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Community college academic deans:

Leadership frames and stress

by

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A dissertation submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Education (Higher Education)

Major Professor: Larry H. Ebbers

Iowa State University

Ames, Iowa

2000

UMI Number: 9990484



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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

A widely shared belief is that leadership is important and that we need more of the right kind of effective leadership. Leadership has been an instrumental component of American culture and the need for good leaders derives ultimately from dangers and uncertainties built into the human experience. The value placed on rationality and predictability, and the need to believe that events have discernible and controllable causes has led to research on effective leadership (Trice & Beyer, 1993). Although leadership has been widely discussed, written about, and practiced for thousands of years, it still remains an illusive area of inquiry and understanding (Astin & Leland, 1991; Bass, 1990; Stogdill, 1974; Yukl, 1981).

While the characteristics of leadership have been a focus of research, the underlying concern has been with leadership effectiveness. Research on the effectiveness and control in leadership has often measured differing leader variables such as measures of traits or characteristics, behaviors, contribution to group processes, accumulation of resources, readiness of group to handle change and crisis, and leader's quality of work life (Bass, 1990). However, the results of much of the leadership effectiveness literature has often been described as fragmented and contradictory (Chemers, 1997; Fiedler, 1967). Many researchers have suggested that a lack of integration across theories and approaches reduces the usefulness of findings for researchers and practitioners (Bensimon, 1989; Birnbaum, 1988; Blake & Mouton, 1991; Bolman & Deal, 1984). "A successful integration [of leadership

theory] should illuminate common findings and provide a platform for the next generation of theory and research" (Chemers & Ayman, 1993, p. 293). One guiding question recently has been to determine what kind of leaders are right for what kind of situations, but this question remains largely unanswered (Hoy & Miskel, 1991). A leader in the right situation can make the leader as well as an institution more effective. Since specific situations, generic causes, and social transactions all appear to affect leadership success, a first step to reconcile contradictions in leadership research is to recognize the multifaceted nature of leadership (Bolman & Deal, 1984, 1991).

The Middle Manager Leader

One group that needs to be particularly effective in organizations is the middle manager. Albrecht (1992) cautioned that middle management leadership is so significant that "one of the surest ways to sink a quality program is to ignore, go around, go over, or otherwise leave out middle managers" (p. 208). Middle managers provide essential links between senior managers who provide the direction and the plan for the organization and those who do the work of producing products and services for the organization. The detail of implementation of policy from the top is the work of those in the middle. To be effective, middle managers often need to be able to influence others and obtain adequate resources to accomplish tasks, neither of which can be accomplished just through the use of authority in their position (Trice & Beyer, 1993).

Many managers in organizations are facing role changes and upheaval as institutions restructure or operate differently through total quality management (TQM). Middle managers in the community college have the most to lose with TQM because for many years they held

the power in small decentralized units, and could compete for growth and resource allocation (Thor, Scarafioti, & Helminski, 1998). Thor et al. (1998) suggested that middle level leaders could probably accomplish more if they became more effective in exercising human relations and transactional leadership in a way that attends to cultural differences across an organization's subunits. In addition to consensus building skills and cultural knowledge, middle managers will also need political skills like negotiation (Trice & Beyer, 1993, p. 293). Managers who try to implement quality improvement programs must learn to both bargain and listen to those whom they supervise. However, these leaders were often concerned that the process of empowering others, disempowers themselves (Albrecht, 1992).

Another reason middle manager positions are complex is that they lack the same access that the CEO or president has the same broad base of information to use as an informal means of power (Mintzberg, 1983). In addition, higher managers have wider contacts and better information and typically possess stronger political skills. Mintzberg (1983) suggested that as the hierarchy of power is descended, the manager must deal with more personal controls of a superior, and the organization's bureaucratic controls become more intense and restrictive. The lower in the hierarchy the manager, the greater the incentive to deflect orders and bureaucratic standards downwards, and to either exploit or withhold information flowing upward. "The irony of the job of managing the middle line is that the control systems serve both as the means to power and the means to take it away. The middle manager is truly caught in the middle" (p. 127). Middle managers also perceive themselves faced with contradictions and double binds, and hold on to knowledge and expertise as a survival strategy. Leaders at levels with more control over the managerial position usually expressed more satisfaction in their jobs and greater fulfillment of their need for autonomy

and self-actualization than do those at lower levels (p. 129). Effective mid-level leaders would also utilize various elements of leadership research including trait theory, behavioral theory, contingency theory, and cultural theory (Trice & Beyer, 1993).

The research on middle level managers calls for a theory of integrated leadership—rational, human relations, cultural and political—in order for the leader to see and have more effective control over all possibilities for exchange with subunits (Albrecht, 1992; Bolman & Deal, 1991). If middle managers do not have a way to control resources and information; lower satisfaction, burnout and stress are likely to result (Sauter, Hurrell, & Cooper, 1989).

The Academic Dean

One of these middle manager positions in a role of flux and ambiguity is the academic dean in higher education. The academic dean position has taken on a more critical leadership role for many reasons (Tucker & Bryan, 1988). College and university presidents have had less time to handle internal concerns and have delegated more responsibility downward. Another concern, stated in a report by the AACC (1985) is that this generation of academic presidents and deans must lead higher education away from a declining and devalued college degree. Some have suggested that there is a crisis in higher education because “one of the most significant developments in postwar academic life has been the progressive breakdown of governance and leadership” (Keller, 1983, p. 27).

At four-year colleges, academic deans have taken on more tasks that used to be presidential duties such as program evaluation (Cantu, 1997; McCarty & Reyes, 1987, Tucker & Bryan, 1988). With a larger role, their effective leadership is essential. “In the academic anatomy of institutions of higher learning, deans provide the delicate but crucial

backbone of university decision making" (Wolverton, Wolverton, & Gmelch, 1999, p. 80)

Deans have captured an increasing role in the governance of colleges, and through their positions they directly influence the success of colleges and universities (Birnbaum, 1992).

To accommodate the many decades of changes in society, colleges and universities have become autonomous, competitive and responsive organizations. On today's campuses, administration does not involve only making political decisions about who gets what, but also acting upon an understanding of all participants' viewpoints (Cohen & Brawer, 1994). Perkins (1991) stated that the academic dean holds "the most difficult position in the community college. He or she must guide the direction of the instructional program and at the same time handle the multitude of matters that affect the everyday life of the college" (p. 49).

McCarty and Reyes (1987) suggested that the vocation of administration, as a special and identifiable field of study within higher education, "is in its infancy" (p. 2). The study of leadership in higher education has been problematic because of the "dual control systems, conflicts between professional and administrative authority, unclear goals, and other special properties of normative, professional organizations" (Bensimon, Neumann, & Birnbaum, 1989, p. iv.) Leadership research has recently shifted from a rational perspective to a cultural and symbolic perspective as the ambiguity of purpose, as well as the diffusion of power and authority, has constrained administrative leaders (Bensimon, et. al., 1989).

In a setting of so much flux, conflict and uncertainty, a need exists for leadership that embraces a multiplicity of differences rather than one that is based on the assumption of a single and shared reality (Bensimon, 1989; Bolman & Deal, 1984, 1991). Besides needing to be skilled in both political negotiations and human relations, Bernier (1987) described the

need for academic deans to be “symbolic representatives” and leaders for a “community of professionals” in academia (p. 21). The role of academic leaders in the preservation of academic culture may be even more critical today than in the past, because increased specialization, professionalization, and complexity have weakened the values and beliefs that provided institutions with a common sense of purpose, commitment, and order (Dill, 1982; Schein, 1985; Sergiovanni, 1992). Leaders may be better able to sustain and strengthen their institutions by attending to the symbolic events that occur (Dill, 1982). Townsend and Bassoppo-Moyo (1997) added that future research on higher education leadership needs to incorporate the administrator understanding of the cultural environment which they termed contextual competence.

Higher education leadership requires that deans possess multiple skills today. Academic deans must be able to harness the symbolic resources and human resources of their units for success. Adept academic deans often must also carry out administrative duties with negotiation skills in building consensus. There is need for deans to take on multiple roles as they are caught between the expectations of their college’s departments and those of the central administration (Baldridge, 1971). Deans need to create meaning that determines their behavior in given situations. The ability to act as the college’s liaison, advocate, and spokesperson to the university may give deans a multifaceted way to influence their peers (Mintzberg, 1983). Hence, just as researchers have found that middle managers require a multitude of skills, the academic dean, the middle manager in higher education, must have an understanding of the structural, symbolic, human resource, and political sides of their organizations. Having these perspectives would offer such a dean more control of diverse situations in flux, and might make the stressful setting of a college easier to lead and manage.

Although academic deans are essential to the operation of colleges and universities, they have been understudied in higher education leadership (Cantu, 1997; Griffiths & McCarty, 1980; McCarty & Reyes, 1987). Research to date on academic deans at the community college level has been even more limited and narrowly focused.

The academic deanship is worthy of further research for many reasons: 1) academic deans are important leaders on college campuses; 2) academic deans in community colleges are presently understudied; 3) a understanding of the academic deanship is essential for future improvements within the position; 4) the position constitutes the middle rung on the presidential ladder, a pivotal role in the route to the college presidency; and 5) the academic deanship is important in its own right because it appears to occupy a central position in the academic structure between faculty and higher administration.

Stress and Leaders of Community Colleges

The call for academic deans who can lead with “consummate sophistication” (McCarty & Reyes, 1987, p. 7), better management skills, and collegiality is still heard. With the limited scope of existing research on the academic deanship, developing an enhanced understanding of multifaceted effective leadership in the position is the first logical step towards future improvement. In addition, the position of dean is one, which in traveling the roads of academe, business, and everyday administration, causes the dean to play two or more roles in conflict with each other. The role-ambiguity may likely be related to low job satisfaction, increased stress and burnout, and role-conflict (Gmelch & Miskin, 1993, 1995). Bolman and Deal (1991) asserted that the use of several of the bureaucratic, human relations, political, and symbolic frames gives the leader more personal control over his or her roles

and resources. A leader's control over events has been studied in relation to leadership effectiveness (Cantu, 1997; Bolman & Deal, 1991; 1992) and leader stress measures (Sauter, et al., 1989).

Community college leadership serves as an excellent arena for examining leadership stress in higher education because, of all the leaders in higher education, community college leaders are often in daily contact with individuals from all parts of society (Vaughan, 1992). Because of the uniqueness of community colleges, the research has suggested that administration in community colleges is both similar to and different from administration in business corporations. Community colleges currently face conflicts over institutional missions, cutbacks in state and federal funding, increasing competition from proprietary schools, and a host of other concerns. To manage these changes, the colleges need effective leadership and they need it now. One difference between community colleges and corporations is that the former is a public agency, and its support depends on perceptions of value by the public and its representatives. Another difference is that lines of authority are not clearly defined. Community college faculty, leaders, and students are more likely to act as partners in a common venture, and they do not carry out orders but rather accomplish tasks aided by a leader's explanations, cajoling, and cooperation (Cohen & Brawer, 1994). These characteristics of community colleges alone suggest possible influences on the amount of stress experienced by academic deans, but the public calls for increasing educational quality also add to the dean's responsibilities.

Recent calls for educational accountability affecting community colleges have come from reports that also recommend an emphasis on strong leadership (*A Nation at Risk: The Imperative for Educational Reform*, The National Commission on Excellence, 1983);

Building Communities: A Vision for a New Century, AACJC, 1988; *New Expeditions*, AACJC, 2000). In addition to changing academic requirements, community colleges are increasingly asked to do more with less. Community colleges have been caught between difficult roles—trying to provide access and opportunity to as many as possible, while also maintaining academic standards despite increased student unpreparedness (O'Banion, 1989). O'Banion (1989) suggested that while the community college innovation of the 1960's was driven by access, the current innovation is motivated by the complementary concept of access with quality. He added that unlike four-year colleges, community colleges are nontraditional and untraditional; they do not even adhere to their own traditions: they make and remake themselves and therefore need able leaders to carry out this process.

Junior colleges also differ from other institutions of higher education in ways that have vast implications for leadership. Kanter, in Cohen and Brawer (1994), stated that compared to other institutions, the community college workforce is a more diverse potpourri of visionaries, scientists, men and women of trades, and assembly lines workers who all have unique idiosyncrasies. Community colleges often have a large number of leaders with degrees in education, often from leadership training programs housed in departments of educational administration (Richardson & Wolverton in Cohen & Brawer, 1994). A perception that these colleges are more deeply rooted in bureaucratic traditions than universities may be accounted for by the number of leaders with these degrees (Birnbaum, 1988, p. 105). Researchers have suggested that future leaders must change community college values and increase campus vision, create campus climates with balances among employee perspectives, and get others to want to do something important through increased political skills (Fryer & Lovas, 1991; Roueche, Baker, & Rose, 1989; Vaughan, 1989).

Coming changes and differences in staff, resources, standards, and outcomes will all affect the position and effectiveness of the academic dean of the future. Studies of deans at four-year colleges have found that some of these leaders' levels of stress in their institutions are related to administrative changes and the lack of control over them (Sarros, et al., 1998). In the more volatile community college setting, these academic stresses are also likely to be apparent.

Just as there is a need to further study the academic dean, the stress and amounts of control encountered by deans, there is also a critical need to study the dean in the community college setting. However, few serious scholars have been concerned with researching administrators in the community college despite one out of every three college students being in such a college (Cohen & Brawer, 1994). A need to study community college leadership is being heard from the faculty as Kempner (1990) found that a number of faculty members across the nation are complaining about their college's leadership. His qualitative research suggests that some of the faculty think administrative leaders hinder student learning because of academic deans' poor instructional leadership and ineffective communication with faculty. Cooper and Kempner (1993) also found that college administrators are creating crises for themselves because of their ignorance of and/or lack of respect for the underlying dynamics of the culture of the college.

Current college leadership research should utilize an integrative leadership theory. A community college academic dean leadership study should incorporate a multifaceted yet practical view of leadership because community college administrators tend to be skeptical about the practical uses of theories on organizations and leadership (Bensimon in Cohen & Brawer, 1994). Many if not most community college administrators are unfamiliar with the

different perspectives on leadership, and they tend to see the scholarship as interesting but not necessarily relevant to their daily activities (Bensimon, in Cohen & Brawer, 1994). These leaders often ignore conceptual works on leadership because, unlike popular works, they are not prescriptive and the research does not delineate how to determine or use one's leadership style(s).

Framing Theory

With little research conducted on community college academic deans, this study was designed to enhance knowledge about these leaders and compare the leadership frames (i.e., styles) of academic deans with differing measures of their control and stress. This study utilized a cognitive theoretical approach to accomplish this goal, Bolman and Deal's (1984) theory of leadership, as well as incorporating current stress theory as operationalized in the research of Sarros, et al. (1998).

This leadership frame theory was chosen for this study because many other theoretical approaches that have been applied to the study of leadership in the past have been limited in their integration of leadership knowledge. Past theories such as Stogdill's (1948) trait approach, Fiedler's (1967) contingency approach, Kerr and Jermier's (1978) situational approach, and Hersey and Blanchard's (1977) situational leadership approach emphasized different aspects of leadership. Each focused on either the leader, the situation, or the interplay between the leader and the situation (Hoy & Miskel, 1991). An integrative leadership theory can incorporate much of current leadership knowledge, and Bolman and Deal's (1984) frame theory is one such integrated model.

In 1984, Bolman and Deal combined existing research on organizations, leadership, and management from a variety of areas and classified this information into four cognitive perspectives or frames. The frames are: the structural (bureaucratic), which “derives its outlook particularly from the discipline of sociology;” the human resource, which “borrows its assumptions from the fields of psychology and organizational behavior;” the political, which “borrows ideas from political science;” and the symbolic, which “synthesizes concepts and imagery from a number of disciplines but most notably from anthropology” (Bolman & Deal, 1984, pp. 3-4).

According to the theory, the frames become lenses through which administrators, managers, and leaders perceive organizational occurrences (Bolman & Deal, 1984). Each of the political, human relations, structural and symbolic theoretical perspectives has leader advantages and enacts a different image of the organization. Each perspective contains ingredients that are essential to an integrative science of organizations; respectively the ingredients are that institutions are intentionally rational, are human systems, often have scarce resources, and have a reality that is socially constructed and symbolically influenced (Bolman & Deal, 1991). The four frames in Bolman and Deal’s theory “serve as prisms through which people interpret and respond to presenting circumstances” (Bolman & Deal, 1993, p. 23). Far too often leaders are faced with challenging situations that they do not quite comprehend. Framing the situation, or looking at it through more than one perspective has allowed leaders to make the best decisions and take the best actions within their organizations. Different frames have helped to expand problem definitions and have given leaders who approach ineffective outcomes a broader range of factors to explore.

