strategies.

Senior Administrators: Senior administrative levels include the president, vice president, chancellor, vice chancellor, and provost.

Structural Frame: This frame emphasizes order and hierarchy in organizations. Its core premise (Bolman & Deal, 2003) highlights clear, well understood roles and relationships with coordination and communication as key elements.
Symbolic Frame: This frame defines beliefs, faith and the personal meaning items and events hold to people as ways to understand and cope with a chaotic and unpredictable world. Bolman and Deal (2003) state that organizational culture is a key element.

Conceptual Framework

“You’ve always wondered how you’d handle it. A crisis hits. You’re the person in charge. Do you rise to the occasion? Or do you freeze up, wallow in self-doubt, or otherwise fumble your chance to shine?” (Useem, 2001, p. 126). Useem wrote these words in What It Takes, shortly after September 11, 2001. The article focused on leadership around the events of a national crisis and highlighted the characteristics of some of the more prominent people who took charge. Although this was a crisis situation, the leadership qualities Useem wrote about could apply to countless scenarios, crisis or routine, where leadership is essential. Honesty, sincerity, and integrity are principles that transcend business, politics, education or any other arena where leadership roles are vital. Useem emphasized the symbolic nature of leadership which demands that a leader be visible and an active part of engaging people on their level. Individuals should be valued in an organization with profitability not always the highest goal.

DePree (1989) described leadership as an art where leaders are responsible not only for building corporate assets and legacies but also for nurturing the people they lead. DePree contended that people are all that matter. They are the heart and soul of any organization and without them leaders have no function since there would be no need for leadership. He wrote that in many instances, leaders seem primarily concerned with leaving a legacy which includes monetary assets and achievements that exemplify and glorify the leader. DePree proposed that a
more worthwhile legacy involves presenting and offering opportunities for followers that enable them to develop meaning, joy, and fulfillment in their lives.

While leadership traits are critical factors in defining leadership, other elements such as culture appear equally as important. Roberts (1987) wrote that even Attila the Hun acknowledged the individuality of the tribes and nations he conquered. While certain rules and customs of the Hun lifestyle were enforced, other customs that did not distract from the authority of the Hun empire were preserved. Attila allowed some aspects of the culture of the conquered nation to remain in place.

Yukl (2002) described organizational culture as “the shared values and beliefs of members about the activities of the organization and interpersonal relationships” (p. 108). He professed that a major function of leadership is to guide an organization through change. Successful leaders facilitate this process by understanding the culture of an institution and then implementing the proposed change through existing cultural channels.

Another dimension of leadership, a behavioral context, appears throughout classic and contemporary literature. In order for organizational goals and objectives to be accomplished, leadership must consider behavioral aspects of followers in response to prompts from leaders. Certain styles of leadership such as participative, democratic, or authoritative elicit different types of behavior. Behavior of the leader influences behavior of the follower. Mayo (1945) explored behavioral aspects of leadership with the Hawthorne Studies. McGregor (1960) developed Theory X and Theory Y which stressed that underlying assumptions of management shape the behavioral responses of followers. Yukl (2002) contended that “leadership effectiveness depends in part on how well a manager resolves role conflicts, copes with demands, recognizes opportunities, and overcomes constraints” (p.12).
While behavioral theories dealt with the styles of leadership, contingency theories evolved suggesting that leadership behavior should change based on contextual components of a situation. Tannenbaum and Schmidt (1987) stated that leadership was much more complicated than labeling a leader as strong or permissive. A leader determines the most appropriate course of action or behavior dependent upon the situation and the talents and needs of the followers. In other words, a leader should be aware of the situation and its implications and possess the ability to change his leadership style to best match that particular situation. Hersey and Blanchard (1995) developed a situational leadership theory divided into four quadrants dependent upon task/support orientations of the leader and follower. Vroom and Yetton (1973) viewed leadership in terms of contingencies with the leader choosing the level of decision making most effective in a situation.

Transformational theories formed yet another aspect of the concept of leadership. They “remind us of leadership’s significant role in developing a vision for the future, articulating congruent strategies, aligning people with the desired change, motivating and inspiring people, and advocating change” (Carlson, 1996, p. 296). Carlson viewed charisma, vision, trust, and empowerment as key elements of transformational theory.

In addition to innumerable leadership theories, many definitions of leadership construct themselves around the difference between leadership and management practices. According to Bolman and Deal (1994), “in modern organizations, management provides consistency, control and efficiency. But leadership is needed to foster purpose, passion and imagination” (p. 77). Leaders create visions and strategies to deal with change. Kotter (1999) declared that a distinct difference between management and leadership exists. He stated that management is about coping with complexity where as leadership is about coping with change. In many instances,
management is portrayed as the mechanical and methodological components of running an organization. In contrast, leadership becomes elevated to a loftier role of empowering followers and strategizing action plans. Buckingham and Coffman (1999) contended that “great managers are not miniexecutives waiting for leadership to be thrust upon them. Great leaders are not simply managers who have developed sophistication. The core activities of a manager and a leader are simply different” (p. 63).

The concept of leadership in American higher education introduces yet another set of variables. In Cities Without Suburbs, Rusk (1995) discussed changes in urban America since World War II. After the war, urban areas were still inner city since many people had moved from rural areas in order to find work created by military industries. The suburban movement was just beginning. Rusk stated that in 1950, almost 70% of the population of 168 metropolitan areas lived in 193 central cities. By 1990 over 60% of the population of 320 metropolitan areas lived in suburbs.

This redistribution of population strongly impacted higher education. Education in tandem with social service became increasingly popular as business men became university presidents and replaced the more traditional clergy and academic appointments in board and trustee positions (Rudolph, 1990).

An educational identity crisis occurred. In an attempt to understand the massive changes and public sentiment regarding education in general, Scribner and Layton (1995) focused on the values of efficiency, quality, equity, and choice. They questioned the concept of what is good education. Who should be governed and who should benefit from a good education? Financial aspects of a good education are also crucial factors. Scribner and Layton felt that competing value systems made education a political hotbed with complexities far beyond what is good and
what is right. They wrote about the educational environment surrounding K-12. However, the identity crisis applied equally to the higher education environment. Carlson (1996) wrote that school reform or change invokes different images to different sets of people. Legislators, parents, school boards, and state appointed educational governing boards perceive change from their own frames of reference. Owens (2004) stated that education is similar to working in a sea of change. “Everything is in constant motion, nothing stands still: while action is unfolding on center stage, the foreground and the background are moving as well, all at different speeds and not always in the same direction” (p. xv). He stated that the basic challenge entails finding some type of adaptive leadership which provides stability in a volatile environment.

Perhaps Kerr (1997) best summarized the problems and opportunities currently facing higher education. In 1900, only 4% of the college-age population attended higher education institutions. By the end of the century, this percentage had reached over 40% with total enrollment rising from 238,000 students to 15 million and research by American institutions far surpassing European counterparts. However, as the twenty-first century began, Kerr described an aging population, diminishing resources, declining productivity rates and increasing global competitiveness as signs that a new America is upon us. Kerr continued by stating that the future of higher education is inscrutable and that regardless of the type, size, or location of the institution “each campus has its own distinctive future” (p. 347).

While college campuses are indeed unique, the identity of the metropolitan or urban university is shared with and affected by its nearby city. Another researcher, van der Wusten (1998) elaborated on the economic, political, and cultural impact of the university and its local surroundings. He described these institutions as performers of multiple functions which include the traditional social service efforts. However, van der Wusten also claimed that these
universities are “directing their efforts to strengthen the competitive position of the urban entities in which they find themselves. Increasingly such efforts are now formalized in university-city bridging institutions” (p. 9). Many metropolitan universities residing in suburban locations are regional in focus rather than solely restricted to city boundary locations. Severino (1996) described a typical urban education mission statement that viewed “the urban university as pastor, counselor, social worker, or consultant facilitating problem solving in the community” (p. 303). Rowley (1999) studied three central components of public service in urban universities: mission, policy and practice. He found that while many universities profess a commitment to providing services, not all hold public service as a main concern. Accordingly, no one institution can address or adequately combine academia, social service, business orientations and all the other roles attributed to the emerging identity of metropolitan colleges. Hathaway, Mulhollan and White (1995) characterized this identity struggle in terms of the change process. “Metropolitan universities are agents of change. These institutions must play a role in the transformation of society, but the transformation is not unilateral. Just as the university is a transformer of society of which it is a part, so it will be transformed by that society” (p. 13).

Not surprisingly, educational leadership for the metropolitan university requires distinct and unique skills. Presidents and other senior administrators of these institutions deal with far more than faculty, curriculum, and students. Community expectations, restrictions, and economic sanctions play an equal part in the decision making process for these leaders. Community resonance and feedback influence growth and program choice just as much as funding and conventional measurements of academic success. Romig (2001) defined leadership as “facilitating Side by Side relationships in pursuit of shared goals” (p. 43). He stated that in
order to accomplish this task, a systems model that recognized all of the various parts and how they were interrelated was necessary.

**Bolman and Deal Four-Frame Model of Leadership**

Bolman and Deal (1991) developed the Four-Frame Model of Leadership theory that employs a holistic approach to the concept of leadership. Individuals, whether they be leaders or followers, experience their world through their own preconditioned framework. Bolman and Deal referred to this framework as a lense or filter that best fits the circumstances and makes sense of what is happening. They observed that resistance to change or resistance to challenging existing mores is actually quite commonplace. When situations arise that fit the existing frame of reference, then understanding and a level of comfort take place. However, when circumstances arise that do not match or fit previously held beliefs or actions, individuals tend to freeze or immobilize. They become trapped in a distorted picture that holds them in misconceptions and discourages any attempt to see beyond the known parameters.

After examining and exploring a multitude of leadership theories, Bolman and Deal (1991, 1992b, 1995, 2003) found that even with a vision, strategy, and plan of action, no one theory covered the scope and complexity of the issues leaders must deal with in our current society. Upon reflection and through their own personal beliefs, they developed a frame theory which encourages the leader to view the problem, change, or any situation through different points of reference. Bolman and Deal (1991) called these four frames or windows the structural, human resource, political, and symbolic frames. No one frame is appropriate or accurate for implementation in every situation. Instead, the leader should consider viewing the issue through
multiple frames in order to address all aspects involved and capture the complete picture of reality.

The structural frame derived from the discipline of sociology emphasizes differentiation of clear roles and responsibilities along with integration of how these roles and responsibilities are communicated. The human resource frame derived from the fields of psychology and organizational behavior focuses on the value of people. In this frame, the organizational leader understands that the organization exists for the betterment and mutual profitability of itself and the individual. The individual does not exist for the benefit of the organization. The political frame derived from the discipline of political science considers organizations as arenas of competition over scarce resources. Conflict is inevitable and therefore constructive ways of dealing with power struggles should be sought and viewed in a positive light. The symbolic frame drawn mostly from the field of anthropology, deals with making sense of an unpredictable and turbulent environment. Bolman and Deal (1992) stated that the use of stories, myths, rituals, symbols and heroes explain what is incomprehensible or alarming.

All four frames represent different perspectives or tools to assist in the understanding of a situation requiring leadership skills. Other researchers have conducted studies utilizing Bolman and Deal’s Four-Frame Model of Leadership across a wide spectrum of populations adding to the body of knowledge on multi-frame leadership behavior (Borden, 2000; Cantu, 1997; Durocher, 1995; Flaer, 1998; Gilson, 1994; Harlow, 1994; Kelly, 1997; Wolf, 1998). This study explored leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership.
Research Questions

1. What is the dominant leadership orientation, if any, used by senior administrators at American metropolitan universities?

2. To what extent, if any, do senior administrators at American metropolitan universities use single, paired, or multiple frames?

3. To what extent, if any, are there statistically significant differences between frame usage and selected personal variables among senior administrators at American metropolitan universities?

4. To what extent, if any, are there statistically significant differences between frame usage and professional variables among senior administrators at American metropolitan universities?

5. To what extent, if any, are there statistically significant differences between frame usage and selected institutional variables among senior administrators at American metropolitan universities?

6. To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators at American metropolitan universities?

Methodology

Selection of the Population

The population of this study consisted of 407 senior administrators in four-year institutions of higher education designated as American metropolitan universities according to the criteria established by the Coalition of Urban and Metropolitan Universities. The Coalition
Appendix C) provided a list of presidents and chancellors from member institutions. Other senior administrators at these institutions of higher education were identified through use of the Coalition of Urban and Metropolitan Universities (CUMU) database and website. American metropolitan universities who are members of the coalition link their websites to the CUMU public website. With permission of the coalition, these universities were contacted for personnel and addresses of executives serving at senior administrative levels. Contact was made by exploring the institution’s website for the desired information. If the information was not listed on the site, a phone call was made to the institution’s office of the president for identification of personnel. Senior administrative levels included the president, chancellor, vice president, vice chancellor, and provost.

Data Collection

A cover letter (Appendix D), a letter of support from CUMU (Appendix E), a letter of support from Dr. John C. Hitt, President of the University of Central Florida (Appendix F), the Leadership Orientations Survey (Self), and a self-addressed stamped envelope were mailed to participants on January 9, 2006. The cover letter included a section of informed consent as designated and approved by the Institutional Review Board of the University of Central Florida (Appendix G). A follow-up letter was sent on January 30, 2006. A third and final follow-up letter and the survey were mailed on February 18, 2006, to participants who did not return the survey with the previous two contacts (Appendix H). These letters included language that stated all answers and participation were voluntary and confidential.
Instrumentation

The Bolman and Deal Leadership Orientation Survey (LOS) Self (1990) was used with permission. This survey instrument in which individuals rate themselves was developed by Bolman and Deal to measure leadership behavior and styles utilizing the four organizational frames (structural, human resource, political, symbolic). Chapter 3 of this study contains a more comprehensive review of the LOS instrument. In Section I Leadership Behaviors of the LOS, 32 statements ask leaders to rate themselves on leadership behaviors according to how often the behaviors are true based on a Likert scale. In Section II Leadership Style of the LOS instrument, six statements rank leadership style from the perspective of the respondent. In Section III Overall Rating, two statements representing an overall rating of effectiveness by the respondent in terms of management versus leadership were asked using a Likert scale along with a percentage category. Section IV Respondent Information asked the research participants nine questions regarding demographic information on personal, professional, and institutional characteristics. Personal characteristics included age, gender, major field of study in the highest academic degree completed, and the respondent’s highest academic degree. Professional characteristics included respondent’s job title and years served as an administrator. Institutional characteristics included student size of the university, proximity of the university to city location, and the most current Carnegie Classification of the institution.

Bolman and Deal (1991) pilot tested the LOS (Self) instrument on populations of students and managers to assess the internal reliability of each scale. The instrument is now in its third iteration with internal reliability reported as very high: Cronbach’s alpha for the four frame measures was structural .920, human resource .931, political .913 and symbolic .931. In this
study, Cronbach’s alpha was calculated for Section I and Section II responses of the LOS instrument.

Factor analysis is a measure of evidence of internal structural validity. Bolman and Deal (1991, 1992a, 1999) used factor analysis to determine response clusters consistent with the structural, human resource, political, and symbolic frames. Factors aligning with the conceptual definitions of the frames consistently emerged. In this study, a factor analysis of the 32 item Section I Leadership Behaviors portion of the LOS instrument was performed to confirm the grouping of the four frames as described by Bolman and Deal.

Bolman and Deal (1991, 1992a, 1992b) have collected data from leaders in schools, higher education, government, and business using the LOS instrument. Other researchers have also utilized the LOS instrument across a wide spectrum of populations adding to the body of knowledge on multi-frame leadership behavior and style (Borden, 2000; Cantu, 1997; Chang, 2004; DeFrank-Cole, 2003; Durocher, 1995; Flaer, 1998; Gilson, 1994; Harlow, 1994; Kelly, 1997; Rivers, 1996; Turley, 2002; Wolf, 1998).

Data Analysis

As survey instruments were returned, SPSS for Windows version 12.0 was used to calculate each respondent’s scores on the LOS and the Respondent Information Section. Research question 1, “What is the dominant leadership orientation, if any, used by senior administrators at American metropolitan universities?” was analyzed using frequencies and percentages from responses to questions in Section I, Leadership Behaviors. Research question 2, “To what extent, if any, do senior administrators at American metropolitan universities use
single, paired or multiple frames?” was analyzed with the same data set using frequencies and percentages to report results.

Research question 3, “To what extent, if any, are there statistically significant differences between frame usage and selected personal variables among senior administrators at American metropolitan universities?” was analyzed using analysis of variance (ANOVA). A mean scale score was developed for each of the four frames by summing individual responses to each item corresponding to that particular frame in the Section I Leader Behaviors portion of the LOS. A factorial ANOVA was performed on data obtained from personal variables age and gender to determine if a significant difference existed on frame usage based on age and gender. A post hoc analysis using Scheffe was employed when any ANOVA result indicated a significant difference existed. The personal characteristics, major field of study in the highest academic degree completed and the respondent’s highest academic degree were analyzed using frequencies and percentages to report results.

Research question 4, “To what extent, if any, are there statistically significant differences between frame usage and selected professional variables among senior administrators at American metropolitan universities?” was analyzed using the same method as research question 3. Professional characteristics including respondent’s job title and years served as an administrator were analyzed using a factorial ANOVA. A post hoc analysis using Scheffe was used when any ANOVA value indicated a significant difference existed.

Research question 5, “To what extent, if any, are there statistically significant differences between frame usage and selected institutional variables among senior administrators at American metropolitan universities?” was analyzed using the same method as research questions 3 and 4. Institutional characteristics including student size of the university and proximity of the
university to city location were analyzed using a factorial ANOVA. A post hoc analysis using Scheffe was used when any ANOVA indicated a significant difference existed. The institutional variable, the most current Carnegie Classification of the institution, was analyzed using frequencies and percentages to report results.

Research question 6, “To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators of American metropolitan universities?” was analyzed using data from Section III, Overall Rating. Frequencies, mean scores and percentages were used on the respondent self-rating responses.

**Delimitations**

This study was limited to senior administrators of metropolitan universities whose institutions are members of CUMU. Senior administrators of metropolitan universities whose institutions are not members of CUMU were excluded. Assessments of data were delimited to those CUMU senior administrators whose members responded to the LOS. Those senior administrators who are members of CUMU and chose not to participate in the survey were excluded. The CUMU membership body consists of public and private institutions of higher education. No differentiation was made between public and private four-year universities. No differentiation was made between those individuals whose position title was provost or a combined title of provost and vice president.
**Limitations**

Analyses were based on the concept of leadership as described in the LOS instrument designed by Bolman and Deal. Data collection occurred through the use of mailed questionnaires. Responses are subject to the validity of self-perception of leadership concepts.

**Assumptions**

It is assumed that respondents provided accurate and truthful responses to the LOS and respondent information survey sections. It is assumed that the respondents completed the survey instrument personally.

**Significance of Study**

In addition to Bolman and Deal’s (1991, 1992a, 1992b, 1999) research, other studies have been conducted exploring multi-frame usage in different populations. Kelly’s (1997) study of senior executives and administrators in business and industry and higher education focused on leadership orientations and frame usage. Fewer than half of the leaders studied used multiple frames of leadership. The most dominant leadership orientation was the human resource frame. Flaer (1998) conducted a frame analysis of the leadership styles of dental and medical school deans. His research showed multiple frame usage by all of the deans with the human resource frame as most predominant. Borden (2000) studied 250 Florida area campus administrators to determine the utilization of leadership frames. Her findings indicated that nearly half of the administrators used multiple frames with the most dominant as the human resource frame.

No studies of frame usage have been conducted with senior administrators at metropolitan universities. These administrative leaders require versatility and flexibility of
leadership styles in order to effectively identify problems and effectively choose the most constructive solutions. This research study was conducted in order to contribute to the growing body of knowledge of metropolitan universities and leadership components at senior administrative levels.

In addition, this study added to the existing body of knowledge of Bolman and Deal’s (2003) Four-Frame Model of Leadership. It provided data concerning the relationship of designated personal, professional, and institutional factors in regard to framing leadership practices. The results of this research are intended to suggest to current and future senior administrators at metropolitan universities the possibility of developing alternative styles of leadership using the frame theory to enhance their existing styles. Bolman and Deal (1994) stated:

If our goal is to develop leaders, we need to overhaul the training that we currently offer to administrators and managers. Rather than emphasizing rationality, control and efficiency, leadership development programs will need to highlight political strategies of bargaining, building coalitions and finding common agendas among conflicting interests. Programs will need to reinforce the importance of values, symbols and symbolic activity. (p. 93)

Summary

A plethora of explanations and theories defining leadership exists spanning a time frame of hundreds of years. New angles examining older theories appear in current literature along with completely new theories developed by contemporary scholars. One such contemporary theory, Bolman and Deal’s Four-Frame Model of Leadership (1991), has been used by a number of researchers to examine leadership style and behavior in educational environments.
Higher education in the United States began with early colonists attempting to replicate European institutions. However, American independence and individuality spawned a much different organization. Today, universities in the United States continue to evolve far beyond traditional concepts. Characterized by a blend of academe, economic sanctions, political undertones, and business ties with the local community in which they reside, American metropolitan universities require unique administrative leadership. This study explored leadership styles and leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership. Understanding of higher educational challenges coupled with knowledge of organizational infrastructure will hopefully lead to development and implementation of new strategies for successful governance and leadership of these unique institutions.
CHAPTER 2
REVIEW OF THE LITERATURE

Introduction

Chapter 2 contains a review of the literature in five broad areas. The first section discusses diverse ways of defining leadership with an emphasis on the uniqueness of American thought and a review of selected leadership theories. Section two describes some of the challenges facing higher education administrators by facilitating an understanding of past events and policies which have led to the present environment. The third section focuses on the evolution and emergence of the American metropolitan university and its individuality. Section four describes Bolman and Deal’s Four-Frame Model of Leadership theory (1991, 1992, 2003) in context with the growing need for a holistic approach to complex educational issues. The final section discusses related research utilizing Bolman and Deal’s Four-Frame Model of Leadership.

Leaders and Leadership

Leadership, an intangible and nebulous concept, perseveres as one of the most discussed and debated topics in modern literature. It has been defined through countless theories and practices over thousands of years and yet a comprehensive and collectively approved definition remains elusive. Not only is leadership intangible, but in America the founding principles of our nation add further complications to its definition (Fiedler, 1967). Our democratic form of government tempered with a fiercely independent American spirit produces conflicting individual and community values which add another dimension to the meaning of leadership.
These beautiful words, “we hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are Life, Liberty and the pursuit of Happiness” (Jefferson, 1776) were supported by men weary and distrustful of the leadership of the day. What were our forefathers thinking? What made them leaders individually and then collectively as they united the colonies in a shared vision of independence? Thomas Cronin (1987) defined leadership as “the process whereby an individual or a few select individuals are in a position to provide the vision and make things happen” (p. 35). He stated that our democratic society had to contain citizens that were willing to lead at times and yet be followers at other times. In fact, Cronin saw leadership and democracy in direct contrast with each other just as freedom and authority are warring concepts.

The Gettysburg Leadership Model (1993) devised by the Eisenhower Leadership Program described leaders as individuals who create opportunities, offer alternative solutions, build coalitions, and mold a unified vision of what the future might become. The program contends that leadership abilities and skills can be developed and are not limited to just a few special people. Smith (1996) defined leadership as a “collective action orchestrated in such a way as to bring about significant change while raising the competencies and motivation of all those involved” (p. 95). It implies a relationship between the leader and those that follow based on intentional influence. Smith contended that real leadership occurs when followers voluntarily follow due to the personal power and credibility of the leader. A leader may not necessarily hold a formal position of leadership or even be perceived as a leader by others (Burns, 1996). Astin and Astin (1996) described leadership as a process involving relationships that lead to shared action with all people possessing the potential to become leaders. In addition, their social change model of leadership development expressed the dilemma of conflicting values of individualism
and community especially unique to democratic societies. Reconciliation of those values requires an understanding and an appreciation of how collaboration and individualism can coexist and on an even deeper level, become mutually enhancing. Astin and Astin (1996) expressed this concept through a musical metaphor utilizing the distinctive American musical form of improvised jazz. A jazz ensemble democratically showcases each member periodically throughout a performance while the other members provide accompaniment. These shared sounds together form a common purpose within the group to create beautiful music just as the shared values in the leadership process forge a common purpose uniting individuals in some form of communal action.

In a similar line of reasoning, Bennis (1989) stated that Americans have always suffered from a tension between individual rights and the common good but never more so than today. “While we’ve loved and admired John Wayne striking out on his own with just a horse and a rifle, we’ve also known that the wagon train couldn’t make it across the plains unless we all stuck together” (p. 19). Struggling to find a national sense of purpose and common vision, our nation has become jaded and skeptical of its leaders. Leadership in Bennis’ view, requires self-knowledge, clear personal goals, passion and integrity.

Is it possible to honor and even celebrate diversity and the uniqueness of each person and at the same time work within a collaborative group setting? Rand discussed individualism versus collectivism in her book, *Anthem* (1937). Rand grew up in Soviet Russia at a time where leadership existed as a dictatorship with power exercised as force. She subsequently defended passionately the right to make life a reason unto itself with the individual striving and reaching for the highest possibilities and goals. The concepts of freedom and authority challenge leaders and followers to accept diversity within the boundaries of common interests for everyone. Rand
addressed individualism versus collectivism in a series of novels that underscore the necessity of
taking a stand for individual beliefs and values. She proposed that the greatest guilt in
organizations which permeates through society is the acceptance of allowing others to take
leadership roles by default. As individuals, leadership should be applied to oneself with ethical
and moral considerations for individual actions. In this way, Rand contended that everyone
could achieve fulfillment and maintain individual integrity.

Burns (1996) stated that the leadership forest of literature has become tangled and
confused. Most scholars tend to identify with a particular leadership theory often at the expense
of losing sight of the historical context and global aspects enmeshed in leadership studies. He
cited “the dissection of every conceivable trait, behavior, historical/political/economic context
and follower/group characteristic” (p. 149) as just a few of the variables associated with the
analysis of those we deem to be leaders and what makes them successful. Current literature
abounds with old and new theories approaching leadership from a multitude of psychological,
behavioral and situational models. Autobiographies of successful individuals who have led other
individuals, communities, or organizations through periods of unrest to periods of great
prosperity fill the bookstore shelves. Organizational successes highlighting management
practices and corporate infrastructure also feature largely in the study of leadership. All profess
to have some clue or key element essential in understanding why leaders deemed successful
actually succeed and how these elements predict successful leadership for others.

Fiedler (1967) stated that in many instances success or failure of an organization rests on
the perception of the quality of its leadership. There is a wide-spread belief that prosperity may
be dependent upon the individual who leads as evidenced by the titles, honors, salaries, and
bonus packages offered to top executives across all types of organizations. This assumption
implies that an individual who succeeds in one arena should have characteristics that ensure success in other venues. However, as Fiedler (1967) pointed out, “we must ask whether and to what extent the leadership style of the manager at the second and higher levels of the organization will, in fact, influence organizational effectiveness” (p. 236).

For example, several years ago, Iacocca (1984) wrote a best selling book, *Iacocca: An Autobiography*, chronicling his journey from fired Ford Motor Company executive to revered president and CEO of Chrysler Corporation. Iacocca gave a detailed account of how he completely turned around a nearly bankrupt organization and turned it into the leading American car manufacturer in the late 1970s. The book inspirationally related Iacocca’s methods, management style and work ethics and came to be cited as timeless examples of successful leadership. Iacocca’s autobiography became the first prototype of a successful CEO turned celebrity figure explanation of leadership. It captured the American spirit of independence, determination and vision but did it truly capture the essence of leadership (Collins, 2001)?

Another insight into leadership from an individual perspective came from former New York City Mayor Rudy Giuliani who shared his personal philosophy in a book aptly entitled *Leadership* (2002). While not autobiographical, it does set forth certain principles that Giuliani professed to have acted as guidelines throughout his career which include his tenure as mayor of New York and his leadership role in the events following the terrorist attacks of September 11. Useem (2001) described Giuliani as a visible, accessible leader who listened to those around him and stuck to the facts. Characteristics he also employed as mayor in his campaign to clean up New York City. Are these characteristics of leadership or personal traits of a dynamic person in a leadership position?
Another approach in the quest to define leadership takes the form of organizational scrutiny. Why do certain companies succeed or prosper when others fail or remain mediocre? DePree (1989) outlined the success strategy of the Herman Miller Company in *Leadership is an Art*. The Scanlon Plan implemented by the company more than 50 years ago promised employees a portion of the financial gain if they suggested ways to improve productivity. DePree claimed that the art of leadership and the philosophy of top management were “liberating people to do what is required of them in the most effective and humane way possible” (p. xx). High profit margins, low employee turnover and national recognition proved this to be a winning strategy for Herman Miller but is this a transferable strategy for other companies?

Collins (2001) evaluated eleven Fortune 500 companies for their rise from good organizations to great organizations. He identified key elements that allowed them to maintain their ‘great’ ranking for at least a minimum of 15 years. Collins referred to this communal strategy as the Hedgehog Concept adapted by Berlin (1953) from the Greek fable of The Hedgehog and the Fox. The hedgehog doggedly pursued one focus only. While the fox pursued many areas, he did not know any of them well which allowed the hedgehog in its simplicity to ultimately prevail. In a business sense, this philosophy embraced three components supported and endorsed by top level leadership in each of the corporations reviewed by Collins. He found top leadership focused on: 1) passions of their people; 2) what the company does best; and 3) understanding of what drives cash flow or the economic engine, however unlikely, of the corporation. In addition, he found that all of these companies possessed what he called Level 5 leaders defined as leaders who “channel their ego needs away from themselves and into the larger goal of building a great company” (p. 21). Collins argued that these principles applied equally to other types of organizations whether they be commercial, non-profit, or educational.
Yet another avenue of thought pursues historical and contemporary theories as a means of defining leadership and the role of a leader. When leadership was initially explored in a formal sense, theorists believed that certain physical, personal, and social traits personified the essence of leadership. Stogdill (1974) reported in *Handbook of Leadership* that certain traits did indeed emerge as consistent markers of superior leadership. However, Stogdill (1995) clearly stated that further studies indicated leadership to be more than a function of personality traits. Situations and behavioral patterns persistently played a role in functional leadership as well as traits. Yukl (2002) stated that theorists saw these definitive traits as endowments possessed by certain individuals who then became leaders. These traits did not guarantee effective leadership but were considered a good base or foundation. Controversy existed as to whether these traits were inherent in a person’s personality or if they could be taught or acquired in some manner. Kirkpatrick and Locke (1995) identified six core traits of leadership: drive, the desire to lead, honesty, confidence, cognitive ability, and the knowledge of business. However, they concluded that these “traits only endow people with the potential for leadership” (p. 141). While possession of these traits clearly gives an advantage to the individual, it does not necessarily follow that the individual will have the expertise, courage, or drive to pursue a leadership role. It was evident that although many of these characteristics are present in good leaders, other elements such as situational and behavioral factors influenced leadership outcomes.

Behavioral theorists proposed a concept that the leader must consider the behavior of his followers. Knowing the attributes or level of need of the follower, a suitable style of leadership can then be employed. Behavior of the leader influences behavior of the follower. Mayo (1945) conducted the Hawthorne Studies in 1911. His study showed that people responded to attention from management with increased productivity. It was deduced that the employees responded to
feeling valued by the employer as to their opinions of what working conditions were best. These feelings of value generated feelings of loyalty which produced more goods. Even though this is the common assumption, Owens (2004) stated that the real discovery was that the group bonded together and took pride in themselves and what they were accomplishing. As a result, productivity remained high even when the experiment returned the employees to their original conditions. Behavior of the employer produced a change in behavior of the employee.

More behavioral theories emerged in the 1950s after World War II ended and the economy boomed. It was thought in order for organizational goals and objectives to be accomplished, management must consider behavioral aspects of employees in response to prompts from management. Certain styles of leadership such as participative, democratic, or authoritative elicited different types of behavior from employees. McGregor (1960) proposed that managerial expectations of employees determined the quality and level of productivity of those employees. Theory X, the conventional view, placed the needs of the organization as most important. This style provided guidelines and structure with a more centralized mode of management. Theory Y placed the needs of the people first. This style allowed employees more flexibility and autonomy to achieve work and personal goals. McGregor concluded that when the needs of the workers reached an adequate level of subsistence, then Theory X no longer served as a motivating factor in productivity. Management held the responsibility to recognize and alter its leadership assumptions in order to shape behavioral responses of workers appropriately. However, neither Theory X or Theory Y proved productive on a long term basis when used as the sole means of leadership.

While behavioral theorists captured more of the essence of leadership, they still did not fully explain leadership. Contingency theorists stated that in addition to traits and behavior, the
environment also contributed to leadership outcomes. While behavioral theories dealt with the styles of leadership, contingency theories evolved suggesting that leadership behavior should change based on contextual components of a situation. Different situations require different styles of leadership. Tannenbaum and Schmidt (1987) believed that leadership was much more complicated than categorizing a leader as strong or permissive. They proposed that a leader determines the most appropriate course of action or behavior dependent upon the situation and the talents and needs of the followers. In other words, a leader should be aware of the situation and its implications and possess the ability to change his leadership style to best match that particular situation. Vroom and Yetton (1973) viewed leadership in terms of contingencies with the leader choosing the level of decision making most effective in a situation. They proposed five styles of leadership ranging from autocratic to completely participative, any of which may be equally effective dependent upon the environment. A seven-question decision tree guides the leader to diagnose which leadership style best fits the situation. Hersey and Blanchard (1995) developed a situational leadership theory divided into four quadrants. They studied task and relationships as central components to effective leadership with the thought that there is no single universal leadership style for success. They stated, “In managing for effectiveness a leader must be able to diagnose his own leader behavior in light of his environment” (p. 148). The most effective leader chooses the correct blend of support and task orientation dependent upon the situation and the follower.

Transformational theories formed yet another aspect of the concept of leadership. Prior to this line of thought, leadership research and philosophy revolved around two dimensions almost at opposite ends of a continuum (Owens, 2004). The traditional model viewed leadership as hierarchical and driven by a designated leader who emphasized structure and productivity. In
contrast, the other dimension emphasized relationships and collective efforts between the leader and the followers. James MacGregor Burns influenced most of the theories on transformational leadership. In 1978, Burns wrote a book outlining and contrasting the concepts of transactional and transformational leadership. Burns stated, “I define leadership as leaders inducing followers to act for certain goals that represent the values and motivations—the wants and needs, the aspirations and expectations—of both leaders and followers” (p. 19). Transactional leadership occurred when a leader influenced behavior of a follower by means of an exchange process. This exchange could be positive or negative and take the form of money, praise, rewards, or consequences. Transformational leadership, on the other hand, entailed an engagement between the leader and the followers which raised both to higher levels of motivation and action. Burns’ definition of transformational leadership contained elements of morality and values. Depree (1989) embodied this strategy with the Scanlon Plan in the Herman Miller Company.

Burns (1978) also described another ultimate and higher level of transformational leadership referred to as transcending leadership. He cited Gandhi as an example of “dynamic leadership in the sense that leaders throw themselves into a relationship with followers who will feel ‘elevated’ by it and often become more active themselves, thereby creating new cadres of leaders” (p. 20). Manz (1998) made the distinction in The Leadership Wisdom of Jesus: Practical Lessons for Today that this type leader is not only visionary but actually empowers his followers to do great things themselves. In a business mode Manz suggested that by putting profit and maximized returns second to the welfare of employees, organizations can rise to top performance in the long run.

However, it is important to recognize that both transactional and transformational leadership styles have proven successful and appropriate depending upon the circumstances. A
balance of styles and overall awareness of the situation or organization creates a multi-dimensional framework for deciding the best course of action. Collins (2001) cautioned that a strong charismatic personality often found in transformational leaders can actually become a liability. When followers become enthralled with the person more than the concept, factual presentation of reality may be limited to what the followers believe most closely reflects the leader’s vision. No one likes to be the bearer of bad news. Collins referred to this as the Stockdale Paradox named for Vice Admiral Jim Stockdale and his enlightening book, *In Love and War: The Story of a Family’s Ordeal and Sacrifice During the Vietnam Years* (Stockdale & Stockdale, 1990). Stockdale emerged sane from the horrors and years as a Vietnam prisoner of war by living the philosophy that ultimately his faith would prevail in the end. He would be united with his family regardless of the difficulties. Stockdale never set a mental time table for release but maintained conviction that no matter how bleak reality became, his reality culminated with return to the United States and his loved ones. Collins claimed it is essential in good leadership practice to receive and accept the facts as did Stockdale no matter how daunting they may be while simultaneously maintaining the optimism necessary to fulfill whatever vision has been presented. Collins stated that effective leaders employ methods that develop strategies meeting the needs based on reality but specific to their organizations or people.

In yet another attempt to understand leadership, problem solving techniques of acclaimed leaders combined with systems theory have been examined. Systems theory explains how individual components of an organization interact and relate (Birnbaum, 1988; Owens, 2004). In turn, they change each other along with the organization. Boundaries between components are fluid allowing communication and information to constantly pass through. Senge (1990) applied systems theory to business organizations. He described five disciplines as necessary elements
for active and continual learning in an organization. The fifth discipline, systems thinking, requires a leader to view situations as non-linear. Relationships twist, flow, loop back and flow again in order to balance each other. They cannot be identified as simple cause and effect. Utilizing a systems approach, Nadler and Hibino (1994) devised a method they called Breakthrough Thinking. Acknowledging that the environment we live in constantly changes, they developed seven key principles to help analyze situations with the focus placed on the best solution and not dwelling on what caused the problem. Nadler and Hibino referred to Breakthrough Thinking as “the powerful combination that derives from an awareness of larger ends, bigger solutions, and constant change, while including the people, elements, dimensions, and attributes necessary to arrive at the best results” (p. 3). It is a holistic approach that treats every problem as unique. Romig (2001) stated that “leadership involves many components: leader, contributors, their interactions, and their relationships to team, department, organizational, and outside influences. What is needed is a systems model that describes how all these parts are intimately related” (p. 38).

Another controversial aspect of leadership involves understanding its relationship with management. Kouzes and Posner (1987) stated “the unique reason for having leaders—their differentiating function—is to move us forward. Leaders get us going someplace” (p. 33). Leadership connotes change, innovation and at times even revolution. Whereas, management brings to mind thoughts of stability and maintenance. Some researchers (Bennis, 1989) believe the terms leadership and management are mutually exclusive and that understanding the differences between the concepts plays a vital role in the development of leaders. Bennis cited our educational system as a prime example of one much more in tune with management than leadership. It primarily teaches training at the expense of educating with a focus on efficiency
and getting the job done. He stated, “training is good for dogs, because we require obedience from them. In people, all it does is orient them toward the bottom line” (p. 47). Opting for short-term solutions may temporarily fix the problem but these solutions will not endure over time. Buckingham and Coffman (1999) determined that a great leader looks outward toward the future as a visionary and activist. A great manager, looks inward as to what unique talents individuals within the corporation possess for better performance. Kotter (1999) claims this debate remains an enormous problem in leadership literature. The terms are used synonymously when they are not synonyms or the terms are frequently misused in place of each other. Kotter (1999) viewed the concepts as complementary systems with distinctive goals and methods. He purported “the fundamental purpose of management is to keep the current system functioning. The fundamental purpose of leadership is to produce useful change” (p. 11). Romig (2001) proposed that leadership is not dependent upon organizational hierarchy and that effective leaders create results from any level within the organization. He viewed managerial influence as occurring only through formal lines of authority and structure. Yukl (2002) stated the issue is not the difference between the two concepts but the degree to which they overlap. The concepts may at times be incompatible if one is more dominant than the other or if they are not integrated harmoniously within the organization. However, both are equally necessary with the correct balance depending upon the organizational situation.

Bolman and Deal (1994) contended that although an individual can be both an effective manager and a leader, they are separate concepts and address separate issues. Leadership is necessary when an organization no longer operates in its intended capacity and a major change or overhaul looms on the horizon. Management on the other hand, according to Bolman and Deal (1994), focuses on “tinkering with the current system to make it work better” (p. 79). The
results of a study completed by Bolman and Deal in 1991 indicated clearly that leadership and management were seen by participants as distinct concepts with areas of overlap. In the study, the two measures relating to self-perceived effectiveness as a leader and as a manager were highly correlated but “associated with different combinations of frame orientations” (p. 524) as defined by Bolman and Deal’s Four-Frame Model of Leadership. It would seem that leadership and management are distinct concepts, both vitally important, symbiotic in nature and overlapping in spheres of influence. The only unanimous assumption is that leadership without effective management cannot sustain an organization through change, growth, and internal evolution.

As the management debate continues, so does the quest for a comprehensive definition of leadership. Perhaps the best conclusion and possibly the only conclusion to be drawn about leaders and leadership is that it takes all kinds to make vastly different individuals, communities, and organizations effectively exist in harmony. Cronin (1987) said:

We shall know we are making progress not when we discover or produce a handful of charismatic Mount Rushmore leaders, but when we can boast we are a nation no longer in need of those-larger-than life great leaders because we have become a nation of citizens who believe that one person can make a difference and every person should regularly try (p. 38).

**Leadership Challenges in Higher Education**

Leadership in educational institutions today prompts a variety of responses many of which are controversial or negative in thought. What makes this topic provoke such emotional public outcry and generate such pessimistic press and media coverage? How, in turn, can leadership lead in such a turbulent and depressing environment? Fowler (2000) began chapter two of, *Policy Studies for Educational Leaders*, with a quote from *The Wizard of Oz*. “Toto, I
don’t think we’re in Kansas any more.” She was referring to changes in educational policy that have taken place over the past few decades. These changes have catapulted education from a safe and predictable mode into a wildly unstable and hostile environment. In order to understand the challenges facing educational leadership today and develop some constructive framework to provide solutions, it is necessary to understand the progression and deterioration of public sentiment which has led to this point.

The American research university emerged in the late 1800s when graduate schools became part of the curriculum. Honigman (1997) contended that from 1920 through 1960, higher education became a multi-purpose, multi-structured entity attempting to satisfy scholars, scientists, parents, and students. “The delicate balance between research, teaching, paternalism, and the collegiate world was maintained precariously” (p. 17).

Clark Kerr while president of the multi-campus University of California wrote The Uses of the University (2001) in which he explained the now famous concept of “multiversity”. Kerr contended that the university began as a single community consisting of students and faculty. By 1963, it had morphed into numerous communities sharing a common name and related purposes. With a booming post World War II economy, the federal government began to sponsor university research through grants, appropriations, and additional student financial aid (Altbach, 2005). In his inaugural address as president of the University of California, Kerr (1958) stated “the world has changed--from an emphasis on tradition to an emphasis on progress” (p. 4) which he felt applied equally to institutions of higher education. Curriculum shifted from an undergraduate to graduate studies focus bringing new levels of prosperity and resources for the university.
However, by the beginning of the 1980s as population demographics changed and the economy slowed, educational institutions became the target of increasing criticism and scrutiny. In 1983, The Reagan administration under the direction of Secretary of Education, T.H. Bell, released a governmental report entitled *A Nation at Risk*. This report described American educational foundations as succumbing to states of mediocrity that threatened the very future of the nation due to lack of educational leadership. President Reagan noted that he had utmost confidence in the American public to initiate reforms curtailing the negative trend.

Further fueling the downward spiral of confidence in educational leadership, lobbyists for higher education came under fire. The funding practice of academic earmarking brought national attention to major universities forcing a number of administrators and presidents to resign from their positions. Student loan defaults led Congress to pass legislation demanding accountability. Cook and McLendon (1998) argued that “it was probably the allegations of misuse of federal research money that became the single most damaging and far-reaching public embarrassment for higher education” (p. 37) in the 1990s. As tuition rates increased, they reported the very value of a college education was questioned. Was it a worthwhile return on investment for the American public when so many other societal needs and social causes existed? Scribner and Layton (1995) looked at how contradictory values and beliefs affected educational politics and policies. They examined five questions that seemed to be at issue throughout any period in public school history.

1. Who should go to school?
2. What should be the purposes of schooling?
3. What should children be taught?
4. Who should decide issues of school direction and policy?
5. Who should pay for schools? (p. 5)

They argued that there are no answers or solutions to these issues “because they rest on underlying tensions among competing values. In other words, they cannot be resolved in a pluralist democratic system” (p. 5). Scribner and Layton focused on the values of efficiency, quality, equity, and choice. They questioned the concept of what is good education. They concluded that competing value systems made education a political hotbed with complexities far beyond what is good and what is right and that this internal struggle dated back to the founding of our country not just the present turbulent times. These values encompassed all levels of educational structure from K-12 through four-year universities.

Attempts to question or refute the governmental report met with skepticism and hostility. Berliner and Biddle (1995) disputed the findings of Secretary Bell’s committee calling its conclusion of educational mediocrity a manufactured crisis. They challenged many of the allegations set forth as unsubstantiated myths not grounded in any scientific data or evidence. They insisted that in some instances, data had been deliberately misconstrued and interpreted leaving an image of educational inferiority. The authors further claimed that the attack on the American educational system was a calculated campaign to distract the public from governmental policies shuffling tax dollars to corporate entities in the form of tax incentives. Political strategies developed to combat the real issues that masked governmental attempts to defer tax dollars for other purposes. Skyrocketing double digit inflation and an overabundance of governmentally funded school programs developed in the liberal 1970s to assist the poor and disadvantaged produced a mounting drain on the slowing economy. Schools had become community centers rather than educational centers. As the economy tightened, fewer funds were available for far too many programs that never should have qualified as educational priorities in
the first place (Berliner & Biddle, 1995; Carlson, 1996; Cook & McLendon, 1998; Fowler, 2000). The political strategy consisted of discrediting the recipient of these funds, namely the educational system. If the schools were under pressure for reform and accountability, then tax dollars could be diverted until the educational system and its leaders proved responsible and worthy once again.

Berliner and Biddle (1995) concluded that the American educational system was not in the state of disarray and confusion as indicated in Bell’s report. In addition, they argued that the failure of the educational system in some areas was a direct result of societal problems imposed on schools. Further, major critics of education were using the report sanctioned by the president to further their own political goals “by scapegoating educators” (p. 4). Many educators professed that American universities once regarded as internationally superior now found themselves viewed as costly and inefficient liabilities (McMillen, 1991).

No matter what side was right, accurate, or honest in its assessment of the educational system, the damage had been done. Public perception of the American educational system became so doubting and distrustful that school leadership was criticized no matter what suggestions for improvement were offered. This brief summary of the radical change in educational philosophy, policy, and perception over the last few decades explains some of the difficulties and complexities facing educational leadership today. Fowler (2000) stated that educational leaders have been defined as part of the problem. As a result, business leaders constitute role models and provide input for solutions to educational problems further alienating the educational leadership community. Language used to describe higher education includes references to the higher education industry, the increasing market of schools, and refers to students as consumers (Tierney, 2004). In fact, comparisons of the university president in
today’s environment with that of the CEO of a major corporation abound with both positions regarded as requiring similar skills and responsibilities (Galarza, 2006). Many of the leadership models previously discussed are rooted in a business arena with implied adaptability to an educational setting. Birnbaum (1988) stated that this crossover from business to education may seem applicable but in reality the two entities are vastly different. He cited tenured faculty, academic freedom, and alumni as just a few of the major deviations. Weingartner (1996) also saw colleges as different organizations. Providing facilities for students in terms of both learning and extracurricular activities and a duty to include and engage alumni further delineate the differences. Birnbaum postulated that leaders in education “are subject to internal and external constraints that limit their effectiveness” (p. 29) while the business community is not limited by the same factors. Birnbaum stated that other conceptual frameworks are necessary in educational leadership.

Again, it is crucial to understand the challenges facing the higher educational community before attempting to find solutions or models for guidance. Negative public perception combined with a lack of confidence in the ability of leadership to correct perceived problems constitutes an enormous hurdle. Educational leadership must operate within this atmosphere and environment. Three overlapping areas of influence repeatedly emerge through the literature with a value based common denominator. What responsibility does leadership have to the nature and mission of a university versus the obligation of social responsibilities to the public? Zusman (2005) stated the discord between the ideals of equality and merit, the balance between teaching and research, and the demand that universities serve as a resource for economic growth form this common denominator. Fowler (2000) succinctly described three broad areas that impact policy for higher education: economic changes, demographic changes, and ideological shifts.
The economic recession of the late 1970s coupled with conservative public opinion resulted in voter trends discouraging new taxes and tax increases. Despite the renewed economic growth since that time, public opinion remains skeptical and wary of new taxes. In an effort to maintain a revenue stream for existing and competing programs, politicians cut and reduce spending on optional public service programs (Fowler, 2000; Kerr, 1997). Education arguably fits this category. Zusman (2005) declared “both policy makers and the general public increasingly view higher education as primarily a private benefit rather than a broader social good” (p. 132).

While the threat of homeland terrorist attacks channels essential funds to our military, at the same time, it depletes former revenue sources for education (Fowler, 2000). In addition, the distribution of wealth in the United States has become even more unbalanced with a sharp division resulting by class, race, and ethnicity (Fowler, 2000; Johnstone, 2005; Keller, 2001). Many more children grow up in households labeled as poverty level which in turn affect levels of student loans and financial aid expectations. As Fowler (2000) eloquently stated, “educating poor children well is costlier than educating those whose families have abundant or adequate resources” (p. 4). Universities are charged to continue increasing enrollment and face funding deficiencies at the same time.

A second major component affecting current educational challenges involves demographic trends. University enrollment mushroomed after World War II with the Government Issues (G.I.) Bill and returning servicemen. Once again in the first decade of the 21st century, U.S. Bureau of Census projections predict another large surge in college admissions consisting of the grandchildren of the World War II veterans (Keller, 2001; Kerr, 1997). Kerr stated the projected additional 5 million students by 2010 represents an increase of one-third fold
in potential college admissions. Nontraditional students and part-time students contribute to these numbers as well. In addition, the parents and grandparents of these students comprise a two-tiered older segment of the population with the potential for enormous impact upon policy making and funding ramifications for higher education. Tier-one consists of baby boomers now in their 50s looking toward retirement years. Tier-two includes those citizens already retired who can expect a longer lifespan due to healthier lifestyles and medical breakthroughs. In 1958 the American Association of Retired Persons formed enrolling people over the age of 50. This organization provides a unified voice through lobbyists creating a powerful voting segment of the population. Because of the age and stage of life for these people, items such as medicare, social security, and pension legislation rank as funding priorities far above higher education. (Berliner & Biddle, 1995; Fowler, 2000; Keller, 2001; Zusman, 2005).

Another demographic factor of major import is the growing multiplicity of our population. Keller (2001) reported that one out of seven persons over the age of five grows up speaking some language other than English in their home. Zusman (2005) reported that more than 25% of college enrolled students were ethnic minorities representing an increase of 16% from 1980. With the shift in public sentiment that higher education is a private benefit and not a public service, state and federal funding decreases. The burden of educational costs shifts to the parents and student. Universities are then forced to consider other revenue sources with higher tuition fees a likely target (Johnstone, 2005). In consequence as Zusman related, “rising tuition costs may keep low-income students from entering or from completing college” (p. 131). In addition, the learning demands of such a diverse population enlarge yet again the responsibilities of the university. Bilingual programs, multi-cultural programs, and accommodations for varied religious practices become additional areas requiring funds (Fowler, 2000).
A third component with which higher education administrators must contend is shifting ideologies and governance structures. With balanced state and federal budgets becoming major legislative agendas, a combination of program cuts with searches for new revenues becomes the yearly norm. State governments in particular face deficits larger than at any time in the last half century (Lav & Johnson, 2003). The ideological shift from emphasis on access and equality to accountability over the last two decades manifests itself in many forms for higher education. While accountability is a reasonable expectation for any organization or system, higher education must deal with state mandates and governing board mandates which might not always be in harmony. Knott and Payne (2004) stated that “relationships that the board develops with the state legislature and the governor depend on the historical peculiarities of individual states and the people involved” (p. 27). Zusman (2005) contended that governance structures vary significantly depending upon the status and classification of the institution. For example, a public institution may differ strikingly from a private institution with even more variations possible dependent upon the state in which they reside. Campus structure whether there is a single campus or multicampus system also impacts governance configuration. Trends vary widely with success and failure across state boundaries. Zusman wrote, “In other states most notably Florida beginning in 2000, multicampus systems and boards have become political footballs—abolished, re-established, and bypassed in quick succession” (p. 146). Fowler (2000) declared that a shared ideology of skepticism of governmental proposals has united the Religious Right movement and the conservative business community. Since many universities are public institutions, they fall under governmental jurisdiction which sets them up for scrutiny and criticism by these groups who are politically powerful entities.
Understanding the copious challenges and turbulent atmosphere surrounding educational leaders, it should come as no surprise some top universities have reported difficulty finding presidential leadership. Leatherman (1995) reported that intrusive and grueling searches have become the norm “because the jobs are so complicated, the climate so political, and the scrutiny so public” (p. A23). Internal duties involve students, faculty, and staff while external responsibilities involve trustees, government officials, community leaders, and the media (Weingartner, 1996). Weingartner questioned whether the job could be adequately handled by any one person. He proposed that shedding insight on this leadership role might be the most helpful and beneficial course of action to take “with only Don Quixote left to think that such illumination could alter the fundamental situation that causes it” (p. 4). Birnbaum (1988) contended that presidents and other senior administrators influence others by recognition and awareness of organizational persona. He stated that it was a mistake to believe that only officially titled leadership positions held people that could lead. Further, the best way to develop leadership capabilities was through awareness and understanding of multiple approaches to problems. Birnbaum and Eckel (2005) found that most presidents serve terms of less than seven years. They described the complexities of the role in terms of administrative, political, and entrepreneurial functions ranging from managerial type tasks to fundraising responsibilities. Although this educational presidential position may seem similar to other business executive positions, it entails a significant difference.

Shared governance with a variety of constituents complicates the lines of and dispersion of authority. Faculty and boards of trustees represent two of the most influential groups and the president must report to both.
Kerr (2001) stated that the presidential role must follow and change with the path of the multiversity. There are two aspects of presidential leadership most often in opposition with each other: duty and survival. Duty encompasses the path and way that things should be accomplished. However, survival recognizes that employment may rest on a less influential and prestigious track. Blumenstyk (2005) reported that the problem of preparing individuals for educational presidential roles remains substantial. Not enough mentors and informal networks exist for presidents to easily obtain confidential advice. The Chronicle of Higher Education’s survey, What Presidents Think, (2005) found less than 41% of the presidents felt they were very well prepared for their first presidential job. The survey based on responses from 764 presidents and chancellors showed presidents as most unprepared for fund raising responsibilities and dealing with legislators and other political figures.

Owens (2004) cautioned individuals aspiring to become educational leaders to be aware of the divisive and contentious world in which they would work. He summarized the challenges to educational leadership and the role of leaders in education by pointing out two sources of conflict that underlie this world:

1. One source lies in the different ways in which different people can and do understand what educational organizations are and how they are best led and managed.

2. The second source lies in the pervasive disagreement among people in our society about the nature of education itself and what the goals of schooling should be. (p. 39)

These are not conflicts that have solutions. These are conflicts requiring balance and harmony aided by skilled leadership.
American Metropolitan Universities

Not surprisingly, educational leadership for the American metropolitan university necessitates additional distinct and unique skills. While senior administrators at these institutions deal with faculty, curriculum and students, they also contend with an increasingly important responsibility as a stakeholder and participant in community affairs. This type of university is committed to “interaction with the metropolitan area and adopts a leadership role in responding to community needs” (Johnson & Bell, 1995, p.3). However, proactive partnerships capitalizing on the strengths of the community and the strengths of the university also fulfill another part of its obligation to community enhancement. While problems of an academic, economic, governmental, and educational nature beset any university, the metropolitan institution must grapple with them not as an individual entity but as a partner in a group of many players.

The American metropolitan university continues to evolve from the concept and infrastructure of the American university. Neither institution resembles the English and German models upon which our early educational system was founded. Honigman (1997) referred to the American university as turning the traditions of the European models upside down. The American university took elements of the English and German traditions but used them in a different context. He claimed the resulting institution was as much a surprise to the early American educators as to the historians who reflect upon our educational evolution today. Rudolph (1990) chronicled the history of the American university following the influences of German and English colleges which had existed for hundreds of years. The English university produced gentlemen and scholars who became leaders and clergy. These schools were for the privileged class of society. German universities were more research focused and promoted
student spirit and camaraderie. Although the first universities in the United States were
patterned after their European predecessors, American universities diverged into institutions that
encompassed differences in wealth, economic levels, geographic regions, and governmental
interactions. Male students in Europe were drawn from monasteries, local courts and
surrounding land owning families. The mission or purpose of these institutions for the most part
was to train young men for public life in church and state. In direct contrast, few colonial
Americans received any formal education since survival took precedence over the luxury of
learning. In addition, an independent spirit and strong sense of individualism molded higher
education concepts with a much more democratic influence than European counterparts.

Rudolph (1990) pointed out that the deepest roots of the American university are rural. A
bucolic environment was considered the ideal habitat to foster morals, ideals, and intellectual
development. Problems of cities such as housing, sanitation, poverty, and crime encouraged
moral and character decline. Blue skies and the countryside depicted nature as pure and
unblemished as God intended it to be. Therefore, the pastoral atmosphere and a strong
commitment to the land directed American educational venues.

However, as new territories and the western frontier were settled along with the
enormous growth of towns and cities, the United States became a much more sprawled and urban
society. The Morrill Federal Land Grant Act of 1862 established colleges promising agricultural
education. It connected the common man and the concept of education as feasible, desirable, and
possible. In reality, the land grant colleges did not necessarily espouse the views of the common
man or educate farmers in agrarian methods. They did, however, through the Morrill Act “create
a new and fresh view of teaching the agricultural and mechanic arts to a group of students
different than those traditionally attending institutions of higher education” (Ziegler, p. 219).
New subjects, new students and new practices emerged. Rudolph (1990) described this transition as two different versions of a fundamental American principle. The farmer and the self-made man were both viewed as “self-reliant free men achieving self respect and security among equals. The land-grant college served both: it sustained the yeoman, it liberated the farm boy who would make his way in the city” (p. 265). The American university developed and nurtured a basic American philosophy of social responsibility. Education in tandem with social service became popular in a number of locations leading to college settlement establishments. The American university had now moved from a church-oriented college into an institution with a much broader range of programs and an outlook reflecting community and economic factors (Bok, 1982; Rudolph, 1990). Businessmen became university presidents and replaced clergy in board and trustee positions. This further encouraged a stronger awareness of community activity especially with those institutions located in urban areas.

A new type of academic institution emerged; the metropolitan or urban university. Boyer (1994) called the new American college “an institution that celebrates teaching and selectively supports research while also taking special pride in its capacity to connect thought to action, theory to practice” (p. A48). This institution no longer holds the bucolic agrarian model as the ideal. While it still provides the same role and function as the traditional academic entity, it adds community service and engagement to its curriculum and mission. It is a hybrid of academe and business. This type of institution continues to struggle and define itself as rural and city boundaries become increasingly blurred. The urban university also contends with an elitist attitude prevalent in higher education which holds scholarly pursuit as the most laudable objective while considering community involvement a by-product and sometimes even a plebian characteristic (Berube, 1978).
Ernest Lynton (Johnson & Bell, 1995) proposed that a metropolitan university incorporates a wide range of instructional needs tailored to suit the particular region in which it resides. He stated that:

It offers undergraduate as well as graduate programs not only at traditional times and places but also in ways which make higher education accessible to older students and working professionals. A metropolitan university’s regional orientation and strong commitment to serve the intellectual need of its surrounding communities and constituencies add up to an institutional model different from that of the traditional research university (p. xi).