Each frame has been described as a model of a leadership type. Like theories, models have helped leaders focus on a limited number of features of organizational life and have been used to account for organizational effectiveness and ineffectiveness. "Models can contribute more directly to diagnosis than can whole bodies of theory or formal theoretical statements, because models are generally simpler, less determined, and less fully specified" (Harrison & Shirom, 1999, p. 11). The four models together resulted in the Bolman and Deal theory.

Bolman and Deal's framing theory was chosen for this study for many reasons. First, their more comprehensive approach is more inclusive of leadership knowledge than each of the trait, contingency, behavioral, and cultural approaches to leadership. Second, this approach is a broad and practical tool for a cognitive understanding of leadership perspectives (Bolman & Deal, 1984). Third, this theoretical approach has been tested experimentally both in business related studies (Bolman & Deal, 1991), and in numerous educational studies (Burks, 1992; Cantu, 1997; Gilson, 1994; Redman, 1991; Strickland, 1992). Specifically, this theory has been employed in studies involving college presidents (Bensimon, 1989) and with higher administrators in university settings (Bolman & Deal, 1991; Gilson, 1994, Redman, 1991). This theoretical approach should also be beneficial in developing an understanding of the leadership frames of academic deans in community colleges. Since some research has already suggested that use of more than one of these frames leads to increased control over situations and effectiveness in leaders (Bensimon, 1989; Bolman & Deal, 1991; Cantu, 1997), this study compared these frames with academic dean stress and satisfaction. Associating measures of personal control (stress) to academic

dean use of singular or multiple frame perspectives in community colleges was informative to understanding community college leadership effectiveness.

Summary of the Problem

In recent years, while institutions of higher education have grown in complexity, community colleges have decentralized in structure, and simultaneously grown more competitive for funding dollars. These changes have altered administrators' roles. For example, as time spent dealing with internal college affairs becomes increasingly limited, community college presidents are becoming more dependent on their college deans and academic deans to perform these once presidential duties.

From the time the first academic dean was appointed by Harvard's president in 1864 to head the medical school, academic deans have played a vital but changing role in colleges and universities (McCarty & Reyes, 1987). In recent years, deans' role-ambiguity and importance have increased (Wolverton, et al., 1999). For example, Perkins (1991) noted that the academic dean holds a difficult dual position at the college. The dean position involves both guiding "the direction of the instructional program and at the same time handling the multitude of matters that affect the everyday life of the college" (p. 49).

Academic deans have served many functions in community colleges. The academic dean has routine contact with the full spectrum of organizational levels: students, staff, faculty and other administrators. Traditionally, they have been involved in budgeting, creating and revising policies, and meeting with various college affiliates (Tucker & Bryan, 1988). Presently, academic deans perform traditional duties as well as being given increased responsibilities in organizing, delegating, hiring, planning, decision-making, and fundraising.

The dean must deal with short and long range planning, managing change, resolving conflicts, tolerating ambiguity, allocating scarce resources, and dealing with uncertainty and risk. All of these work responsibilities can be sources of stress, and the effectiveness with which the dean understands and deals with these challenges is partially dependent upon the dean's leadership style and ability to handle stress.

Though the deanship has been studied extensively, limited information concerning the leadership styles and measures of stress of effective academic deans exists. While researchers have called for more study of the leadership styles of effective academic deans (Griffiths & McCarty, 1980; McCarty & Reyes, 1987), an extensive review of the literature revealed that two dissertation studies (Bowman, 1994; Cantu, 1997) document these leaders' stress. Bowman (1994) studied how style, flexibility of style, and dean effectiveness affected measures of the deans' work-related stress. While both Bowman's (1994) and Cantu's (1997) studies began to illuminate behavioral differences across the leadership styles of effective academic deans, neither study described community college deans. Cantu (1994) noted that the study of differences between effective and average academic deans was limited only to "Master's Colleges and Universities and Doctorate-Granting Institutions" (p. 11). Since these colleges usually have multiple deans, Cantu's (1997) study is not generalizable to a study of junior or community college academic deans, since these institutions often have only one or two academic deans.

The prevalence of stress in higher education administration is important to research. A serious deterrent to effective leadership has been the presence of chronic occupational stress. The Occupational, Safety and Health Administration (1990) estimated the physical, psychological, financial, and social costs of work stress to be as high as \$200 billion a year,

with executive stress accounting for \$20 billion of this number. Moreover, 50 years of scientific research have suggested that work is a major source of stress and plays a role in personal health and well-being as well as reduced productivity (Marshall & Cooper, 1979; Rice, 1992). The leader's ability to handle stressful situations has seriously affected leadership ability (Gardner, 1990). Many researchers have called for more study of the causes and abatement of dean role-conflict, stress, and ambiguity (Sarros, et al., 1998; Vaughan, 1986; Wolverton, et al., 1999). Vaughan (1986) suggested that though educational leaders view stress as part of the job and handle it, there is lack of knowledge about how stress affects the leaders personally and professionally. Researching aspects of leader effectiveness in tandem with the Bolman and Deal (1984) theory of multiple frames will be a way to understand community college deans' ability to control their work stress. Research in other venues suggested that the use of more than one of these frames leads to increased leader control over situations and effectiveness (Bensimon, 1989; Bolman & Deal, 1991; Cantu, 1997). Comparing measures of personal control (stress) to academic dean use of singular or multiframe perspectives in community colleges was informative to understanding community college leadership effectiveness in this study.

Research studying academic deans in four-year schools suggested that other variables influenced how a leadership style relates to measures of stress. Increased size of the institution in terms of number of faculty and/or students often created more work and stress for leaders (Anderson & King, 1987; Bowman, 1994; Cantu, 1997). Additional years of experience in the deanship was shown to give these leaders more tools to deal with their stress (Bowman, 1994; Cantu, 1997). Stress of community college deans at larger schools who possessed less experience was also researched in this study. Research on academic dean

leadership style and the influence of experience and size of faculty at institutions have revealed inconclusive results (Gilson, 1994; Warner, 1992). In addition, studies of leadership styles of academic deans have shown differences across the academic discipline of deans at four-year colleges and universities (Cantu, 1997; Warner, 1992). Since community college academic deans most often come from education or administration disciplines, this variable was not a factor in this study. These differences in influential characteristics across former studies suggested a need for further understanding of the variables related to academic deans' leadership style, particularly at community colleges.

Statement of the Problem

This study was motivated with the concern that information related to academic deans is still deficient. Although the importance of leadership within the deanship was a topic of interest to many researchers (Anderson & King, 1987, Sarros, et al., 1998), these large-scale studies have been mostly confined to the academic dean at four-year colleges and universities. Additionally, dean demographics research is warranted since a comprehensive database on community college dean demographics was not found in the literature, and the need for such demographics research is indicated in the literature (Bensimon, 1989; Birnbaum, 1988; Griffiths & McCarty, 1980; Vaughan, 1992). Existing leadership research indicated "that leadership style in an organization is an important factor in the effectiveness of that organization" (Gilson, 1994, p. 16). Yet, until this study was conducted, relevant information was unknown about how community college academic deans incorporated their leadership styles (i.e., frames) into their work, and if those styles differed among deans with variable levels of stress and satisfaction.

Purpose of the Study

A number of research questions were devised to elicit a wide variety of information on the academic deanship at community colleges. Generally it was hypothesized that the dean's leadership behavior (use of frames) would affect levels of job-related stress.

Specifically, this study answered the following research questions:

1. What is the current community college academic dean demographic profile including task, role and stress characteristics?
2. Which and how many leadership frames (Bolman & Deal, 1984) are most commonly used by academic deans at the community college?
3. Do community college deans recognize and perceive correctly the frames of leadership they use most prominently?
4. Are there significant differences between the leadership frames employed by community college academic deans with lower and higher measures of stress?
5. Are there significant differences between the leadership frames of academic deans with low and high measures of stress when deans are compared according to demographic variables including their number of years of experience, their gender, and/or the size of their institution?

Significance of the Study

This study was conceived due to the paucity of research on effective leadership within the academic deanship at the community college. Dean demographics at the community colleges resulting from the study provided a needed baseline of information. The leadership frames of randomly selected academic deans were gathered in this study utilizing a modern and cognitive theoretical approach to leadership, Bolman and Deal's (1984) theory of leadership frames. This theory combined existing research on organizations, leadership, and management from a variety of subject areas and classified the information into four

cognitive frames or perspectives. The frames were the structural, human resource, political, and symbolic orientations (Bolman & Deal, 1984).

The dramatic changes described in community college focus and leadership suggested that community college deans need to juggle roles and responsibilities as well as their leadership styles. These multiple roles created stress and role-conflicts that were measured in the study. The stress levels of community college academic deans added to the knowledge of leadership effectiveness and control of these leaders, and were obtained from measures of the Dean's Stress Inventory (Gmelch & Swent, 1984; Gmelch, Wilke, & Lovrich, 1984).

Results of this study are beneficial to several groups. First, information gained from this research is valuable to academic deans who seek to enhance their understanding of effectiveness in the deanship and to understand their sources of stress. Second, information gathered from this study can be utilized by educational leadership programs in the training of academic deans in styles associated with the frames of leadership associated with lower stress. Third, researchers will find the comparative methodology and results of this study useful in future research.

Limitations of the Study

Dean self-perceptions. Leadership is not simply the behavior of an isolated individual but involves the process of influencing another person or group (Yukl, 1981). One limitation of this study is that information from the deans came from one source, the deans themselves. Therefore, the data may be biased toward a dean's own perceptions of how he or she may wish to appear and away from the reality of their behavior and stress. These measures may thus have been influenced by the current stress, current job dynamics,

economic conditions, or other factors present when the surveys were completed in the spring of 2000.

Survey Research Methodology. Questionnaire measures are often considered invalid if they depart from an ideal definition of particular behaviors or different situations give rise to different survey interpretations (Weiss, 1999). Although an attempt was made to develop questions that are generalizable across a broad range of colleges, this generalizability is not understood to be of the highest value. In surveying respondents, there was no guarantee that all respondents agreed about the meaning of leadership, no guarantee that they had in mind a uniform concept rather than a generalized conception, and no guarantee that the surveys really measured what was desired. Whether the survey measured a leader's behavior, traits, or effects of a cultural situation, was a limitation of this study. The assessment of each leader's responses was also a reflection of one moment in time, and may have been influenced by factors present at the time of the survey.

Classification of institutions. One limitation of this survey was that the institutions surveyed include all types of community colleges including vocational, liberal arts, and technical. These differing environments with possibly different governance, hierarchy, and responsibilities, added to the complexity in interpreting results.

Classification of academic deans. Many community colleges have differing bureaucratic structures that devolve different titles and tasks upon the object of this study, the academic dean. While a definition was provided to each campus encompassing the wide range of duties carried out by the particular dean of interest, the actual individual surveyed in some cases may instead be the Chief Academic Officer or another dean of the college fulfilling more than one role.

Use of a multiframe model of leadership. A single diagnostic model that is easy to use and more universally applicable than a multiframe model such as that of Bolman and Deal (1984) may have made the study less complex. Therefore, the broadness of the leadership orientations theory may be a limitation of this study. Nevertheless, there were sound empirical, theoretical, and practical reasons for using multiple and even competing frames and models in diagnosis, since many organizational theorists have agreed that no single model or frame fully captures the complexity and multifaceted nature of organizational reality (Bolman & Deal, 1991; Harrison & Shirom, 1999). Since each approach brought particular insights and emphases into leadership understanding, a dean's application of these divergent models allowed a fuller practical model of a college's and leader's complexity.

Definition of Terms

Academic Deans and Dean. Academic deans are those administrators who oversee the operations of various discipline areas in a college. Academic deans have supervised faculty in departments, governed the operation of one or more academic departments, and commonly have overseen chairpersons in charge of departments. Academic deans have often reported directly to the Chief Academic Officer at institutions. While the administrative name for academic dean varied among institutions (i.e., vice-president of academic affairs, dean of faculty, dean of instruction, or just the title of dean), academic deans commonly oversaw the details of operation of the transfer college or the vocational-technical college.

Administrative Relationship Stress (Relationship Stress). Items that related to a dean's relationships with superiors and the perception of having received poor training and

limited authority to perform the role adequately fit into administrative relationship stress (Sarros, et al., 1999).

Administrative Task Stress (Task Stress) Items that related to a dean's everyday duties such as attending meetings, meeting deadlines, and balancing personal and professional obligations fit into the administrative task stress (Sarros, et al., 1999).

Assessed Stress. The dean's assessment of the overall level of stress they experience as a dean is assessed stress.

Community College. The term community colleges will be used to describe junior colleges, two-year colleges, and technical colleges. They are accredited to offer the associate of arts degree as their highest degree. Most of these colleges also offer extensive occupational programs leading to certificates. The ability to award an AA degree distinguishes them from many of the publicly supported area vocational schools and adult education centers, and most proprietary business and trade institutions.

Faculty-role Stress (Faculty Stress). Items that related to the recognition (or perceived lack of) for scholarly and administrative achievements and performance fit into faculty-role stress (Sarros, et al., 1999).

Full-time Faculty. Full-time Faculty refers to the number of faculty employed by the college, who have an office on the campus and work under the direction of the academic dean. The total faculty number includes those additional faculty hired on a part-time or adjunct basis. This variable was used as a measure of the size of the institution.

Human Resource Frame. Leaders who exhibit characteristics of the human resource frame value relationships and feelings and seek to lead through facilitation and empowerment. They tend to define problems in individual or interpersonal terms and look for

ways to adjust the organization to fit people—or to adjust the people to fit the organization (for example, through training and workshops).

Leadership Frames (Leadership Orientations). Leadership frames, or leadership orientations, involved the four preferred ways that leaders think and act in response to everyday issues and problems. These frames, also called styles, include the structural, the human resource, the political, and the symbolic (Bolman & Deal, 1984).

Perceived Expectations Stress (Perceived Stress). Items that refer to the need to generate external revenue sources for faculty programs and meeting the needs of various constituents fit into perceived expectations stress (Sarros, et al., 1999).

Percent Stress. The dean's self-assessment of the percentage of total stress in their lives that results from being a dean is percent stress.

Political Frame. Leaders who exhibit characteristics of the political frame are advocates and negotiators who value realism and pragmatism. They spend much of their time networking, creating coalitions, building a power base, and negotiating compromises.

Role-Ambiguity. Role-ambiguity relates to having insufficient information to perform the required task, or having ambiguous or problematic work requirements.

Role-Ambiguity Stress (Role Stress). This stress involves items related to the handling of staff and student concerns, and staff development in terms of promotion and appraisal (Sarros, et al., 1999).

Role-Conflict. Role-conflict related to concurrent conflicting demands made upon the dean and the differing roles played by this leader.

Stress. The definition of stress used in this study was the “anticipation of one’s inability to respond adequately to a perceived demand accompanied by one’s anticipation of negative consequences for an inadequate response” (Gmelch, 1992).

Structural Frame. Leaders who exhibit characteristics of the structural frame value analysis and data, keep their eye on the bottom line, set clear directions, hold people accountable for results, and try to solve organizational problems with either new policies and rules or through restructuring.

Symbolic Frame. Leaders who exhibit characteristics of the symbolic frame instill a sense of enthusiasm and commitment through charisma and drama. They pay diligent attention to myth, ritual, ceremony, stories, and other symbolic forms.

Total Stress. Total stress scores for the deans involve the composite score for 32 stress items from the Dean’s Stress Inventory by Gmelch and Swent (1984).

Years of Additional Administration. Years of additional administration referred to the number of years deans have been in an administrative position outside of being an academic dean, including possibly division head, dean, vice-president, or president.

Years of Experience. Years of experience referred to the number of years individuals have held their present position as academic dean. Bensimon (1987) described the influence of experience (years in a position) on the leadership frames of college presidents.

Summary. This chapter described the need for a community college academic dean study, and the next chapter traces the development of leadership, frame and stress theories. The third chapter outlines the survey methodology employed and the instruments and chapter four details the results of the survey. The final chapter summarizes the study and discusses conclusions and recommendations for further research.

CHAPTER II

LITERATURE REVIEW

This review of related literature is organized into five sections. The first section traces the historical development of major approaches to the study of leadership. Leadership styles including Bolman and Deal's theory (1984) of leadership are described as cognitive approaches to leadership in a second section. The third section explores the role and position of the community college academic dean in institutions. A fourth section combined Bolman and Deal's leadership theory (1984) with studies of academic deans by examining connections to the variables of knowledge of frames, years of experience, and faculty size. The final section documents stress theory as related to the independent variables described in the fourth section. Throughout the sections, research on academic deans and variables is often described from non-community college settings, but community college research is emphasized where found.