Not only is the core concept or mission statement for a metropolitan university different than a traditional university, but the leadership style of its president and senior administrators must encompass a wider range of challenges and problems. Hathaway, Mulhollan and White (Johnson & Bell, 1995) stated that the interaction between the urban university and the surrounding community becomes a mutual exchange of information between the two thus changing many traditional concepts. Without strong leadership by the president and key administrators of the university, the full potential of this new relationship will not be recognized. The educational leader must demonstrate the advantages of community interaction, prepare unique budgetary requirements, and maintain academic excellence under extreme public scrutiny all at the same time. They cautioned that partnerships consist of separate entities that come together for a mutual cause. With a metropolitan university it is imperative that the mission and essence of education remain distinct and independent within a partnership framework. Responsibility for this lies with presidential and senior leadership positions encompassing not only administrators, but key faculty and deans as well.

Johnson (1995) discussed several leadership tasks and challenges for metropolitan universities he saw as essential for rebuilding public support. He proposed that increasing and
improving communication between the university and its neighboring community constituted the greatest leadership challenge for university administrators. He stated that open, flowing links foster a network comprised of the university, public officials, community leaders, businesses, and social organizations. This open atmosphere would then in turn encourage partnerships and discussion of mutually relevant issues. Johnson further postulated that unless higher education regained the faith and confidence of the public who elect government leaders and legislators, issues of program funding and quality would continue. He described the fiscal challenges for a metropolitan university as distinctly unique among higher education institutions due to its broader mission of community involvement.

Adding to the confusion of metropolitan university identity, Grobman (1988) charged that not all universities located in cities are urban universities. Many geographically located institutions cling to the traditional methods of educational operation. Grobman contended that it is the responsibility of the university leadership “to use full persuasive powers of the position to inform the general and specific publics of the fundamental differences in the mission of an urban state university from the missions of other kinds of postsecondary institutions” (p. 115). Grobman emphasized that urban universities are participating citizens of the city in which they are located. Multiple interactions exist with the city and the university concerned with the problems and economic health of the metropolitan region. Habiby and Amirkhanian (2003) suggested six recommendations for advancing the role of an urban university in conjunction with community involvement. These institutions should:

1. Create an explicit urban economic development strategy focused on the surrounding community.

2. Include community participation and dialogue in formulating this strategy.
3. Charge specific departments and offices with explicit economic development goals.

4. Create a high-level coordinator to oversee and advance the effort.

5. Deploy university leadership to serve on the boards of business associations, community organizations, and public-sector bodies.

6. Think long-term (p.44)

While metropolitan universities are part of the community in which they reside, they interact on many levels through the students that attend these institutions. Kerr (2001) described students in the city as older, married, vocationally oriented, and highly diversified by ethnic classifications. These students are highly competitive and instead of identifying with the university as a whole, they interact as subcultures within the overall infrastructure. These subcultures include collegiate, academic, vocational, and nonconformist categories. Kerr referred to these subcultures in his concept of a multiversity. Hathaway, Mulhollan and White (1995) characterized this identity struggle in terms of the change process. “Metropolitan universities are agents of change. These institutions must play a role in the transformation of society, but the transformation is not unilateral. Just as the university is a transformer of society of which it is a part, so it will be transformed by that society” (p. 13). They perceived a special role of the metropolitan university was to prepare students to live in a highly diversified society. Because of the historical migration of minority and disadvantaged groups to cities, these educational institutions face the challenge of assisting students not always academically prepared for college level material. Not surprisingly, service opportunities take vastly different paths when undertaken by so many different types of people. Thus, the identity of a metropolitan university shifts with its constituent members and changes shape as these members interact.
Another factor contributing to the uniqueness of metropolitan universities deals with student mobility and access. Barnett and Phares (1995) acknowledged that a large portion of urban residents are place bound. “They are geographically limited in the sense that existing family, work, and personal commitments keep them from seeking further education beyond a reasonable commuting distance from where they live or work” (p. 40). Accessibility through evening classes, weekend classes, part-time programs, and accelerated degree programs provide alternatives to traditional educational options. However, these alternatives require careful planning, resources, and visionary leadership to create them and make them work within the limited budget of today’s educational environment.

In addition, metropolitan universities often maintain multiple campuses since transportation and mobility of students are factors impeding participation. Technology plays a major role in creating both a fragmentation of the student body and at the same time providing accessibility through the concept of distance learning and on-line classes.

Other aspects of challenge and distinction for metropolitan universities exist. Brownell (1995) cited lack of extensive alumni bases and established university foundations as major impacts on funding. Collaborations, alliances, and resource sharing with other metropolitan universities in the same region are essential for growth and possibly even survival. Politically, the formation of partnerships, coalitions, and alliances with other educational institutions yields more power when pressuring state legislatures or state level educational boards to revise or expand policies. Metropolitan educational administrators deal with far more than faculty, curriculum, and student issues. Community expectations, restrictions, and economic sanctions play an equal part in the decision making process for these leaders.
Obviously, the ongoing evolution of the metropolitan university complicates attempts to understand and define successful leadership styles and strategies. Duderstadt and Womack (2003) claimed that educational leadership even in quiet less turbulent times presented multitudes of challenges. The speed with which changes are occurring compels leaders to search for new methods of decision making and guidance. They claimed that most of the educational reforms in the last decade have been reactive rather than strategic or proactive. Further, it is the responsibility of the higher educational community to formulate and lead change instead of scrambling to catch up with reforms imposed by outside forces.

Jarrell (2005) proposed that service and reactive opportunities represent only part of the community involvement of a metropolitan university. She stated that a number of factors combined have shifted the emphasis from a one-way service mentality to a more mutually beneficial relationship with its surrounding neighbors. The most recent metropolitan model continues to address community problems in the traditional mode. However, it also seeks community engagement in a proactive sense highlighting programs and collaborations already flourishing.

For example, the Orlando Florida region fosters a healthy hospitality and tourism industry. The University of Central Florida located in Orlando partnered with a number of the local hotel and entertainment facilities to open a premiere hospitality management school. Funding, internships, scholarships, and experiential learning benefit the students while the business community gains a well-trained and well-educated supply of future employees (Lewis, 2005). In a similar approach but with a completely different area of community focus, the university created the College of Optics and Photonics which houses the Center for Research & Education in Optics and Lasers. The central Florida region hosts a prosperous and growing
simulation and training industry (Hoover, 2005). The university through research grants and government contracts works closely with the simulation industry providing expertise, students, and other resources. The university benefits and so does the community. Jarrell (2005) described this win-win type of activity as a holistic approach with shared responsibility, economic benefits, and authority.

As urban growth continues with its ensuing problems of what constitutes appropriate and prudent development, the urban university has a great opportunity to play a role as a stakeholder and objective researcher at the same time. Involving the university as a partner, the local community can explore solutions and options when tackling issues such as transportation, healthcare, growth management, and finite natural resources. At urban universities, the blend of faculty expertise combined with real world community problems engages the spirit of American ingenuity which characterized educational development in our country from the early colonists. Understanding the challenges and differences in a metropolitan university and its adjacent community is essential for the formation of leadership skills and strategy. Hurley (1995) stated that the unique characteristics of metropolitan universities are not well known or understood by the institutions themselves. Nor are they understood by the communities in which they interact. He asserted that due to the growing role this type of institution plays both locally and nationally, it is imperative that research studies explore the dynamics involved. Hurley suggested a strong need for empirical assessment with timely and comparable data from metropolitan universities that includes information on students, faculty, administration, funding, organizational structure, leadership, and policy formation. With this data, strategies and models for successful community and university collaborations could become not only acceptable but highly desirable.
Bolman and Deal Four-Frame Model of Leadership

In the early 1980s, Bolman and Deal (1991, 1992a, 1992b, 2003) developed the Four-Frame Model of Leadership theory that employs a holistic approach to the concept of leadership. Individuals whether they are leaders or followers experience their world through their own preconditioned framework. Bolman and Deal referred to this framework as a filter that best fits the circumstances and makes sense of what is happening. They observed that resistance to change or resistance to challenging existing mores is actually quite commonplace. When situations arise that fit the existing frame of reference, then understanding and a level of comfort take place. However, when circumstances arise that do not match or fit previously held beliefs or actions, individuals tend to freeze or immobilize. They become trapped in a distorted picture that holds them in misconceptions and discourages any attempt to see beyond the known parameters.

When Bolman and Deal began working together, they realized their own personalities were quite different as were their views on leadership. After reviewing and discussing many theories, Bolman and Deal (1991, 1992b, 1995, 2003) devised the Four-Frame Model of Leadership which includes the structural, human resource, political, and symbolic frames. They developed the four frames in an effort to blend their styles together and to incorporate theories from all patterns of thought (Bolman & Deal, 1991). No one frame is appropriate or accurate for implementation in every situation. Instead, the leader should consider viewing the issue through multiple frames in order to address all aspects involved and capture the complete picture of reality. Frames are mental maps to assist with comprehending and navigating through situations and issues. Individuals are instinctively drawn to one or two frames congruent with personal beliefs and intrinsic leadership styles. In many cases, this forces an interpretation of an event
through the known and comfortable frame but leaves out other nuances and alternatives evident if viewed from a multi-frame mode. Preset expectations blind leaders from forming an accurate assessment and in turn from choosing the most beneficial solutions. Bolman and Deal (2003) alleged that using all four frames as a tool, allows a more complete perspective of any situation.

Bolman and Deal (1991, 1992a, 1992b, 2003) based each of the four frames on scientific disciplines and theories. The structural frame derived from the discipline of sociology emphasizes differentiation of clear roles and responsibilities. This is accomplished through established rules, procedures, policy, protocol, and predictable patterns of communication. Its core premise according to Bolman and Deal (2003) espouses clear, well-understood roles and relationships with coordination among these roles as the key to a successful organization. The structural frame assumes that a formal delineation of responsibility and a logical infrastructure which fits the organization will decrease conflict and increase efficiency.

Theoretically, this frame has its roots in Taylor’s (1911) scientific management work from the early 1900s. Taylor, an engineer, developed four principles of scientific management which emphasized a distinct division of responsibility between management and workers. He reduced jobs into specific tasks and patterned duties for employees as those done by machines. Taylor believed people were motivated by money and therefore productivity was straightforward and best achieved by concrete direction. Taylor’s theory stressed rigid discipline and concentration on assigned tasks with no deviation from the endorsed program of activity.

The second influence for this frame originated with Weber, a German economist, whose work did not reach America until 1947. Weber (1987) thought that a bureaucratic structure was most efficient. It emphasized rules, procedures, and a strict chain of command and authority. He proposed that a hierarchical design and promotion on the basis of merit were key elements.
On the other hand, Bolman and Deal (2003) stated that while structure is essential, it must fit the work and culture of an organization. No one structure is correct for every situation. They described the structural frame as a blueprint for interchange between internal and external constituents which results in achieved objectives and goals set by the organization. They proposed two design issues as intrinsic to an organization’s structure. The first issue, differentiation, deals with assigning roles and work allocations necessary to complete organizational objectives. The second issue, integration, deals with the process of coordinating roles and jobs in synergy. Both concepts together form the backbone or framework of the organization.

Integration occurs in two ways: vertically where higher levels of authority control and coordinate lower levels of authority through policy and rules; and laterally where structure is less formal and communication occurs through meetings, networks, and committees (Bolman & Deal, 2003). Uniformity and standard operating procedures assist in ensuring that all components of the organization remain focused on clearly stated objectives.

Bolman and Deal (2003) also incorporated social architecture into the structural frame. This concept includes employee attitudes, skill levels, technology availability, and many other areas. Organizations are complex. The structural frame viewpoint recognizes this complexity and that multiple structural designs exist. Successful organizations are dependent upon congruency between the social architecture and the correct match up of differentiation and integration methods.

Carlson (1996) discussed most school systems as bureaucratic in nature with hierarchical relationships dependent upon rules and regulations. This type of leadership can impede innovative change and creativity. Bolman and Deal (2002) cited structural components such as
curriculum, assessment procedures, and legalities as standards commonly in place. While these standards are valuable, they must be weighed against the unpredictable environment of education and subject to change when necessary.

The human resource frame derived from the fields of psychology and organizational behavior focuses on the value of people. Conflict arises when the individual has personal needs that are not met through employment responsibilities. The key to effectiveness lies in recognizing the symbiotic relationship between people and organizations and then aligning the organizational form to enable and empower people to do their jobs. Bolman and Deal (2003) based the human resource frame on four core assumptions.

Core assumption one states that organizations exist to serve human needs. Humans do not exist to serve organizational needs. Maslow (1987) listed a hierarchy of needs beginning with physiological and progressing to self-actualization. Maslow contended that lower level needs such as safety and hunger must be satisfied before motivation for higher needs can begin. McGregor (1960) added to Maslow’s theory with the concept that managerial expectations of employees determine the quality and level of productivity of those employees. It is management’s task to develop an environment where people can meet their own goals by directing their own efforts with organizational goals in mind. Conflict arises when human needs are secondary to organizational needs.

Bolman and Deal’s (2003) second core assumption for this frame states that people and organizations need each other. Organizations need people for their talent, creativity, ideas, and work. People need organizations for money, careers which challenge, and opportunities to grow. In a symbiotic relationship, both sides have vested interests.
Core assumption three (Bolman & Deal, 2003) states that a poor fit between the individual and the organization causes both parties to experience negative consequences. People withdraw, become apathetic, or even sabotage the organization as a result of frustration and failure on the job (Argyris, 1987). The balance or fit between meeting the needs of the workforce and meeting the productivity goals of the organization critically affects long-term success for both entities.

The last assumption for the human resource frame states that alignment between the individual and the organization equally benefits all parties. Bolman and Deal’s (2003) human resource frame used interpersonal interaction in an attempt to adjust the organizational fit to the individual fit. Employees are the competitive advantage, not the service or goods produced. Leadership using this frame values and supports the employee fostering a culture of participation and openness. Birnbaum (1988) cautioned that the size of many institutions of higher education limits many of the factors that promote personal interaction. Bolman and Deal (2003) expressed concern that many leaders in educational settings assume too much power and responsibility thus deemphasizing the relationship aspect of leadership. Feedback from colleagues, open communication, and shared authority help promote the interdependence necessary to tackle the complex issues facing today’s educational administrators.

The political frame derived from the discipline of political science considers organizations as arenas of competition over scarce resources (Bolman & Deal, 2003). Individuals within the organization compete to achieve their own interests through power and influence. As an arena, the organization houses the interaction of many different interests and agendas. As an agent, the organization serves as a tool for competing players who bargain to
achieve their goals. Bolman and Deal (2003) contended that there are five core assumptions which assist in understanding the political frame and impact leadership.

The first assumption addresses the emergence of coalitions within the organization. Coalitions form because members have common goals and feel they can accomplish more together than as separate entities. There is an interdependence among members that supersedes the fact that their individual goals may only partially overlap. These coalitions lobby together because they recognize the need for power to accomplish their aims.

Despite the formation of coalitions, each group maintains its own beliefs, values, and perceptions of reality. The second assumption of the political frame stresses that these differences are enduring and inevitably produce conflict especially when diversity abounds and resources are scarce. The political frame does not view conflict as negative but as a vehicle for change. Kotter (1999) stated that an effective leader creates an agenda for change by crafting a vision that considers holistically all of the elements and stakeholders in a long-range plan. The leader then formulates a strategy to deal with change and carryout the vision. Bolman and Deal (2003) contended that organizational change and effectiveness depend upon the leader’s ability to use political skills as they carry out strategies.

The third assumption states that most important decisions center around the allocation of a finite amount of resources. According to Bolman and Deal (2003), the concept of scarce resources promotes increased political posturing and intensity to obtain an equitable share by the different coalitions and stakeholders within the organization. Because of scarce resources and enduring differences, conflict is central to organizational dynamics. The fourth assumption sets forth power as the most important asset. French and Raven (1959) identified five bases of social power by which an individual can influence others. Expert power involves the ability to
influence others through an individual’s knowledge and expertise in particular areas. Referent power relies on the strength of the relationship between the leader and his followers. Legitimate power draws on the organizational structure and can be thought of as the official title of the leader in an organization. Reward power involves control over desired resources or rewards. Coercive power is the potential to influence through the use of negative sanctions. Bolman and Deal contend that the exercise of power is a natural part of organizational conflict and can be used constructively or destructively.

The fifth and last assumption of the political frame emphasizes that goals and decisions of the organization are not necessarily set by top leadership. Instead, they are developed through the process of bargaining and negotiating among competing key stakeholders. Constructive negotiation finds solutions for more than one party. Fisher, Ury and Patton (1991) proposed a strategy that increases chances for an agreement beneficial to multiple parties. They contended that “there is a third way to negotiate, a way neither hard nor soft, but rather both hard and soft” (p. xii). Their strategy revolves around four steps: 1) separating the people from the problem; 2) focusing on interests not positions; 3) inventing options for mutual gain; and 4) insisting on objective criteria. Realistically, not everyone will win or even achieve a measurement of success at the same level. However, it is possible to structure a plan of action that allows the majority of players to perceive some type of gain. Removing emotional elements and using objective criteria enhance chances for success.

Bolman and Deal (2003) stated that interdependence, divergent interests, and scarcity of resources breed political activity. They asserted that political processes and conflict are universal in nature and a permanent part of corporate existence. It is not whether organizations are political but rather to what degree politics rule the organization. Leadership must consider
the potential for collaboration, the formation of long-term relationships, and the adaptation to inevitable change.

Carlson (1996) advised those in educational leadership positions to be aware of the consequences and ramifications of political decisions. Many difficult choices arise which force ethical considerations and courage to oppose the status quo. Bolman and Deal (2002) stated that two features make education political whether or not they are formally recognized or ignored by leadership. Due to the myriad stakeholders that compose an educational institution, coalitions will form with varying degrees of power. In addition, scarce resources, principally lack of funding, necessitates choosing limited options. Interaction between the groups combined with finite resources makes conflict inevitable.

The symbolic frame proposed by Bolman and Deal (2003) drawn mostly from the field of anthropology, deals with making sense of an unpredictable and turbulent environment. This frame differs markedly from Bolman and Deal’s structural, human resource, and political frames. It relies on beliefs, faith, and the personal meaning items and events hold in an organization. Emphasis is placed on emotional responses of the individuals who make up the organization rather than the rational features prominent in the other frames. The symbolic frame sees corporate life as chaotic, always changing, and unpredictable. As a result, people search for ways to bring some semblance of order and understanding to situations that defy logical behavior.

Bolman and Deal (2003) characterize this frame through five core assumptions. They asserted that what is most important about an event is not what actually happened but what it means. Further, we as individuals create the meaning based on our beliefs, values, and faith. Closely intertwined with this, assumption two states that events have multiple meanings because
we as individuals interpret experiences through our own frames of reference. Meanings are thus unique to the individual.

As a result, assumption three projects that collectively symbols create and explain the meaning of organizational events and activities. Maslow (1987) postulated in his theory of human needs that level three is the need for belongingness or love. People strive to satisfy this need for acceptance by finding a place in a group. Symbols form building blocks of shared meaning so that group members identify with each other through recognition of common beliefs (Bolman & Deal, 2003). Symbols define for members how they feel, who they are and how they are to do things in an organization.

Assumption four states that symbolic activities form an environment in an organization that helps people find purpose and passion in their lives both professionally and personally. Myths, visions, and values generate a sense of purpose in an organization. Myths form a link between the present and the past and illustrate the values that make a particular organization unique. Visions link the present with the future by creating an image of what might be accomplished together. Heroes serve as role models for group members to emulate. Stories humanize events and help establish traditions. Rituals and ceremonies include socialization and help heighten the feeling of membership (Bolman & Deal, 2003).

The fifth core assumption of the symbolic frame ties all elements of the frame together. Organizational culture is the cohesive force that unites and solidifies people around shared meanings. Duncan, Ginter and Swayne (1995) defined culture as the customary way of doing things with three important characteristics. Culture is learned by on the job observation and interaction. Culture is shared by group members through a variety of symbols and symbolic activities. Culture is subjective but contains an objective component as well. Edgar Schein
(1987, 1995) associated the concept of culture with certain categories of ideas and behaviors that groups hold in common. These categories include customs, traditions, espoused values, metaphors, and rituals. Schein contended that culture bound together all things to make a coherent whole. He stated, “cultural understanding is desirable for all of us, but it is essential to leaders if they are to lead” (p. 281).

Bolman and Deal (2002) referred to culture as being created over time and that educational institutions in particular often have very strong cultures. They encourage leaders to understand and diagnose the strengths and weaknesses inherent in their institution. Organizational culture both guides and shapes interaction between internal and external stakeholders such as faculty, administrators, students, and community members.

The Four-Frame Model of Leadership consolidates elements of trait, behavioral, and contingency leadership theories. Bolman and Deal (1991, 1992a, 1992b, 1999, 2003) proposed that use of multiple frames (structural, human resource, political, and symbolic) enhances leadership effectiveness. Because the internal and external environment of any institution constantly changes, a multiple frame perspective serves as a tool to better equip leaders with information processing and perception of situations.

Related Research Using the Four-Frame Model of Leadership

Bolman and Deal (1991, 1992a, 1992b, 1999) conducted studies using qualitative and quantitative methods of research. They designed a survey instrument drawn from the four leadership frames, *Leadership Orientations Survey* (1990). The survey, constructed on the assumption that behavior of an individual is guided by his preconditioned patterns of viewing situations, has two parallel versions. One version (Self) asks individuals to rate themselves and
the other version (Other) asks colleagues to rate these same individuals. Both survey versions also contain an assessment of perceived management effectiveness and perceived leadership effectiveness. The Leadership Orientations Survey (LOS) instrument is reviewed more thoroughly in Chapter 3. Two hypotheses guided Bolman and Deal’s (1991, 1992b) approach and method of study. Hypothesis one presumes the ability to reframe situations is an asset to leaders and critical to understanding increasingly complex issues. The multi-frame approach allows a broader perspective of the situation. Hypothesis two presumes that no one frame is automatically appropriate. Each situation differs so that the judgment of which frame or frames best fit the situation will vary accordingly.

In 1991, Bolman and Deal utilized a qualitative method employing narratives provided by administrators about their experiences to determine how many and which frames they applied. Interviewees were asked to provide written critical incidents that described a situation requiring effective leadership. All respondents were participating in institute or leadership workshops. Criteria for coding frame responses was based on frame-related issues and frame-related actions. Bolman and Deal (1991) chose a sample of 145 higher education administrators, 63 American school administrators (15 Minnesota school superintendents, 48 principals from Florida schools) and 220 school administrators from the Republic of Singapore. The results for all three samples indicated that usage of one or possibly two frames occurred primarily in the narrative incidents examined. Only 5% of the respondents used all four frames. In other words, the respondents rarely exhibited criteria utilizing more than two frames and almost none described situations containing all four frames. Among the higher education administrators 24% used single frames, 50% used paired frames, and 26% used multiple frames (three or four frames). Frames used most frequently by the higher education administrators were political (71%), structural (67%),
human resource (59%), and symbolic (17%). The political frame showed statistically significant
greater usage among American administrators. All three populations used the structural frame in
approximately 60% of the situations with the symbolic frame utilized less than 20% of the time.
The three groups varied widely on the usage of the human resource and political frames.

A second quantitative study completed by Bolman and Deal (1991) utilized the two
versions of the Leadership Orientations Survey (LOS). The authors collected data from 90
senior managers of a multinational corporation, 145 higher education administrators, 140 United
States school administrators and 229 school administrators from the Republic of Singapore. A
factor analysis conducted on results from both versions of the LOS consistently produced factors
associated with the four frames with all four frames emerging clearly. The international
corporate sample scored highest on the structural frame with much less emphasis of utilizing the
symbolic frame. Patterns found in both American samples indicated a higher orientation toward
the structural and human resource frames with the political and symbolic frames slightly less.
Regression analysis uncovered a strong relationship between frame orientations and managerial
and leadership effectiveness as perceived by colleague ratings. The four samples used by
Bolman and Deal (1991) predicted a minimum of 59% variance in perceived managerial
effectiveness and 62% in leadership effectiveness. Managerial effectiveness was related to an
emphasis on the structural frame while leadership effectiveness was associated with use of the
symbolic and political frames.

Bolman and Deal (1991) also used this study to examine gender in terms of frame usage.
The corporate middle manager sample consisted of almost all male participants. However,
women represented a third of the sample of higher education administrators and a majority in the
United States school administrators and school administrators from the Republic of Singapore.
Using t tests, data showed that men and women in comparable positions were more alike than different. In both the higher education and Singapore samples, no statistically significant differences were noted. Among the American school administrators, differences did exist but the range was not widely diverse. Women in that group did rate higher on the structural, political, and symbolic frames but not on the human resource frame where the stereotypic expectation would have fallen.

Analyses of narratives from groups of principals in Florida and Singapore (Bolman & Deal, 1992a) found that only 19% of the American principals and 13% of the Singapore administrators used three frames. Neither group showed more than 6% utilizing all four frames. The human resource frame was the preferred choice by both groups with 86% and 98% respectively. The political frame was the third frame of choice for both groups but the American principals preferred its use 50% of the time as opposed to only 21% by the Singapore group. The symbolic frame was the least frequent choice of frames by both groups.

Bensimon (1989, 1990) interviewed college presidents to determine the extent to which they incorporated single or multiple frame behavior when describing good leadership. She used Birnbaum’s (1988) adaptation of Bolman and Deal’s model specifically oriented toward academic organizations. Birnbaum proposed that each frame described academic behavior for various situations at various times. He labeled frames as structural, collegial (human resource), political, and cultural (symbolic). Bensimon (1989, 1990) collected data through on-site interviews with the presidents of 32 colleges who were participating in a five-year longitudinal study conducted by the National Center for Postsecondary Governance and Finance. She used content analysis to code references to elements of the four frames. If interview responses contained at least two references to elements of a frame, then this constituted use of that
particular frame. She found that 13 presidents (41%) espoused single frame theories, 11 (34%) used paired frames and 8 (25%) used multiple frames. Presidents utilizing a single frame approach were most likely to use bureaucratic or collegial frames. Almost half of the paired frame data showed collegial and symbolic as the most common duo. Bensimon (1989, 1990) also explored frame analysis by length of tenure and institutional type. New presidents with less than three years experience mostly used a single frame approach to leadership. Multi-frame usage occurred almost exclusively with more experienced presidents. Community college presidents were much more likely to utilize a single frame approach.

Another study examining leadership roles outside of an educational arena, but one facing similar criticism and challenges involved non-profit agency leaders. Heimovics, Herman and Jurkiewicz-Coughlin (1993, 1995) assessed evolving leadership practices of chief executive officers of non-profit organizations. They postulated that due to the growing complexity and interdependence upon governmental support, non-profit leadership faced critical challenges of funding limitations and mission ambiguity. Just as higher education suffered from drastically changing political and funding environments over the last four decades, non-profit executives grappled with many of the same problems. Liberalism and abundant government funding in the late 1960s through the 1970s allowed a variety of non-profits to flourish and offer many services to the public. However, with the change in political climate of the early 1980s combined with mounting societal demand, the environment radically altered for these institutions. Resources and governance emerged as key elements in continued success and in some cases even survival. Heimovics, Herman and Jurkiewicz-Coughlin (1993, 1995) speculated that effective leadership must operate with the knowledge that conflict becomes inevitable when resources are scarce. Using Bolman and Deal’s Four-Frame Model of Leadership, they concluded that a group of
executives designated as effective were more likely to encompass characteristics of the political frame than a comparison group designated as less effective. They also concluded that a sample of effective executives would demonstrate multiple frame usage when dealing with threatening situations where as less effective executives would rely on one or two frame usage. The sample of designated effective and less effective executives was derived from a previous study which engaged a panel of judges and specific criteria for selection purposes. All executives in the sample worked in a large metropolitan community. Critical event interviews were conducted and recorded by two coders. Tests for interrater reliability produced “acceptable to strong interrater reliabilities on all but one instance of the frame analyses (reliability of counts for the symbolic frame were less than the other frames)” (p. 423). Total sample size for this study included 52 executives with codeable data from 26 successful events and 25 unsuccessful events from the effective executives and 24 successful events and 23 unsuccessful events from the comparison group. Chi-square tests revealed a significant difference in the groups with the effective executives employing the political frame 43 of 51 events as opposed to the comparison group usage of 26 of 47 events. Heimovics, Herman and Jurkiewicz-Coughlin (1993, 1995) used t tests to evaluate the differences between the two groups in multiple frame analysis. The test of multiple frame use and executive effectiveness designated an executive as a multiple frame user if three different frames were present in the description of an event. For all thresholds, t tests of differences in proportion showed statistically significant results with effective executives employing the use of three or more frames more often. These results support Bolman and Deal’s (1991, 1992, 2003) contentions that the ability to integrate the use of multiple frame perspectives enhances and strengthens leadership effectiveness and therefore success.
Gilson’s study (1994) compared leadership orientations of higher education administrators in 13 Missouri public colleges and universities with Bolman and Deal’s 1991 study of 94 higher education administrators. Administrative positions for this study included a wide range of levels: president, chancellor, assistant to the vice chancellor, assistant to the president, assistant to the provost, dean, department chair, director, assistant director and coordinator. A sample of 1,250 administrators received the LOS instrument with a total of 699 returned and usable for data analysis. Gilson conducted a factor analysis of the 32 item Leadership Behavior section of the LOS. After varimax rotation, all but 11 of the framing variables loaded into four categories. The Missouri sample factor analysis only partially supported Bolman and Deal’s assumption that administrators’ discernment of the perceptual frames of their organizations precisely matched the structural, human resource, political, and symbolic frames (Gilson, 1994). Although the Missouri sample showed four factors, the results differed slightly from the Bolman and Deal’s analysis. In the Missouri sample, the symbolic and political frames did not emerge distinctly but loaded instead into a single factor, one smaller factor emerged for the human resource frame and two separate factors represented a division of the structural frame. Gilson reported that the division of the structural frame may suggest that the frame is more complex than originally believed. Findings for the Missouri sample suggested that Missouri higher education administrators are a highly homogenous sample employing conventional management practices in problem solving. The assumption that administrators view their organizations through a human resource frame was partially supported with this study.

Using Bolman and Deal’s Leadership Orientations Survey, Kelly (1997) investigated several dimensions of frame usage comparing senior level executives from Fortune 500 companies and senior administrators from four-year public universities. She sought to determine
if statistically significant differences existed between the two groups in mean scores on frame orientations, in frequencies between age and frame orientations and in frequencies between years of work experience and frame orientations. She also examined whether there was a difference in the number and types of frames used by both groups. The sample for this study consisted of higher education administrators in public universities located in the state of Missouri and senior level executives from Fortune 500 companies with headquarters in Missouri, including Kansas locations in the greater Kansas City, Missouri metropolitan area. The LOS was administered to a sample of 277 subjects (224 executives and 53 higher education administrators). The total number of completed and usable surveys for data analysis was 139 received from 93 executives and 46 higher education administrators. Senior level executive and administrator titles included chairmen, vice chairmen, chief executive officers, presidents, senior vice presidents, executive vice presidents, vice presidents, provosts, chancellors, vice chancellors, assistants to vice chancellors and directors. Cronbach’s coefficient alpha computed for each of the four scales on the Bolman and Deal LOS showed an alpha of .6748 for the structural frame, .8081 for the human resource frame, .7444 for the political frame and .8030 for the symbolic frame. Multivariate analyses of variance and chi square tests indicated no statistically significant differences in mean scores between the two groups and no statistical differences between years of work experience and leadership orientations. The chi square test of independence did show statistically significant differences in frequencies between age and use of the political frame. No statistically significant differences were found between age and use of any of the other frames. Descriptive statistics and frequencies showed approximately 30% of the executives and higher education administrators used multiple framing (three or four frames) leadership styles. Of that 30%, higher education administrators demonstrated multi-frame usage totals of 37% as
compared to 26.9% of the business executives. When compared with Bolman and Deal’s 1991 study which showed higher education leaders using paired frames by 50%, Kelly’s study showed higher education administrators used paired frames by 24%. The human resource frame emerged as the dominant frame of use for both groups (62%) in Kelly’s study.

Borden (2000) explored leadership orientations of area campus administrators in Florida’s state university and community college systems. This quantitative study asked administrators to rate themselves on frame usage as well as relationships to campus size, type, coursework offered, gender, age, and other demographic features. Leadership and managerial effectiveness self ratings were also examined. Administrative titles included provost, campus president, director, executive officer, dean, and coordinator. The LOS instrument was administered to a total of 250 area campus administrators. Out of that population, 146 usable surveys comprised the sample from 93 community college sites and 24 state university sites. Cronbach’s alpha performed on the data collected resulted in alpha values of .84 for the structural frame, .82 for the symbolic frame, .81 for the human resource frame and .81 for the political frame. Descriptive statistics were used to analyze data regarding frame usage and one-way ANOVAs were employed to explore frame use based on each of the demographic characteristics. The human resource frame emerged as the primary frame used by area campus administrators (89.6%) with the symbolic frame as second. The political frame was identified as the least used frame. Approximately 50% of the area campus administrators utilized a multi-frame leadership style defined as utilizing three or four frames in decision making. Statistically significant relationships materialized with frame usage and campus type, highest level of coursework offered and highest degree in its entirety offered. Other demographic characteristics exhibited limited influence on frame utilization.
Summary

This chapter reviewed leadership theories and definitions in a broad context in order to demonstrate that the search for the most perfect comprehensive definition remains as elusive as it was a hundred years ago. Bolman and Deal (1991, 1992a, 1992b, 2003) contended that successful and effective leadership encompasses a multi-perspective approach. They suggested that it was not one way or one style or one theory that applied in every situation. Instead, effective leadership especially in the complex environment of higher education needs flexibility and openness for alternative viewpoints. American metropolitan universities in particular are characterized by a unique blend of academe, economic sanctions from internal and external sources, political undertones, and business ties with the local community. They require exceptional leadership. Limited research exists focusing on the distinctiveness of the metropolitan university. While the research studies contained in this review showed multi-frame usage in various higher education communities, no studies utilizing Bolman and Deal’s Four-Frame Model of Leadership theory have been conducted with institutions designated as metropolitan universities.
CHAPTER 3
METHODOLOGY

Introduction

Lee Bolman and Terrence Deal proposed that not one approach can sufficiently guide leaders in the diverse world of today’s organizations (1991, 1992a, 1992b). They contended that multiple schools of thought must be considered and utilized by leaders dependent upon the situation at hand. No single theory is correct in each case or all of the time. This study sought to explore leadership styles and leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership (1991).

Statement of the Problem

Using Bolman and Deal’s Leadership Orientations Survey (Self) instrument with an additional Respondent Information section, this study addressed the following questions: 1) whether there is a dominant leadership orientation used by senior administrators at American metropolitan universities; 2) whether these administrators use single, paired, or multiple frames; 3) whether there are degrees of difference between frame usage and selected personal, professional, and institutional variables among these administrators; and 4) whether self-perception of leadership effectiveness and management effectiveness differs in senior administrators at American metropolitan universities.
Research Questions

1. What is the dominant leadership orientation, if any, used by senior administrators at American metropolitan universities?

2. To what extent, if any, do senior administrators at American metropolitan universities use single, paired, or multiple frames?

3. To what extent, if any, are there statistically significant differences between frame usage and selected personal variables among senior administrators at American metropolitan universities?

4. To what extent, if any, are there statistically significant differences between frame usage and professional variables among senior administrators at American metropolitan universities?

5. To what extent, if any, are there statistically significant differences between frame usage and selected institutional variables among senior administrators at American metropolitan universities?

6. To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators at American metropolitan universities?

Selection of the Population

The population of this study consisted of 407 senior administrators from 74 institutions of higher education designated as American metropolitan universities according to the criteria established by the Coalition of Urban and Metropolitan Universities. The Coalition (Appendix C) provided a list of presidents and chancellors from member institutions. Other senior administrators at these institutions were identified through use of the Coalition of Urban and
Metropolitan Universities (CUMU) database and website. American metropolitan universities who are members of the coalition link their websites to the CUMU public website. With permission of the coalition, these universities were contacted for personnel and addresses of executives serving at senior administrative levels. Contact was made by exploring the institution’s website for the desired information. If the information was not listed on the site, a phone call was made to the institution’s office of the president for identification of personnel. Senior administrative levels included the president, chancellor, vice president, vice chancellor, and provost. All participants were over the age of 18 and no compensation was provided for participation.

Data Collection

Survey implementation techniques outlined in Dillman’s (2000) Tailored Design Method were adapted for this project. Dillman stated that multiple contacts, content of letters, and appearance of all correspondence contribute to increased return rates. A cover letter (Appendix D), a letter of support from CUMU (Appendix E), a letter of support from Dr. John C. Hitt, President of the University of Central Florida (Appendix F), the Leadership Orientations Survey (Self), and a self-addressed stamped envelope were mailed to 407 senior administrators on January 9, 2006. The cover letter included a section of informed consent as designated and approved by the Institutional Review Board of the University of Central Florida (Appendix G). The first mailout yielded a return of 108 survey responses. A follow-up letter was sent on January 30, 2006, to those individuals who had not replied to the first mailout. The second mailout yielded a return of 69 additional survey responses. A third and final follow-up letter and the survey were mailed on February 18, 2006, to those individuals who had not replied to mail
outs one or two (Appendix H). This third mailout yielded 68 survey responses for a comprehensive response rate of 245 surveys (60.2%). Of the 407 individuals contacted for participation and the 245 who replied, 25 of these individuals declined to participate in the research project. Thus, the total number of useable surveys for data input in this study was 220 or 54.1%. Boser and Green (1997) studied trends across time in response rates for mail surveys. They reported that acceptable response rates varied by population accessed. Their review showed average mean response rates for educational studies with a population of K-12 educators was 62.1%. After additional reviews of comparative and descriptive studies, Green and Boser (2001) recommended a minimum standard of 70% ± 20% return for surveys in education creating an acceptable range of 50% to 90%.

The three letters sent to the senior administrators included language that stated all answers and participation were voluntary and confidential. Information would only be released as summaries in which no individual’s answers could be identified. Participants were advised that the identification number on the survey instrument was used to delete the participant’s name from the mailing list when the survey was returned. The list of names was then revised to reflect the deletions so that individual names could never be connected to the results in any way. All returned surveys were renumbered on a random basis for data entry further ensuring that no individual’s answers could be identified.

**Instrumentation**

Bolman and Deal (1991, 1992a, 1992b) designed a survey instrument based on the four leadership frames (structural, human resource, political, symbolic). This instrument, Leadership Orientations Survey (1990), constructed on the assumption that behavior of an individual is
guided by the preconditioned patterns of viewing situations, has two parallel versions. One version (Self) asks individuals to rate themselves and the other version (Other) asks colleagues to rate these same individuals. Two hypotheses guided Bolman and Deal’s approach and method of study. Hypothesis one presumed the ability to reframe situations is an asset to leaders and critical to understanding complex issues. Hypothesis two presumed that no one frame is always appropriate. Each situation differs so that judgment of which frame or frames best fit the situation varies accordingly.

Bolman and Deal’s Leadership Orientation Survey (LOS) Self was used with permission of the authors (Appendix A). One revision was made to the instrument also with permission from the authors. According to Dillman (2000), use of complete sentences assists with minimizing erroneous answers by respondents. Therefore, in Section I Leadership Behaviors, the pronoun ‘I’ was added before each of the 32 phrases in order to form complete sentences. For example, the phrase ‘think very clearly and logically’ became the sentence ‘I think very clearly and logically’.

The LOS contains three sections as designed by Bolman and Deal: leadership behaviors, leadership style, and overall rating. A fourth section, respondent information, added by the researcher requested demographics such as personal, professional, and institutional characteristics. Personal characteristics included age, gender, major field of study in the highest academic degree completed, and the respondent’s highest academic degree. Professional characteristics included respondent’s job title and years served as an administrator. Institutional characteristics included student size of the university, proximity of the university to city location, and the most current Carnegie Classification. In Section I Leadership Behaviors of the LOS, 32 statements ask leaders to rate themselves on leadership behaviors according to how often the
behaviors are true. Respondents used a five point Likert scale to reflect their rating of leadership behavior (1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = always). Items 1, 5, 9, 13, 17, 21, 25, 29 of the LOS are consistent with the structural frame. Items 2, 6, 10, 14, 18, 22, 26, 30 correspond with the human resource frame. Items 3, 7, 11, 15, 19, 23, 27, 31 characterize the political frame and items 4, 8, 12, 16, 20, 24, 28, 32 represent the symbolic frame. Subscales do exist within each frame in a consistent sequence. The eight subscales include analytic, supportive, powerful, inspirational, organized, participative, adroit, and charismatic. For example, the analytic subscale consists of items 1, 9, 17, 25. However, Bolman and Deal (1991) have primarily used the eight item frame measures such as items 1, 5, 9, 13, 17, 21, 25, 29 of the structural frame and eight item sets corresponding to the human resource, political, and symbolic frames in research. They have used the four item subscales for management development. This study focused on the eight item frame measures for the four frames and did not utilize the subscales.

In Section II Leadership Style of the LOS instrument, six statements rate leadership style from the perspective of the respondent. This is a forced-rank choice with each statement containing four phrases (representing each of the four frames) with a ranking of 4 representing the phrase that best describes the senior administrator and a ranking of 1 representing the phrase that least describes the senior administrator.

In Section III Overall Rating, two statements representing an overall rating of effectiveness by the respondent in terms of management versus leadership were asked using a Likert scale. The five point Likert scale used percentages as well as numeric points (1 = bottom 20%, 5 = top 20%).
A supplementary section geared specifically to elicit demographic information from respondents was added. Section IV Respondent Information asked the research participants nine questions regarding personal, professional, and institutional characteristics. Personal characteristics included age, gender, major field of study in the highest academic degree completed, and the respondent’s highest academic degree. Professional characteristics included respondent’s job title and years served as an administrator. Institutional characteristics included student size of the university, proximity of the university to city location, and the most current Carnegie Classification of the institution.

Reliability

Items for inclusion in the LOS were selected from a larger pool of items composed by Bolman and Deal and their colleagues. Bolman and Deal (1991) pilot tested the LOS (Self) instrument on populations of students and managers to assess the internal reliability of each scale. Reliability statistics based on a multi-sector sample of 1,300 colleague ratings of managers in business and education are posted on Dr. Bolman’s website (2006). The instrument is now in its third iteration with internal reliability reported as very high: Cronbach’s alpha for the four frame measures were structural .920, human resource .931, political .913, and symbolic .931. Cronbach’s coefficient alpha, a reliability of the internal consistency of test items was computed for Section I and Section II of the LOS for the political, human resource, symbolic, and structural frames on the returned and completed 220 survey instruments.
Shavelson (1996) defines validity as “the extent to which the interpretation of the results of the study follows from the study itself and the extent to which the results may be generalized to other situations with other people” (p. 19). Internal validity suggests that items align in a predictable pattern according to defined conceptual constructs. Factor analysis reduces a larger set of variables to a smaller set of factors by combining variables that are highly correlated with each other. Each set of variables combined becomes a factor (Gall, Gall, & Borg, 2003). Factor analysis is a measure of evidence of internal structural validity. Bolman and Deal (1991, 1992a, 1999) conducted a number of factor analyses to determine response clusters consistent with the structural, human resource, political, and symbolic frames. They analyzed data from both the LOS (self) version and the LOS (other) version of the instrument. Bolman and Deal’s studies have included North American college and university administrators, Singapore school administrators, North American female corporate managers, and international managers from Europe, Asia, and Latin America (1999). Bolman and Deal (1992b) conducted a factor analysis using data from 681 senior administrators in higher education. Their principal components analysis followed by varimax rotation of all factors with an eigenvalue >1.0 and item loadings above .50 produced four factors. Each factor represented one of the four frames (structural, human resource, political, symbolic). Bolman and Deal (1992b) stated that factors aligning with the conceptual definitions of the frames have consistently emerged in similar populations. In some cases “a bleed of items across frames arises from overlap of the symbolic frame with the human resource or political frame. However, the political and human resource frames show little overlap with each other” (p. 274). Bolman and Deal (1992b) reported that none of the frames overlap with the structural frame.
In this study, a factor analysis of the 32 item Section I Leadership Behaviors portion of the LOS instrument was performed on the researcher’s data to investigate the grouping of the four frames as described by Bolman and Deal (1991, 1992a, 1992b, 2003). A total of 220 completed surveys were used.

Bolman and Deal (1991, 1992a, 1992b) have collected data from leaders in schools, higher education, government, and business using the LOS instrument. Other researchers have also utilized the LOS instrument across a wide spectrum of populations adding to the body of knowledge on multi-frame leadership behavior and style (Borden, 2000; Cantu, 1997; Chang, 2004; DeFrank-Cole, 2003; Durocher, 1995; Flaer, 1998; Gilson, 1994; Harlow, 1994; Kelly, 1997; Rivers, 1996; Turley, 2002; Wolf, 1998).

Data Analysis

As survey instruments were returned, SPSS for Windows version 12.0 was used to calculate each respondent’s scores on the LOS and the Respondent Information Section. Research question 1, “What is the dominant leadership orientation, if any, used by senior administrators at American metropolitan universities?” was analyzed using frequencies and percentages from responses to questions in Section I, Leadership Behaviors. Research question 2, “To what, if any, extent do senior administrators at American metropolitan universities use single, paired, or multiple frames?” was analyzed with the same data set using frequencies and percentages to report results.

Research question 3, “To what extent, if any, are there statistically significant differences between frame usage and selected personal variables among senior administrators at American metropolitan universities?” was analyzed using analysis of variance (ANOVA). A mean scale
score was developed for each of the four frames by summing individual responses to each item corresponding to that particular frame in the Section I Leader Behaviors portion of the LOS. A factorial ANOVA was performed on data obtained from personal variables age and gender to determine if a significant difference existed on frame usage based on age and gender. A post hoc analysis using Scheffe was employed when any ANOVA result indicated a significant difference existed. The personal characteristics, major field of study in the highest academic degree completed and the respondent’s highest academic degree were analyzed using frequencies and percentages to report results.

Research question 4, “To what extent, if any, are there statistically significant differences between frame usage and selected professional variables among senior administrators at American metropolitan universities?” was analyzed using the same method as research question 3. Professional characteristics including respondent’s job title and years served as an administrator were analyzed using a factorial ANOVA. A post hoc analysis using Scheffe was used when any ANOVA value indicated a significant difference existed.

Research question 5, “To what extent, if any, are there statistically significant differences between frame usage and selected institutional variables among senior administrators at American metropolitan universities?” was analyzed using the same method as research questions 3 and 4. Institutional characteristics including student size of the university and proximity of the university to city location were analyzed using a factorial ANOVA. A post hoc analysis using Scheffe was used when any ANOVA indicated a significant difference existed. The institutional variable, the most current Carnegie Classification of the institution, was analyzed using frequencies and percentages to report results.
Research question 6, “To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators at American metropolitan universities?” was analyzed using data from Section III, Overall Rating. Frequencies, mean scores and percentages were used on the respondent self-rating responses.

Summary

This study utilized a mail survey methodology to collect quantitative data in order to explore the Bolman and Deal Four-Frame Model of Leadership orientations of senior administrators at American metropolitan universities. The four part survey mailed to 407 senior administrators from 74 institutions identified as members of the Coalition of Urban and Metropolitan Universities elicited data on leadership orientations and selected demographic characteristics. Three mailings yielded a comprehensive response rate of 245 surveys (60.2%). Of the 407 individuals contacted for participation and the 245 who replied, 25 of these individuals declined to participate. Thus, the total number of useable surveys for data input in this study was 220 (54.1%) representing 71 out of 74 institutions. Results of the survey methodology are presented in Chapter 4.
CHAPTER 4

RESULTS

Introduction

This chapter provides a description of respondents and an analysis of data relevant to the research questions. The first section presents results of this study’s reliability and validity examinations of the Bolman and Deal’s (1990) Leadership Orientations Survey (Self) instrument. Section two describes the sample and presents demographic characteristics of senior administrators at American metropolitan universities. Section three analyzes the data within the framework of the six research questions and includes a discussion of assumptions for factorial ANOVAs as related to the data in this study. A summary concludes the chapter.

Leadership Orientations Survey Instrument (Self)

The Leadership Orientations Survey instrument has been used by other researchers to explore leadership styles of higher education administrators at different levels and in different settings. Internal consistency of each of the structural, human resource, political, and symbolic frames has been examined. The LOS has not been used with administrators of American metropolitan universities. Therefore, reliability and validity examinations were completed on data from the returned surveys in this study.

Reliability

Cronbach’s coefficient alpha, a reliability of the internal consistency of test items, was computed for Section I and Section II of the LOS for the political, human resource, symbolic,
and structural frames on the returned and completed survey instruments. According to George and Mallory (2005), the closer the alpha value is to 1.00, the greater the internal consistency of items in the instrument being examined.

In Section I Leadership Behaviors of the LOS, 32 statements asked leaders to rate themselves on leadership behaviors according to how often the behaviors are true. Respondents used a five point Likert scale to reflect their rating of leadership behavior (1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = always). Items 1, 5, 9, 13, 17, 21, 25, 29 of the LOS are consistent with the structural frame. Items 2, 6, 10, 14, 18, 22, 26, 30 correspond with the human resource frame. Items 3, 7, 11, 15, 19, 23, 27, 31 characterize the political frame and items 4, 8, 12, 16, 20, 24, 28, 32 represent the symbolic frame. Cronbach’s alpha for the four frame measures in this study of the LOS Section I were structural .826, human resource .862, political .866, and symbolic .869. These results were consistent with results reported in other studies of higher education populations (Bolman, 2006; Borden, 2000; Chang, 2004; Turley, 2002; Wolf, 1998).

In Section II Leadership Style of the LOS instrument, six statements rated leadership style from the perspective of the respondent. This is a forced-ranked choice with each statement containing four phrases (representing each of the four frames) with a ranking of 4 representing the phrase that best describes the senior administrator and a ranking of 1 representing the phrase that least describes the senior administrator. The LOS Section II reliability ranges were structural .819, human resource .768, political .446, and symbolic .637. Further, results indicated that deleting variables in either the political frame or the symbolic frame did not increase the reliability coefficients sufficiently to place them in a modest or higher range of reliability. In addition to the low reliability ratings, 17 of the returned surveys in this study included
respondent information failing to rank each question or failing to use the directed ranking hierarchy correctly. While some researchers have used Section II in their study results, others (Cantu, 1997; Chang, 2004; Durocher 1995; Gilson, 1994; Kelly, 1997; Turley, 2002) have utilized only Section I. Because of the limitations in reliability ranges and missing data, this researcher chose not to include Section II items in data analysis.

Validity

Validity evidence supporting the conclusion that the scores from the LOS instrument were a valid assessment of senior administrators’ leadership orientations was investigated. This type of validity evidence is referred to as internal structure evidence because it suggests that items line up in a predictable manner according to what thematically ties them together conceptually (Gall, Gall, & Borg, 2003).

In the context of this study, a factor analysis of the 32 item Section I Leadership Behaviors portion of the LOS instrument was performed on the researcher’s data to investigate the grouping of the four frames as described by Bolman and Deal (1991, 1992a, 1992b, 1999). Surveys mailed to the 407 administrators, yielded a response rate of 60.2% (N=245). Of the 245 who replied, 25 of these individuals declined to participate. Thus, the total number of useable surveys for data input in this study was 54.1% (N=220). The maximum likelihood estimation procedure was applied to extract the factors from the variable data. Kaiser’s rule was used to determine which factors were most eligible for interpretation. Four factors were extracted as evidenced in Tables 1 and 2.

After varimax rotation of all factors (Table 3), all but seven of Bolman and Deal’s framing variables loaded into the four frame categories with a loading value of $\geq .5$. Table 4
shows an analysis breakdown of the four frames with loading values, variables, and percent of variance explained. Together, these four factors are capable of explaining approximately 52.9% of all the variable variances.

Table 1
Factor Transformation Matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>1 Symbolic</th>
<th>2 Human Resource</th>
<th>3 Structural</th>
<th>4 Political</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Symbolic</td>
<td>.578</td>
<td>.535</td>
<td>.465</td>
<td>.405</td>
</tr>
<tr>
<td>2 Human Resource</td>
<td>.467</td>
<td>-.175</td>
<td>.862</td>
<td>-.093</td>
</tr>
<tr>
<td>3 Structural</td>
<td>.460</td>
<td>.826</td>
<td>-.115</td>
<td>-.305</td>
</tr>
<tr>
<td>4 Political</td>
<td>.487</td>
<td>-.022</td>
<td>.167</td>
<td>-.857</td>
</tr>
</tbody>
</table>


Table 2
Total Variance Explained

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cum.%</td>
</tr>
<tr>
<td>2</td>
<td>2.575</td>
<td>8.046</td>
<td>40.789</td>
</tr>
<tr>
<td>3</td>
<td>2.400</td>
<td>7.501</td>
<td>48.290</td>
</tr>
<tr>
<td>4</td>
<td>1.488</td>
<td>4.650</td>
<td>52.940</td>
</tr>
</tbody>
</table>

Note. Extraction Method: Maximum Likelihood. Factor 1=Symbolic, Factor 2=Human Resource, Factor 3=Structural, Factor 4=Political
<table>
<thead>
<tr>
<th></th>
<th>Factor 1 Symbolic</th>
<th>Factor 2 Human Resource</th>
<th>Factor 3 Structural</th>
<th>Factor 4 Political</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbolic/12</td>
<td>.742</td>
<td>.199</td>
<td>.124</td>
<td>.237</td>
</tr>
<tr>
<td>Symbolic/20</td>
<td>.727</td>
<td>.213</td>
<td>.114</td>
<td></td>
</tr>
<tr>
<td>Symbolic/24</td>
<td>.603</td>
<td>.136</td>
<td>.120</td>
<td>.180</td>
</tr>
<tr>
<td>Symbolic/4</td>
<td>.579</td>
<td>.406</td>
<td>.189</td>
<td></td>
</tr>
<tr>
<td>Symbolic/32</td>
<td>.551</td>
<td>.350</td>
<td>.187</td>
<td>.210</td>
</tr>
<tr>
<td>Political/11</td>
<td>.550</td>
<td>.115</td>
<td>.103</td>
<td>.515</td>
</tr>
<tr>
<td>Symbolic/16</td>
<td>.535</td>
<td></td>
<td>.252</td>
<td>.227</td>
</tr>
<tr>
<td>Political/3</td>
<td>.514</td>
<td>.204</td>
<td>.274</td>
<td>.278</td>
</tr>
<tr>
<td>Symbolic/8</td>
<td>.499</td>
<td>.163</td>
<td></td>
<td>.375</td>
</tr>
<tr>
<td>Symbolic/28</td>
<td>.425</td>
<td>.419</td>
<td>.172</td>
<td>.233</td>
</tr>
<tr>
<td>Structural/21</td>
<td>.402</td>
<td>.180</td>
<td>.338</td>
<td></td>
</tr>
<tr>
<td>Human resource/10</td>
<td>.115</td>
<td>.757</td>
<td></td>
<td>.179</td>
</tr>
<tr>
<td>Human resource/2</td>
<td>.144</td>
<td>.748</td>
<td>.116</td>
<td></td>
</tr>
<tr>
<td>Human resource/18</td>
<td>.146</td>
<td>.712</td>
<td>.219</td>
<td>.147</td>
</tr>
<tr>
<td>Human resource/26</td>
<td>.231</td>
<td>.579</td>
<td>.109</td>
<td>.110</td>
</tr>
<tr>
<td>Human resource/6</td>
<td>.231</td>
<td>.579</td>
<td>.181</td>
<td></td>
</tr>
<tr>
<td>Human resource/14</td>
<td>.223</td>
<td>.509</td>
<td>.217</td>
<td></td>
</tr>
<tr>
<td>Human resource/22</td>
<td>.497</td>
<td></td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>Political/27</td>
<td>.267</td>
<td>.431</td>
<td>.169</td>
<td>.424</td>
</tr>
<tr>
<td>Human resource/30</td>
<td>.297</td>
<td>.408</td>
<td>.222</td>
<td>.125</td>
</tr>
<tr>
<td>Structural/17</td>
<td>.119</td>
<td></td>
<td>.784</td>
<td>.153</td>
</tr>
<tr>
<td>Structural/9</td>
<td>.161</td>
<td>.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural/13</td>
<td>.163</td>
<td>.116</td>
<td>.686</td>
<td>.105</td>
</tr>
<tr>
<td>Structural/1</td>
<td>.107</td>
<td>.124</td>
<td>.624</td>
<td>.195</td>
</tr>
<tr>
<td>Structural/25</td>
<td>.113</td>
<td>.168</td>
<td>.470</td>
<td>.119</td>
</tr>
<tr>
<td>Structural/5</td>
<td>.234</td>
<td>.168</td>
<td>.456</td>
<td>-.110</td>
</tr>
<tr>
<td>Structural/29</td>
<td>.143</td>
<td>.174</td>
<td>.396</td>
<td></td>
</tr>
<tr>
<td>Political/23</td>
<td>.222</td>
<td>.162</td>
<td></td>
<td>.609</td>
</tr>
<tr>
<td>Political/7</td>
<td>.220</td>
<td></td>
<td>.384</td>
<td>.589</td>
</tr>
<tr>
<td>Political/31</td>
<td>.213</td>
<td>.160</td>
<td>.388</td>
<td>.543</td>
</tr>
<tr>
<td>Political/19</td>
<td>.418</td>
<td>.198</td>
<td>.122</td>
<td>.462</td>
</tr>
<tr>
<td>Political/15</td>
<td>.239</td>
<td>.341</td>
<td>.302</td>
<td>.441</td>
</tr>
</tbody>
</table>

Table 4
Leadership Orientations Factor Analysis

<table>
<thead>
<tr>
<th>Factor 1: Symbolic Frame (Percent of variance explained = 32.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to be an inspiration to others.</td>
</tr>
<tr>
<td>I communicate a strong sense of vision and mission.</td>
</tr>
<tr>
<td>I see beyond current realities to generate exciting new opportunities.</td>
</tr>
<tr>
<td>I inspire others to do their best.</td>
</tr>
<tr>
<td>I serve as an influential model of organizational aspirations and values.</td>
</tr>
<tr>
<td>I am highly imaginative and creative.</td>
</tr>
<tr>
<td>I am highly charismatic.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 2: Human Resource Frame (Percent of variance explained = 8.1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I show high sensitivity and concern for others’ needs and feelings.</td>
</tr>
<tr>
<td>I show high levels of support and concern for others.</td>
</tr>
<tr>
<td>I am consistently helpful and responsive to others.</td>
</tr>
<tr>
<td>I give personal recognition for work well done.</td>
</tr>
<tr>
<td>I build trust through open and collaborative relationships.</td>
</tr>
<tr>
<td>I foster high levels of participation and involvement in decisions.</td>
</tr>
<tr>
<td>I listen well and am unusually receptive to other people’s ideas and input.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 3: Structural Frame (Percent of variance explained = 7.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I approach problems with facts and logic.</td>
</tr>
<tr>
<td>I approach problems through logical analysis and careful thinking.</td>
</tr>
<tr>
<td>I develop and implement clear, logical policies and procedures.</td>
</tr>
<tr>
<td>I think very clearly and logically.</td>
</tr>
<tr>
<td>I have extraordinary attention to detail.</td>
</tr>
<tr>
<td>I strongly emphasize careful planning and clear time lines.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 4: Political Frame (Percent of variance explained = 4.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am politically very sensitive and skillful.</td>
</tr>
<tr>
<td>I am a very skillful and shrewd negotiator.</td>
</tr>
<tr>
<td>I succeed in the face of conflict and opposition.</td>
</tr>
<tr>
<td>I am unusually persuasive and influential.</td>
</tr>
<tr>
<td>I am very effective in getting support from people with influence and power.</td>
</tr>
</tbody>
</table>
Symbolic frame variable 28 (generate loyalty and enthusiasm) and human resource frame variable 30 (am a highly participative manager) did not load sufficiently with any one factor. Structural frame variables 21 and 29 (set specific measurable goals and believe in clear chain of command) did not load with any one factor. Variables 3, 15, and 27 (mobilize people/resources, deal with organizational conflict, and develop alliances respectively) associated with the political frame did not sufficiently load on that factor. All other 25 variables for the four frames produced results consistent with Bolman and Deal’s Four-Frame Model of Leadership theory. In this study, the researcher chose to include all 32 variables for data analysis from Section I Leadership Behaviors due to their theoretical correctness. Factor analysis is a measure of evidence of internal structural validity. While factor analysis does not prove that respondents are consciously aware of or utilize the four frames, the procedure does establish that respondents identified items for each frame in association with each other and at the same time differentiated items into frame categories (Bolman & Deal, 1991).