Leadership Theory

The English word "leader", deriving from its Anglo-Saxon root "laeder", which meant to take people on a journey, is more than a thousand years old. Throughout human history, social and political observers have recognized the importance of leadership and contemplated the most appropriate form for it to take. Good leadership was often thought of in terms of successful leaders and was most often discussed in the masculine sense in the literature reviewed. Descriptions of the generalship of Alexander the Great, of Napoleon, of Robert E. Lee, and of George Patton, the political leadership of Elizabeth I, Abraham Lincoln, and Charles DeGaulle, and the business leadership of Henry Ford and Andrew

Carnegie all showed society's stake in its leaders and their performance (Fiedler & Chemers, 1974). "The importance of good leadership has, therefore, always been recognized...the concern with leadership has a long history, but its systematic study is of recent vintage" (Fiedler & Chemers, 1974, p.1).

Early views in leadership writings often expressed a philosophical position about life, such as the work by Plato or Hobbes, or embodied principles derived through observation of exemplary leaders such as the work of Machiavelli and Confucius. They often reflected a greater concern with what leaders should be than with what leadership really was (Chemers, 1997). However, through their essays, parables, and epics, authors and poets have also advised people on the ways to be an effective leader. The way leadership has been understood across cultures has differed over time, and in the twentieth century a new approach to illuminating leadership was added, the empirical scientific method. Both in early research and today, leadership researchers have criticized past research for reliance on human perception and its susceptibility to inaccuracies in perception. Despite this reliance in the research methods, however, most well-known leaders appeared to have common traits or behaviors that could be studied.

Most of the focus of recent research has been on determinants of leader effectiveness (Yukl, 1981). Research on effectiveness and control in leadership has often measured differing leader variables such as traits or characteristics, behaviors, contribution to group processes, accumulation of resources, readiness of the group to handle change and crisis, and leader's quality of work life (Bass, 1990). To assure reliability in the information gathered, investigators have developed improved techniques for measuring leadership. Still, the three major approaches (self-reports, subordinate reports, and expert ratings), though differing in

the source of information, are similar in that they all measure social perception (Chemers & Ayman, 1993, p. 140). Some researchers suggested that since leadership is a social interaction, perception and interpretation remain critical to understanding the leadership process.

Over time, more encompassing theories of leadership have been studied as the different theories contradicted each other. For example, in one theory, leadership was defined as one's interpersonal influence enacted through unique situations in one theory (Yukl, 1981), but has been defined as the process of embedding values, attitudes, beliefs and behaviors in an organization in another theory (Roueche, et al., 1989). While leadership is the most studied aspect of work organizations, the role of leadership in the cultures of organizations has only recently received much interest (Schein, 1985; Sergiovanni, 1992).

Many researchers have suggested that a lack of integration across different theories and approaches ultimately diminishes the utility of research findings for both scientist and practitioner. A good theory should integrate and illuminate common findings and be a platform for future theory and research. Researchers suggested that to understand the contradictions in the multifaceted leadership theories, models should first group together findings with the same underlying processes in order to see the commonalities within the different theories (Chemers & Ayman, 1993).

In the last decade, a synthesis of studies of leadership in organizations had suggested that a leaders' vision is the only characteristic of effective leadership common to all reports and that it is an integral part of leadership (Bolman & Deal, 1991; Pearce, 1995). Many of these studies are moving to a more systemic and holistic approach to the study of leadership (Pearce, 1995). Tracing the historical development of major leadership approaches will

illustrate the directions of leadership research beginning with great leader characteristics to current approaches of studying organizational vision and culture. The first four approaches to be examined include 1) The Trait Approach, 2) The Behavioral Approach, 3) The Situational and Contingency Approaches, and 4) The Cultural and Symbolic Leadership Approach.

The Trait Approach. One approach to the study of leadership developed in the early part of this century was called the Great Man Theory of Leadership or the Trait Approach (Bass, 1990; Hoy & Miskel, 1991; Yukl, 1981). The 19th century philosopher, Thomas Carlyle, offered a theory of leadership that held that great leaders possessed some special trait or characteristic that allowed them to rise to positions of prominence regardless of the situation (Chemers, 1997; Yukl, 1981). The approach sought to “identify distinctive physical or psychological characteristics of individuals that relate or explain the behavior of leaders” (Hoy & Miskel, 1991, p. 253). In many instances, the approach also attempted to isolate characteristics and traits that differentiated leaders from non-leaders (Bass, 1990; Hoy & Miskel, 1991). A common view has been that there was something about the leader as a person that provided the unique qualifications for that person’s ascendancy. Trait investigations were the dominant research strategy in leadership from the early 1900's to the Second World War.

During the time of trait theory popularity, from 1904 to 1948, over 100 trait studies were conducted. This number greatly increased during the period of 1920 to 1950 with the advent of psychological testing (Yukl, 1981). Research of this kind examined several different traits associated with leaders, such as physical, personality, and ability characteristics (Yukl, 1981). The trait approach gradually lost its popularity around 1948 when Stogdill published a review of 124 trait studies (Bass, 1990; Yukl, 1981). Stogdill

(1948) reported that among trait studies, there was little evidence to indicate a certain set of traits could cause one to become a leader. Furthermore, he indicated that leadership traits seemed to differ from situation to situation (Stogdill, 1948). He also concluded that these early studies were not very successful in correlating personal characteristics, personality traits, and abilities of natural leaders with leadership effectiveness (Stogdill, 1948). His research led to the end of trait theory as a basis of leadership. "A person does not become a leader by virtue of the possession of some combination of traits, but the pattern of personal characteristics of the leader must bear some relevant relationship to the characteristics, activities, and goals of the followers" (Stogdill, 1948, p. 48).

Trait theory met its demise because the early research did not consider the question of how traits interact as an integrator of personality and behavior, or how the situation determines the relevance of different traits and skills for effectiveness (Yukl, 1981). The 1948 literature review by Stogdill greatly discouraged many leadership researchers from studying leader traits, whereas industrial psychologists interested in improving managerial selection continued to conduct trait research (Yukl, 1981). The emphasis on selection focused a second round of trait research on the relation of leader traits to leader effectiveness, rather than on the comparison of leaders and nonleaders (Hoy & Miskel, 1991; Yukl, 1981). "The question is whether the individual who looks like a leader and is therefore chosen to fill a leadership job will also turn out to be an effective leader" (Fiedler & Chemers, 1974, p. 25). Predicting who will become leaders and who will be effective are quite different tasks. Yukl (1981) also added that information about the effective managerial skills of employees in an organization is useful for identifying training needs and planning development activities.

Over the next 25 years, this round of trait research produced more consistent results through inclusion of specific administrative and technical skills and improved measures of the traits (Stogdill, 1974). According to Stogdill (1974), in a second review of 163 trait studies, a more conclusive set of leadership characteristics were revealed.

The leader is characterized by a strong drive for responsibility and task completion, vigor and persistence in pursuit of goals, venturesomeness and originality in problem solving, drive to exercise initiative in social situations, self-confidence and sense of personal identity, willingness to accept consequences of decision and action, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence other persons' behavior, and capacity to structure social interaction systems to the purpose at hand. (p. 81)

Clearly, some relationships between leadership attributes and leadership status were found. While the relationships in some cases were weak, the evidence is worthwhile to report (Fiedler & Chemers, 1974). The characteristics found to be important include self-confidence, emotional stability, energy level, initiative, stress tolerance, and lack of defensiveness (Yukl, 1981). However, cognitive skills and self-assurance were found to be much more important than the need for power or initiative. The new traits related to effectiveness include ability to influence other persons' behavior and capacity to structure interaction systems to the purpose at hand. The new trait approach attempted to identify which personal traits characterized leaders and made them more or less effective (Trice & Beyer, 1993). Cognitive skills and self-assurance are much more important than some traits like power or initiative (Bass, 1990). While these effectiveness characteristic findings are informative, they did differ across some studies. Personal traits are clearly only one component of leadership and not the whole story (Bass, 1990).

Many scholars (Bass, 1990; Hoy & Miskel, 1991; Yukl, 1981) continued to feel that despite a relatively consistent set of leadership characteristics, the situation variable had been left out. At one extreme, Fiedler and Garcia (1987) suggest that personality traits do not even contribute highly to effective leadership performance. In addition, Stogdill (1974) wrote, "Four decades of research on leadership has produced a bewildering mass of findings...It is difficult to know what, if anything, has been convincingly demonstrated by replicative research. The endless accumulation of empirical data has not produced an integrative understanding of leadership" (p. viii). Stogdill cautioned that the premise that certain leader traits are absolutely necessary for effective leadership has not been proven in two and one-half decades of research. Most researchers recognized that certain traits increase the likelihood that leaders will be effective but that the importance of different traits is very much a function of the nature of the leadership situation (Bass, 1981).

Thus, leadership must be conceived in terms of the interaction of variables that are in constant flux and change. Although Stogdill did not dismiss the study of traits, noting that reliable differences in ability, activity, and character were associated with leadership, his analysis foreshadowed the more complex contingency theories in which personal characteristics were related to situational variables (Chemers, 1997).

The Behavioral Approach. The Behavioral Approach is a research perspective developed between 1946 and 1960 which attempted to understand what leader behaviors facilitated the development of worker behaviors. Methods used in the behavioral approach include the use of diaries, observations, activity sampling, self-reports, questionnaires, and critical incidents (Yukl, 1981). By far the greatest numbers of studies on leadership behavior have used questionnaires to describe what leaders do (Yukl, 1981). In behavioral leadership

approaches, researchers endeavored to identify certain styles of leadership manifested by leaders and then attempted to assess their effects on followers (Trice & Beyer, 1993).

Questionnaire research on leadership has been dominated by the influence of the Ohio State University (OSU) Leadership studies initiated in the 1940's. Essential work within the behavioral tradition was first undertaken by the Bureau of Business Research at OSU in the 1940's (Hoy & Miskel, 1991; Yukl, 1981). The initial questionnaire had a list of 150 examples of behaviors from which subordinate answers led to two categories of behavior. The questionnaire identified two poles of behavior—"initiating structure vs. consideration, autocratic vs. democratic, task-oriented vs. socioemotional, or production centered vs. employee centered" (Trice & Beyer, p. 255). The Ohio State University Leadership Studies determined that subordinates perceived their supervisor's behavior in two primary dimensions: consideration and initiating structure (Stogdill, 1974). The answers to the questionnaire led to the development of the Leader Behavior Description Questionnaire (LBDQ) in 1950 by John K. Hemphill and Alvin Coons (Hoy & Miskel, 1991). The questionnaire's two facets of leadership behavior, initiation of structure and consideration were then measured (Bass, 1990; Hoy & Miskel, 1991; Yukl, 1981).

Initiation of structure is a leader behavior that defines roles and tasks for followers. Yukl (1981) defined initiation of structure as the "degree to which a leader defines and structures his or her own role and the roles of subordinates toward attainment of the group's formal goals" (p. 75). Consideration is those "behaviors which esteem the feelings and well-being of followers" (p. 75). Consideration is also the degree to which a leader acts in a friendly and supportive manner, shows concern for subordinates, and looks out for their welfare.

Two years later the LBDQ was revised by Andrew Halpin and B.J. Winer (Bass, 1990). The next step in the Ohio State studies was to determine how these two variables were related to the leader's effectiveness. Five of six later experiments found that considerate leaders had higher subordinate performance and/or satisfaction. The results for initiating structure were less consistent.

Similar to the Ohio State University studies, the Survey Research Center at the University of Michigan examined leader behavior in a variety of business and governmental organizations (Hoy & Miskel, 1991). Initial research discovered two facets of leader behavior, production-oriented behaviors and employee-centered behaviors, which correlate to the two facets in the Ohio State studies. The University of Michigan conducted a program of research on leadership behavior the purpose of which was to locate clusters of leader characteristics that are closely related to each other and to effectiveness criteria (Hoy & Miskel, 1991). The criteria of effectiveness included job satisfaction, turnover, absenteeism, productivity, and efficiency.

Both the Ohio State and Michigan studies later revealed that each of the two leadership behavior categories were more in-depth than first thought. The categories, instead of forming two distinct dimensions, formed four dimensions that were differentiated by degrees of "task-defining" and "interpersonal behaviors" (Hoy & Miskel, 1991, p. 269) Both studies revealed that the most effective leaders appeared to be those who exhibited behaviors that were high in both behavioral dimensions. Effectiveness was attributed to leaders who exhibited strong goals with high interpersonal activity among employees (Hoy & Miskel, 1991).

A human relations movement of the 1930's and 1940's suggested that how employees were treated, and how they felt about their work and supervisors affected performance. The theory has been buttressed by academics such as Likert (1961), Argyris (1964), and Bennis (1966). Likert (1961) summarized these and other studies by finding that three types of leadership behavior differentiated between effective and ineffective managers: task-oriented behavior, relationship-oriented behavior, and participative leadership. Task-oriented behavior is similar to initiating structure in that effective managers concentrated on planning and scheduling the work, coordinating subordinate activities, and providing necessary assistance. Effective managers also were more considerate, helpful and supportive with subordinates, giving rise to better relations. Participative leadership involves the use of decision procedures intended to allow subordinates, peers, superiors, or outsiders some influence over the leader's decisions (Likert, 1961). Argyris (1964) conducted research on the benefits of improving employees lives and the positive effect on the organization. Bennis (1966) researched how human events affected decision making in organizations like colleges. All of these studies suggested that a leader's understanding of the human elements of an organization is important to successful leadership.

The two dimensions in the OSU and Michigan studies appear to be separate and conceptually distinct, as most research has been inconclusive as to their correlation. Most studies have shown the consistent relationship that subordinates are usually more satisfied with a leader who is at least moderately considerate (Yukl, 1989). Mintzberg (1973) came to the conclusion that many of these studies failed to provide much insight into what a manager does. He conducted a study with unstructured observations and found three managerial roles: figurehead, leader, liaison; three information-processing roles: monitor, disseminator, and

spokesman; and four decision-making roles: entrepreneur, disturbance handler, resource allocator, and negotiator (Mintzberg, 1973). Because of all the roles that a leader undertakes, one problem with the Ohio and Michigan studies was the futility in attempting to identify a universally appropriate leadership style based upon the consideration and initiating structure dimensions due to overlooked situational contingencies (Bass, 1981; Yukl, 1971). The behavioral approaches at Ohio State University and University of Michigan were described as impressive, but criticized for their lack of strong theoretical foundations (Hoy & Miskel, 1991). Having subordinates report how their managers behaved can also lead to the problems of subordinate biases or interpretational differences. Despite these problems with behavioral leadership research, recent studies using transactional and transformational leadership questionnaires continued the OSU and Michigan behavioral approach to leadership.

In deference to the findings in several behavioral studies, Blake and Mouton (1964) developed the Managerial Grid Theory to describe managers in terms of concern for people and concern for performance. Blake and Mouton's Grid theory (1964) was based on the assumption that there is a certain consistent pattern in behavior. The details of one's behavior change endlessly in situations, but the general pattern of behavior allows for behavior to be predicted. They have used "concern for production" as a horizontal axis and "concern for people" as a vertical axis (p. 29). Five basic types can be placed on the system--the 1-1, 9-9, 1-9, 9-1, and 5-5 leader styles. A person's leadership style can be located on the grid by identifying the degree of concern for production on a nine-point scale on one axis and a concern for people on another nine-point scale axis. Those high on one end but not on the other, (1,9) or (9,1), are hypothesized to be less effective than they could be because they ignore either important relational or task aspects of organizational functioning. Other leaders

balance the two scales by compromising the apparently conflicting demands of relationships and tasks, but the compromise (5,5) results in outcomes that support a group's satisfactory performance. The most effective (9,9) emphasizes both while the least effective (1,1) emphasizes neither. Extensive studies in Japan have borne out the hypothesis that leaders high in both relations and task behavior are found to be the most effective, and some of these studies find a significant interaction between the two variables (Misumi, 1985).

The grid theory supported the hypothesis that an integrated leadership style is the ideal, but in doing so introduced a greater range of leadership styles than in the OSU and Michigan studies. The researchers created these styles based on behavioral science studies conducted at the time. The Blake and Mouton model emphasized that a specific leader need not be either a task-type leader or a human relationship-type leader but rather one who engaged in one of five possible leadership patterns. A leader can blend concerns for people and concerns for production in any one of 81 variations (Hampton, Summer, & Webber, 1987).

The grid has been criticized for asserting that one best way (9,9) exists of providing leadership without concern for the particular task, nature of environment, or qualities of participants (Bensimon, et al., 1989, p. 13). In addition, little subsequent research to specifically test their hypotheses apart from opinions of managers has been undertaken (Blake & Mouton, 1982). While many of the early universal theories of leadership behavior suggested that effective leaders utilize two different behaviors: supportive and task-oriented, many of these studies postulated that the same style of leadership is appropriate in all situations. Few studies have incorporated situational variables in a systematic manner or

investigated whether different procedures are more effective for different types of decisions (Hoy & Miskel, 1991).