Population and Demographic Profile

The population of this study consisted of 407 senior administrators from 74 institutions of higher education identified as members of the Coalition of Urban and Metropolitan Universities. Surveys mailed to the 407 administrators, yielded a response rate of 60.2% (N=245). Of the 245 who replied, 25 of these individuals declined to participate. Thus, the total number of useable surveys for data input in this study was 54.1% (N=220) representing 71 out of 74 institutions.
Personal Characteristics

In Section IV Respondent Information of the LOS, nine questions asked senior administrators demographic information pertaining to personal, professional, and institutional characteristics. Table 5 details personal characteristics obtained from questions 43, 44, 45, and 46. Question 43 dealt with age categories of senior administrators. No respondents were under the age of 40. Approximately one-half of the sample or 53.2% \((n=117)\) indicated that they were between the ages of 50 to 59. Approximately 28.2% \((n=62)\) were age 60 or more with only 18.6% \((n=41)\) reporting as under 50 years of age. Results from question 44 indicated that more than twice as many males \((n=148, 67.3\%)\) in this sample held senior administrative positions than females \((n=71, 32.3\%)\).

Question 45 asked respondents for the highest academic degree they had completed. Two-thirds of this sample \((n=147, 66.8\%)\) indicated they held a terminal degree in some field including a Juris Doctor (J.D.). Approximately 21.8% \((n=48)\) of the administrators reported a master’s degree as their highest level of education followed by 7.3% \((n=16)\) with a bachelor’s degree. Only 4.1% \((n=9)\) of the respondents selected other as their response.

In question 46, respondents selected the field of study in which they had completed their highest degree. Higher education \((n=37, 16.8\%)\) represented the largest segment of individual categories. Social Sciences \((n=34, 15.5\%)\) was the second most frequently selected category followed by business administration \((n=30, 13.6\%)\) and other \((n=29, 13.2\%)\). Some respondents who selected the other category specified in writing on the returned surveys that they held a Juris Doctor (J.D.). The five individual education categories when combined accounted for 35% \((n=77)\) of the degree areas of senior administrators.
Table 5
Personal Characteristics of Senior Administrators (N=220)

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (n=220)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>30 to 39</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>40 to 49</td>
<td>41</td>
<td>18.6</td>
</tr>
<tr>
<td>50 to 59</td>
<td>117</td>
<td>53.2</td>
</tr>
<tr>
<td>60 and over</td>
<td>62</td>
<td>28.2</td>
</tr>
<tr>
<td><strong>Gender (n=219)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>148</td>
<td>67.3</td>
</tr>
<tr>
<td>Female</td>
<td>71</td>
<td>32.3</td>
</tr>
<tr>
<td><strong>Highest Academic Degree (n=220)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>16</td>
<td>7.3</td>
</tr>
<tr>
<td>Masters</td>
<td>48</td>
<td>21.8</td>
</tr>
<tr>
<td>Doctorate</td>
<td>147</td>
<td>66.8</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Area of Degree (n=220)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td>30</td>
<td>13.6</td>
</tr>
<tr>
<td>Educational Leadership</td>
<td>20</td>
<td>9.1</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Higher Education</td>
<td>37</td>
<td>16.8</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Other Education Field</td>
<td>17</td>
<td>7.7</td>
</tr>
<tr>
<td>Engineering</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>Healthcare</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Humanities</td>
<td>18</td>
<td>8.2</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>Public Affairs</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>34</td>
<td>15.5</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
Professional Characteristics

In Section IV Respondent Information of the LOS, questions 41 and 42 asked senior administrators demographic information pertaining to personal, professional, and institutional characteristics. Table 6 details these professional characteristics.

Table 6
Professional Characteristics of Senior Administrators (N=220)

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President</td>
<td>23</td>
<td>10.5</td>
</tr>
<tr>
<td>Vice President</td>
<td>111</td>
<td>50.5</td>
</tr>
<tr>
<td>Chancellor</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>Vice Chancellor</td>
<td>40</td>
<td>18.2</td>
</tr>
<tr>
<td>Provost</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Years as Administrator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 5 years</td>
<td>12</td>
<td>5.5</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>27</td>
<td>12.3</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>45</td>
<td>20.5</td>
</tr>
<tr>
<td>16 to 20 years</td>
<td>24</td>
<td>10.9</td>
</tr>
<tr>
<td>20 plus years</td>
<td>110</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.

The population of this study consisted of 407 senior administrators from 74 institutions designated as American metropolitan universities by the Coalition of Urban and Metropolitan Universities. A total of 71 out of the 74 institutions were represented in the response data. Of the 220 senior administrators who responded to the LOS instrument, 10.5% (n=23) identified themselves as president and 6.4% (n=14) as chancellor of their institutions. As a combined category due to similar job responsibilities, presidents and chancellors represented 16.9% (n=37)
of survey respondents. Therefore, 50% ($n=37$) of the possible presidential respondents ($n=74$) replied. Vice presidents and vice chancellors constituted the majority of the position respondent titles with 50.5% ($n=111$) and 18.2% ($n=40$) respectively. As a combined category due to similar job responsibilities, vice presidents and vice chancellors accounted for 68.6% ($n=151$) of the respondents. Only 13.2% ($n=29$) of the respondents stated their job title as provost. However, infrastructure at some institutions confers a dual title of provost-vice president. No distinction was made for this category on the survey instrument. As a result, some provost-vice presidents may have marked only the vice president level.

Fifty percent ($n=110$) of the administrators reported serving in an administrative capacity for more than 20 years. The second highest category, 11 to 15 years, held 20.5% ($n=45$) of the responses followed by 6 to 10 years with 12.3% ($n=27$) of the responses. Those administrators with 5 years or less experience accounted for 5.5% ($n=12$).

Institutional Characteristics

In Section IV Respondent Information of the LOS, nine questions asked senior administrators demographic information pertaining to personal, professional, and institutional characteristics. Table 7 details institutional characteristics obtained from questions 47, 48, and 49.

Question 47 referred to the size of campus in terms of student population for each of the respondents. As shown in Table 7, the largest portion of senior administrators presided over campuses of 10,000 to 19,999 students ($n=78$, 35.5%) followed by campuses of 20,000 to 30,000 ($n=51$, 23.2%). The campus size with 30,000 or more students contained 14.1% ($n=31$) of the respondents. Approximately 18.2% ($n=40$) of the administrators held positions at campuses with
5,000 to 9,999 students. Only 8.6% (n=19) of the administrators served at campuses with 4,999 students or less.

Of the 217 senior administrators who responded to question 48 regarding the location of their campus in conjunction with the nearest city, the vast majority (n=162, 73.6%) reported institutions within city limits. All other campus administrators in the surrounding metropolitan areas, approximately 22% (n=47), reported locations of 1 mile to 20 miles outside of city limits.

Table 7
Institutional Characteristics of Metropolitan Universities (N=220)

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size of Campus (n=219)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1,000 students</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>1,000 to 4,999 students</td>
<td>17</td>
<td>7.7</td>
</tr>
<tr>
<td>5,000 to 9,999 students</td>
<td>40</td>
<td>18.2</td>
</tr>
<tr>
<td>10,000 to 19,999 students</td>
<td>78</td>
<td>35.5</td>
</tr>
<tr>
<td>20,000 to 30,000 students</td>
<td>51</td>
<td>23.2</td>
</tr>
<tr>
<td>30,000 plus students</td>
<td>31</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Proximity to City (n=217)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within city limits</td>
<td>162</td>
<td>73.6</td>
</tr>
<tr>
<td>1 to 5 miles</td>
<td>23</td>
<td>10.5</td>
</tr>
<tr>
<td>6 to 10 miles</td>
<td>18</td>
<td>8.2</td>
</tr>
<tr>
<td>11 to 20 miles</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>20 plus miles</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Carnegie Classification (n=218)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Research Extensive</td>
<td>50</td>
<td>22.7</td>
</tr>
<tr>
<td>Doctoral Research Intensive</td>
<td>71</td>
<td>32.3</td>
</tr>
<tr>
<td>Masters I</td>
<td>57</td>
<td>25.9</td>
</tr>
<tr>
<td>Masters II</td>
<td>24</td>
<td>10.9</td>
</tr>
<tr>
<td>Baccalaureate Liberal Arts</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Baccalaureate General</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>Do not know</td>
<td>6</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
Question 49 asked respondents to indicate the most current Carnegie Classification of their institution. Results in Table 7 showed 32.3% \((n=71)\) held positions at Doctoral Research Intensive universities. Masters I level respondents \((n=57, 25.9\%)\) and Doctoral Research Extensive respondents \((n=50, 22.7\%)\) placed second and third in the response groupings. Approximately 10.9% \((n=24)\) of the senior administrators indicated their universities were classified as Masters II institutions. Only 4.5% \((n=10)\) reported their institutions as baccalaureate liberal arts or baccalaureate general under Carnegie Classification designations.

**Research Questions and Results**

**Research Question 1**

What is the dominant leadership orientation, if any used by senior administrators at American metropolitan universities?

In Section I Leadership Behaviors of the LOS, 32 statements asked leaders to rate themselves on leadership behaviors according to how often the behaviors are true. Respondents used a five point Likert scale to reflect their rating of leadership behavior \((1 = \text{never}, 2 = \text{occasionally}, 3 = \text{sometimes}, 4 = \text{often}, 5 = \text{always})\). Table 8 displays overall mean scores by frame. The human resource frame had the highest mean score \((4.30)\). This score indicates that senior administrators in this study perceived that they exhibited leadership behaviors characteristic of the human resource frame most frequently. The structural frame mean score \((4.03)\) and the symbolic frame mean score \((4.02)\) indicate respondents perceive utilizing these frame behaviors less frequently than the human resource frame. These two scores while not identical were nearly the same values with a difference of only .01. The political frame produced
the lowest mean score (3.97) indicating it was perceived by respondents as the least utilized frame behavior.

Table 8
Mean Scores by Leadership Frame Section I Leader Behaviors (N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural frame (n=217)</td>
<td>4.03</td>
<td>.479</td>
<td>2-5</td>
</tr>
<tr>
<td>Human Resource frame (n=218)</td>
<td>4.30</td>
<td>.449</td>
<td>2-5</td>
</tr>
<tr>
<td>Political frame (n=216)</td>
<td>3.97</td>
<td>.506</td>
<td>1-5</td>
</tr>
<tr>
<td>Symbolic frame (n=215)</td>
<td>4.02</td>
<td>.542</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item. Response scale utilized: 1=never, 2=occasionally, 3=sometimes, 4=often, 5=always.

Table 9 identifies the mean scores, standard deviations, and ranges for each of the 32 variables in Section 1 Leader Behaviors of the LOS. Responses to items in the symbolic frame ranged from 1 to 5, 2 to 5, and 3 to 5. Responses to items in the political frame ranged from 1 to 5 and 2 to 5. The structural and human resource frames contained ranges from 2 to 5 or 3 to 5. None of the four frames contained a range from 4 to 5 only.

The human resource frame contained items which generated the highest mean scores of all four frames. The mean score range of 4.17 to 4.51 showed a consistent level of response to items in this frame. Item 6 (build trust through collaborative relationships) and item 2 (show high levels of support and concern for others) produced the highest mean scores (4.51 and 4.37 respectively). Item 30 (am a highly participative manager) held the lowest mean score (4.17) of the human resource frame.
Table 9
Analysis of Responses in Section 1 Leader Behaviors by Item and Frame (N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Frame (n=217)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Think very clearly and logically</td>
<td>4.30</td>
<td>.514</td>
<td>3-5</td>
</tr>
<tr>
<td>5. Emphasize planning and time lines</td>
<td>4.07</td>
<td>.692</td>
<td>2-5</td>
</tr>
<tr>
<td>9. Logical analysis/careful thinking</td>
<td>4.23</td>
<td>.650</td>
<td>2-5</td>
</tr>
<tr>
<td>13. Develop clear and logical policies</td>
<td>4.00</td>
<td>.679</td>
<td>2-5</td>
</tr>
<tr>
<td>17. Approach problems with facts/logic</td>
<td>4.23</td>
<td>.672</td>
<td>2-5</td>
</tr>
<tr>
<td>25. Extraordinary attention to detail</td>
<td>3.60</td>
<td>.913</td>
<td>2-5</td>
</tr>
<tr>
<td>29. Clear structure/chain of command</td>
<td>3.90</td>
<td>.829</td>
<td>2-5</td>
</tr>
<tr>
<td>Human Resource Frame (n=218)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. High levels of support/concern</td>
<td>4.37</td>
<td>.579</td>
<td>3-5</td>
</tr>
<tr>
<td>6. Build trust through relationships</td>
<td>4.51</td>
<td>.577</td>
<td>2-5</td>
</tr>
<tr>
<td>10. Show sensitivity/concern</td>
<td>4.25</td>
<td>.652</td>
<td>3-5</td>
</tr>
<tr>
<td>18. Helpful/responsive to others</td>
<td>4.21</td>
<td>.644</td>
<td>3-5</td>
</tr>
<tr>
<td>22. Listen well/receptive to input</td>
<td>4.29</td>
<td>.654</td>
<td>2-5</td>
</tr>
<tr>
<td>26. Give recognition for good work</td>
<td>4.30</td>
<td>.683</td>
<td>3-5</td>
</tr>
<tr>
<td>30. Am a highly participative manager</td>
<td>4.17</td>
<td>.692</td>
<td>2-5</td>
</tr>
<tr>
<td>Political Frame (n = 216)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mobilize people and resources</td>
<td>4.17</td>
<td>.672</td>
<td>2-5</td>
</tr>
<tr>
<td>7. Skillful and shrewd negotiator</td>
<td>3.64</td>
<td>.808</td>
<td>2-5</td>
</tr>
<tr>
<td>11. Unusually persuasive/influential</td>
<td>3.91</td>
<td>.782</td>
<td>2-5</td>
</tr>
<tr>
<td>15. Deal with organizational conflicts</td>
<td>3.75</td>
<td>.706</td>
<td>2-5</td>
</tr>
<tr>
<td>19. Get support from powerful people</td>
<td>4.08</td>
<td>.643</td>
<td>2-5</td>
</tr>
<tr>
<td>23. Politically sensitive/skillful</td>
<td>4.06</td>
<td>.783</td>
<td>1-5</td>
</tr>
<tr>
<td>31. Succeed against opposition</td>
<td>4.02</td>
<td>.623</td>
<td>2-5</td>
</tr>
<tr>
<td>Symbolic Frame (n = 215)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Inspire others to do their best</td>
<td>4.15</td>
<td>.644</td>
<td>2-5</td>
</tr>
<tr>
<td>8. Highly charismatic</td>
<td>3.52</td>
<td>.955</td>
<td>1-5</td>
</tr>
<tr>
<td>12. Inspiration to others</td>
<td>3.92</td>
<td>.770</td>
<td>2-5</td>
</tr>
<tr>
<td>16. Highly imaginative and creative</td>
<td>3.91</td>
<td>.835</td>
<td>2-5</td>
</tr>
<tr>
<td>20. Communicate vision/mission</td>
<td>4.18</td>
<td>.747</td>
<td>1-5</td>
</tr>
<tr>
<td>28. Generate loyalty and enthusiasm</td>
<td>4.17</td>
<td>.612</td>
<td>3-5</td>
</tr>
<tr>
<td>32. Model of organizational values</td>
<td>4.10</td>
<td>.722</td>
<td>2-5</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item. Response scale utilized: 1=never, 2=occasionally, 3=sometimes, 4=often, 5=always.
The lowest mean score of all four frames (3.52) found in the symbolic frame dealt with item 8 (am highly charismatic). Mean scores for the symbolic frame ranged from means of 3.52 to 4.19. The second overall lowest mean score for all four frames (3.60) was associated with item 25 (have extraordinary attention to detail) of the structural frame. Mean scores ranged from 3.60 to 4.30 for the structural frame. The political frame contained mean scores ranging from 3.64 to 4.17. Item 7 (skillful and shrewd negotiator) represented the lowest political mean score (3.64). Item 3 (mobilize people and resources) produced the highest mean score in this frame (4.17). Both the symbolic frame highest mean score (4.19) and the political frame highest mean score (4.17) were nearly equivalent to the lowest frame mean score of the human resource frame (4.17).

Table 10 provides a comprehensive view of individual mean scores by frame. Respondent scores for the human resource frame were highest of all four frames with the often or always ranges in 76.9% (n=169) of the responses. The structural frame showed responses in the often or always categories as 57.2% (n=126). The symbolic frame and the political frames showed 55.4% (n=122) and 52.2% (n=115) responses in the often to always ranges respectively. The structural (n=120), political (n=109), and symbolic (n=114) frames all showed respondents mean scores in the often range approximately 50% of the time. In contrast, the human resource frame showed respondent mean scores as 70% (n=154) in the often range and 6.9% (n=15) in the always range.
Table 10
Individual Mean Scores by Frame Section I Leader Behaviors (N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Individual Mean Score</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td>1.00 – 1.99</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2.00 – 2.99</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>3.00 – 3.99</td>
<td>89</td>
<td>40.5</td>
</tr>
<tr>
<td></td>
<td>4.00 – 4.99</td>
<td>120</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>(n=217)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource</td>
<td>1.00 – 1.99</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2.00 – 2.99</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>3.00 – 3.99</td>
<td>49</td>
<td>22.3</td>
</tr>
<tr>
<td></td>
<td>4.00 – 4.99</td>
<td>154</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>15</td>
<td>6.9</td>
</tr>
<tr>
<td>(n=218)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political</td>
<td>1.00 – 1.99</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2.00 – 2.99</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>3.00 – 3.99</td>
<td>92</td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>4.00 – 4.99</td>
<td>109</td>
<td>49.5</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>(n=216)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic</td>
<td>1.00 – 1.99</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>2.00 – 2.99</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>3.00 – 3.99</td>
<td>88</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>4.00 – 4.99</td>
<td>114</td>
<td>51.8</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>(n=215)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item. Response scale utilized: 1=never, 2=occasionally, 3=sometimes, 4=often, 5=always

Research Question 2

To what extent, if any, do senior administrators at American metropolitan universities use single, paired, or multiple frames?

Multiple frame usage is defined as a frame mean score of 4 or above. Table 11 depicts mean scores of respondents with individual mean scores ≥ 4.0. Mean scale scores in this range indicated that the respondent used behaviors associated with that frame often or always. Results
indicated that of the 220 senior administrators who participated in the research study, 10.5% (n=23) used none of the four frames often or always.

Table 11
Frequency Distribution by Leadership Frame Usage (Mean ≥4.00) (N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Frame (n=23)</td>
<td>23</td>
<td>10.5%</td>
</tr>
<tr>
<td>One Frame (n=39)</td>
<td></td>
<td>17.7%</td>
</tr>
<tr>
<td>structural</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>human resource</td>
<td>23</td>
<td>10.4</td>
</tr>
<tr>
<td>political</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>symbolic</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Two Frames (n=49)</td>
<td></td>
<td>22.3%</td>
</tr>
<tr>
<td>structural/human resource</td>
<td>22</td>
<td>10.0</td>
</tr>
<tr>
<td>structural/political</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>structural/symbolic</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>human resource/symbolic</td>
<td>11</td>
<td>5.0</td>
</tr>
<tr>
<td>human resource/political</td>
<td>9</td>
<td>4.0</td>
</tr>
<tr>
<td>political/symbolic</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>Three Frames (n=41)</td>
<td></td>
<td>18.6%</td>
</tr>
<tr>
<td>structural/human resource/political</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>structural/human resource/symbolic</td>
<td>12</td>
<td>5.4</td>
</tr>
<tr>
<td>structural/political/symbolic</td>
<td>5</td>
<td>2.2</td>
</tr>
<tr>
<td>human resource/political/symbolic</td>
<td>18</td>
<td>8.1</td>
</tr>
<tr>
<td>Four Frames (n=68)</td>
<td></td>
<td>30.9%</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item. Response scale utilized: 1=never, 2=occasionally, 3=sometimes, 4=often, 5=always.

Approximately 17.7% (n=39) of the senior administrators indicated by individual mean scores of 4 or above that they utilized only one frame often or always. Respondents utilizing one frame identified the human resource frame (n=23, 10.4%) as most frequently chosen among the
four. The structural frame was used by 4.5% (n=10) followed by the political frame with 1.8% (n=4) and the symbolic frame with 0.9% (n=2).

Behavior indicative of two frames demonstrated by an individual mean score of $\geq 4$, was reported by 22.3% (n=49) of the administrators. The most prevalent combination of frames included the structural/human resource blend (n=22, 10%). The human resource/symbolic combination was the second most frequently used (n=11, 5.0%) followed by the human resource/political duo (n=9, 4%). Thus, all three of the top reporting duos by those utilizing two frames included a human resource element. Three other combinations reported were the political/symbolic (n=4, 1.8%), structural/political (n=2, 0.9%), and the structural/symbolic (n=1, 0.4%).

Those respondents indicating three frame usage (n=41, 18.6%) showed the highest percentage for the human resource/political/symbolic frame combination (n=18, 8.1%). The structural/human resource/symbolic trio was utilized by 5.4% (n=12) of the respondents and 2.7% (n=6) showed a preference for the structural/human resource/political frames. The remaining combination of structural/political/symbolic frames was reported by 2.2% (n=5) of the senior administrators.

The highest percentage of respondent individual mean scores of 4 or higher, for any of the frames showed four frame usage as characteristic of 30.9% (n=68) of the sample. Three frame usage as reported in Table 11 showed 18.6% (n=41). Thus, multiple frame practice as defined by individual mean scores of $\geq 4$, yielded a total of 49.5% (n=109) of the respondents. In other words, nearly half of the senior administrators in this study reported using three or four frames often or always.
Research Question 3

To what extent, if any, are there statistically significant differences on frame usage based on selected personal variables among senior administrators at American metropolitan universities?

Four factorial ANOVAs were generated (see Table 12). The independent variables were age (with three levels) and gender (with two levels). The dependent variables were the individual mean frame usage scores for the structural, human resource, political, and symbolic frames. A separate factorial ANOVA was generated for each frame usage score.

Assumptions for Factorial ANOVAs

Accuracy of data is crucial to any type of statistical procedure. To assure the integrity of the data in this study, an inspection was performed on the researcher’s database for accuracy of input, missing values, and values not possible in the assigned specified ranges of responses. Errors due to inputting were corrected. Missing values by subjects were noted in the appropriate tables.

The factorial analysis of variance (ANOVA) contains three assumptions in using the sampling distribution of \( F \) to test hypotheses (Shavelson, 1996). The first assumption states that scores for any particular subjects are independent of other scores of other subjects. The simplest procedure to assess the independence of errors across individuals involves the examination of residual plots by group (Lomax, 2000). Plots of each of the four dependent variables (structural frame, human resource frame, political frame, symbolic frame) with each of the six independent variables selected from the personal, professional, and institutional variables appeared to be random displays of points for each grouping. Thus, the residual errors in this study are assumed to be random and independent errors.
The second assumption Shavelson (1996) described is normality. Kurtosis (peakedness or flatness of distribution) and skewness (symmetry of distribution) measure deviations from normality. A kurtosis or skewness value between ± 1.0 is considered acceptable for most psychometric purposes (George & Mallory, 2005). For the structural frame, skewness and kurtosis were respectively, 0.018 and -0.428. For the human resource frame skewness and kurtosis were respectively, -0.209 and -0.733. For the political frame skewness and kurtosis were respectively, -0.257 and 0.026. For the symbolic frame skewness and kurtosis were respectively, -0.382 and 0.062. All values for this study fell within the ± 1.0 range.

Spatz (2005) noted that a true normal distribution would have a mean, median, and mode of equal score. For the structural frame the mean, median, and mode respectively were 4.03, 4.00, and 4.00; for the human resource frame the mean, median, and mode respectively were 4.33, 4.25, and 4.00; for the political frame the mean, median, and mode respectively were 4.00, 4.00, and 4.00; and for the symbolic frame the mean, median, and mode respectively were 4.02, 4.00, and 3.75. Because the mean, median, and modes for each of the four frames were close in range, the distributions for this study approximate a normal distribution. Histograms displaying a normal bell curve also showed normal distributions for the dependent variables.

Assumption three (Shavelson, 1996), homogeneity of variances, states that the dependent variable should have the same variance in each category of the independent variables. Levene’s test of homogeneity of variance contends that if the Levene statistic is significant ($p \leq .05$), this may be an indication of unequal variances and increase the chance of Type I error (Lomax, 2000). When instances of significance occur, George and Mallory (2005) contended that if further checks of distributions of the measures of normality such as skewness and kurtosis are within acceptable parameters, then the ANOVA analysis is valid. Of the 12 factorial ANOVAs...
performed in this study, two showed significant Levene values. The structural frame dependent variable showed $p=.017$ for the independent variables of age and gender. The human resource frame dependent variable showed $p=.001$ for the independent variables of age and gender. Skewness and kurtosis for these variables as previously indicated, showed parameters within normal distribution. This researcher also conducted boxplot tests of the normality assumption for these variables. Rectangles for the dependent values were approximately at the same Y elevation for all categories, indicating little difference among groups. The mean lines for all boxplots tests fell approximately within halfway distances in all of the rectangles also indicating normality (Spatz, 2005). Thus, results for the ANOVAs in this study were considered valid.

**Structural Frame ANOVA**

Table 12 displays the results of the factorial ANOVA performed to determine whether there were statistically significant mean differences in the structural frame as a function of age and gender. No statistically significant mean difference on the structural frame existed between males and females or for the interaction of gender and age at an $\alpha$ of .05. However, there was a statistically significant mean difference in the use of the structural frame based on age, $F(2, 210)=2.995, p=0.52$. Age accounted for 2.8% of the variance in score in the structural frame.
Table 12
Analysis of Variance for Mean Scale Scores of Frames by Age and Gender (N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(partial)</td>
</tr>
<tr>
<td>Structural (n=215)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.364</td>
<td>2</td>
<td>.682</td>
<td>2.995</td>
<td>.052*</td>
<td>.028</td>
</tr>
<tr>
<td>Gender</td>
<td>.023</td>
<td>1</td>
<td>.023</td>
<td>.100</td>
<td>.752</td>
<td>.000</td>
</tr>
<tr>
<td>Age/gender</td>
<td>.114</td>
<td>2</td>
<td>.057</td>
<td>.250</td>
<td>.779</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>47.819</td>
<td>210</td>
<td>.228</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource (n=216)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.688</td>
<td>2</td>
<td>.344</td>
<td>1.732</td>
<td>.179</td>
<td>.016</td>
</tr>
<tr>
<td>Gender</td>
<td>.535</td>
<td>1</td>
<td>.535</td>
<td>2.697</td>
<td>.102</td>
<td>.013</td>
</tr>
<tr>
<td>Age/gender</td>
<td>.502</td>
<td>2</td>
<td>.251</td>
<td>1.264</td>
<td>.285</td>
<td>.012</td>
</tr>
<tr>
<td>Error</td>
<td>41.880</td>
<td>211</td>
<td>.198</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political (n=214)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3.487</td>
<td>2</td>
<td>1.744</td>
<td>7.485</td>
<td>.001*</td>
<td>.067</td>
</tr>
<tr>
<td>Gender</td>
<td>1.796</td>
<td>1</td>
<td>1.796</td>
<td>7.711</td>
<td>.006*</td>
<td>.036</td>
</tr>
<tr>
<td>Age/gender</td>
<td>.206</td>
<td>2</td>
<td>.103</td>
<td>.441</td>
<td>.644</td>
<td>.004</td>
</tr>
<tr>
<td>Error</td>
<td>48.681</td>
<td>209</td>
<td>.233</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic (n=213)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.910</td>
<td>2</td>
<td>.955</td>
<td>3.438</td>
<td>.034*</td>
<td>.032</td>
</tr>
<tr>
<td>Gender</td>
<td>2.113</td>
<td>1</td>
<td>2.113</td>
<td>7.609</td>
<td>.006*</td>
<td>.035</td>
</tr>
<tr>
<td>Age/gender</td>
<td>.477</td>
<td>2</td>
<td>.238</td>
<td>.858</td>
<td>.426</td>
<td>.008</td>
</tr>
<tr>
<td>Error</td>
<td>57.769</td>
<td>208</td>
<td>.278</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
*p<.05

The Scheffe post hoc test results presented in Table 13 showed statistical significance between mean scale scores in age groups 40 to 49 (\( p = .043 \)) and age group 60 plus. Table 16 showed administrators aged 40 to 49 exhibited significantly higher mean scores (4.19) in the structural frame than those administrators aged 60 plus (\( M = 3.94 \)).
Table 13
Scheffe Post Hoc Comparisons Age with the Structural Frame

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Mean Difference</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(I)</td>
<td>(J)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I - J</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>50-59</td>
<td>.1525</td>
<td>.0883</td>
<td>.228</td>
</tr>
<tr>
<td></td>
<td>60 plus</td>
<td>.2474*</td>
<td>.0978</td>
<td>.043</td>
</tr>
<tr>
<td>50-59</td>
<td>40-49</td>
<td>-.1525</td>
<td>.0883</td>
<td>.228</td>
</tr>
<tr>
<td></td>
<td>60 plus</td>
<td>.0949</td>
<td>.0755</td>
<td>.455</td>
</tr>
<tr>
<td>60 plus</td>
<td>40-49</td>
<td>-.2474*</td>
<td>.0978</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>-.0949</td>
<td>.0755</td>
<td>.455</td>
</tr>
</tbody>
</table>

*p<.05

*Human Resource Frame ANOVA*

Table 12 displays the results of the factorial ANOVA performed to determine whether there were statistically significant mean differences in the human resource frame as a function of age and gender. No statistically significant mean difference on the human resource frame existed between males and females or age with \( \alpha \) at the .05 level. In addition, no statistically significant mean difference on the structural frame existed for the interaction of males and females and age with \( \alpha \) at the .05 level.

*Political Frame ANOVA*

There was no statistically significant mean difference on the political frame based on the interaction of age with gender (see Table 12). However, there was a statistically significant mean difference in the use of the political frame based on age, \( F(2, 209)=7.485, p=.001 \). Age accounted for 6.7% of the variance in score in the political frame. In addition, there was a statistically significant mean difference, \( F(1, 209)=7.711, p=.006 \), based on gender. Gender
accounted for 3.6% of the variance in score in the political frame. No post hoc test was run on the gender variable since there are only two groups, male and female. As shown in Table 16, male mean scores for the political frame (3.94) were significantly lower than female mean scores (4.03).

Table 14 presents Scheffé post hoc test results for the variable of age with political frame usage. Statistical significance occurred between mean scale scores in age groups 40 to 49 ($p=.005$) and 60 plus. Administrators aged 40 to 49 exhibited significantly higher mean scores (4.15) in the political frame than those administrators aged 60 plus ($M=3.83$).

Table 14
Scheffé Post Hoc Comparisons Age with Political Frame

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean Difference (1 - J)</th>
<th>SE</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>50-59</td>
<td>.1586</td>
<td>.0887</td>
</tr>
<tr>
<td></td>
<td>60 plus</td>
<td>.3253*</td>
<td>.0982</td>
</tr>
<tr>
<td>50-59</td>
<td>40-49</td>
<td>-.1586</td>
<td>.0887</td>
</tr>
<tr>
<td></td>
<td>60 plus</td>
<td>.1666</td>
<td>.0766</td>
</tr>
<tr>
<td>60 plus</td>
<td>40-49</td>
<td>-.3253*</td>
<td>.0982</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>-.1666</td>
<td>.0766</td>
</tr>
</tbody>
</table>

$p<.05$

Symbolic Frame ANOVA

Table 12 displays the results of the factorial ANOVA performed to determine whether there were statistically significant mean differences in the symbolic frame as a function of age and gender. Results indicated there was no statistical significance in the usage of the symbolic frame based on the interaction of age with gender. However, a statistically significant mean
difference was found in the use of the symbolic frame based on age, \( F(2, 208) = 3.438, p = .034 \) and based on gender, \( F(1, 208) = 7.609, p = .006 \) respectively. Age and gender accounted for 3.2% and 3.5% of the variance in score respectively in the symbolic frame. No post hoc test was run on the gender variable since there were only two groups, male and female. Male mean scores for the symbolic frame (3.98) were significantly lower than female mean scores (4.11). Table 15 presents Scheffe post hoc test results for the variable of age with symbolic frame usage. This test showed no statistical significance occurred between mean scale scores in any of the age groups within the symbolic frame with \( \alpha \) at the .05 level.

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean Difference</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - J</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>.1234</td>
<td>.0961</td>
<td>.440</td>
</tr>
<tr>
<td>60 plus</td>
<td>.1933</td>
<td>.1068</td>
<td>.197</td>
</tr>
<tr>
<td>50-59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>-.1234</td>
<td>.0961</td>
<td>.440</td>
</tr>
<tr>
<td>60 plus</td>
<td>.0699</td>
<td>.0842</td>
<td>.709</td>
</tr>
<tr>
<td>60 plus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>-.1933</td>
<td>.1068</td>
<td>.197</td>
</tr>
<tr>
<td>50-59</td>
<td>-.0699</td>
<td>.0842</td>
<td>.709</td>
</tr>
</tbody>
</table>

* \( p < .05 \)

An individual mean scale score was calculated for each of the four frames for each respondent by summing individual responses to each item corresponding to that particular frame in the Section I Leader Behaviors portion of the LOS. Table 16 displays respondents’ mean scale scores for the structural, human resource, political, and symbolic frames by age, gender, and age with gender. Under the age variable, the human resource frame displayed the highest
mean scale scores for any of the frames and age levels with a mean scale range of 4.24 to 4.33. The political frame contained the lowest scores with a mean scale range of 3.83 to 4.15. Age level 60 plus showed the lowest mean scale score of any frame, (3.83) under the political frame, when compared with the other age groupings. Age level 40 to 49 showed the highest mean scale scores with a range of 4.14 to 4.33 when compared with the other age groupings.

Under gender, the human resource frame contained the highest mean scale scores for both males (4.28) and females (4.33). Males displayed the lowest mean scores in the political frame (3.94) while the female lowest mean score (4.00) occurred in the structural frame.

Mean scale scores under age and gender were consistently higher in the human resource frame than any other frame with a mean scale range of 4.07 to 4.40. The overall highest female mean score occurred in the 50 to 59 age bracket within the human resource frame ($M=4.34$). The overall highest male mean score (4.40) occurred within the human resource frame with age bracket 40 to 49. The political frame contained the lowest mean scores for both the female sample (3.59) and the male sample (3.89) in the 60 plus age grouping.
Table 16
Mean Scale Scores by Age and Gender for Each Leadership Frame (N=220)

<table>
<thead>
<tr>
<th>Age (n=220)</th>
<th>n</th>
<th>ST</th>
<th>HR</th>
<th>PO</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 to 49</td>
<td>41</td>
<td>4.19</td>
<td>4.33</td>
<td>4.15</td>
<td>4.14</td>
</tr>
<tr>
<td>50 to 59</td>
<td>117</td>
<td>4.03</td>
<td>4.32</td>
<td>3.98</td>
<td>4.01</td>
</tr>
<tr>
<td>60 plus</td>
<td>62</td>
<td>3.94</td>
<td>4.24</td>
<td>3.83</td>
<td>3.95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender (n=219)</th>
<th>n</th>
<th>ST</th>
<th>HR</th>
<th>PO</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>148</td>
<td>4.05</td>
<td>4.28</td>
<td>3.94</td>
<td>3.98</td>
</tr>
<tr>
<td>Female</td>
<td>71</td>
<td>4.00</td>
<td>4.33</td>
<td>4.03</td>
<td>4.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age &amp; Gender (n=216)</th>
<th>n</th>
<th>ST</th>
<th>HR</th>
<th>PO</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 to 49 male</td>
<td>19</td>
<td>4.16</td>
<td>4.40</td>
<td>4.26</td>
<td>4.21</td>
</tr>
<tr>
<td>female</td>
<td>20</td>
<td>4.21</td>
<td>4.25</td>
<td>4.05</td>
<td>4.08</td>
</tr>
<tr>
<td>50 to 59 male</td>
<td>78</td>
<td>4.06</td>
<td>4.32</td>
<td>4.04</td>
<td>4.08</td>
</tr>
<tr>
<td>female</td>
<td>38</td>
<td>3.98</td>
<td>4.34</td>
<td>3.90</td>
<td>3.91</td>
</tr>
<tr>
<td>60 plus male</td>
<td>48</td>
<td>3.95</td>
<td>4.29</td>
<td>3.89</td>
<td>4.04</td>
</tr>
<tr>
<td>female</td>
<td>13</td>
<td>3.92</td>
<td>4.07</td>
<td>3.59</td>
<td>3.63</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.

Research Question 4

To what extent, if any, are there statistically significant differences on frame usage based on selected professional variables among senior administrators at American metropolitan universities?

Table 17 provides a regrouped structure for data from questions 41 and 42 of the survey instrument. Categories as shown in Table 17 were used for the factorial ANOVA procedure comparing mean scores for job title, years as an administrator and any potential interaction between the two variables and frame usage. Under the job title section from question 41, president and chancellor were combined to form one category due to similar job responsibilities. The terms vice president and vice chancellor also denote similar positions and were combined to form one unit. Question 42 indicated that 50% of the respondents reported administrative experience at more than the 20 year level. After reviewing the frequency and distribution of data for this question, categories were collapsed from 5 categories to 3 categories. Those
administrators with 10 years or less (formerly categories of 0 to 5 and 6 to 10 years) experience constituted 17.7% \((n=39)\) of the sample. The category 11 to 20 years (formerly categories 11 to 15 and 16 to 20 years) held 31.4% \((n=69)\) of the respondents followed with the 20 plus years experience category remaining intact with 50% \((n=110)\) of the individuals.

Table 17
Professional Characteristics of Senior Administrators \((N=220)\)

<table>
<thead>
<tr>
<th>Collapsed Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Title</strong> ((n=217))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>President/Chancellor</td>
<td>37</td>
<td>16.8</td>
</tr>
<tr>
<td>Vice President/Vice Chancellor</td>
<td>151</td>
<td>68.6</td>
</tr>
<tr>
<td>Provost</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td><strong>Years as Administrator</strong> ((n=218))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 10 years</td>
<td>39</td>
<td>17.7</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>69</td>
<td>31.4</td>
</tr>
<tr>
<td>20 plus years</td>
<td>110</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.

Table 18 presents data generated by the factorial ANOVAs conducted with the structural, human resource, political, and symbolic frames, job title, years as an administrator, and the interaction with job title and years in administration. Four factorial ANOVAs were generated. The independent variables were job title (with three levels) and years in administration (with three levels). The dependent variables were the individual mean frame usage scores for the structural, human resource, political, and symbolic frames. A separate factorial ANOVA was generated for each frame usage score. The results indicated no statistically significant mean difference on the structural frame, human resource frame, political frame, or symbolic frame
existed based on the variables job title and years as an administrator or for their interaction with
\( \alpha \) at the .05 level usage.

Table 18
Analysis of Variance for Mean Scale Scores of Frames by Job Title and Years as an
Administrator (\( N=220 \))

<table>
<thead>
<tr>
<th>Frame</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(partial)</td>
</tr>
<tr>
<td>Structural (( n=214 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title</td>
<td>.159</td>
<td>2</td>
<td>.079</td>
<td>.337</td>
<td>.714</td>
<td>.003</td>
</tr>
<tr>
<td>Years Administrator</td>
<td>.055</td>
<td>2</td>
<td>.027</td>
<td>.116</td>
<td>.891</td>
<td>.001</td>
</tr>
<tr>
<td>Job/years</td>
<td>.114</td>
<td>4</td>
<td>.029</td>
<td>.121</td>
<td>.975</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>48.577</td>
<td>206</td>
<td>.236</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource (( n=215 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title</td>
<td>.318</td>
<td>2</td>
<td>.159</td>
<td>.797</td>
<td>.452</td>
<td>.008</td>
</tr>
<tr>
<td>Years Administrator</td>
<td>.374</td>
<td>2</td>
<td>.187</td>
<td>.935</td>
<td>.394</td>
<td>.009</td>
</tr>
<tr>
<td>Job/years</td>
<td>.456</td>
<td>4</td>
<td>.114</td>
<td>.570</td>
<td>.684</td>
<td>.011</td>
</tr>
<tr>
<td>Error</td>
<td>41.356</td>
<td>207</td>
<td>.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political (( n=213 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title</td>
<td>.077</td>
<td>2</td>
<td>.038</td>
<td>.151</td>
<td>.860</td>
<td>.001</td>
</tr>
<tr>
<td>Years Administrator</td>
<td>.531</td>
<td>2</td>
<td>.266</td>
<td>1.042</td>
<td>.355</td>
<td>.010</td>
</tr>
<tr>
<td>Job/years</td>
<td>.697</td>
<td>4</td>
<td>.174</td>
<td>.684</td>
<td>.604</td>
<td>.013</td>
</tr>
<tr>
<td>Error</td>
<td>52.263</td>
<td>205</td>
<td>.255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic (( n=212 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title</td>
<td>.029</td>
<td>2</td>
<td>.014</td>
<td>.049</td>
<td>.952</td>
<td>.000</td>
</tr>
<tr>
<td>Years Administrator</td>
<td>.015</td>
<td>2</td>
<td>.007</td>
<td>.025</td>
<td>.975</td>
<td>.000</td>
</tr>
<tr>
<td>Job/years</td>
<td>.654</td>
<td>4</td>
<td>.163</td>
<td>.558</td>
<td>.694</td>
<td>.011</td>
</tr>
<tr>
<td>Error</td>
<td>59.756</td>
<td>204</td>
<td>.293</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.

Table 19 contains mean scale scores for the structural, human resource, political, and
symbolic frames by job title, years as an administrator, and job title with years as an
administrator. Under the job title variable, the human resource frame displayed the highest mean scale scores for any of the frames and job titles with a range of 4.08 to 4.36. The political frame contained the lowest mean scores with a range of 3.92 to 3.99. Job title category president/chancellor showed the lowest mean scale score of any frame (3.92) under the political frame when compared with the vice presidents/vice chancellors and provosts. The symbolic frame contained mean scores almost identical across the three job titles of president/chancellor, vice president/vice chancellor, and provost, (4.02, 4.03, and 4.00 respectively). The structural frame showed a mean score range of 3.93 to 4.08.

Under years as an administrator, the human resource frame contained the highest mean scale scores across all categories with a range of 4.26 to 4.32. The highest mean score for this variable (4.32) under the 20 plus category for years of experience was found in the human resource frame. The structural frame held the second highest mean scores with a range of 4.01 to 4.11. The total lowest frame mean scores range was found in the political frame, 3.91 to 4.02. The mean scale scores for the symbolic frame ranged from 3.89 to 4.06.

Mean scale scores under job title and years as an administrator were consistently higher in the human resource frame than any other frame with a mean score range of 4.04 to 4.50. The two highest mean scale scores found in the human resource frame were provost (4.50) with 20 plus years experience and vice president/vice chancellor (4.37) with 0 to 10 years experience. The lowest mean score was found in the provost (3.83) category with 20 years plus experience under the political frame. The second lowest mean scale score (3.88) occurred under the structural frame with the president/chancellor category of 0 to 10 years experience and again in the political frame with the provost (3.88) category of 0 to 10 years experience. The political frame contained the lowest mean scale score range of any of the frames (3.83 to 4.13).
Table 19
Mean Scale Scores by Job Title and Years as an Administrator by Frame (N=220)

<table>
<thead>
<tr>
<th>Job Title (n=217)</th>
<th>n</th>
<th>ST</th>
<th>HR</th>
<th>PO</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>President/Chancellor</td>
<td>37</td>
<td>3.95</td>
<td>4.23</td>
<td>3.92</td>
<td>4.02</td>
</tr>
<tr>
<td>Vice President/Vice Chancellor</td>
<td>151</td>
<td>4.08</td>
<td>4.36</td>
<td>3.99</td>
<td>4.03</td>
</tr>
<tr>
<td>Provost</td>
<td>29</td>
<td>3.93</td>
<td>4.08</td>
<td>3.93</td>
<td>4.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years as an Administrator (n=218)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10 years</td>
<td>39</td>
<td>4.11</td>
<td>4.26</td>
<td>3.94</td>
<td>3.89</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>69</td>
<td>4.01</td>
<td>4.28</td>
<td>3.91</td>
<td>4.03</td>
</tr>
<tr>
<td>20 plus years</td>
<td>110</td>
<td>4.03</td>
<td>4.32</td>
<td>4.02</td>
<td>4.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Title/Years Administrator (n=215)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>President/Chancellor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 10 years</td>
<td>3</td>
<td>3.88</td>
<td>4.04</td>
<td>4.04</td>
<td>4.08</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>6</td>
<td>4.04</td>
<td>4.29</td>
<td>4.13</td>
<td>4.20</td>
</tr>
<tr>
<td>20 plus years</td>
<td>28</td>
<td>4.05</td>
<td>4.31</td>
<td>3.90</td>
<td>3.93</td>
</tr>
<tr>
<td>VicePres/ViceChan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 10 years</td>
<td>29</td>
<td>4.00</td>
<td>4.37</td>
<td>3.97</td>
<td>4.07</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>45</td>
<td>3.98</td>
<td>4.18</td>
<td>3.96</td>
<td>3.93</td>
</tr>
<tr>
<td>20 plus years</td>
<td>73</td>
<td>4.05</td>
<td>4.32</td>
<td>3.99</td>
<td>4.08</td>
</tr>
<tr>
<td>Provost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 10 years</td>
<td>6</td>
<td>4.10</td>
<td>4.33</td>
<td>3.88</td>
<td>4.04</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>16</td>
<td>4.09</td>
<td>4.32</td>
<td>4.10</td>
<td>3.97</td>
</tr>
<tr>
<td>20 plus years</td>
<td>9</td>
<td>4.07</td>
<td>4.50</td>
<td>3.83</td>
<td>4.08</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
ST=structural, HR=human resource, PO=political, SY=symbolic

Research Question 5

To what extent, if any, are there statistically significant differences on frame usage based on selected institutional variables among senior administrators at American metropolitan universities?

Four factorial ANOVAs were generated. The independent variables were size of campus (with three levels) and proximity (with two levels). The dependent variables were the individual mean frame usage scores for the structural, human resource, political, and symbolic frames. A separate factorial ANOVA was generated for each frame usage score. Table 20 provides a
regrouped structure for data from questions 47 and 48 of the survey instrument. After reviewing the frequency and distribution of data for questions 47 and 48, categories were collapsed for statistical test performance. Under the size of campus variable, question 47, categories were collapsed from 6 categories to 3 categories. Administrators presiding over campuses of 1 to 9,999 students constituted 26.8% (n=59) of the sample. Student size campuses of 10,000 to 19,999 showed 35.5% (n=78) of the sample followed by administrators at campuses of more than 20,000 students (n=82, 37.3%). Table 20 reflects changes in question 48 from 5 categories to 2 categories. Respondents (n=162, 73.6%) indicated that the majority of campuses were located within city limits. All other categories were combined to indicate respondents (n=55, 25.0%) with campuses in the surrounding metropolitan areas of 1 mile to more than 20 miles outside of city limits.

Table 20
Institutional Characteristics of Metropolitan Universities (N=220)

<table>
<thead>
<tr>
<th>Collapsed Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Campus (n=219)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 9,999 students</td>
<td>59</td>
<td>26.8</td>
</tr>
<tr>
<td>10,000 to 19,999 students</td>
<td>78</td>
<td>35.5</td>
</tr>
<tr>
<td>20,000 plus students</td>
<td>82</td>
<td>37.3</td>
</tr>
<tr>
<td>Proximity to City (n=217)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within City Limits</td>
<td>162</td>
<td>73.6</td>
</tr>
<tr>
<td>Surrounding Area</td>
<td>55</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.

Table 21 presents data generated by the factorial ANOVAs conducted with the structural, human resource, political, and symbolic frames, size of campus, proximity to city, and the
interaction with size of campus and proximity to city. No statistically significant mean
difference on the structural frame, human resource frame, political frame, or symbolic frame
existed based on the variables size of campus and proximity to city or for their interactions with
α at the .05 level among senior administrators at American metropolitan universities.

Table 21
Analysis of Variance for Mean Scale Scores of Frames by Size of Campus and Proximity to City
(N=220)

<table>
<thead>
<tr>
<th>Frame</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( \eta^2 ) (partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural ((n=212))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of Campus</td>
<td>.274</td>
<td>2</td>
<td>.137</td>
<td>.593</td>
<td>.554</td>
<td>.006</td>
</tr>
<tr>
<td>Proximity to City</td>
<td>.148</td>
<td>1</td>
<td>.148</td>
<td>.641</td>
<td>.424</td>
<td>.003</td>
</tr>
<tr>
<td>Size/Proximity</td>
<td>1.044</td>
<td>2</td>
<td>.522</td>
<td>2.260</td>
<td>.107</td>
<td>.021</td>
</tr>
<tr>
<td>Error</td>
<td>47.784</td>
<td>207</td>
<td>.231</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource ((n=213))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of Campus</td>
<td>.138</td>
<td>2</td>
<td>.069</td>
<td>.336</td>
<td>.715</td>
<td>.003</td>
</tr>
<tr>
<td>Proximity to City</td>
<td>.000</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td>.969</td>
<td>.000</td>
</tr>
<tr>
<td>Size/Proximity</td>
<td>.068</td>
<td>2</td>
<td>.034</td>
<td>.164</td>
<td>.849</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>42.757</td>
<td>208</td>
<td>.206</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political ((n=211))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of Campus</td>
<td>.271</td>
<td>2</td>
<td>.135</td>
<td>.529</td>
<td>.590</td>
<td>.005</td>
</tr>
<tr>
<td>Proximity to City</td>
<td>.056</td>
<td>1</td>
<td>.056</td>
<td>.218</td>
<td>.641</td>
<td>.001</td>
</tr>
<tr>
<td>Size/Proximity</td>
<td>1.129</td>
<td>2</td>
<td>.565</td>
<td>2.208</td>
<td>.112</td>
<td>.021</td>
</tr>
<tr>
<td>Error</td>
<td>52.681</td>
<td>206</td>
<td>.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbolic ((n=210))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of Campus</td>
<td>.287</td>
<td>2</td>
<td>.144</td>
<td>.485</td>
<td>.617</td>
<td>.005</td>
</tr>
<tr>
<td>Proximity to City</td>
<td>.078</td>
<td>1</td>
<td>.078</td>
<td>.265</td>
<td>.607</td>
<td>.001</td>
</tr>
<tr>
<td>Size/Proximity</td>
<td>.913</td>
<td>2</td>
<td>.456</td>
<td>1.541</td>
<td>.217</td>
<td>.015</td>
</tr>
<tr>
<td>Error</td>
<td>60.713</td>
<td>205</td>
<td>.296</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
Table 22 details mean scale scores for the structural, human resource, political, and symbolic frames by size of campus, proximity to city, and size with proximity. Under the size of campus variable, the human resource frame displayed the highest mean scale scores for any of the frames and size categories with a mean score range of 4.27 to 4.35. The structural frame showed consistent mean scores of 4.02 to 4.05. The political frame contained the lowest mean scores with a range of 3.96 to 3.99. Both the structural frame and the political frame ranges displayed little difference in the minimum and maximum means respectively. The symbolic frame ranged from mean scores of 3.99 to 4.09.

Under proximity to city, the human resource frame again presented the highest mean score range of 4.29 to 4.30. The symbolic frame with mean scale scores of 4.01 to 4.02 showed very little variation as did the human resource frame scores. The political frame contained the lowest mean score range of 3.91 to 3.99 followed by the structural frame with a mean score range of 3.98 to 4.05.

Under the combined variable results of size of campus with proximity to city, the human resource frame in Table 22 accounted for the highest mean score range of 4.24 to 4.34. It also contained the highest individual mean score (4.34) in the category 20,000 plus students in the surrounding area. The political frame ranged lowest with mean scores of 3.81 to 4.09. This frame contained the lowest individual mean score (3.81) in the category 20,000 plus students in surrounding metropolitan areas. The structural frame and the symbolic frame displayed mean score ranges of 3.83 to 4.12 and 3.87 to 4.15 respectively.
Table 22
Mean Scale Scores by Size of Campus and Proximity to City by Frame (N=220)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>ST</th>
<th>HR</th>
<th>PO</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Campus (n=219)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 9,999 students</td>
<td>59</td>
<td>4.05</td>
<td>4.35</td>
<td>3.96</td>
<td>4.09</td>
</tr>
<tr>
<td>10,000 to 19,999 students</td>
<td>78</td>
<td>4.03</td>
<td>4.27</td>
<td>3.97</td>
<td>3.99</td>
</tr>
<tr>
<td>20,000 plus students</td>
<td>82</td>
<td>4.02</td>
<td>4.29</td>
<td>3.99</td>
<td>4.01</td>
</tr>
<tr>
<td>Proximity to City (n=217)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within City Limits</td>
<td>162</td>
<td>4.05</td>
<td>4.29</td>
<td>3.99</td>
<td>4.02</td>
</tr>
<tr>
<td>Surrounding Area</td>
<td>55</td>
<td>3.98</td>
<td>4.30</td>
<td>3.91</td>
<td>4.01</td>
</tr>
<tr>
<td>Size/Proximity (n=213)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 9,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>city limits</td>
<td>39</td>
<td>3.96</td>
<td>4.24</td>
<td>3.89</td>
<td>3.93</td>
</tr>
<tr>
<td>surrounding area</td>
<td>19</td>
<td>4.12</td>
<td>4.29</td>
<td>4.09</td>
<td>4.15</td>
</tr>
<tr>
<td>10,000 to 19,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>city limits</td>
<td>56</td>
<td>4.08</td>
<td>4.30</td>
<td>3.94</td>
<td>4.00</td>
</tr>
<tr>
<td>surrounding area</td>
<td>19</td>
<td>3.98</td>
<td>4.24</td>
<td>4.05</td>
<td>4.09</td>
</tr>
<tr>
<td>20,000 plus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>city limits</td>
<td>65</td>
<td>4.07</td>
<td>4.32</td>
<td>4.00</td>
<td>4.03</td>
</tr>
<tr>
<td>surrounding area</td>
<td>15</td>
<td>3.83</td>
<td>4.34</td>
<td>3.81</td>
<td>3.87</td>
</tr>
</tbody>
</table>

Note. Not all respondents completed every survey item.
ST=structural, HR=human resource, PO=political, SY=symbolic

Research Question 6

To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators at American metropolitan universities?

In Section III Overall Rating of the LOS, two questions, 39 and 40, asked senior administrators to rate their overall effectiveness as a manager and as a leader. Respondents used a five point Likert scale to reflect their rating of management effectiveness in LOS question 39 and leadership effectiveness in LOS question 40. The response scale utilized the Likert scale delineations with a percentage description added for clarification: 1=bottom 20%, 2=low-mid 20%, 3=middle 20%, 4=mid-upper 20%, and 5=top 20%.
Table 23 depicts respondent frequency and percent data for effectiveness as a manager and effectiveness as a leader. Approximately 63.2% \((n=139)\) of the administrators viewed their management skills in the top 20% bracket. They also chose the top 20% bracket for leadership skills in the majority of cases \((n=147, 66.8\%)\). Overall, senior administrators in this sample rated themselves in the upper-mid 20% to top 20% categories for both management \((n=203, 92.3\%)\) and leadership \((n=211, 95.9\%)\) effectiveness categories. As a manager, no respondents reported skills lower than the middle 20% range. One respondent indicated leadership skills in the low-mid 20% category and 3.6% \((n=8)\) of the respondents fell in the middle 20% range.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manager ((n=220))</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom 20%</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Low-mid 20%</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Middle 20%</td>
<td>17</td>
<td>7.7</td>
</tr>
<tr>
<td>Upper-mid 20%</td>
<td>64</td>
<td>29.1</td>
</tr>
<tr>
<td>Top 20%</td>
<td>139</td>
<td>63.2</td>
</tr>
<tr>
<td><strong>Leader ((n=220))</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom 20%</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Low-mid 20%</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Middle 20%</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td>Upper-mid 20%</td>
<td>64</td>
<td>29.1</td>
</tr>
<tr>
<td>Top 20%</td>
<td>147</td>
<td>66.8</td>
</tr>
</tbody>
</table>

In Table 24, respondent mean scores for effectiveness as a manager and effectiveness as a leader showed as 4.55 and 4.62 respectively. Both mean scores fell between the Likert scale ratings of 4 (upper-mid 20%) and 5 (top 20%). The range of the leadership mean scale scores (2-
5) was larger than the range of mean scores (3-5) for management effectiveness despite a slightly higher mean for leadership.

Table 24
Effectiveness as a Manager and a Leader Mean Scores (N=220)

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager (n=220)</td>
<td>4.55</td>
<td>.635</td>
<td>3-5</td>
</tr>
<tr>
<td>Leader (n=220)</td>
<td>4.62</td>
<td>.580</td>
<td>2-5</td>
</tr>
</tbody>
</table>

Note. Response Scale Utilized: 1=bottom 20%, 2=low-mid 20%, 3=middle 20%, 4=mid-upper 20%, and 5=top 20%.