Yukl (1981) cautioned that cataloging specific behavior incidents is not necessarily sufficient to classify behavior as task or relations oriented. The most distinguishing aspect of this interactive grid model is that it started research on the value of possessing both high-task and high relationship orientations in leaders who guide decisions as opposed to utilizing the same approach in all situations (Lockwood, 1995). The implication for midmanager deans is that participative management will not be appropriate in all situations. Several scholars have pointed out problems in behavioral approaches to leadership studies. The studies suffer from being overly descriptive. Additionally, due to changing situational variables, there is conflict among numerous behavioral studies (Yukl, 1981). Despite these negative aspects, the behavioral approach was and is influential in leadership theory and research.

The Situational and Contingency Approaches. Because trait and behavioral theories often led to inconsistent results, another approach became prevalent in the leadership studies of the late 1940's and 1950's, known as the Situational Approach (Bass, 1990). There was a notion that great events made leaders of otherwise ordinary people. Situational approaches were research perspectives on leadership in direct opposition to the prior trait approaches (Bass, 1990). Some theorists attempted to discover situational characteristics that influenced leader success, while others attempted to find specific characteristics of situations which might act as substitutes for leadership (Kerr & Jermier, 1978). Variables of interest to situational researchers included,

1. Structural properties of the organization: size, hierarchical structure, and formalization;

2. Organizational climate or culture; openness, participativeness, group atmosphere, values and norms;
3. Role characteristics: Position power, type and difficulty of task, procedural rules;
4. Subordinate characteristics: Education, knowledge and experience, tolerance for ambiguity, responsibility, power. (Hoy & Miskel, 1991, p. 255)

Situational researchers argued that the effectiveness of specific leadership behaviors depends upon the situation in which the leader and followers interact. They focused on discovering which aspects of situations are crucial and which behaviors are effective in them (Trice & Beyer, 1993, p. 257). The purpose of Hersey and Blanchard's situational leadership theory (1977) was to account for the situation component left out by Blake and Mouton's (1964) managerial grid. This situational theory used the same two dimensions of the grid but incorporated the situational idea of subordinate maturity level as a crucial aspect. Bolman and Deal (1991) found problems in this theory as the theory failed to distinguish between support for a person and support for specific behaviors of a person. Bolman and Deal (1991) also suggested that the theory oversimplified the options available to leaders and the range of situations encountered, and neglected the problem of the Pygmalion effect through assumptions that manager's perceptions of subordinates' maturity are reliable.

Some current situational scholars suggested that situational components can act as substitutes for leadership behaviors (Kerr & Jermier, 1978). These researchers agree that directive behavior will have the most beneficial effects when subordinates are unable to accomplish tasks without help and that supportive behaviors will result in higher levels of satisfaction when other aspects of the environment increase the need for subordinate support. But they suggested that when other aspects of a situation substitute for the leader, both of

these behaviors are less necessary and important (Kerr & Jermier, 1978). Since these substitutes are not prevalent all of the time, the situational approach appeared to be no more inclusive than the trait and behavioral approaches. A more adequate definition of a situation's relationship to leadership was still needed.

Another situational leadership question focused on a leader's style. Somewhere between the broad personality trait and the specific behavior sits the "leadership style" which reflects a relatively stable pattern of response to social situations (Chemers, 1997, p. 21). The leadership style should appear in a person as a relatively enduring set of behaviors regardless of the situation. It differs from a leader's traits by focusing on what the leader does rather than what the leader is. One of the first and most famous studies of leadership style was conducted by Lewin, Lippitt, and White (1939) who looked at groups of boys led by adult male leaders exhibiting democratic, autocratic, or laissez-faire styles. They raised questions about the degree to which the leader should take major responsibility for the direction and administration of the group versus the degree to which the leader should be concerned primarily with personal relations, encouragement of participation, and shared planning with the group. They were unable to find a satisfactory solution to the question and there are few tests to spell out the specific circumstances under which styles are most appropriate (Fiedler, 1967).

The Contingency Approach developed because of inadequate results of studies of leadership traits, behaviors, and situations. While several of the earlier studies illustrated the phenomenon of leadership to a degree, because of their numerous and sometimes conflicting reports, they fell short in wholly capturing the subject. The growth of more inclusive theories arose from the need for leadership formulations with greater descriptive and explanatory

powers. The Contingency Approach was the first approach that attempted to meld together leadership behaviors with changing situations (Bass, 1990).

These contemporary theories, referred to as contingency theories, maintained that leadership effectiveness depends upon the fit between personality characteristics and behavior of the leader and situational variables such as task structure, position, power, and subordinate skills and attitudes. There appeared to be no one best style; so contingency theories attempted to predict which types of leaders would be most effective in different situations. The contemporary question is: What traits under what situations are important to leader effectiveness? Many of the prevailing and current models guiding leadership research involved a contingency approach.

Specifying the conditions or situational variables that affect the relationship between leader traits or behaviors and performance criteria was one of the goals of the theory. The fit between personality characteristics and behavior of the leader and situational variables such as task structure and attitudes all suggested that there is no one best leadership style. Three such contingency theories are: Fiedler's contingency model, Fiedler's cognitive resource theory, and House's path-goal theory.

Fiedler developed the first and one of the most renowned contingency theories in 1967 (Hoy & Miskel, 1991). Fielder purported that "no single personality trait, trait pattern, or particular style of leader behavior assures good organizational performance in all leadership situations. A person may be a very effective leader in one situation but very ineffective in another" (Fiedler & Chemers, 1974, p. 73). Furthermore, the situation sometimes influences how a leader will behave. Fiedler's (1967) contingency model does not try to measure leader behavior but rather the motivations behind leadership behavior. Fiedler

views the leadership situation as an arena in which the leader seeks to satisfy personal goals and to accomplish organizational goals (Fiedler & Chemers, 1974).

Fiedler collected data from a wide variety of group and leader situations (more than 800 groups) over more than 10 years. Fiedler's method included categorizing the type of situation (one of eight octants), determining the style of the leader, and determining which groups performed their tasks successfully or unsuccessfully. Effectiveness of group performance was then correlated with leadership style (Fielder & Chemers, 1974). Fiedler's contingency theory utilized the Least Preferred Co-worker scale (LPC) to interpret a leader's style and behavior (Hoy & Miskel, 1991). This instrument consisted of 16 dichotomous items that, when added, achieved a leader's overall score (Fiedler & Chemers, 1974). The LPC model deals with the moderating influence of situational variables on the relationship between leadership traits and subordinate performance. By having leaders rank the least preferred co-worker in their groups, researchers were able to make interpretations of leaders' emotions, task and interpersonal orientations, cognitive complexity, and motivations (Hoy & Miskel, 1991).

Those leaders who score high on the LPC are generally more human relations-oriented, while those who score low on the instrument are more goal-oriented. A leader's score can be influenced by the way a leader's style is affected by a more favorable or less favorable environment (Fiedler & Chemers, 1974). For Fiedler (1967), leadership style refers to the underlying need structure of the individual that motivates behavior which differs from situation to situation. "Important leadership behaviors of the same individual differ from situation to situation, while the need structure which motivates these behaviors may be seen as constant" (Fiedler, 1967, p. 36).

His results suggested several conclusions for a model of leadership effectiveness. Fiedler's contingency model operates with three basic components, "1. Leadership style is determined by the motivational system of the leader; 2. Situational control is determined by group atmosphere, task, structure, and position power; 3. Group effectiveness is contingent on the leader's style and control of the situation" (Hoy & Miskel, 1991, p. 274). The relationship of these variables depends upon a complex situational variable called situational favorability, which is the extent to which the situation gives a leader control over subordinates. "The contingency model shows that task-motivated people perform best if they have either a great deal of or very little control and influence; relationship-motivated people perform better if their control and influence are moderately high...[but he notes that] by increasing the leader's control and influence and hence the favorableness of his situation,...[a leader may] decrease his performance under certain conditions" (Fiedler & Chemers, 1974, p. 129).

Meta-analyses of numerous studies testing the contingency model have been performed, and provide support for his model (Peters, Harke, & Pohlmann, 1985; Strube & Garcia, 1981). Fiedler's theory thus represents a big step in going beyond the simple idea that a situation affects leadership. His theory is the longest lasting attempt to answer what kind of leadership style is most effective in what kind of situation. Despite that, the debate over validity of the model continues and interest in the model in terms of understanding leadership effectiveness has waned in recent years (Yukl, 1981). The important implication for midmanager deans is that in settings of good leader relations with subordinates, a more unstructured task structure, and weak positional power (using a team environment), a high-LPC leader (strong in human relations) would be most effective.

Fiedler's theory suggested that the most effective way of improving leadership is not to change a person's style of leadership but to place leaders in positions suitable to their leadership orientation or to have them alter their situations to be consistent with their strengths (Bensimon, et al., 1989).

In an effort to improve his initial theory and incorporate two factors largely ignored, Fiedler and Garcia (1987) created a revised contingency approach called Cognitive Resource Theory. In this modification, a leader's intelligence and experience are added to the model. Cognitive resources refer to the intellectual abilities, technical competence, and job-relevant knowledge acquired through formal training or experience in the organization. Cognitive Resource Theory maintains that in the best of all possible worlds, the leader's intellectual abilities are the major source of the plans, decisions, and strategies to guide group actions. The new model attempted to merge the ideas of directive behavior, stress, task motivation (LPC) and cognitive resources (Fiedler & Garcia, 1987).

The researchers examined how the cognitive characteristics of leaders developed through training and through experience. Utilizing their theory, they investigated the ability, known as situational control, of leaders to vary power, influence, and control in multiple situations. Several power and influence leadership theorists have continued to work with and devise similar models focusing on different and unique aspects of the leadership situation. For example, Mintzberg (1983) conceptualized a power typology. His typology examines both internal and external power within an organization and he believes power to be the result of control over a technical skill, body of knowledge, or resource. The systems of authority, expertise, ideology and politics are at play in all organizations. To be most

effective, administrators must learn to harness and tap into these systems to control a situation (Mintzberg, 1983).

One other contingency theory is House's path-goal theory which gets its name because it explains how leaders influence their subordinates' perceptions of work goals, personal goals, and other paths to goal attainment. Leaders are described as effective when they enhance the acceptance, satisfaction, and motivation levels of their subordinates. A fundamental assumption of the path-goal model is that leaders can vary their behavior to match the situation, and the theory examines these behaviors (Hoy & Miskel, 1991). The path-goal theory is beneficial because it is designed to explain varying results of field surveys by suggesting that the effects of leadership depend on situational variables, particularly task structure (House, 1971; Misumi, 1985). Yukl (1981) pointed out, however, that some theorists would argue that using position or authority to control rewards and punishments is considered more manipulation and coercion by a leader than actual leadership.

There are slight differences in these contingency theories. House's path-goal theory does not seek to measure the motivational basis of leader behavior, while Fiedler's model does. Fiedler's contingency theory does not try to measure leader behavior while House's model does.

Some critics of contingency theories suggested that the models are limited in their complexity and conceptualization of leadership, and lack strong empirical support. The models usually fail to distinguish between leadership and management, and assume that the domain of leadership is limited just to the relationships between managers and immediate subordinates without regard to a superior's effects (Bolman & Deal, 1991). In addition, contingency approaches, though representing movement from simplistic theories of the past,

have been found to be “complex, imprecisely formulated, and difficult to test” (Yukl, 1981, p. 169). Although meta-analyses of the theory suggest otherwise, some believe empirical support for the models is lacking (Yukl, 1981).

That leadership is some kind of social transaction suggests that contingency theories are not the most comprehensive theory of leadership. The bottom line is that the question of what kind of leaders for what kind of situations still remains unanswered (Hoy & Miskel, 1991). Cooper and Kempner (1993) added that the contingency model of leadership is troubling in its assumption that social and organizational relationships are neutral.

The theory has faced the obstacle of inconsistent results concerning the leadership behavior of initiating structure. Yet contingency theories are significant in their introduction of a conceptual link between leadership and expectancy theory of motivation that gives psychological meaning to task structure.

The Cultural and Symbolic Approaches. Schein suggested that one of the most consistent findings by historians, sociologists, and other social psychologists is that what leadership should be depends on the particular situation, the task to be performed, and the characteristics of the leader’s subordinates (in Hesselbein, Goldsmith & Beckhard, 1996). Schein added that one reason so many different theories of leadership exist is that different researchers focus on different elements. All of these theories are correct on one level, because they all identify one central component of the complex human situation known as leadership. “At another level, all of these theories lack a concern with organizational dynamics, their different needs and problems at different stages of evolution” (Schein, in Hesselbein, et al., 1996, p. 60).

To account for these different organizational needs and stages, one of the most recent leadership approaches found in the literature was the Cultural or Symbolic Approach. This approach became prevalent in the early 1980's and remains widely used today (Kuh & Whitt, 1991). In a description of leadership and management, to manage meant to bring about, to accomplish, to have charge of or responsibility for, and to conduct. To lead was to influence, guide in direction, course, action, and opinion. This distinction is crucial as managers are people who do things right and leaders are people who do the right thing (Cantu, 1997).

Cultural and symbolic approaches to leadership view leaders both as symbols for their organizations as well as "managers of meaning" (Smircich & Morgan, 1982, p. 262). The phrase "manager of meaning" is meant to draw attention to a defining characteristic of true leadership. These theorists suggested that the active promotion of values that provide shared meaning about the nature of the organization is the most important job of leaders. Thus the cultural or symbolic leader/manager serves as an active symbol for the organization and its members, being what the organization should culturally be (Sergiovanni, 1992).

Schein (1990) defined culture as a pattern of basic assumptions developed by a group as it learns to cope with its problems of external adaptation and internal intervention. These assumptions over time have worked well enough to be considered valid and are therefore taught to new members as the correct way to perceive, think, and feel in relation to organization problems. People struggling to manage uncertainties learn and develop a culture (Schein, 1990). "People in organizations generate ideologies that provide them with more or less articulated sets of ideas that help them, individually and collectively, to cope with ambiguities and uncertainties" (Trice & Beyer, 1993, p. 5). Because of these characteristics of culture, learning models should help us understand cultural change. There are two main

ways in which culture can be changed. First, new norms and beliefs develop around the way members respond to critical incidents (Schein, 1985). Second, culture is created through modeling by leader figures that helped group members to identify with them and internalize their values and beliefs.

An important aspect of symbolic leadership tapping into institutional culture is the way in which the actions of the leaders are interpreted by members of the organization (Sergiovanni, 1992). Good intentioned leaders can culturally have their actions misinterpreted, so it is essential for symbolic leaders to understand the implications of their actions on cultures of organizations (Smircich & Morgan, 1982). For example, if the leader had internal conflicts, such as wanting a team-based consensus process but also wanting complete control of this process, there will be inconsistent policies that become embedded in the culture of the organization (Schein in Hesselbein, et al., 1996). To be effective, leaders must have extraordinary levels of perception and insight into the world and themselves, and the emotional strength to manage their own and others' anxiety as learning and change become more a way of life. Leaders also need skills in analyzing cultural assumptions, and the willingness to elicit participation and share control (Kuh & Whitt, 1991; Schein, in Hesselbein, et al., 1996). To supply people with clear direction, ground rules for behavior, and ideas about how to respond or make the most appropriate decisions in ambiguous situations, leaders should tap into culture to provide stability and predictability for their members.

There have been notable works written on symbolic leadership. In addition to the multitudes of biographies on heroic, symbolic, and successful leaders, Bensimon (1989) has conducted research on symbolic leaders. Another of the most influential writers on the

subject is Sergiovanni (1992) who has written widely on methods of symbolic leadership.

Sergiovanni (1992) stated that principals and superintendents have special leadership responsibilities. It is up to these leaders to establish followership as the basis of effectiveness in the school. One of the ways leaders do this is to practice “purposing” which is that continuous stream of actions by an organization’s formal leadership “which induces clarity, consensus and commitment regarding the organization’s basic purposes” (Sergiovanni, 1992, p. 72).

In addition, because of the need in the 1990’s and 2000’s to dramatically change, transform and revitalize the culture of educational organizations, charismatic and transformational leadership theory has garnered a great deal of attention in symbolic approaches to leadership. Roueche, Baker, and Rose (1989) stated that transformational leaders are change agents. In their study of CEO’s of exemplary community colleges, they identified five themes associated with charismatic behavior: vision, influence orientation, people orientation, motivational orientation, and values orientation. They also note that this transformational leadership can come from any level in the organization (Roueche, et al., 1989).

In addition to incorporating behavioral leadership theory, cultural approaches value trait and contingency theories of leadership as well. While traits such as self-confidence, emotional stability, energy level, initiative, and stress tolerance have been found to be important to leadership effectiveness, it is also clear that leadership behavior must be viewed in the context and culture of the situational requirements and constraints faced by the leader. Galbraith (1994) suggested that deans who value interpersonal success will be most effective in an environment characterized by good leader relations, an unstructured task structure, and

weak position power. Deans are key members of colleges that must deal with a multidimensional world: multiple customers, multiple partners, multiple suppliers, multiple levels of government, and multiple labor unions. They will be required to employ, "multiple skill specialties, using multiple technologies while producing multiple products and services" (Galbraith, 1994, p. 13).