Summary

Chapter 4 presented an analysis of data obtained from the responses of 220 senior administrators at American metropolitan universities to Bolman and Deal’s (1990) Leadership Orientation Survey (Self) instrument. Six research questions provided the framework for analysis of the survey data. In addition, information from Section IV Respondent Information of the LOS instrument formed a demographic profile based on personal, professional, and institutional characteristics of the respondents. A summary and discussion of results, study conclusions, and recommendations for future research follow in Chapter 5.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Section one of Chapter 5 presents a brief summary of the study. Section two includes a discussion of findings followed by conclusions in section three. The fourth section discusses implications for leadership practices of senior administrators at American metropolitan universities. The fifth section consists of recommendations for future research.

Summary

Purpose of the Study

This study sought to explore leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership (1991). Using Bolman and Deal’s (1990) Leadership Orientations Survey (Self) instrument with an additional Respondent Information section, this study addressed the following: 1) whether there is a dominant leadership orientation used by senior administrators at American metropolitan universities; 2) whether these administrators use single, paired, or multiple frames; 3) whether there are degrees of difference in frame usage based on selected personal, professional, and institutional variables among these administrators; and 4) whether self-perception of leadership effectiveness and management effectiveness differs in senior administrators at American metropolitan universities.
Population and Data Collection

The population of this study consisted of 407 senior administrators from 74 institutions of higher education identified as members of the Coalition of Urban and Metropolitan Universities. Surveys mailed to the 407 administrators, yielded a response rate of 245 surveys (60.2%). Of the 245 who replied, 25 of these individuals declined to participate. Thus, the total number of useable surveys for data input in this study was 220 (54.1%) representing 71 out of 74 institutions.

Instrumentation

The Bolman and Deal Leadership Orientation Survey (LOS) Self (1990) was used with permission. This survey instrument in which individuals rate themselves was developed by Bolman and Deal to measure leadership behavior and styles utilizing the four organizational frames (structural, human resource, political, and symbolic). In Section I Leadership Behaviors of the LOS, 32 statements ask leaders to rate themselves on leadership behaviors according to how often the behaviors are true based on a Likert scale. In Section II Leadership Style of the LOS instrument, six statements rank leadership style from the perspective of the respondent. In Section III Overall Rating, two statements representing an overall rating of effectiveness by the respondent in terms of management versus leadership were asked using a Likert scale along with a percentage category. Section IV Respondent Information asked the research participants nine questions regarding demographic information on personal, professional, and institutional characteristics. Personal characteristics included age, gender, major field of study in the highest academic degree completed, and the respondent’s highest academic degree. Professional characteristics included respondent’s job title and years served as an administrator. Institutional
characteristics included student size of the university, proximity of the university to city location, and the most current Carnegie Classification of the institution.

**Threats to Validity**

Shavelson (1996) presented two underlying concepts in his definition of validity. External validity is the extent to which conclusions of a study can be generalized to other populations and settings. Internal validity refers to the independent variable and its ability to influence the dependent variable. Was the change or difference noted in the study actually attributable to the independent variable?

Several threats to external validity presented themselves in this study. Population validity (Gall, Gall, & Borg, 2003) refers to the extent that results from a study sample can be generalized to a larger defined group. Selection of participants in this study was limited to 407 senior administrators in four-year institutions of higher education identified as members of the Coalition of Urban and Metropolitan Universities. Surveys mailed to the 407 administrators, yielded a response rate of 245 surveys (60.2%). A total of 162 (39.8%) senior administrators failed to respond in any capacity. Of the 245 administrators who replied, 25 declined to participate. Thus, the total number of useable surveys for data input in this study was 220 (54.1%). Senior administrators of metropolitan universities whose institutions were not members of CUMU were excluded. While these institutions may qualify under the criteria established by CUMU for metropolitan universities, there may be differences philosophically as to why they do not join. Therefore, senior administrators of non-member CUMU institutions may have responded differently to the LOS instrument if given the opportunity which may have produced different results. In addition, a number of administrators within the surveyed sample
declined to participate \((n=25)\). Thus, results of this study may not be representative of the metropolitan university senior administrator population due to population validity concerns.

Further, this study made no differentiation between public and private metropolitan institutions. It is not known if senior administrators at these metropolitan universities differ in frame orientation and usage. As a result, generalizations cannot be drawn in relation to private or public institutions or any other classification of metropolitan universities that was not studied in this dissertation.

Another aspect of validity deals with statistical conclusions. This study attempted to minimize threats in this area by considering statistical power analysis. A factorial ANOVA compares mean scores for not only the main effect between factors but also for the interaction effect. Thus, this statistical test is more powerful than many other statistical designs. Factorial ANOVAs were performed in this study on data obtained from personal, professional, and institutional characteristics (independent variables) and the four frames (dependent variables). This study also examined the assumptions of independence, normality, and homogeneity of variances for factorial ANOVAs. Criteria for these assumptions were met, therefore, results for the ANOVAs in this study were considered valid.

Internal reliability posed additional threats to validity. In an attempt to control for the threat of instrumentation, evidence of reliability and validity were gathered. Cronbach’s coefficient alpha, a reliability of the internal consistency of test items, was computed for Section I of the LOS. These results were consistent with results reported in other studies of higher education populations (Bolman, 2006; Borden, 2000; Chang, 2004; Turley, 2002; Wolf, 1998). Validity evidence supporting the conclusion that the scores from the LOS instrument were a valid assessment of senior administrators’ leadership orientations was also investigated. While
the factor analysis conducted does not prove that respondents are consciously aware of or utilize the four frames, the procedure does establish that respondents identified items for each frame in association with each other and at the same time differentiated items into frame categories (Bolman & Deal, 1991).

Three additional threats to internal validity in this study involved possible hypothesis guessing, evaluation apprehension, and selection bias (Isaac & Michael, 1995). Hypothesis guessing occurs when study participants respond in ways they believe the researcher wants them to respond. In Section I Leadership Behaviors of the LOS, 32 statements asked senior administrators to rate themselves on leadership behaviors utilizing a five point Likert scale. In Section II Leadership Style, senior administrators rated themselves on leadership style utilizing a forced-rank choice method. The different methods of evaluation in Section I and Section II may assist in reducing the threat of hypothesis guessing. However, while some researchers have used Section II in their study results, others (Cantu, 1997; Chang, 2004; Durocher 1995; Gilson, 1994; Kelly, 1997; Turley, 2002) have utilized only Section I. Because of the limitations in reliability ranges and missing data, this researcher chose not to include Section II items in data analysis. Thus, the threat of hypothesis guessing was not addressed in this study. Bolman and Deal (1991) suggested further research utilizing multiple measures from multiple sources may counteract this halo effect.

Evaluation apprehension occurs when threats to a person’s ego may be perceived thereby creating results not reflective of the respondent’s true self-perception (Isaac & Michael, 1995). This study attempted to counteract the threat of evaluation apprehension by including language assuring respondents of confidentiality and anonymity in the initial letter sent with the LOS instrument and subsequent follow-up letters.
Selection bias, another threat to internal validity, may have been a factor given the number of nonrespondents (162) in this study. Selection bias results when the sample is not representative of the population (Isaac & Michael, 1995). The researcher attempted to diminish this bias by sending follow-up letters to nonrespondents. The first mailout sent January 9, 2006, yielded a return of 108 survey responses. A follow-up letter was sent on January 30, 2006, to those individuals who had not replied to the first mailout. The second mailout yielded a return of 69 additional survey responses. A third and final follow-up letter and the survey were mailed on February 18, 2006, to those individuals who had not replied to mailouts one or two. This third mailout yielded 68 survey responses for a comprehensive response rate of 245 surveys (60.2%).

Discussion of Findings

While Chapter 4 contains a full presentation of results, this section summarizes the findings as they relate to each of the study’s six research questions. This section also includes a summary of the demographic profile developed from Section IV of the LOS instrument.

Demographic Profile

Personal characteristics revealed the vast majority of administrators as age 50 or higher with most respondents in the range of 50 to 59 years of age. Male respondents outnumbered female respondents by approximately a two to one ratio. Two-thirds of the respondents held doctorate degrees. Of the 220 senior administrators in this study, 35% of them reported completion of their highest academic degree in some area of education.

Professional characteristics indicated most responses in this study were provided by vice presidents and vice chancellors (68.6%). Presidents and chancellors accounted for 16.9% of the
responses. Fifty percent of the administrators reported serving in an administrative capacity for more than 20 years.

Institutional characteristics showed the largest portion of senior administrators (35.5%) presided over campuses of 10,000 to 19,999 students followed by campuses of 20,000 to 30,000 (23.2%). Almost three-fourths of the administrators reported their institutions were located within city limits. According to the most current Carnegie Classifications, most respondents (32.3%) held positions at Doctoral Research Intensive universities.

Research Question 1

What is the dominant leadership orientation, if any, used by senior administrators at American metropolitan universities?

Respondent scores for the human resource frame were highest of all four frames with the often or always ranges in 76.9% (n=169) of the responses. The structural frame showed responses in the often or always categories as 57.2% (n=126). The symbolic frame and the political frames showed 55.4% (n=222) and 52.2% (n=115) responses in the often to always ranges respectively. While senior administrators in this study indicated that the human resource frame dominated frame choices, the other three frame choices clustered around a very small range of variation. This may indicate that respondents navigate from a human resource perspective as a base style of leadership. They can listen, gather ideas and alternatives and then in turn, use the other frames as secondary and in almost equal proportions for solutions and directions. With this pattern of frame distribution, it would appear that these administrators use the structural, political, and symbolic frames in a consistent and supportive mode with the human resource frame.
The overall mean frame scores for the four frames strengthen this conclusion. The human resource frame had the highest mean score (4.30). This score indicates that senior administrators in this study perceived that they exhibited leadership behaviors characteristic of the human resource frame most frequently. The structural frame mean score (4.03), the symbolic frame mean score (4.02), and the political frame mean score (3.97) indicate respondents perceive utilizing these frame behaviors less frequently than the human resource frame but utilize the other concepts almost equally. These mean frame scores underline the unity of a multiple frame leadership perspective.

A number of other studies have shown varied results. The majority of these studies (Bolman & Deal, 1991, 1992a; Borden, 2000; Chang, 2004; Kelly, 1997; Turley, 2002; Wolf, 1996) showed the human resource frame as the most dominant leadership orientation supporting the findings (76.9%) in this dissertation. Results in all but Borden’s study, indicated the second most dominant frame as the structural leadership orientation. While those results concur with findings of this study, it is of importance to note that the degree of difference in usage of the structural (57.2%), political (55.4%), and symbolic (52.2%) frames in this study was not widely varied.

A quantitative study completed by Bolman and Deal (1991) utilized the two versions of the Leadership Orientations Survey (LOS). The authors collected data from managers of a multinational corporation, higher education administrators, United States school administrators, and school administrators from the Republic of Singapore. The international corporate sample scored highest on the structural frame with much less emphasis of utilizing the symbolic frame. However, Bolman and Deal stated that the most typical patterns found in American samples
indicated a higher orientation toward the human resource and structural frames with the political and symbolic frames slightly less.

Analyses of narratives from groups of principals in Florida and Singapore (Bolman & Deal, 1992a) found the human resource frame was the preferred choice by both groups with 86% and 98% respectively. The structural frame was the second preference. The political frame was the third frame of choice for both groups but the American principals preferred its use 50% of the time as opposed to only 21% by the Singapore group. The symbolic frame was the least frequent choice of frames by both groups. Again, this sample indicated the human resource and structural frames as most utilized.

Using Bolman and Deal’s Leadership Orientations Survey, Wolf (1996) conducted a study to determine leadership orientations of campus safety directors at public four-year institutions. His results indicated the human resource frame as most dominant in usage followed by the structural, political, and symbolic frames respectively.

Kelly (1997) investigated several dimensions of frame usage comparing senior level executives from Fortune 500 companies and senior administrators from four-year public universities. The human resource frame emerged as the dominant frame of use for both groups (62%) with the structural frame as second preference.

Borden (2000) explored leadership orientations of area campus administrators in Florida’s state university and community college systems. The human resource frame emerged as the primary frame used by area campus administrators (89.6%) with the symbolic frame as second. The political frame was identified as the least used frame.

Another pertinent study, conducted by Turley (2002) with radiation therapy program directors at higher education institutions, showed similar results. Both the quantitative and
qualitative findings indicated that the human resource frame and the structural frame respectively showed the greatest frequency of use.

Chang (2004) reported on leadership orientations of department chairs and faculty utilization of instructional technology in teaching. His study utilized the Bolman and Deal Leadership Orientations Survey (Other) instrument whereas most research studies have employed only the LOS (Self) version. According to faculty ratings in the often and always ranges, frames most utilized were the human resource frame closely followed by the structural frame.

On the other hand, Bensimon (1989, 1990) collected data through on-site interviews with the presidents of 32 colleges who were participating in a five-year longitudinal study conducted by the National Center for Postsecondary Governance and Finance. Presidents utilizing a single frame approach were most likely to use the bureaucratic (structural) frame. Almost half of the paired frame data showed collegial (human resource) and symbolic as the most common duo. The political frame was the least espoused frame in her studies.

In addition, a qualitative study conducted by Bolman and Deal (1991) chose a sample of 145 higher education administrators, 63 American school administrators (15 Minnesota school superintendents, 48 principals from Florida schools) and 220 school administrators from the Republic of Singapore. Frames used most frequently by the higher education administrators were political (71%), structural (67%), human resource (59%) and symbolic (17%). The political frame showed statistically significant greater usage among American administrators. No mean scores were available for comparison from the Bolman and Deal (1991) study.

As noted, Bensimon’s studies (1989, 1990) and Bolman and Deal’s (1991) study produced different frame leadership orientations results. A number of factors may have
contributed to the differences. Bensimon’s study was qualitative with a small sample size consisting of presidents from community colleges as well as four-year institutions. Since governance and infrastructure of community colleges differ from four-year institutions of higher education, these factors may have played a role in outcome (Bensimon, 1989). Bolman and Deal’s (1991) study contained multi-cultural elements of an international sample possibly contributing to different results. In addition, both studies took place in the early 1990s, a time period when educational issues and criticism such as the governmental report, *A Nation at Risk*, influenced major leadership decisions. The tone set by negativity and decreased funding sources, may have contributed to a more structural approach towards leadership as demands for accountability increased (Cook & McLendon, 1998).

Research Question 2

To what extent, if any, do senior administrators at American metropolitan universities use single, paired, or multiple frames?

Bolman and Deal (1991, 1992a, 1992b, 2003) contended that successful and effective leadership encompasses a multi-perspective approach. They suggested that it was not one way or one style or one theory that applied in every situation. Instead, effective leadership especially in the complex environment of higher education needs flexibility and openness for alternative viewpoints.

Multiple frame usage was defined in this study as a frame mean score of 4 or above. Results indicated that of the 220 senior administrators who participated in the research study, 10.5% (*n*=23) used none of the four frames often or always. Approximately 17.7% (*n*=39) of the senior administrators indicated that they utilized only one frame often or always. Behavior
indicative of two frames was reported by 22.3% ($n=49$). Multiple frame practice as defined by individual mean scores of $\geq 4$, yielded a total of 49.5% ($n=109$). In other words, nearly half of the senior administrators in this study reported using three or four frames often or always.

Further underscoring the multiple frame perspective, all combinations of three frame groupings (18.6%) were represented in the breakdown of multiple frame usage. When taken into consideration with four frame usage (30.9%), these administrators exhibit the cognitive ability to shift perspectives dependent upon the situation. Greater flexibility may be a result of the diversity of issues both internally and externally faced by metropolitan university senior administrators. Tackling issues with the community such as transportation, healthcare, growth management, and finite natural resources form only part of the demand for leadership skills. Faculty, staff, and students create another component. The high percentage of administrators using multiple frame leadership behaviors may be an indication that adaptation to the complexities of higher education along with community challenges has taken place. Bolman and Deal (1992a, 1992b, 1994) reported that the ability to utilize multiple frames is a key element of effectiveness in senior administrative positions.

Other studies with higher education samples have shown percentages of multiple frame usage supporting the researcher’s findings. Wolf’s (1996) research with campus safety directors showed 46% indicated multiple frame usage. Borden’s study (2000) of area campus administrators in Florida’s state university and community college systems indicated approximately 47.3% of the area campus administrators utilized a multi-frame leadership style defined as utilizing three or four frames in decision making. Turley (2002) combined quantitative and qualitative methodologies in her research with radiation therapy directors at universities. The quantitative data utilizing a modified version of the LOS instrument found
multi-frame use in 44.1% of the respondents. Her qualitative portion using the critical incident technique demonstrated multiple frame leadership with 60% of the respondents.

In contrast, Bensimon (1989, 1990) interviewed college presidents to determine the extent to which they incorporated single or multiple frame behavior when describing good leadership. She found that 13 presidents (41%) espoused single frame theories, 11 (34%) used paired frames and only 8 (25%) used multiple frames.

Bolman and Deal’s (1991) sample of 145 higher education administrators, 63 American school administrators (15 Minnesota school superintendents, 48 principals from Florida schools) and 220 school administrators from the Republic of Singapore produced results indicating that usage of one or possibly two frames occurred primarily with all three groups. Only 5% of the respondents used all four frames. In other words, the respondents rarely exhibited criteria utilizing more than two frames and almost none described situations containing all four frames. Among the higher education administrators, 24% used single frames, 50% used paired frames and 26% used multiple frames (three or four frames). In another study with groups of principals in Florida and Singapore, Bolman & Deal (1992a) found that only 19% of the American principals and 13% of the Singapore administrators used three frames. Neither group showed more than 6% utilizing all four frames.

Kelly (1997) compared higher education administrators in public universities and senior level executives from Fortune 500 companies. Results showed approximately 30% of the executives and higher education administrators used multiple frame (three or four frames) leadership styles. Of that 30%, higher education administrators demonstrated multiple frame usage totals of 37% as compared to 26.9% of the business executives.
Chang’s (2004) study utilizing the LOS (Other) version found faculty participants rated their department chairs as most frequently not using any particular frame (56.8%). Multiple frame approach findings indicated usage of only 14.8%. In other words, department chairs were perceived by faculty as more likely to show no particular leadership orientation as opposed to single, paired, or multiple frame styles.

Findings in this study indicated that multiple frame use occurred with approximately 50% of the respondents and was supported by other higher education studies (Borden, 2000; Turley 2002; Wolf, 1996). However, Bolman and Deal’s research (1991, 1992a) also supported by a number of studies (Bensimon, 1989, 1990; Chang, 2004; Kelly, 1997) indicated that leadership positions such as those at senior administrative levels rarely use more than two frames. According to Bolman and Deal (1994), a management focus rather than a leadership focus especially in public schools created and perpetuated organizations governed by rules and procedures. They argued that in order to develop leaders and change this mentality, an emphasis on political strategies and symbolic activities must be developed.

Bennis (1989) cited the American educational system as a prime example of one much more in tune with management than leadership. Its focus has centered on getting the job done with efficiency held as a higher prize than educating in many instances. Changing a culture based on bureaucracy requires leadership not management practices.

Further, Kouzes and Posner (1987) stressed the importance of change in incremental steps allowing the natural diffusion process to facilitate acceptance and support. Perhaps the divergence and contradictions in study results encompassing older research and more current research is an indication of the incremental steps of the change process taking place in higher education.
Duderstadt and Womack (2003) claimed that educational leadership even in quiet less turbulent times presented multitudes of challenges. The speed with which changes are occurring compels leaders to search for new methods of decision making and guidance. They claimed that most of the educational reforms in the last decade have been reactive rather than strategic or proactive.

The increased numbers of higher education administrators using multiple frames as shown in this study and others may be an indication that as Bolman and Deal (2003) alleged, using all four frames as a tool, allows a more complete perspective of any situation. Changes of this magnitude take place slowly. Therefore, the mixed study results may be reflective of such a change. As Hathaway, Mulhollan and White (1995) stated, “Metropolitan universities are agents of change. These institutions must play a role in the transformation of society, but the transformation is not unilateral. Just as the university is a transformer of society of which it is a part, so it will be transformed by that society” (p. 13).

Research Question 3

To what extent, if any, are there statistically significant differences on frame usage based on personal variables of age and gender among senior administrators at American metropolitan universities?

The data indicated no statistical significant difference existed in mean scores on the human resource frame between males and females and age. Mean scores were consistently highest for this frame regardless of either variable. This finding supports the dominance of the human resource frame as found in research question 1. Administrators in this study utilize this frame most frequently across all age groups and gender boundaries with its emphasis on relationships and alignment of the organization with the individual (Bolman & Deal, 2003).
Since relationships are key elements in creating partnerships, metropolitan university administrators require the ability to engage others both in the community and in the university for success. Age did however show statistically significant mean differences in the use of the structural frame and the political frame for the same two groups. Those administrators in age group 40 to 49 showed mean scores of 4.19 and 4.15 with the structural frame and the political frame respectively. The mean scores of administrators in age group 60 plus were 3.94 and 3.83 for the structural and political frames respectively. These mean scores indicate that the younger group of administrators utilize the structural and political frames more frequently than the older group. Although not statistically significant, results also indicated that those administrators in the age group 40 to 49 showed most consistent and highest mean scores across all four frames. The 60 plus age group showed the lowest mean scores across all of the frames.

Since almost half of this sample employs multiple frame leadership behavior, it would appear that the younger group is more comfortable with the multi-frame perspective than the older group. With the rapid changes and turbulent atmosphere of the prior two decades, perhaps the younger administrators have adapted a broader leadership behavior repertoire out of survival than the older more established administrators who held positions with more security due to tenure and years on the job.

Other studies show contradictory results. Kelly’s (1997) study of executives and higher education administrators showed statistical significance with the age group of 46-55 years utilizing the political frame more frequently than other age groups. However, Borden’s research (2000) indicated statistical significance in the political frame for those aged 60 plus. The contradictory findings among the different studies present a number of possible explanations. One explanation for the findings in this study might be that those administrators in age group 40
to 49 are more willing and open to try different approaches such as the use of multiple frames thus utilizing both the structural and political frames more frequently. Administrators in the 60 plus age range may be more inclined to maintain status quo using methods they are most comfortable in practicing through years of experience.

Bolman and Deal (2003) observed that resistance to change or resistance to challenging existing mores is quite commonplace. When situations arise that fit the existing frame of reference, then understanding and a level of comfort take place. However, when circumstances arise that do not match or fit previously held beliefs or actions, individuals tend to freeze or immobilize. They become trapped in a distorted picture that holds them in misconceptions and discourages any attempt to see beyond the known parameters. Thus, maintenance of status quo becomes the desirable course of action.

On the other hand, the political frame by definition requires leaders to “spend much of their time networking, creating coalitions, building a power base” (Bolman & Deal, 1991, p. 512). In many instances, administrators over the age of 60 have more experience, more infrastructure in place, and more time through delegation of less important responsibilities to cultivate and maintain a power base. Romig (2001) stated that leadership involves many components including the leader, followers, their interaction and relationships combined with external influences. The experience and knowledge that comes with age may foster a broader view of the organization along with the savvy which assists in capitalizing on these strengths. Consequently, higher usage of the political frame in this age range rather than the younger administrative groups may be more prevalent.

More importantly, contradictory findings among the studies may be an indication again that change is occurring across all age groupings. Bennis (1989) described a crucial need for
leadership in American institutions arising from the turbulence and upheavals of the past years. He stated that a pervasive unease concerning the integrity of existing leadership has left a major void and national search for new quality leaders. If old methods are not adequate or comprehensive enough to fulfill this void in leadership, then new ways must be sought. Bolman and Deal (1991, 1992, 2003) have consistently portrayed the Four-Frame Model of Leadership as a holistic approach to the management and leadership of complex issues. Their model proposes benefits for leadership enhancement not dependent upon any age grouping. Perhaps the mixed results are a reflection of the perceived shift from single and paired frame usage to a multiple frame perspective.

Research question 3 also investigated differences, if any, on frame usage based on gender and the interaction of age and gender. The data indicated no statistically significant difference in mean scores on the structural and human resource frames based on gender. There was a statistically significant mean difference in the use of the political and symbolic frames based on gender. Female administrators showed higher mean scores with use of the political frame (4.03) and the symbolic frame (4.11). Male administrators showed lower mean scores of 3.94 and 3.98 for the political and symbolic frames respectively. This may be an indication that female administrators are more likely to form alliances and cooperative networks along with an awareness of culture and ceremonial traditions than male counterparts which are characteristic of the political and symbolic frames. These attributes may be necessary to balance and overcome impediments for job success still evident in our society due to gender bias. In addition, as reported previously, the age variable showed significance for the younger category of administrators in age group 40 to 49 for the political frame as well as for gender. It follows that in this study more females in age group 40 to 49 utilize the political frame in leadership
behavior. As diversity among the workforce has become more acceptable due to legal and ethical practices, more women have advanced to senior administrative positions. These opportunities and changes may be reflected by higher numbers in the younger age groupings because of the recent time frame in which they have taken place.

Other researchers with higher education populations have found differences based on gender but the findings are contradictory. Turley’s (2002) study involving radiation therapy program directors found statistically significant differences with females showing higher scores than males with usage of the human resource, political, and symbolic frames. The structural frame showed no statistically significant differences. These results support the present study’s findings with respect to higher female utilization of the political and symbolic frames. However, Chang’s (2004) study of department chairs and instructional technology in teaching produced conflicting results. His study showed males with statistically significant higher scores with respect to the structural, human resource, and symbolic frames.

Bolman and Deal (1991, 1992a) found no differences among frame orientations between men and women in their studies of American and international school administrators. They contended that stereotypically, expectations might be to assume that women would record higher scores on the human resource frame with its characteristics of participative and supportive leadership behavior rather than the political frame entailing aggressiveness and assertiveness. This assumption projects that women value more nurturing and caring traits than men and that men value shrewdness and power more than women. In the Bolman and Deal study conducted in 1991, the American portion of the sample of international school administrators did show women rated as significantly higher than men on the structural, political, and symbolic frames, but not on the human resource frame. One other study (Borden, 2000) of area campus
administrators in Florida showed no statistical difference between men and women based on frame usage.

Schein (1995) wrote that there is indeed one glaring difference between the sexes in the business environment. She proposed that the difference is not in leadership style but in numbers. Undisputedly, far fewer women hold positions of influence and power than men but these reasons are not based on leadership styles and behaviors. She contended that effective leaders are effective whether they are male or female and should be thought of as simply leaders. As Schein suggested, both sexes need to seriously consider the speed with which changes are taking place and then focus on providing opportunities for the most qualified of either sex to take on the correspondingly appropriate leadership role.

Research Question 4

To what extent, if any, are there statistically significant differences on frame usage based on professional variables of job title and years of experience among senior administrators at American metropolitan universities?

There were no statistically significant mean differences in frame usage based on job title. The human resource frame mean scores were higher than the other three frames indicating that this frame is consistently used by senior administrators in this study regardless of job title.

Demographics showed that approximately 66% of the administrators held terminal degrees with 35% of those degrees involving some field of education. Individuals who choose education as a profession in many instances possess nurturing and mentoring as personality characteristics. Students of all ages benefit from supportive relationships provided by educators. The human resource frame embodies these traits so dominance of this frame is logical.
This study’s results also showed very little range variation within the mean scores of the symbolic frame and the political frame indicating that utilization among the different job titles is relatively consistent for these frames. Job responsibilities do vary among the categories of president and vice president depending upon the divisional administrative area. Some vice presidents such as university relations and community relations are more externally oriented while vice presidents of research and admissions are more student and faculty oriented. Provosts generally have an even greater academically directed internal focus primarily dealing with faculty. Despite the different position responsibilities, administrators in this study showed similar tendencies in frame usage. This may be a result of recurring exposure to external constituents due to partnerships with the local community, a hallmark characteristic of metropolitan universities.

Borden’s study (2000) of area campus administrators supported this researcher’s findings. None of the other studies examined by this researcher contained references to differentiations based on job title. Many of the studies reviewed included a wide range of levels and position titles which would have made comparisons unequal in terms of job responsibilities and exposure to external forces associated with senior administrators of metropolitan universities. This study targeted presidents, chancellors, vice presidents, vice chancellors, and provosts only.

Results for question 4 also found that there were no statistically significant mean differences in frame usage based on years of experience. Demographic information for this group indicated that 50% of the administrators had more than 20 years experience. As previously reported, the age variable did show statistical significance on the political and structural frames with the younger group of administrators utilizing the frames more frequently.
than the 60 plus age group. This would indicate that chronological age of the administrator is a more important determinant in frame usage than years of experience. Environmental influences including the combative political climate and negative public perception of more recent years may be contributing factors in the development of multiple frame leadership skills among younger administrators. Results of this study were supported by other studies in higher education that found no statistical significance in frame usage and years of experience (Borden, 2000; Kelly, 1997; Turley, 2002).

Although not exactly the same comparison, Bensimon (1989) addressed college presidents in two categories for number of frame orientations and years of work experience. New presidents designated as those with 1 to 3 years in office were most likely to use a single frame orientation approach to leadership. Experienced presidents (those in office 5 years or more) and those presidents who had previously held other presidential appointments almost exclusively utilized a multiple frame leadership orientation. Bensimon suggested that the more experienced presidents were capable of handling the complexities and scope of multiple frame leadership.

Wolf’s study (1996) of campus safety directors found statistically significant results with experience levels of less than 1 year, 11 to 15 years, and 16 to 20 years of experience and usage of the human resource frame. These categories showed respondents with higher mean scores than those respondents in the 6 to 10 year experience category. Wolf suggested that those in the 6 to 10 year time span may be at a crossroads or midpoint in their career which might account for the lower scores. Wolf also found that safety directors with less than one year experience scored significantly higher than their counterparts of more than 20 years experience. He attributed this
result as a possible indication that the more senior safety directors no longer possessed the energy or spirit required to successfully lead with human resource frame elements.

Further research following the premise of Bensimon’s study (1989) on multiple frame orientation coupled with specific frame usage and years of experience may provide additional insights. Bolman and Deal (1994) stated that leadership is cultivated primarily through knowledge gained from bad experiences as well as good experiences. They contended that experience can be nurtured through observation, reflection, conversation, mentorships, and instructional programs. Are frame orientation and multiple frame usage therefore related to years of experience or types of experience? Does the age of a leader matter as much as how experience has shaped and molded who he has become as a person? Is it a factor of both elements? Is there no direct relationship among these variables? No conclusions can be drawn without additional research.

Research Question 5

To what extent, if any, are there statistically significant differences on frame usage based on the institutional variables of size of campus and proximity to city limits among senior administrators at American metropolitan universities?

Results of this study indicated no statistically significant mean differences in the structural, human resource, political, or symbolic frames based on the variables size of campus and proximity to city limits. Mean scores for the political frame and the structural frame showed little variations despite campus size. This may indicate that similar infrastructure and hierarchical relationships among the universities in this study exist regardless of campus size or the range of distance within and around city limits. Thus, elements of the structural frame would show little variation.
Metropolitan universities are by definition in close proximity to city locations so exposure to competition for resources from businesses and other educational institutions and the need for cooperative alliances may routinely affect these universities more than student population and distance. Dynamics of the political frame would therefore show more uniform impact since distance from the physical location of the city would only differ by small increments. In fact, demographics revealed that 73.6% of the institutions in this study resided within city limits. None of the other studies reviewed by this researcher contained references to differentiations based on proximity of the institution to the nearest city.

Other higher education studies (Borden, 2000; Wolf, 1996) completed with comparisons of frame usage and campus size as defined by student Full Time Equivalent (FTE) hours supported findings of this research with results showing no statistical mean score differences among the variables. The human resource frame contained the highest mean scores of all four frames regardless of student size category for this study and the Borden and Wolf studies.

Research Question 6

To what extent, if any, does self-perception of leadership effectiveness and management effectiveness differ in senior administrators at American metropolitan universities?

Senior administrators in this sample rated themselves in the upper-mid 20% to top 20% categories for both management (n=203, 92.3%) and leadership (n=211, 95.9%) effectiveness categories. Respondent mean scores for effectiveness as a leader (4.62) were slightly higher than the mean scores for effectiveness as a manager (4.55). Both mean scores fell between the Likert scale ratings of 4 (upper-mid 20%) and 5 (top 20%). Administrators in this study viewed themselves as top managers and top leaders.
Buckingham and Coffman (1999) determined that leaders look outward with a focus on vision and strategy. In contrast, managers look inward with a focus on the unique talents possessed by individuals within the organization which guide the way to better performance. They contended that only a few exceptional individuals excel in both venues. The senior administrators in this study have reached top levels of administrative responsibilities. As a result, they may view themselves as experienced managers or leaders who have evolved into effective blends of both concepts. They represent a mature and well-educated group of administrators which is not surprising due to the requirements necessary to attain top level leadership positions in metropolitan universities. This study did not examine frame patterns as predictors of effectiveness of management and leadership since the theoretical differences between the concepts were not the focus of this dissertation.

Bolman and Deal (1994) contended that although an individual can be both an effective manager and a leader, they are separate concepts and address separate issues. Leadership is necessary when an organization no longer operates in its intended capacity and a major change or overhaul looms on the horizon. Management on the other hand, according to Bolman and Deal (1994), focuses on making the current system work better. The results of a study completed by Bolman and Deal in 1991 indicated that leadership and management were seen by participants as distinct concepts with areas of overlap. In the study, the two measures relating to self-perceived effectiveness as a leader and as a manager were highly correlated but “associated with different combinations of frame orientations” (p. 524) as defined by Bolman and Deal’s Four Frame Model of Leadership. Managerial effectiveness was rated higher by their sample than leadership effectiveness. Borden (2000) reported similar findings, however, the managerial
effectiveness mean score in her study (4.39) was only slightly higher than the leadership
effectiveness mean score (4.37).

Comparing Results of this Study and Other Four-Frame Studies

Although findings of other research studies were presented with results of this
dissertation’s findings, a number of considerations should be taken into account when making
comparisons. A wide variation in frequency and percentages of results despite the appearance of
consistent findings within frame parameters exists. For example, the human resource frame
emerged as the dominant frame with the structural frame as second preference in many
referenced studies. While this is an accurate finding, the nuance or degree of variation may not
have been evident in the published results. Was the disparity within frame mean scores large or
small? Were the other frames clearly divergent or separated by only minute increments?

Sample size also varied considerably across the studies as did composition of the
samples. Occupationally, higher education is a general category comprised of faculty, program
directors, department chairs, administrators, and ancillary divisions. These positions require
different skills and responsibilities. They entail contact with different stakeholders both
internally and externally to the institution. Consequently, leadership behaviors may not follow
the same patterns. In addition, types of institutions such as community colleges, private colleges,
and public universities operate under vastly different governing structures with direct impact on
senior administrative levels. No differentiation has been made in the comparison of research
studies in higher education despite these critical factors.

Another area of consideration deals with research methods and instrumentation. The
cited studies differed in qualitative and quantitative research styles, performance of different
statistical tests, and processes for calculating frame usage. Further, variations in the LOS instrument and survey items while reported in the studies, are still grounds for potential variations in results. Even tests utilizing the same categories such as age, years of experience, and size of institution may have been conducted with different groupings. For example, age categories in one study were listed as 40 to 49 years while another study listed categories from 45 to 55 years.

Conclusions

The purpose of this study was to explore and provide insights into the leadership behaviors of senior administrators at American metropolitan universities as conceptualized by Bolman and Deal’s Four-Frame Model of Leadership (1991). Based on the review of literature and the research findings in this study, several conclusions regarding this researcher’s sample have been formed.

Senior administrators in this study indicated that the human resource frame (76.9%) dominated all other frame choices. The three other frames, while not as dominant as the human resource frame, clustered around a very small range of variation. The structural frame at 57.2% emerged as second choice, but the symbolic frame (55.4%) and the political frame (52.2%) all fell within a few percentage points. Bolman and Deal (1992b) characterized the human resource frame leaders as valuing relationships with an interpersonal approach to matching people and the organization in the best possible fit. The dimensions of the frame (Bolman & Deal, 1992a) outline a leader that fosters participation and involvement. This may indicate that respondents choose the human resource frame as a base style of leadership. They can listen, gather ideas and alternatives and then in turn, use the other frames as secondary and in almost equal proportions
for solutions and directions. Further underlining the unity in scores, the overall mean frame scores for the human resource, structural, political, and symbolic frames were 4.30, 4.04, 4.02, and 3.97 respectively.

Multiple frame usage in this group proved higher than Bolman and Deal’s (1991, 1992a) previous studies. Nearly half of the administrators, 49.5%, reported using three or four frames often or always which corresponds with the dispersion of the frames in discerning dominant frame affiliation. Of those respondents that reported three frames, the most frequent combination was the human resource, political, and symbolic trio. Bolman and Deal (1992a, 1992b, 1994) reported that the ability to utilize multiple frames is a key element of effectiveness in senior administrative positions. They further contended that effective leadership embraces political tenets and possesses a deep understanding of symbolism and culture. The political frame leader characterized by the ability to form supportive coalitions and the symbolic frame leader distinguished by the ability to communicate a strong sense of vision form crucial dimensions of what constitutes effective leadership. Women in this group did show a higher propensity for utilizing the political and symbolic frames than did men suggesting a gender difference in balance with utilization of multiple frames.

*The Chronicle of Higher Education* conducted a survey, *What Presidents Think* (2005), based on responses from 764 presidents of four-year institutions falling under the six current Carnegie Classifications. Presidents were asked to consider the most important attributes they considered as essential in their success as presidents. Strong leadership ability (50.0%) ranked first, interpersonal skills (44.8%) ranked second, and a strong vision of the institutional mission (42.8%) ranked third. Multiple frame leadership encompasses these attributes suggesting that the senior administrators who responded to this study show a high level of confidence and savvy in
their leadership behaviors. This was also evident in their self-perception of effectiveness scores as a leader where 95.9% ranked themselves in the upper-mid 20% to top 20% effectiveness categories.

Demographic variables indicated 81.2% of the respondents were age 50 or older. The variable of age did show significance between those age 40 to 49 and those age 60 or more. The younger category showed a higher propensity for use of the political and structural frames than did the older group. Further research with closer inspection of age categories would be necessary before any conclusions could be drawn. In addition, demographic variables showed 50% of the respondents reported more than 20 years experience as an administrator and 66.8% held a doctorate degree in some field. This represents a mature, well-educated, and seasoned group of administrators which is not surprising due to the responsibilities and complexities necessary to deal with the unique problems and exceptionalities of a metropolitan university.

**Implications for Practice**

Nearly half of the senior administrators who took part in this study utilized multiple frames in their leadership orientation behaviors. Reinforcement of that behavior along with innovative ideas for team leadership with a frame orientation is recommended. The other half of the administrators utilized paired frame, single frame, or no frame orientation at all indicating an opportunity to introduce frame orientation behavior as an enhancement to leadership skills. Consequently, a number of implications for practice exist which would encompass both groups.

Bolman and Deal (1994) discussed mentorships and internships as ways of teaching leadership. At this senior level of administration, internships are not options. Mentorships may be desirable but again at this level, these type relationships are not easily or readily available. In
fact, The Chronicle of Higher Education’s survey, What Presidents Think (2005), reported that only 40.6% of university presidents felt they were very well prepared for their first presidential position. Blumenstyk (2005) wrote that the problem of preparing individuals for educational presidential roles remains substantial. Not enough mentors and informal networks exist for presidents to easily obtain confidential advice. It is recommended that some form of support group should be explored as a means of assistance and aid when dealing with the complexities at these institutions. A council or forum for presidents, vice presidents, and provosts consisting of administrators trained in frame orientation techniques could be convened for senior administrators or for each job title sharing frame orientations and serving as a confidential source of advice.

Bolman and Deal (1994) discussed the need to overhaul current methods of leadership training. However, senior administrators at this level many times are the ones asked to teach these seminars. Despite the premise of lifelong learning, this audience may be more difficult to approach with different concepts in an area they deal with on a daily basis. In addition, time is an element these administrators do not have in abundance and therefore attending a conference on leadership techniques may not be a high priority. Generally, senior administrators have annual or bi-annual retreats. It is recommended that Bolman and Deal’s Four-Frame Model of Leadership (1991) become a presentation at the retreats. Individually, presidents, vice presidents, and provosts could become familiar with the frame orientations in a non-threatening and conciliatory atmosphere. Since the human resource frame which espouses participative leadership is the dominant frame used by many senior administrators, it might be suggested that a team concept of the frame approach be considered for top level administrators. Someone’s
weakness is balanced by another team member’s strength. Utilizing the Four-Frame Model of Leadership as a team tactic may enhance receptiveness to new methods.

Finally, more emphasis should be placed on the complexity and demands facing senior level administrators. Weingartner (1996) questioned whether these jobs could be adequately handled by any one person. He cited internal duties involving students, faculty, and staff plus external responsibilities involving trustees, government officials, community leaders, and the media as creating jobs so overpowering that no one could possibly do all that they require. Greater understanding through research regarding metropolitan universities might assist with the creation of peer counseling opportunities and peer councils designed to provide assistance for a population not accustomed to seeking help or advice.

**Recommendations for Future Research**

Additional research with American metropolitan university samples should be conducted. Consideration of sample size, variables with similar categories, and positions of similar responsibility should be matched.

1. This study used the LOS (Self) instrument. Other studies should be conducted using the LOS (Other) version in addition to the LOS (Self). Bolman and Deal (1992b) stated that college presidents rated themselves higher on usage of the symbolic frame than in comparison with colleague ratings. Self-perception while helpful, would be more illuminating when combined with colleague ratings.

2. Metropolitan senior administrators interact with community leaders almost as frequently as they interact with internal constituents. A study utilizing the LOS (Other) with
external community leaders who work closely with the president and vice presidents, 
might provide insight into metropolitan university leadership.

3. Metropolitan university presidents and vice presidents interact with deans, department 
chairs, and directors of university centers. A study utilizing the LOS (Other) with only 
internal colleagues might provide insight into metropolitan university leadership.

4. Limitations of this study included unequal comparisons due to qualitative and 
quantitative research methods and sample size. Coordinated attempts to more closely 
replicate existing studies utilizing either research method may prove helpful.

5. It is recommended that attention be placed on mixed methods of qualitative and 
quantitative research, but with more consistent requirements or specifications for frame 
measurements.

6. Further analysis of the LOS instrument’s constructs should be performed with uniform 
reporting of measurements within published studies. This researcher found the variations 
in reporting methods difficult to understand and therefore compare in any meaningful or 
logical pattern. In addition, this researcher chose not to utilize data from Section II 
Leadership Style of the LOS (Self) because of missing data and incorrect completion of 
questions. A further review of this section for format or content may be in order.

7. Since age and gender showed statistical significance in two categories of this study, 
additional research centering on these factors should be undertaken. (Younger 
administrators showed statistically significant higher mean scores than older 
administrators for both the structural and political frames. Female administrators showed 
statistically significant higher mean scores than male administrators for the political and 
symbolic frames.) It is recommended, although not shown as statistically significant in
this study, that additional research regarding years of experience be carefully studied for possible variations in frame orientation.
APPENDIX A

LEADERSHIP ORIENTATIONS SURVEY (SELF)
LEADERSHIP ORIENTATIONS (SELF)
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Section I. Leadership Behaviors

Instructions:
Please indicate how often each of the items below is true for you by circling one answer for each statement.

START HERE

<p>| | | | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>I think very clearly and logically.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>2.</td>
<td>I show high levels of support and concern for others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>3.</td>
<td>I have exceptional ability to mobilize people and resources to get things done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>4.</td>
<td>I inspire others to do their best.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5.</td>
<td>I strongly emphasize careful planning and clear time lines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>6.</td>
<td>I build trust through open and collaborative relationships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>7.</td>
<td>I am a very skillful and shrewd negotiator.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>8.</td>
<td>I am highly charismatic.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>9.</td>
<td>I approach problems through logical analysis and careful thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>10.</td>
<td>I show high sensitivity and concern for others' needs and feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>11.</td>
<td>I am unusually persuasive and influential.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>12.</td>
<td>I am able to be an inspiration to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>13.</td>
<td>I develop and implement clear, logical policies and procedures.</td>
<td>1</td>
<td>2</td>
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<td>14.</td>
<td>I foster high levels of participation and involvement in decisions.</td>
<td>1</td>
<td>2</td>
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<td>15.</td>
<td>I anticipate and deal adroitly with organizational conflict.</td>
<td>1</td>
<td>2</td>
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<td>16.</td>
<td>I am highly imaginative and creative.</td>
<td>1</td>
<td>2</td>
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<td>17.</td>
<td>I approach problems with facts and logic.</td>
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<td>18.</td>
<td>I am consistently helpful and responsive to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>19.</td>
<td>I am very effective in getting support from people with influence and power.</td>
<td>1</td>
<td>2</td>
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<td>20.</td>
<td>I communicate a strong and challenging sense of vision and mission.</td>
<td>1</td>
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<tr>
<td>21.</td>
<td>I set specific, measurable goals and hold people accountable for results.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>22.</td>
<td>I listen well and am unusually receptive to other people’s ideas and input.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>23.</td>
<td>I am politically very sensitive and skillful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>24.</td>
<td>I see beyond current realities to generate exciting new opportunities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>25.</td>
<td>I have extraordinary attention to detail.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>26.</td>
<td>I give personal recognition for work well done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>27.</td>
<td>I develop alliances to build a strong base of support.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>28.</td>
<td>I generate loyalty and enthusiasm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>29.</td>
<td>I strongly believe in clear structure and a chain of command.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>30.</td>
<td>I am a highly participative manager.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>31.</td>
<td>I succeed in the face of conflict and opposition.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>32.</td>
<td>I serve as an influential model of organizational aspirations and values.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

Section II. Leadership Style

Instructions:

Please rank the following items for each question. Give the number “4” to the phrase that best describes you, “3” to the item that is next best, and on down to “1” for the item that is least like you. Each blank should have a number 1 through 4 when complete.

33. My strongest skills are:
   - a. Analytic skills
   - b. Interpersonal skills
   - c. Political skills
   - d. Ability to excite and motivate

34. The best way to describe me is:
   - a. Technical expert
   - b. Good listener
   - c. Skilled negotiator
   - d. Inspirational leader
35. What has helped me the most to be successful is my ability to:
   - a. Make good decisions
   - b. Coach and develop people
   - c. Energize and inspire others
   - d. Build strong alliances and a power base

36. What people are most likely to notice about me is:
   - a. My attention to detail
   - b. My concern for people
   - c. My ability to succeed, in the face of conflict and opposition
   - d. My charisma

37. My most important leadership trait is:
   - a. Clear, logical thinking
   - b. Caring and support for others
   - c. Toughness and aggressiveness
   - d. Imagination and creativity

38. I am best described as:
   - a. An analyst
   - b. A humanist
   - c. A politician
   - d. A visionary

---

Section III. Overall Rating

Instructions:
Compared to other individuals that you have known with comparable levels of experience and responsibility, circle the number that best indicates how you would rate yourself.

39. My overall effectiveness as a manager
   1. bottom 20%
   2. middle 20%
   3. top 20%

40. My overall effectiveness as a leader
   1. bottom 20%
   2. middle 20%
   3. top 20%

---

Section IV. Respondent Information

Instructions:
Please check the response that best corresponds to your organization or to your position.

41. What is your job title?
   - President
   - Vice President
   - Chancellor
   - Vice Chancellor
   - Provost
   - Other

Please Continue
42. What is the total number of years you have been an administrator at any institution?
   ___ 0 – 5 years  ___ 6 to 10 years  ___ 11 to 15 years
   ___ 16 to 20 years  ___ More than 20 years

43. What is your age?
   ___ under 30  ___ 30 to 39  ___ 40 to 49
   ___ 50 to 59  ___ 60 and over

44. What is your gender?
   ___ Female  ___ Male

45. What is the highest academic degree you have completed?
   ___ Bachelor’s degree  ___ Master’s degree  ___ Doctorate
   ___ Other, please specify______________________________

46. What was your field of study in the highest academic degree you completed?
   ___ Business Administration  ___ Engineering
   ___ Education (please select one)  ___ Healthcare
   ___ Educational Leadership  ___ Humanities
   ___ Elementary Education  ___ Natural Sciences
   ___ Higher Education  ___ Public Affairs
   ___ Secondary Education  ___ Social and Behavioral Sciences
   ___ Other Education Field  ___ Other, please specify______________________________

47. What is the size of your campus?
   ___ Less than 1,000 students  ___ Between 1,000 and 4,999 students
   ___ Between 5,000 and 9,999 students  ___ Between 10,000 and 19,999 students
   ___ Between 20,000 to 30,000 students  ___ Over 30,000 students

48. What is the distance between your campus location and the city with which your university interacts?
   ___ Located within city limits  ___ Located 1 to 5 miles outside city limits
   ___ Located 6 to 10 miles outside city limits  ___ Located 11 to 20 miles outside city limits
   ___ Located more than 20 miles outside city limits

49. Under the current Carnegie Classification, your institution would be recognized as a:
   ___ Doctoral/research university – extensive  ___ Baccalaureate college – liberal arts
   ___ Doctoral/research university – intensive  ___ Baccalaureate college – general
   ___ Master’s university I  ___ I do not know
   ___ Master’s university II

** Thank you for your time in completing this questionnaire. **

If you would like to receive an abstract of the results of this study, please enclose your business card with the completed survey.

Diane Trees  •  Assistant Vice President, Community Relations
University of Central Florida  •  36 West Pine Street  •  Orlando, FL 32801
Phone: (407) 317-7725  •  Email: dtrees@mail.ucf.edu

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APPENDIX B

BOLMAN AND DEAL LETTER OF PERMISSION
May 10, 2005

Ms. Diane Trees
Assistant Vice President and
Director, Community Relations
University of Central Florida
36 West Pine Street
Orlando, Fl. 32801

Dear Ms. Trees:

Thanks for your interest in the Leadership Orientations instrument. I am pleased to offer you permission to use the instrument in your research, subject to the following conditions: (a) the research is non-commercial; (b) you agree to provide us a copy of any thesis, report of publication that reports data based on the instrument, and (c) you agree to provide, if we request it, a copy of your data file.

The instruments and information about their use, including data on internal reliability, and a list of research using the Bolman and Deal Four Frames Model, can be found at: http://bspa.umkc.edu/classes/bolman//leadership_research.htm.

Best wishes in your doctoral research.

Sincerely,

Lee Bolman, Ph.D.
Coalition Member Institutions

Membership as of April 14, 2005

U.S. Universities

Boise State University
Buffalo State College (SUNY College at Buffalo)
California State University, Dominguez Hills
California State University, Fresno
California State University, San Bernardino
Calumet College of St. Joseph
Chicago State University
City College of New York
Clayton College and State University
Eastern Michigan University
Florida Gulf Coast University
Florida International University
Indiana University Northwest
Indianapolis University-Purdue University Indianapolis
Jackson State University
Kennesaw State University
Kent State University
Louisiana State University in Shreveport
Macon State College
Metropolitan State University
Northeastern University
Northern Kentucky University
Pace University
Park University
Portland State University
Roosevelt University
Rutgers, The State University of New Jersey – Newark Campus
San José State University
Southern Illinois University Edwardsville
Southwest Missouri State University
Texas Southern University
Texas State University-San Marcos
Towson University
University of Arkansas at Little Rock
University of Baltimore
University of Central Florida
University of Cincinnati
University of Colorado at Colorado Springs
University of Colorado at Denver and Health Sciences Center
University of Connecticut Tri-Campus
University of Houston – Downtown
University of Houston System
University of Illinois at Chicago
University of Louisville
University of Michigan – Dearborn
University of Missouri at Kansas City
University of Missouri – St. Louis

http://www.csudh.edu/CUMU/members.htm
University of Nebraska at Omaha
University of Nevada, Las Vegas
University of North Carolina at Charlotte
University of North Carolina at Greensboro
University of North Florida
University of North Texas System
University of Rhode Island
University of South Carolina Upstate
University of South-Florida
University of South Florida, St. Petersburg
University of Southern Indiana
University of Southern Maine
University of Tennessee at Chattanooga
University of Texas at Arlington
University of Texas at San Antonio
University of Toledo
University of Washington, Tacoma
University of Wisconsin – Milwaukee
Virginia Commonwealth University
Washington State University, Spokane
Washington State University Vancouver
Wichita State University
Widener University
William Paterson University
Wright State University
Youngstown State University

International Universities

London Metropolitan University (UK)
Ryerson University (Canada)
Simon Fraser University (Canada)
University of Victoria (Canada)
University of Western Sydney (Australia)
York University (Canada)
Contact letter one

January 9, 2006

Dear:

Your assistance with a study of leadership orientations of senior administrators at American metropolitan universities is requested. The purpose of this research is to: 1) determine whether there is a dominant leadership orientation used; 2) whether administrators use single, paired or multiple frames; and 3) whether there are degrees of difference among administrators based on selected variables. Completion of this survey will take approximately 10 minutes of your valuable time. Unfortunately, I cannot compensate you for your time.

I am contacting senior administrators, such as yourself, at institutions who are members of the Coalition of Urban and Metropolitan Universities (CUMU). As an administrator, you know and experience firsthand the need for multi-faceted leadership skills when universities share resources with the community, other educational institutions and local businesses. With permission of the Coalition (see attached letter of support) it is hoped that this research will contribute to the growing body of knowledge on metropolitan universities and their complexity. Dr. John C. Hitt, President of the University of Central Florida has also reviewed and supports this research (see attached letter of support).

There are no benefits for participating in the study other than to learn more about the research process, or if you request a copy of the results, you can learn more about what other professionals in leadership roles have said about the topic. Some of the questions on your leadership style may be considered sensitive. Please feel free to only answer questions that you feel comfortable answering. You can also discontinue your participation at any time without penalty. Since this is a small and select sample, we would like to thank you in advance for taking the time to complete this survey.

Please let me assure you that your individual responses will be confidential. To ensure confidentiality please return this consent form in the separate envelope attached. There is an identification number on the survey instrument you received but it is only used so that we can delete your name from the mailing list when the survey is returned and therefore you will not be sent any more reminders to participate. Once the survey is received your name linked to the number will be deleted so that individual names can never be connected to the results in any way. This level of protection is important to me personally and to the University of Central Florida. Please return the consent form and survey in the respective envelope by January 26, 2006.
If you have any questions or comments about this study, please contact me by calling 407.317.7725 or by email: dtrrees@mail.ucf.edu. My faculty supervisor, Dr. Rosemarye Taylor, can be reached by email: rtaylor@mail.ucf.edu.

Questions about research participants’ rights may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 1244 Research Parkway, Suite 207, Orlando, FL 32826 or by calling 407.823.2901. Thank you for your time and consideration.

Sincerely,

Diane H. Trees
Assistant Vice President, Community Relations
University of Central Florida

I have read the procedure described above.

_______ I voluntarily agree to participate in this study.

_______ I would like to receive a copy of the abstract of the results of this study.

_______ I would not like to receive a copy of the abstract of the results of this study.

PARTICIPANT SIGNATURE DATE
APPENDIX E

CUMU LETTER OF PERMISSION AND SUPPORT
January 2, 2006

Dear CUMU colleagues:

I am writing as president of the Coalition to endorse the use of the CUMU database for Diane Trees who is a doctoral student at the University of Central Florida. Her interest is in learning how metropolitan university presidents approach their work using Bolman and Deal’s Leadership Orientation Survey. The CUMU Executive committee approved this request on May 19, 2005.

I have reviewed her research proposal entitled Leadership Orientation of Senior Administrators who Develop and Implement Policy at American Metropolitan Universities, and it is with pleasure that I endorse her study. As president of the Coalition of Urban and Metropolitan Universities I encourage you to complete the survey that Ms. Trees has sent to you.

Sincerely,

James C. Votruba
President, Coalition of Urban and Metropolitan Universities
APPENDIX F

LETTER OF SUPPORT FROM DR. JOHN C. HITT
January 6, 2006

Coalition of Urban and Metropolitan Universities Members

Dear Colleague:

I write in regard to Diane Trees’ dissertation study of the leadership orientations of senior administrators at American metropolitan universities. As members of the Coalition of Urban and Metropolitan Universities, we are all aware of the unique challenges we face as administrators of universities that share resources with the community, other educational institutions, and local businesses. I have reviewed her research proposal entitled Leadership Orientations of Senior Administrators Who Develop and Implement Policy at American Metropolitan Universities, and it is with pleasure that I endorse her study.

Ms. Trees has worked for the University of Central Florida in an administrative capacity for the past ten years. During that time I have witnessed her work ethic, determination, and professionalism. Because of her deep commitment to this study, I support her research and have no doubt it will contribute to the body of knowledge for metropolitan universities.

As president of the University of Central Florida and as a member of the Coalition of Urban and Metropolitan Universities, I encourage you to complete and return the survey by January 27, 2006.

Cordially yours,

John C. Hitt,
President
APPENDIX G

INSTITUTIONAL REVIEW BOARD APPROVAL
August 25, 2005

Diane Trees
534 Sabal Trail Circle
Longwood, FI 32779

Dear Ms. Trees:

With reference to your protocol #05-2802 entitled, “Leadership Orientations of Senior Administrators Who Develop and Implement Policy at American Metropolitan Universities” I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office. This study was approved by the Chairman on 8/24/05. The expiration date for this study will be 8/23/06. Should there be a need to extend this study, a Continuing Review form must be submitted to the IRB Office for review by the Chairman or full IRB at least one month prior to the expiration date. This is the responsibility of the investigator. Please notify the IRB when you have completed this study.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board through use of the Addendum/Modification Request form. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur.

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Barbara Ward
Barbara Ward, CIM
IRB Coordinator

Copy: IRB file
Rosemarye Taylor, Ph.D.

BW jm
Contact letter two

January 30, 2006

Dear

Three weeks ago a survey seeking your assistance with a study of leadership orientations of administrators at American metropolitan universities was mailed to you. Your participation was requested because your university is a member of CUMU and you hold a senior administrative position at the university.

If you have already completed and returned the survey, please accept my sincere gratitude. If you have not, I ask that you please do so today. It is only with assistance from people like you that research regarding metropolitan universities can be successful.

If you did not receive a survey, or if it was misplaced, please contact me by calling 407-317-7725 or by email: dtrees@mail.ucf.edu. I would be most happy to send a replacement to you immediately. Thank you for your time and consideration.

Diane H. Trees
Assistant Vice President, Community Relations
University of Central Florida
February 18, 2006

Dear

Approximately six weeks ago I sent a survey to you regarding leadership orientations of senior administrators at metropolitan universities. To the best of my knowledge, I have not yet received a response. Because your participation is critical to the study, I am asking that you please complete and return the enclosed survey instrument as soon as possible. Very little research has been conducted on metropolitan universities despite the growing number of students and communities which they serve.

The response time for this study is drawing to a close and this is the final contact that will be made with those who I feel are critical to the success of this research. There are a finite number of administrators who are members of the Coalition of Urban and Metropolitan Universities. Your membership and position make your experiences as an administrator valuable and would assure that the survey results are as accurate as possible.

I again want to clarify that your participation is voluntary. If you prefer not to respond for whatever reason, I understand. However, your return of the blank survey form would be most helpful. I assure you that your decision not to respond also remains confidential.

Thank you for your willingness to consider completion of this survey. I hope my efforts draw awareness to the versatility and flexibility required of leaders like you who develop and implement policy at American metropolitan universities.

Sincerely,

Diane H. Trees, Assistant Vice President, Community Relations, University of Central Florida
LIST OF REFERENCES


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Cantu, D.A. (1997). The leadership frames of academic deans randomly selected and nominated as exceptionally effective at public colleges and universities. *Dissertation Abstracts International*, 58(03), 657A.