Qualitative methods of research are becoming widely used in investigating symbolic leadership. The new approaches to symbolic leadership research are forming fresh perspectives not only on leadership, but also on the leaders themselves. Furthermore, leadership research must be open to the methods and approaches of cultural and symbolic theories as well as other emerging approaches if leadership understanding is to advance. The future of research on leadership will need to consider the context of the organization and is strongly supported by Birnbaum's (1988) theory of the cybernetic organization which seeks self-regulation under the care of a leader in a particular environment.

Cultural and symbolic views of leadership suggested that organizational participants gradually through their interactions developed and re-created shared meanings that influence their perceptions and their activities. These shared meanings can be thought of as defining an organization's culture: dominant values, norms, philosophy, rules, and climate. Cognitive theories of leadership are closely related to symbolic approaches in that they emphasize leadership as arising from the social cognition of organizations (Cohen & March, 1974; Sergiovanni, 1992). One such theory of social cognition is Bolman and Deal's frame theory of leadership (Bolman & Deal, 1984), which is used extensively in the current study.

Cognitive Approaches: Leadership Framing Theories.

From the trait approach to the cultural and symbolic approaches to leadership, each leadership theory still has its proponents. In addition to these theories suggesting different techniques for the study of leadership, almost all leadership models are approaches leaders can take to lead and manage organizations. However, while there are a multitude of choices at their disposal, the large variety can cause confusion about which one is most appropriate. One of the problems with choosing one model is that in order to be useful to managers, a managerial ideology must prescribe what they will accept as the right way to achieve some accepted goal. Some performance goals are best served by the authoritarian control theme, while the humanitarian theme serves other goals better. “Neither theme has disappeared entirely, and various popular programs try to blend the two, but this has happened over time” (Trice & Beyer, 1993, p. 65).

Dimensions of Leadership. Many prior conceptualizations of leadership types are built around dichotomies in which leadership types are polarized according to a single dimension rather than being based on a multidimensional classification. The following represent some of the leadership types that have been traditionally classified according to such dichotomies: democratic-autocratic, conservative-progressive, participative-one man rule, liberal-authoritarian, student-centered--teacher-centered, nondirective-directive, dovish-hawkish, employee-centered—production-centered, modern-premodern. However the leadership types that are actually found in human society cannot be adequately described according to such unidimensional dichotomies (Misumi, 1985). Cognitive theory approaches to leadership have included elements of multiple models, including the human-relations and authoritarian models. Cognitive approaches strive to understand the processes of human

thought and action that accompany leadership. Cognitive researchers give different terms to the concept of frames like “schema, schemata, representations, cognitive maps, paradigms, social categorizations, attributions, [and] implicit organizing theories” (Bolman & Deal, 1993, p. 22). A leader will use his/her limited or complex concepts for the benefit of the organization.

Leaders can see problems in new ways by creating internal conflict through confronting the paradoxical and multiple views of leadership (Bensimon, et al., 1989). Much of the current research suggested that the effectiveness of leadership may be related to cognitive complexity (Bensimon, et al., 1989). More complex leaders may have the flexibility to understand situations through the use of different and competing scenarios and to act in ways that enable them to attend simultaneously to various organizational needs (Bensimon, et al., 1989, p. 65). “Sense-making becomes a more active and conscious process when people need to cope with uncertainties arising in nonroutine or unexpected situations” (Trice & Beyer, 1993, p. 82). Using any one model of leadership can lead to a limited and ineffective way of conceptualizing either organizations or leadership, called either/or thinking. In contrast, views about leadership that incorporate many dimensions of leadership take a both/and approach. Quinn (1988) added that ineffective leaders focus on only one model; more effective leaders balance two or more of them. Ineffectiveness is related to individual rigidity and narrow interpretation of organizational needs (Faerman & Quinn 1985; Whetten & Cameron, 1985). The difference between effective and noneffective leaders may be a result of cognitive complexity.

Leadership and management, although distinct, are required of the same individuals (Bass, 1990). At one time, an organization may call upon an individual to perform as a

manager, while at other times the institution may call upon the same person to act as a leader (Bass, 1990). While the terms leadership and management are oftentimes used to mean the same thing, in the context of this study, the terms will not be used interchangeably.

Integrating Leadership Dimensions. The idea that managers should be able to examine problems from different perspectives and along more than one value dimension is not new (Lombard, 1971). Yukl (1981) suggested that leadership effectiveness is probably determined by a complex interaction among the major sets of variables and can best be understood by considering all types of variables simultaneously. However, integrated cognitive approaches are becoming more evident at the conceptual and applied levels because of the complexity of other leadership models. In 1984, Bolman and Deal described the mass of theoretical information resulting from numerous leadership studies as “cultural pluralism: a jangling discord of multiple voices” (p.10). Bolman and Deal’s (1984) leadership frame approach not only utilizes prior social science theory in its formulation, but takes a cognitive approach to leadership (Bolman & Deal, 1993). An early proposition of their theory was that conceptual pluralism slows leadership research by impeding communications among different perspectives.

According to the two researchers, leaders and managers of today have too many divergent leadership options at their command. *Modern approaches to understanding and managing organizations* was written by Bolman and Deal in 1984 to present their metatheory which combined the four major social science schools of thought into one more comprehensive leadership theory. The four frames of the structural, the human resource, the political and the symbolic represent a model for effective leaders to use with their organization (Bolman & Deal, 1984, 1991).

The four frames can all be considered separate but equal for leaders looking for solutions. For example, the rational systems theorists offered an emphasis on organizational goals, roles, and technology, and looked for ways to develop structures that best fit organizational purposes and environmental demands. Human resource theorists emphasized the interdependence between people and organizations. They focused on ways to develop a better fit between people's needs, skills, and values, and their formal roles and relationships. Political theorists viewed power, conflict, and the distribution of scarce resources as the central issues in solving problems. They argued that organizations are like jungles in which managers who understand the uses of power, coalitions, bargaining, and conflict achieve cooperation. Symbolic theorists focused on problems of meaning. They are more likely than other theorists to find virtue in organizational misbehavior and to emphasize the limited ability of managers to create organizational cohesion through power or rational design. Managers must rely on images, drama, magic, and sometimes even luck to bring semblance of order (Bolman & Deal, 1991, pp. 9-10).

In the following quote, Bolman and Deal (1991) described the attributes of effectiveness associated with each of the leadership frames or perspectives:

Each of the frames provides a powerful set of guidelines to enhance leadership effectiveness. Structural leaders can become great social architects who build an analysis of an organization's environment and its capacities into a powerful structure and strategy. Human resource leaders can become catalysts who lead through caring, support, accessibility, and empowerment. Effective political leaders are advocates who are clear about their agenda and sensitive to political reality and who build the alliances that they need to move their organization forward. Symbolic leaders are artists, poets, or prophets who use symbols and stories to communicate a vision that builds faith and loyalty among an organization's employees and other stakeholders. (pp. 444-445)

The political and symbolic frames appear to be least understood by leaders. The political frame assumes that individuals generally act rationally in pursuit of their self-interests but that battles may be confused and chaotic. The symbolic frame assumes that symbols are a way of creating a perception of order, meaning, and truth in situations that are complex.

The Need for Frames. Some authors use the term framing to refer to the ways in which theories shape a leader's diagnostic analysis of the organization (Bensimon, et al., 1989; Birnbaum, 1988; Bolman & Deal, 1984; Harrison & Shirom, 1999). The term "frame" is used broadly to include what others have described as paradigms, perspectives, and theory groups, and to capture differing perspectives embodied within specific diagnostic models and frameworks (Harrison & Shirom, 1999).

The need for multiple frames arises in complex organizations because of diverse institutional relationships. A powerful lesson behind seizing leadership moments in organizations is to manage meaning because uncertainty and ambiguity rear their heads often, thanks in part to the fast pace of change. In order to act, all leaders are compelled to affix meaning to their environments and must make sense of situations before responding. The skill that is required to manage meaning is called framing, and successful use of this tool was connected to leader effectiveness (Smircich & Morgan, 1982). Leadership lies in generating a point of reference, from which direction can emerge for those members who feel disorganized. By choosing one particular meaning over another and sharing the frames with others, leaders assert that their interpretations should be taken as real over other possible interpretations (Fairhurst & Sarr, 1996, p. 3).

While individuals may look to a leader to frame and concretize their reality, they may also react against, reject, or change the reality thus defined. "The key challenge for a leader is to manage meaning in such a way that individuals orient themselves to the achievement of desirable ends" (Smircich & Morgan, 1982, p. 262). The problem may be, however, that a leader only uses one frame of reference. Whenever people approach a situation, they act on the basis of their subjective appraisal of it, which may or may not resemble objective reality (Blake & Mouton, 1991). To be more effective, it is important to understand the silent assumptions that organize our relationships and how we conduct our affairs (Blake & Mouton, 1991). Blake and Mouton's managerial grid theory was useful for identifying the assumptions that leaders hold, but suggested that there is only one-best-way of leadership—the (9,9) human relations leadership style (Bolman & Deal, 1991). Bernier (1987) stated that deans within schools of education should turn their work situation into an opportunity for critical reflection about the universe of meanings that characterize the organizational setting in which they perform as leaders. The dean's personal frame of reference as well as the perceived identity of the dean by other members of the organization can seriously distort or inhibit the collection and interpretation of information. Deans can do this through constant surveillance of the setting and monitoring cultural realities which is the underlying assumption in frame analysis.

The idea that alternate perspectives are equal but different has appeal because it permits leaders to avoid making a choice based on one set of facts. The grid theory had little to say about the structural, political, and symbolic dimensions of leadership and lacked concepts for dealing with variations in situations. In contrast, the cognitive frames theory of

leadership was more useful to researchers because there were a finite set of assumptions available about how to achieve higher performance.

Cognitive framing theorists suggested that the model has many advantages for leaders. Bolman and Deal (1991) suggested that many leaders “live in psychic prisons because they cannot look at old problems in a new light and attack old challenges with different and more powerful tools—they cannot reframe” (p. 4). If managers have limited perspectives, when they “don’t know what to do, they simply do more of what they do know” (Bolman & Deal, 1991, p. 4) which can be worse than doing nothing at all. “Managers can increase their effectiveness and...managers who understand their own frame—and who can adeptly rely on more than one limited perspective—are better equipped to understand and manage the complex everyday world of organizations” (Bolman & Deal, 1984, pp. 4-5). Leadership can become narrow and inflexible if it relies on a specific frame. Through the use of multiple frames, therefore, leaders are less likely to feel trapped in complex situations and organizations. Managers are liberated when they realize that there is always more than one way to respond to any organizational problem or dilemma.

In addition, each frame provides only partial accounts of organizational life, rather than revealing the whole truth about the organization (Harrison & Shirom, 1999). While many leaders predominantly view organizational occurrences through one or two frames (Bolman & Deal, 1991), stepping back from the situation and viewing it through each of the four perspectives can allow leaders to gain a better sense of what is occurring in an organization (Bolman & Deal, 1984, 1991). “Only when managers, consultants, and policymakers can look through all four are they likely to appreciate the depth and complexity of organizational life” (Bolman & Deal, 1991, p. 16). Bolman and Deal’s theory was created

to not only tie divergent schools of thought together in a comprehensive theory, but to give managers and leaders numerous perspectives from which to view their organizations. Several lines of recent research supported the view that effective leaders and effective organizations rely on multiple frames. Studies of effective corporations, of individuals in senior management roles, and of educational administrators all pointed to the need for multiple perspectives (Bolman & Deal, 1991, p. 342). Kerr and Jermier (1978) suggested that while leadership research shares an implicit assumption that the style or frame of leadership likely to be effective may vary according to the situation, some leadership style will undoubtedly be effective regardless of the situation. Hence, as the leadership frame choices of managers and leaders increase, so too does their effectiveness.

Another benefit to using multiple frames is that frames can help clients become aware of their own taken-for granted perspectives and move beyond them (Harrison & Shirom, 1999). The frames leaders use, even multiple ones, reflect their training and their past experience, and the constraints of the situation.

Overreliance on a single frame can sometimes lead to stereotypical thinking, poor decisions, and actions that bring unintended consequences. One frame that is commonly overused in this way treats organizations as political jungles and blames problems on people's thirst for power and their unwillingness to compromise...bureaucratic models and metaphors like clear rules and procedures, are also used unselectively to frame important problems. (Harrison & Shirom, 1999, p. 410)

According to some researchers, looking at all four frames, structural, political, human relations and symbolic, integrated theory with practice to prevent these traps.

Frames as Used in Academic Leadership. The cognitive frame model of leadership is also relevant to higher education. Bolman and Deal's (1984, 1991) theory of leadership has

been extensively tested in academic settings. In secondary schools and public and private colleges frame theory has been found to be informative to practitioners and researchers alike. Since academic leaders may function simultaneously as CAO, colleague, symbol, and public official requiring differing and mutually inconsistent behaviors, these leaders can gain more complex understandings of their positions through frame analysis. By considering how organizational players using the four frames might interpret an event or proposal, leaders will recognize the interactions between bureaucratic, collegial, political, and symbolic processes of colleges (Birnbaum, 1988). The ability to use several frames and switch from one to another may reflect a high level of cognitive differentiation and integration (Bensimon, et al., 1989). Research suggested that as leaders get more responsibility and experience, they become more cognitively complex either because they learn or because the less complex leaders do not remain long in office (Bensimon, et al., 1989). More extensive research on frames used in academic leadership follows in the section on Bolman and Deal's theory.

Summary. The integrative cognitive approach to leadership stresses common functions of leadership that cut across different leadership theories. Chemers (1997) suggested that some of these common functions include a leader's "image management, relationship development, and resource utilization" (p. 27). Image management refers to a leader's ability to project an image that is consistent with observers' expectations. Relationship development reflects the leader's success in creating and sustaining motivated and competent followers. "Resource utilization alludes to the leader's capability for deploying the assets of self and others to mission accomplishment" (p. 27). Effective use of Bolman and Deal's (1984) frame theory allows a leader to be prepared for these functions across many situations. Leaders are able to project a compelling image when they frame their

role and traits to match commonly held templates of how effective leaders should appear, when they frame behaviors that match follower's needs and expectations, and when they frame strategies to match situational demands. Thus, the cognitive frame metatheory incorporated elements of trait, behavior, and situational leadership research.

The Bolman and Deal (1984) frame theory has been chosen for this study because the approach allowed for a complete view of leadership to be achieved. All the frames practiced by administrators in the field were portrayed and studied. Second, this approach allowed the researcher to see what leadership frames were being used, while enhancing understanding of what frames could be used more prevalently for future improvement. Third, the positive perspective of leaders possessing multiple ways of viewing problems in frame theory corresponds with several underpinnings of stress and job control theories.

The Academic Dean in Higher Education

To accommodate the many decades of changes in society, colleges and universities have become autonomous, competitive and responsive organizations. When institutions of higher education first began to appear in this country, the sole administrator was the president. However, as colleges began to grow, presidents became overburdened with various duties and responsibilities. As a result of their expanding roles and changing institutions, college and university presidents now have less time to handle internal university affairs. This transformation in traditional presidential duties has increased the responsibilities of several groups of higher education administrators (Cantu, 1997). Since 1864, when the president of Harvard appointed the first academic dean to oversee the operations of the

medical school, the duties of academic deans have increased (Cantu, 1997; McCarty & Reyes, 1987, Tucker & Bryan, 1988).

The Importance and Role of Academic Deans. Effective leadership is essential to all colleges and universities (Birnbaum, 1992), and the importance of academic deans on college campuses has been documented in a number of ways. “In the academic anatomy of institutions of higher learning, deans provide the delicate but crucial backbone of university decision making” (Wolverton, et al., 1997, p. 80) They hold an important governance role resulting from the numerous responsibilities they are given by presidents. Important campus leaders such as academic deans may hold positions that directly influence the success of colleges and universities (Birnbaum, 1992). This academic middle manager position is often just below an academic vice-president at the community college.

The relationship between the academic vice president and the dean is similar to the dean’s relationship to one of his or her department chairpersons. While the dean relies upon the chairperson to carry out academic missions of the department, the vice president relies on the dean to carry out the academic mission of the dean’s academic unit. The larger and more diverse the institution, the greater the pressures on both dean and vice-president (Tucker & Bryan, 1988). “They must preside over academic units containing a variety of different and unrelated disciplines of which they have only generalized knowledge. Both are pushed and pulled by many and various forces and demands” (Tucker & Bryan, 1988, pp.119-121).

Most institutions including community colleges have two kinds of deans. The first is a dean of a college, school, or division within an institution who has the responsibility for administering the programs and overseeing faculty members of a specific group of

disciplines such as arts and sciences. These deans serve as the president's and vice-president's line officers in relation to faculty.

Another kind of dean is one who has faculty and administration responsibilities for coordination. These deans usually have jurisdiction over academic departments and programs that include faculty members, budget, and curricula. While they are considered part of the institution's central administration, they do not serve as line officers (Tucker & Bryan, 1988). Tucker and Bryan (1988) suggested that this type of dean must balance the roles of dove, dragon, and diplomat: Intervening as a dove between factions, driving away threats to the institution as a dragon, and guiding competitive forces as a diplomat. Academic deans must fulfill all three roles at various times to be effective in the leadership responsibilities entrusted to them.

Some of the tasks of today's academic deans include the responsibility for developing and implementing the curriculum, the selection and development of faculty, and the maintenance of the academic budget within his or her academic unit. Academic deans in colleges and universities have traditionally been first among equals (Cantu, 1997). This is a result of the collegial quality of the institutions and because of the unique midlevel position academic deans hold in the administrative hierarchy. Academic deans bridge the gulf that exists between faculty on the one side and the administration on the other (Cantu, 1997).

In addition to their traditional roles and responsibilities, academic deans also occupy a position that allows them to represent their schools and colleges and perform their duties in unique ways. Bernier (1987) described academic deans as being "symbolic representatives" and leaders for a "community of professionals" (p. 21). Academic deans must be able to harness the symbolic resources and human resources of their units for success. Adept

academic deans carry out administrative duties with a slight amount of manipulation with a legislative process and persistent persuasion. Hence, academic deans have an understanding of the symbolic, human resource, and political sides of their organizations.

Although a difference of opinion may exist in regards to the amount of responsibility academic deans are given within institutions of higher education, the importance of their position would not appear debatable. Researchers from the Institutional Leadership project asked 170 individuals working on a variety of campuses to name the important leaders at their institutions. After presidents and vice-presidents, deans were named by 44 percent of respondents as being critical to college success (Birnbaum, 1992). Clearly deans hold an important governance role resulting from the numerous responsibilities they are given by presidents. They also may hold positions that directly influence the success of colleges and universities (Birnbaum, 1992).

While academic deans are essential to the governance of colleges, they have been understudied (Griffiths & McCarty, 1980). "There has been so little theoretical, conceptual, or research literature published on the deanship as to constitute an embarrassment to both the practitioners and scholars of higher education" (p. v). The call for academic deans who can lead with consummate sophistication (McCarty & Reyes, 1987), who possess better management skills, and who demonstrate collegiality is still heard. With the limited scope of existing research on the academic deanship, developing an enhanced understanding of effective leadership in the position is the first logical step towards future improvement.

Academic Dean Demographics. To better understand today's academic dean, demographic information is useful in illuminating this administrative position. A few large-

scale studies have been undertaken which illustrate various features of the academic deanship. This information serves the purpose of illuminating this administrative position.

Some early dean demographics studies occurred in the 1960's and 1970's when the typical dean was an older white male, had a doctorate in educational administration, and held many years of experience in both K-12 and college levels in both teaching and administration (Cyphert & Zimmer, 1980). Research of this period suggested that male deans outnumbered female deans by at least two-to-one. Moore, Salimbene, Marlier, and Bragg (1983) suggested that the academic dean literature of the time was impaired by a large number of personal or prescriptive accounts. "The demographic accounts that exist are dated, narrow focused on a single kind (education deans, deans of graduate schools) or emphasize role dilemmas and practical tasks" of deans (p. 504).

A large scale demographic dean study was conducted by Anderson and King (1987) among deans of education to verify if the stereotypical dean of Cyphert and Zimmer's (1980) study still existed. They researched whether there were more humanistic styles in academic deans and whether deans of this leadership style had greater longevity in position (Anderson & King, 1987). Anderson and King (1987) found demographic results that showed few changes from previous deanship studies with 12% classifying themselves as minorities and 50% of all deans in their sample holding their present positions five years or less. "There was an inverse relationship between years of service as a dean and the size of the institution. In general the length of service as dean at very large institutions is relatively short" (p. 11). Other demographic information from their study showed that the role of dean was influenced by the size and type of institution where they served. The overwhelming majority of these deans had the terminal degree (either an Ed. D. or Ph. D. in education), the same number had

C & I degrees as administration degrees, most were 50 or older, 88% were white, and 67% were men. Anderson and King concluded that the popular dean stereotype still applied in 1987.

A more recent survey of deans shows slight changes in demographics. Wolverton, et al. (1997) studied academic deans in the U.S. at 60 public and 60 private four-year schools. The deans of each college at these institutions were randomly selected and asked to complete the 1996 National Survey of Academic Deans. The results indicated that 41% were women, 58% worked in public universities, and 12% held minority status. On average at these institutions, 85 full-time faculty and 46 adjunct served 1700 undergraduates and 400 graduate students. The average dean age was 54 years old, and 82% were married. They had served an average of 5.6 years, and only 12.8% had been deans for more than 10 years. Fifty-nine percent viewed themselves as both administrators and faculty. In their research they documented the consistent literature results of a direct influence between role-conflict, effectiveness and stress and overall job satisfaction in these deans. In particular, they found that role-conflict and role-ambiguity explained 19% of the work-related stress of deans. They concluded that deans who try to be all things to all people may compound their role-ambiguity.

These demographic studies suggested that women have gained more deanship positions in the last 20 years, while minorities are staying at a level of about 10%. These studies also suggested that deans have consistently served an average of about five years as dean.

Other Studies of Higher Education Administrators. In addition to demographic studies, there have been studies that have researched academic deans along with other higher

education administrators and focus on a wide variety of topics. Some studies examined characteristics associated with academic dean effectiveness and academic dean success (Townsend & Bassoppo-Moyo, 1997; Vaughan, 1990). Townsend and Bassoppo-Moyo (1997) surveyed over 400 chief academic officers of higher educational institutions who listed their highest needs. These administrators said their highest need for success was contextual competence. Townsend and Bassoppo-Moyo (1997) suggested that future research on higher education leadership could incorporate a study of administrator contextual competence (understanding the environment) into a survey to be sent to these administrators for their ranking of importance. The next highest needs of these administrators were for technical competence and finally interpersonal competence. The survey allowed the leaders to give their own perceptions of needs without having to choose from a list. Previously, Vaughan's (1990) study had found human relations skills and budgetary skills as the highest needs of administrators when asked to select from a given list of needs.

Other research examined the management and leadership styles of deans as perceived by faculty chairpersons and by the deans themselves. One study examined the decision-making styles of deans (McCarty & Reyes, 1987) and found the majority of deans had a human relations frame orientation. Some of the academic dean studies were descriptive/personal accounts of the deanship. Literature of this kind consisted of descriptive information about the roles and responsibilities of the academic deanship and personal accounts of what it is like to be an academic dean. Another type of research focused on academic deans was comparative, and was designed to be applied within the deanship for their future improvement. Studies have focused on academic dean's stress (Bowman, 1994).

Some studies have investigated the leadership and management styles of higher education administrators, while other research has investigated the cognitive complexity of administrators. Few of these works attempted to describe or analyze the academic dean position as part of the larger administrative career structure (Moore, et al., 1983, p. 504). Moore et. al. (1983) suggested that further academic dean research is important because the position constitutes the middle rung on the presidential ladder and plays a pivotal role in the route to the presidency. In a sample of 20% of the population of deans (4000 individuals) in all Carnegie institution classification codes, they found six common variations in dean career paths. The largest group of academic deans came directly from the faculty (Moore, et.al., 1983).

The importance of academic deans in higher education and the lack of large-scale studies of community college academic dean demographics and suggest a need for more study.

Applying Bolman and Deal's Theory to Studies of the Deanship

Effective leadership and effective management have been of interest to researchers and scholars for centuries. The search for the right combination of variables to achieve effectiveness has long been a goal of research investigations (Bass, 1990). The searches are undertaken largely because effective leadership is believed to be essential to organizational success. If attributes associated with effectiveness can be discovered and instilled in leaders, it is believed they will have an impact on the organization's success.

The previous sections of this review of related literature traced the development of leadership studies from the past to the present, including Bolman and Deal's (1984)

leadership theory, and highlighted characteristics and research on the academic deanship.

This section combines each of the previous sections by applying Bolman and Deal's theory to existing research on the academic deanship. This application will illustrate existing knowledge on the five main variables of interest to this study. The independent variables are 1) academic dean frames, 2) dean's years of experience, 3) number of faculty at dean's institutions, and 4) self-recognition of dean frames (perceptions of control). The dependent variable of the study is the measure of dean's stress and the last section of the literature review covers stress theory. Examining each of the variables will reveal why they should be, and are, of interest in the study. The interactions of these variables illuminate characteristics of academic dean effectiveness.

Research on Frames and Higher Education Leadership. The literature related to academic dean frames is sparse, but there has been research on different leadership positions in higher education. The Bolman and Deal (1984) theory has been applied in leadership studies involving higher education administrators (Bensimon, 1987; Cantu, 1997; Gilson, 1994).

Some research resulting from Bolman and Deal's (1984) theory illustrated that leadership effectiveness across higher education is associated with multiple frames (Bensimon, 1989; Bolman & Deal, 1992). Bolman and Deal (1992) found that both quantitative and qualitative methods were useful in examining the relationship between the frames of leaders and their constituents in the different settings of the United States and Singapore. Bolman and Deal's (1992) study examined, through regression analysis, how well the frames capture administrators' thinking, the relations between the leaders' frame orientations and effectiveness and how context and culture influence effectiveness patterns.

In qualitative studies of American and Singapore principals, they found that leaders rarely use more than two frames and almost never use all four. In both samples, the structural frame was a better predictor of managerial than leadership effectiveness, while the reverse was true for the symbolic frame. In addition, for corporate executives and higher education administrators, the symbolic frame was associated with effectiveness as a leader but not as a manager. Moreover, the political frame was more significant in the United States leaders in predicting effectiveness than in the Singapore leaders. Both qualitative and quantitative results suggested that the ability to use multiple frames is critical to effectiveness as both manager and leader (Bolman & Deal, 1992).

Despite the view that more effective leaders using more frames is gaining acceptance in business settings, Bensimon (1989) researched how many educational leaders were incorporating multiple vantage points. She used a small sample of 32 college and university presidents to determine that 13 (41%) used a single frame with the most using bureaucratic or collegial frames, 11 (34%) used two frames, with the collegial/symbolic combination highest, and 8 (25%) used a multiframe orientation with 5 of these presidents using the combination of collegial/political/symbolic. The oldest presidents used multiframe or paired frames, while newer presidents usually used single frames.

Since structurally and administratively, community colleges are more closely aligned with the bureaucratic model of governance, these presidents would likely have a bureaucratic frame. However, Bensimon (1989) examined the preferred cognitive frames implicit in community college president's interpretations of good leadership and found them more likely to have a single or paired-frame orientation than a multiframe orientation. Only two of five community college presidents with a single frame had a bureaucratic orientation while two

others had a collegial frame and the other one had a symbolic frame. Bensimon (1989) suggested that these presidents view the organization as a closed system, because decision-making is centralized, and they control transactions with the external environment (p. 29). Because these presidents cluster in the single-frame category, she suggested that these presidents may not be effective (1989). Research on academic dean frames at community colleges was sought but not found. Similar one-frame results among academic deans who will likely be future community college presidents would have profound implications.

Managers who understand and use only one or two of the frames are like a highly specialized species: They may be well adapted to a very narrow environment but extremely vulnerable to changes in climate or competition...It is still possible for single-frame managers to find a protected niche where they might be very effective for five or ten years, but the turbulent managerial world of the next few decades will belong to the managers and organizations with a more comprehensive understanding of the phenomena of each of the four frames (Bolman & Deal, 1984, pp. 278-279).

Bolman and Deal's (1984, 1991) theory of leadership has been extensively tested in secondary schools, higher education, and business. In their research, Bolman and Deal (1991) utilized regression analyses to illustrate which of the frames predicted effectiveness as a manager. After numerous tests, Bolman and Deal were able to predict "66% of the variance in perceived managerial effectiveness, and 74% in leadership effectiveness" (p. 9). Research resulting from Bolman and Deal's (1984) theory illustrated that leadership effectiveness across many organizations is associated more often with the symbolic organizational perspective than the structural (Bolman & Dean, 1991). Additional literature stressed the importance of the human resource style (McCarty & Reyes, 1987). For managerial effectiveness, the results are almost reversed: the symbolic frame is never significant, while the structural frame is

always a predictor. "The other two frames—human resource and political—are both significant positive predictors of success as both leader and manager, but the political frame is consistently the more powerful of the two" (Bolman & Deal, 1991, p. 12). Academic deans often possess the multiple characteristics of the human resource, structural, political, and symbolic perspectives.

McCarty and Reyes (1987) described colleges as using several models of campus governance including the collegium, the academic bureaucracy, the political system, and the organized anarchy. In a study of four-year college academic deans' decision making styles, McCarty and Reyes (1987) discovered that 72.7% of the time the deans were collegial, 16.4% of the time they were political, 9.1% of the time bureaucratic, and 1.8 percent of the time anarchical. The findings of their study were that the academic dean's ability to conduct effectively the business of the college seems to be enhanced when he/she uses the collegial model.

The research illustrated that often the most effective leaders are those who exhibit the symbolic frame, but those who are the most effective managers exhibit the structural frame. Yet the human resource and political frames were also positive predictors of both effective managers and effective leaders. The results of the above studies also suggested that current programs are inadequate preparation for either management or leadership, since most existing leadership education efforts focus primarily on structural and human resource issues.

After reviewing existing literature relating educational leadership to knowledge of Bolman and Deal's frame theory of leadership, and existing research on academic deans, characteristics of effectiveness seem readily apparent, including the dean's ability to use two or more frames. However, these studies fail to illustrate whether the framing abilities of

leaders are known by the leaders themselves, suggesting levels of job control. In addition, no studies have been found comparing the effective leadership frame orientation to leaders' measures of stress.

Years of Experience and Leadership Effectiveness. A second variable of interest to this study is years of experience. After conducting a review of related literature concerning this variable, it appeared that years of experience, in some instances, does directly impact leadership effectiveness (Bass, 1990; Bensimon, 1987; Cantu, 1997; Gilson, 1994; Warner, 1992). In other studies, years of experience have been said not to directly impact leadership (Bass, 1990; Warner, 1992). However, years of experience were influential in how one learned the skills of leadership (Bass, 1990; Bolman & Deal, 1994).

As leaders gain experience, they appear to have greater skill complexity. In Gilson's (1994) study of higher education administrators, those with five or more years of experience were more likely to use complex leadership strategies than those with less experience. Likewise, in a study of academic deans, Warner (1992) found that years of experience was an influence on the preference and ability to avoid using power connections. This especially seemed to be the case with less experienced deans who called upon their influential connections to assist in performing duties more than their experienced counterparts (Warner, 1992). In addition, a study of college and university presidents (Bensimon, 1989) revealed that less experienced presidents utilized more simplistic leadership perspectives than the very experienced presidents.

A possible explanation for the impact of experience upon leadership is given by Bass (1990) who wrote that "with continued experience, tasks become more routine and leaders get to know their subordinates and usually can work better with them. In addition, the leaders

learn the expectations of the higher authority" (p. 509). Whether this form of experience directly impacts the use of different or multiple frames or the stress of leaders, however, is not known.

Some of the related literature stated that years of experience do not directly impact leadership (Bass, 1990; Warner, 1992). Bass (1990) suggested that leadership effectiveness does not improve with more years of experience. Warner (1992) also found that there was no relationship among academic deans' locus of control orientation and their years of experience. Specifically, "years of experience did not influence the participating deans' selection of the coercive, expert, information, legitimate, referent, and reward power styles" (Warner, 1992, p. 61).

Experience appears to influence the way one learns the skills of leadership. Skills of leadership learned on the job in this manner are even more valuable than formal leadership training (Bass, 1990; Bolman & Deal, 1994).

The effects of years of experience on leadership are problematic. It seems that experience does directly impact leadership, but the way in which it accomplishes this is indefinite and in need of further research. Likewise, there appears to be a growing opinion among researchers that experience is actually more important to learning the skills of leadership than formal training (Bass, 1990; Bolman & Deal, 1994). This view needs further research.

Faculty Size and Leadership Effectiveness. A third variable of interest is faculty size. A review of related literature discovered one common perspective in regards to size and leadership. Generally, researchers viewed the variable of size as being an influence on leadership style (Bass, 1990; McCarty & Reyes, 1987). However, each study examined the

influence of size in slightly different ways. Examining the work of these researchers will clarify the variable of size for this study.

Differences in institutional type, size and mission can have a significant impact on leadership. Bass (1990) noted that as group size increases, leaders become less personal, collegial, and caring towards their employees and more structured and impersonal. In addition, Vroom (1960) indicated that employee characteristics determine at least in part which managerial style will be most effective at an institution. In a study of departmental chairpersons, it was found that differences in perceived influence among the groups analyzed are more closely associated with the size of the respondent's department than with their discipline (Bass, 1990).

Another group of researchers viewed the size of faculty at the institution as having a different effect upon leadership. One study revealed that deans perceived as being more influential are placed in charge of larger departments than less influential deans. McCarty and Reyes (1987) concluded that the most commonly used organizational model of governance in research universities was a collegial model. Bensimon (1989) suggested that the most commonly used model in the smaller community colleges is bureaucratic. These researchers stand in contrast to other researchers who concluded that as institutional size and complexity increases, so too do bureaucratic characteristics. McCarty and Reyes' (1987) study appears to indicate just the opposite.

Like the other variables chosen for investigation in this study, the influence of faculty size on leadership seems to be inconclusive. This study investigated this variable to discover in what ways size of community colleges (in terms of number of full-time faculty) was related to the stress and leadership frames of academic deans.

Leaders' Awareness of Frames and Job Control. A third variable of interest is academic deans' own knowledge of their frames and job control. According to Bolman and Deal's (1984, 1991) theory, effective leaders are able to change their perspectives from one situation to the next. For instance, one situation may call for a leader to be structural in his/her approach, whereas another situation may require a leader to be political in his/her approach. If the leader is unable to change perspectives, this could have a detrimental effect upon the leader's effectiveness. "Leaders need to understand their own frame and its limits" (Bolman & Deal, 1991, p. 445). If leaders understand their frame, they can make adjustments accordingly to make the most effective decisions in their organizations. Birnbaum (1988) also suggested that administrators must recognize the interactions between the frames if they are to be effective. A measure of ineffectiveness in leading is lack of control over the job. The use and knowledge of frames is theorized to increase job control.

While no research was found showing relationships between the use of a particular frame or multiple frames with a leader's stress, there is research evidence that higher measures of job control affected a leader's stress measures and job effectiveness.

Job control has been described as a person's control over tasks and conduct during work. Job control is the degree to which a job gives a leader substantial freedom, independence and discretion in scheduling work and determining procedures to be used in carrying work out (Hackman & Oldham, 1975). Job control is a form of activity: "one exerts control by manipulating, managing or supervising a process or it is a capability implying mastery, proficiency and skill" (Johnson in Sauter, et al., 1989, p. 56).

Without job control, a leader's role may become ambiguous. When purpose is ambiguous, ordinary theories of decision-making and intelligence become problematic. (Cohen & March, 1974). "College presidents live within a normative context that presumes purpose and within an organizational context that denies it" (p. 197). If a positive outcome results from the way a job is framed, the outcome is consistent with a leader's goals and the leader increases the likelihood of choosing that alternative again (Cohen & March, 1974). Role-conflict may result from job ambiguity. Role-conflict is the simultaneous occurrence of two sets of pressures such that compliance with one would make more difficult compliance with the other.

Ambiguity comes from a number of sources including incomplete or vague information. Often the same information is interpreted in different ways by different people. Other times, ambiguity might be deliberately created as a way to hide problems or avoid conflict. "Much of the time, organizational events and processes are so complex, scattered, and uncoordinated that no one can fully understand—let alone control—what is happening" (Bolman & Deal, 1991, p. 27). The frames provided contrasting sets that help people gain access to, express, and apply inert knowledge, in effect gain job control. As ambiguity increases, however, the political and symbolic frames become increasingly relevant (p. 328).

Some research supported the hypothesis that job control and stress are correlated. Research relevant to the control-stress link in the context of work settings almost always treated the job environment as the independent variable, with stress as the dependent variable (Sauter, et al., 1989). Two general aspects of the environment that reflect the amount of control employees experience are managerial style (participative/democratic vs. autocratic) and job/task design (Sauter, et al., 1989). Locus of control has also been hypothesized to

moderate employee reactions to stress (Thoits, 1987). A broad framework for understanding the properties of stressful situations is provided by the notion that, when the demand placed on a person exceeds his or her capacity to cope, the consequences are threatening (Gmelch, 1982). This notion hinted that the ability to exert some power or mastery over the task was a determinant of whether the situation becomes stressful (Fisher in Sauter, et al., 1989 p. 205). Miller (1979) proposed that when individuals control aversive events, they believe that the consequence is created by their own response. A stable source of change in consequence enables them to predict a guarantee that maximum future danger can be minimized in what Miller (1979) described as a max-min hypothesis. The presence of control lessens stress in ways predictability does not account for alone. The mere belief that there is a means for exercising control over noxious stimulation is a sufficient condition for amelioration of the effect of stress (Miller, 1979).

Jackson and Schuler (1985) reported that across 14 studies and 2287 respondents, the average correlation between employees' perceptions of the extent to which their supervisors encourage them to participate in job related decision-making and role-conflict is -0.37. The comparable correlation for role-ambiguity is -0.55 based on 18 studies and 2880 respondents (Jackson, in Sauter, et al., 1989). A general conclusion from research of impact of job control on behavior under stress was that control often lessens the impact of these stimuli, or, moderates the relationship between stressors and strain (Ganster in Sauter, et al., 1989, p. 12.). Increased experience of the leader also appeared to result in increased feelings of job control over the situation and probably increases the individual's confidence in approaching the task (Fiedler & Garcia, 1987). The importance of the leader recognizing the nature of his or her influence and managing the meaning of situations in a constructive way was another

finding. Managing meaning can enhance the ability of individuals to take responsibility for the definition and control of their world (Smircich & Morgan, 1982). If control were to be found to actually lessen the impact of job demands and stress, the workplace could be healthier without necessarily lowering these demands (Ganster in Sauter, et al., 1989). Research also suggested that more job control is an influencer of effectiveness.

The contingency model shows that task-motivated people perform best if they have either a great deal of or very little control and influence; relationship-motivated people perform better if their control and influence are moderately high....by increasing the leader's control and influence and hence the favorableness of his situation,...in fact may decrease his performance under certain conditions (Fiedler & Chemers, 1974, p. 129).

Different frames have not been researched as to their effect on performance. Fiedler and Chemers (1974) did not determine whether a human relations or technical approach to training was more effective, but suggested it may well be that all approaches are equally effective as long as they increase the individual's control and influence.

Some problems with job control relationships to stress remain. Researchers suggested that there is "no current theory to help define the conceptual boundaries of the control construct and to guard against the inclusion of job attributes which serve simply to increase the general competence of the worker" (Sauter, et al., 1989, p. xvi). While these studies had numerous specific variables as indicators of stress including: emotional distress, emotional exhaustion, feelings of conflict and ambiguity, anxiety, and physical symptoms of poor health (House, Stretcher, Metzner, & Robbins, 1986; Jackson in Sauter, et al., 1989, p. 25), the number of variables to represent control were much more limited, reflecting the paucity of research by organizational psychologists. Miller and Birnbaum (1988) suggested that in some of their research, control and information can sometimes have the reverse effect of

adding stress to work and they suggested that control theories must spell out the conditions under which control is stress-enhancing as well as reducing. In addition, measures of stress and control are frequently based on self-reports; the two variables are usually assessed via a written survey completed at one point in time, and the reliability and validity of these measures are often unknown or questionable.

Despite these problems, the empirical results can be interpreted as supporting the hypothesis that control and stress are correlated especially when stress is operationalized as experienced conflict and ambiguity. More job control and feelings of job control may result in lower measures of stress. Bolman and Deal's (1984) frame theory of leadership suggested that using different frames in different situations gives a leader more job control. Since some researchers argue that it is the mere belief in personal control that determines a person's reactions, a leaders' knowledge of frame use would indicate higher job control.

Stress Theory and Research

The dependent variables of interest to this study are the measures of stress on academic deans. How a group performs in emergencies and under stress frequently determines its eventual success and survival (Fiedler, 1967, p. 199). There is little doubt that the leader plays the decisive role under disruptive and trying conditions. Understanding variables that influence stress is critical to keeping good leaders in jobs. Yukl (1981) suggested that a person is unlikely to enjoy being in an administrative position "unless he has a high degree of managerial motivation and relevant traits like self-esteem, stress tolerance, and emotional stability" (p. 278). The stress created by conflicting job pressures, and the need to take risks under conditions of uncertainty are typically found intolerable in

administration jobs. A review of related literature discovered that one measure of leader effectiveness is both the leader's and followers' stress (Fiedler & Chemers, 1974).

Stress Definition. Defining stress is a difficult but critical aspect of stress research. Gmelch and Burns (1991) pointed out that, "Theorists, researchers, practitioners and experts alike cannot agree on a common theory or precise definition of stress" (p. 24). There are at least three distinct meanings of stress in contemporary literature (Rice, 1992). Stress can be external to the leader, an internal mental state of tension, or a physical reaction to a demanding situation (Rice, 1992). King (in King, Stanley, & Burrows, 1987) likened the external definition to the load applied to a steel beam, with the source of the force identified as the stressor. King (1987) suggested the internal mental state is "the amount or change or distortion which occurs in the steel beam as it copes with the applied forces" (p. 2). The physical reaction definition of stress is a combination of the other two. Gmelch (1982) defined stress as "the anticipation of one's inability to respond adequately to a perceived demand accompanied by one's anticipation of negative consequences for an inadequate response" (p. 84).

McGrath (1983) has suggested a four component stress research paradigm, which has guided stress-related research recently. McGrath's (1983) four stages of stress are situation, perception, response selection, and behavior, which are linked by the four processes of appraisal, decision, performance, and outcome. These processes are affected by a leader's individual capabilities, perceptions and values (McGrath, 1983). Gmelch and Wilke (1991) have expanded on these four stages with a Stress Cycle Model, which has the four stages of demands/stressors, perceptions/interpretations, response, and consequences.

Across different studies, the specific variables included as indicators of stress are: emotional distress, emotional exhaustion, feelings of conflict and ambiguity, anxiety, and physical symptoms of poor health (House, 1986; Jackson in Sauter, et al., 1989, p. 25). A needed aspect of stress research is to distinguish between situational stress and stress due to subjectively felt anxiety that the individual cannot refer to a stimulus or situation outside of the person. Researchers should also distinguish between conditions of situational stress which arise from within the group (intragroup stress) and the stress that originates outside the group—the environment (externally originating).

Job stressors generally fall into six categories (Cooper, 1983). These include job conditions, role stress, interpersonal factors, career development, organizational structure, and home-work interface. The work of Gmelch and Burns (1991) has established a job-related stress scale specific to higher education and reflecting the multidimensionality of stressors in higher educational positions. This instrument, the Dean's Stress Inventory (DSI), was used in this study. To make use of the DSI, stress is examined along the lines established by Burns and Gmelch (1995) and since operationalized in the research of Sarros, et al., (1988). The job stressors of interest are job conditions and role stress. While many variables are associated with stress the “literature on stress research [suggests] that the nature of the relationship between personal characteristics and stress is one of propensity, rather than one of direct cause and effect” (Bowman, 1994, p. 6). Researching which leadership styles identify a leader as more prone to the job stressors of interest is one of the goals of this study.

Variables Associated with Stress. One of the variables suggested to influence stress is the leader’s use of different leadership types. Some research has been performed on stress and leadership style or types (Bowman, 1994; Fiedler, 1967; Misumi, 1985). Bowman

(1994) found that deans with a highly directive leadership style reported higher stress than did deans with a more supportive, lower directive style. Most (86%) of the deans in Bowman's (1994) study had a supporting human relations style of leading and these deans reported moderate stress measures. Fiedler has researched how leadership style affects performance in stressful situations. His literature review noted that a "number of writers found that groups under stress should perform better under leaders who structure the situation and who...are task-oriented" (p. 204). Using his Least Preferred CoWorker (LPC) model, he found that a stressful situation may weaken the relation between leadership style and group performance, perhaps because the leader loses control over task performance under conditions of stress. In particular, he found:

Low-stress conditions require relatively managing, controlling leaders, while situations of moderate or interpersonal stress tend to require permissive, considerate leaders, and that task-oriented leaders perform better in highly stressful conditions; that leader intelligence correlates with group performance primarily under low-stress conditions or under conditions which are free of anxiety for the leader, while group member intelligence contributes to group performance under high stress conditions and those which are anxiety-arousing for the leader; and finally that total group performance does not appear to be strongly affected by the range of stress present in his studies. (Fiedler, 1967, p. 219)

Misumi (1985) reported that in studies of PM leadership (performance-centered vs. maintenance-centered), the leadership type preference had implications for cognitive expressions of stress in problem solving. Performance-centered conditions caused a higher degree of anxiety and more unpleasantness than maintenance-centered conditions on groups (Misumi, 1985). If one has strong inclinations to both types of leadership, Misumi (1985) found that this style was an appropriate strategy for minimizing fixed habitual sets. The performance-oriented behavior externally arouses motivation in those followers without

strong situational anxiety and the maintenance-oriented behavior optimally reduced any tension due to either performance-centered behavior or tension from internal or situational sources.

There can be little doubt that stress has a major effect on cognitive resources. However, most leadership research on this topic has focused primarily on the effect of job stress and performance; that is, the effects of time pressure, task complexity, role-ambiguity, or noxious working conditions (Sauter, et al., 1989). Fiedler and his associates undertook an extensive research program to examine possible moderators of the relationship between cognitive resources (i.e., experience and intelligence), and leader performance (Chemers, 1997; Fiedler & Garcia, 1987). This research revealed a powerful moderating role for stress. In these studies, stress was measured through leader self-report measures or by analyzing the nature of the leader's job and working conditions. The findings indicated that when leaders were under high levels of stress, the relationship between leader intelligence and unit performance was nonexistent, and in some cases even negative. Under low levels of stress, intelligence was positively correlated with performance criteria. Leadership experience, on the other hand, was strongly positively correlated with performance under high levels of stress, but uncorrelated with performance when stress was low (Chemers, 1997, p. 39). Fiedler and Garcia (1987) explained that stressful conditions and the anxiety they generate interfere with careful and thoughtful analysis. Leaders with high levels of experience, however, can fall back on known techniques and previously tested solutions. Correlations between intelligence and performance under low stress conditions or between experience and performance under high stress conditions are much stronger when the leader is rated as engaging at higher levels of directive behavior.

In a pilot study (Chemers, Hays, Rhodewalt, & Wysocki, 1985), 62 department chairs at a large university were asked to respond to the contingency model measures, as well as to measures of job stress and stress-related illness. Leaders whose skills match their settings were described as in-match. Findings strongly indicated that in-match chairs reported significantly lower levels of stress and illness than did out-of-match administrators. In a follow-up study involving 385 secondary school administrators, similar results were obtained. In-match administrators, as specified by the contingency model predictions, reported less stress as well as significantly more positive measures of job satisfaction (Chemers, 1997, p. 41). The sense of confidence and control experienced by the in-match leader is conceptually very similar to the sense of confidence and optimism that other theories regard as a central component of successful leadership (Chemers, 1997). Bennis and Nanus's (1985) interviews with successful organizational leaders revealed that a common feature of their orientations to their jobs was a sense of confidence in their own abilities and optimism about the outcomes of their actions. Leaders who were in-match were likely to be more enthusiastic and active, to make more effective use of their own and follower's resources, and to elicit perceptions of competence and control that inspire commitment in followers.

An important predictor of stress may be a fit or match between leader personality and situational demands (Chemers, et al., 1985; Fletcher, 1991). Chemers et al. (1985) found that fit is associated with low levels of stress and high levels of leader confidence and satisfaction. Chemers et al. (1985) found that chairs whose leadership orientation was matched with the level of situational control in their jobs reported less stress. Leaders whose orientation was in-match with the task environment reported more positive moods, and

higher assessments of their own influence in the group. With a good fit, leaders are happier, more confident, and more optimistic about their group activities (Chemers & Ayman, 1993). Fletcher (1991) found that the degree of misfit between a leader and the leadership position is causally related to stress levels. He suggested that the resulting stress is more from the misfit of the person's perception of the environment and themselves. A leader's knowledge of their use of frame theory (Bolman & Deal, 1984) may suggest a similar relationship to stress measures in the current study.

Studies of stress showed the existence of influencing variables such as experience and size of institution. When stress is low, performance correlates negatively with leader experience; when stress is high, it correlates negatively with intelligence. The basis for contingent relations in leadership theories lies in the nature of the situational factors; namely, uncertainty and stress, which arouse leader anxiety. Research shows that dealing with such stresses as conflict, overload, or failure show simpler, less integrated thought processes than do those operating under less stressful conditions. Stress thus induces simpler, less integrated, and less complex types of thought and behavior, and a regression to less mature behavior in some instances (Chemers & Ayman, 1993).

One argument may be that the leader under stress can not simultaneously solve problems intellectually while reacting on the basis of experience. The stress appears to create automatic and unthinking behavior as the intellectual effort and experience interfere with one another (Chemers & Ayman, 1993).

Leader Control of Stress. In light of the research on the effects of stress on a leader, the stress is best controlled and used to one's advantage. The process of stress is begun by a set of specific demands. The academic leader's perception of these demands in part

determines how much stress is produced. If the physical or mental resources are not present to meet the demand, the demand is perceived as a stress trap (Gmelch & Miskin, 1993). Stress is often caused by the difference between demand and personal resources (Gmelch & Miskin, 1993). The leader can transform the negative definition of stress to a positive response by changing the perception of resources from inability to ability: “The anticipation of [a leader’s] ability to respond adequately to a perceived demand, accompanied by anticipation of a positive consequence for an adequate response” will lead to control of the situation (pp. 136-137).

The importance of this control has been documented in other research. Stogdill’s 1974 review (cited in Yukl, 1981) suggested that some characteristics of a leader related to leader effectiveness were “readiness to absorb interpersonal stress, ability to influence other persons’ behavior, and capacity to structure social interaction systems to the purpose at hand” (p. 81). Both situational control and stress tended to have similar effects on leader behavior and performance (Fiedler, 1969). Dunnette (1971) reviewed four assessment center studies and found considerable agreement that the trait of personal control of feelings and resistance to stress were related to managerial success. These studies suggested the importance of a leader finding ways to control stress such as through frame analysis of situations.

Stress and Higher Education. Administrators of higher education deal with unique sources of stress. Gmelch and Burns (1991) suggested that most of the higher education stress findings “do not reflect the full character of profession-specific stress in terms of its multi-dimensionality nor its uniqueness in comparison with other professions” (p. 5). Part of this uniqueness is the uncertainty of role in higher education leadership. Borden (1980) identified uncertainty as being related to situational control, and also showed that a

consideration of control is boss stress. The educational leader often sees the relationship with his /her immediate superior or boss as tense, stressful, and threatening. If there is high boss stress, the leader will experience a high degree of uncertainty about the boss's support and evaluation of the leader's performance. One researcher found that leaders with boss stress create mental conflicts that divert the leaders' attention from tasks and minimize their cognitive resources available to complete jobs (Borden, 1980).

Community college administrators in particular are facing new stressors. Levin (1998) suggested corporate leaders have often asked community colleges to serve the needs of business and industry and this can lead to ignoring the needs of others. New populations have demanded specialized programs and courses. "Declining government financial support...and a more highly competitive marketplace are forces acting on the college" (Levin, 1998, p. 44). In addition, four-year colleges have set academic standards through transfer programs, and tensions resulting from a system of funding based on the number of students enrolled can also create stress (O'Banion, 1989). Researchers have found that more symbolic and ethical leadership is required to reduce stress (Sergiovanni, 1992).

The particular stressors found in research on academic deans is varied. A factor analysis of chair stressors disclosed five stress themes: administrative tasks, faculty-role, role-ambiguity, hierarchical authority, and perceived expectations (Burns, 1992). The swivel position of leader and faculty is a situation that causes department chairs to feel double pressure to be an effective manager and productive faculty member (Gmelch & Miskin, 1993, p. 142). Chairs also identified a proliferation of self-management techniques they used to cope with the pressures including strategic planning and constructive use of conflicts (Gmelch & Miskin, 1993).

Sarros, Gmelch, and Tanewski (1998) examined the changing and multifaceted roles and responsibilities of academic deans at Australian universities. Almost 200 deans responded to a survey, with most respondents being male, about 50, married and with fewer than 5 years experience as dean. They were moderately satisfied with the clarity of their role, but more dissatisfied with their workload and pace of work. The level of stress experienced by deans was moderate, although around 60% of their stress arose from the job. Dean experiences of role-conflict and role-ambiguity were consistent across the sample.

These studies used the Dean's Stress Inventory (DSI), which is based on the Administrative Stress Index of Gmelch and Swent (1984) and the Faculty Stress Index of Gmelch, Lovrich and Wilke (1984). Using a five-point Likert scale of "Slight to High," respondents indicated their level of perceived work stress on each of 41 items. A separate item measures overall work stress. The dimensions of the DSI and their associated reliabilities are: Administrative Task Stress (0.91), Role-Ambiguity Stress (0.81) Faculty-role Stress (0.75), Perceived Expectations Stress (0.82), and Administrative Relationship Stress (0.80). Administrative task stress refers to those regular duties and tasks where leaders meet deadlines, balance obligations and attend meetings; role-ambiguity stress refers to the balancing of staff and student needs; faculty-role stress involves the leader's perceived recognition for achievements; perceived expectations stress relates to meeting the needs of superiors and subordinates; and administrative relationship stress refers to the leader's roles with superiors and levels of authority (Sarros, et al., 1999).

There were only seven individual stress items for deans that exceeded the theoretic mean of 3.0 in terms of being more than a moderate source of stress. This research on deans revealed a job short on time relative to the demands, as the deans experienced more than

moderate stress in balancing their professional commitments and their personal lives. Other dean stressors included dealing with personnel issues and resolving conflict situations. The dean's work contributed 60% of the total stress in life for deans.

Other results of the dean surveys are of interest for this study. The greatest level of stress was for administrative task stress, followed by role-ambiguity stress (Sarros, et al., 1998). The deans most in need of learning how to cope with the conflict and stress of their job are those in their mid-40's to 50's and with 2-5 years experience. The study revealed that deans are confident in their abilities and have good relations with other employees. The deans believed they recognize the intrinsic merits of individuals, and they use these skills in developing long-term plans for the faculty. "What comes through unequivocally in this study is the positive sense of self and destiny that deans need to have in order to cope with the exigencies of the job" (p. 79). The majority of the deans believed they have control of their job and report moderate to low levels of role-ambiguity. Even if the deans had difficulty in compartmentalizing their role, they remained optimistic. The researchers suggested that further study of the leadership of deans be conducted through the use of recognized leadership instruments like the DSI (Sarros, et al., 1998). Stress is influential in the performance and effectiveness of many leaders including academic deans. Stress has been found to correlate to leader styles, experience, and cognitive resources. The use of frames with stress measures has not been studied, but it is theorized that the use of different or multiple frames will influence a leader's match to a situation, his/her ability to control the job role and tasks, and the stressors a leader experiences.

Summary of Related Literature

Although leadership has been discussed, written about and practiced for thousands of years, it still remains an illusive area of inquiry and understanding (Bass, 1990; Yukl, 1981). This chapter reviewed four areas of leadership research including trait, behavioral, situational, and cultural leadership. This section traced the historical developments of the four major approaches to the study of leadership. In the next section, the cognitive theory of leadership revealed through Bolman and Deal's (1984) frame theory was found to be a good model for the study of community college academic deans' leadership. Next, a section expanded understanding of the position of academic deans by reviewing literature related to this position. In the fourth section, a review of literature related to Bolman and Deal's (1984) more comprehensive approach to the study of leadership was then detailed by examining literature related to the four variables of interest to this study: types of frames used, frame awareness and job control, years of experience, and faculty size. The final section explored the relationships of stress measures and research to the dependent variables of interest in this study.

CHAPTER III

METHODOLOGY

The study involved the collection of data from 324 academic deans in 200 sample community colleges. The methodology section describes the research questions, design of the study, the participating institutions and deans, the survey instrument to be used, the data collection methods and the data analysis procedures. The study timeline involved planning and designing the pilot survey and main survey; mailing, administering, and receiving the survey; analyzing the data and summarizing, discussing conclusions, and recommending directions for future research. A total of 344 returns were returned from a sample of 750 deans accounting for a 46% total response rate. Twenty of these surveys were not usable. There were responses from 203 colleges out of the sampled 394 for a 52% college return rate, and there were responses from 46 out of 50 sampled states for a 92% state return rate.

Introduction

This study examined the relationship between the leadership frames and job-related stress measures of academic deans at community colleges. Another goal was to establish a baseline of information about community college academic deans in the United States. Data were collected through surveys sent to community college academic deans across the country. The study employed survey methodology to collect data and used descriptive data, correlation analysis, ANOVA, and regression analysis to analyze the data. The methodology was constructed to allow the researcher to pursue the following research questions for the study:

1. What is the current community college academic dean demographic profile including task, role and stress characteristics?
2. Which and how many leadership frames (Bolman & Deal, 1984) are most commonly used by academic deans at the community college?
3. Do community college deans recognize and perceive correctly the frames of leadership they use most prominently?
4. Are there significant differences between the leadership frames employed by community college academic deans with lower and higher measures of stress?
5. Are there significant differences between the leadership frames of academic deans with low and high measures of stress when deans are compared according to demographic variables including their number of years of experience, their gender, and/or the size of their institution?

Design of the study

A quantitative survey design was chosen for this study to gather large-scale information on community college academic deans. A five-part survey of eight pages and over 30 segments with questions was created to gather information not only for this leadership study but to form a database of information for future research by the Educational Leadership and Policy Studies department on the academic dean in the community college.

Survey Instruments

The survey questionnaire consisted of five sections was utilized for data collection. The five sections of this instrument included a demographics and institutional background section, a dean's task inventory, a dean's stress inventory, a role-conflict and ambiguity section, a leadership orientations section, and an open-ended section of the survey that allowed the opportunity for deans to list other aspects of the job that were major challenges. All sections of the instrument can be found in the survey in Appendix A. Permission to

perform research on human subjects was obtained from Iowa State University and the release form is found in Appendix B.

The first section with demographic and personal background variables, consisted of 24 contextual variables and 10 institutional variables. This section was informed by the demographic segment of the *National Survey of Chairs* (Gmelch, Burns, Carroll, Harris, & Wentz, 1992). The personal variables in this section included: age; gender; marital status; number of children at home; ethnic background; length in dean position; length in additional administrative positions; nature of appointment; reasons for selection as dean; parents' influence; presence of a mentor; scholarship level; satisfaction with: scholarship, role, pace, load, control, and overall; future goals; future move; job identification; self rating of job, and loyalty to job. The institutional variables included college type; number of full-time faculty; number of overall faculty; quality of faculty; vocational reputation; transfer reputation; number of students; number of staff; location of college; and percent of faculty tenured.

A pivotal section to the instrument provided the dependent variables most interesting to this study, and involved the self version of the "Leadership Orientations Questionnaire," (LOQ) created by Lee Bolman (1988) to determine a manager's frame of leadership. The four frames in the questionnaire included the structural frame, human resource frame, a political frame, and the symbolic frame. The thirty-two items allowed for respondents' answers to be numerically coded and analyzed through the use of a five-point Likert scale. Respondents indicated the degree to which each leadership statement was true of them. Response numbers were added and the mean was taken for each frame with each composed from eight statements indicative of the four categories. The frame with the highest average was considered to be the predominant leadership frame. The mean of the four frames was

also taken to compute a multiple frame composite score and the number of individual frames above this mean score were labelled multiple preferences. Permission to use this survey was requested and granted from the authors. Bolman and Deal's permission is found in Appendix C.

The LOQ questionnaire has been described with research results in the refereed journal *Educational Research Quarterly* (Bolman & Deal, 1991). In addition, the LOQ instrument has shown high internal reliability with Cronbach's Alpha ranging between 0.91 and 0.93 across business and education studies. Reliability is the capacity of the instrument to measure the same construct each time it is repeated or administered. Another estimate of reliability commonly used is the internal consistency method, which is based on the average correlation among the items within the test. Using Cronbach's coefficient Alpha to establish the reliability within this sample, the LOQ was found to be 0.93.

Other sections used in the dean's survey included instruments from the "1996 National Study of Academic Deans," used for studying leaders at four-year colleges and created by the Center for Academic Leadership at Washington State University (Sarros, et al., 1998; Wolverton, et al., 1999). One of these sections was a Dean's Task Inventory (DTI) that measures the typical responsibilities of the college deans; a Role-conflict and Ambiguity Questionnaire (Rizzo et al., 1970); and a Dean's Stress Inventory (DSI) listing potential sources of stress for the deans. Permission to use these survey sections was requested and granted by the authors. These survey items were placed on the community college dean questionnaire in order to inform variable relationships with leadership frames of the deans and for possible later comparison of the four-year college deans with the community college deans.

The DTI was created by Sarros, et al. (1998) and involved 32 common educational administrative tasks. Each dean was asked to assess the importance of the 32 tasks to their role as dean on a scale ranging from 1 for "Low" to 5 for "High". A composite score from this portion of the survey was used in this study as a task composite score. Analysis of high and low individual tasks as well as relationships to other variables was also performed. The DTI has recorded an overall reliability of 0.89 in the authors' previous study (1977) and in this study, the internal reliability of this portion of the survey was found to be 0.92.

The 14-item Role-conflict and Ambiguity Questionnaire (Rizzo et al., 1970) was used in this study to measure deans' perceptions of role-conflict and role-ambiguity. Respondents rate their level of perception with the clarity of their role, work relationships, expectations, control of work environment, authority level, and knowledge of job scope. Responses were on a seven-point scale ranging from "Not true of my job" to "Extremely true of my job." This instrument has been psychometrically verified over many studies (Sarros, et al., 1998). In those previous studies, the reliability for the role-conflict portion of the questionnaire was 0.82 and for the role-ambiguity portion, was 0.88. In this study, reliability was found to be 0.83 for the role-conflict portion and 0.87 for the role-ambiguity portion.

The Dean's Stress Inventory was based on the Administrative Stress Index of Gmelch and Swent (1984) and was developed as part of a study by Burns and Gmelch (1995). Stress is examined along the lines established by Burns and Gmelch (1995) and since operationalized in the research of Sarros, et al. (1997). This instrument was developed specifically for higher education administrators. The instrument is a 51-item questionnaire that is answered on a 5-point Likert scale and respondents indicated their level of perceived work stress on items by indicating an answer ranging from "Slight" to "High" with a

midpoint of 3. There were five substress scales that made up the total stress composite. The reliability of these subportions of the instrument are faculty-role stress (0.75), administrative relationship stress (.80), role-ambiguity stress (.81), perceived expectations stress (.82) and administrative task stress (.91). In this study, the overall stress instrument was found to have an internal reliability of 0.94 with substress reliabilities similar to previous studies. The stress instrument was developed specifically for use on a homogeneous population (i.e. educational administrators) in order to maximize the internal validity of the instrument.

A draft questionnaire based on the above surveys was developed and pilot tested with seven former/retired academic deans at Iowa community colleges. None of these respondents were in the population to be sampled. The respondents were asked to respond to all the survey questions as well as keep track of any interpretations of the questions. The pilot study was critiqued to determine if the questions were stated clearly, if they solicited the intended responses, addressed pertinent information, and if any additional relevant information could be included. Six of the seven pilot test surveys were returned and then were followed up through phone calls to the respondents. Because of the pilot test, some survey demographic questions were rewritten, some new questions were added, and some individual questions had sections added in order to get more thorough and valuable responses. As well as minor corrections (missing spacing, inadvertent numbers), the following additional questions were found to be necessary to make the survey more informative.

One question (6) involved adding a space for the type of college: technical vs. transfer or comprehensive. Another question (5) added a space for the college name, and another (13) changed some wording (college vs. school) to reflect that the question was about previous leadership in college. On a previous leadership positions question (13), some deans

asked that an open-ended answer choice be given for those deans who had not held leadership positions in college. Finally, on developmental leadership questions (17 and 18), the categories of professional organization leadership and community service organization were added. Overall, the pilot respondents found the questions informative, thorough and pertinent to the described purposes of the study. Some deans suggested that the length might hamper a large response rate. After incorporating the suggestions of this pilot test, the survey was proofed and distributed to the larger sample population.

Participants in the study

The target population for the study included all academic deans from the American Association of Community Colleges (AACC) member schools. These public two-year, community and junior colleges in the United States were identified from the 2000 membership directory of the AACC. These colleges numbered 959 institutions excluding private and special-interest institutions such as Native American two-year schools. These institutions were excluded to achieve a more homogeneous sample of community colleges.

To achieve equitable college and academic dean samples across differing states in the United States, a stratified sampling methodology was employed to obtain comparable ratios across the state and region populations. Stratified sampling is often more reliable than cluster sampling when the population is scattered geographically as proportions are preserved (Weiss, 1999). In stratified sampling, the population is first divided into homogeneous groups, and in this case, the groups were states. The members of each state have the highest likelihood of homogeneous governing boards, accreditation procedures, or regulation.

A random sample proportional to the size of the group was obtained from each state and this sample ensures that no state group was missed. The ratio followed in this study was close to a sampling of 2 colleges for every 5 per state group. This sampling methodology resulted in a total of 394 colleges being randomly sampled, and the method was instituted as follows. Each states' AACC institutions were listed with numbers and the college, along with its academic deans that were picked by using a table of random numbers. In states with 0-10 colleges, at least 3 were randomly sampled and these states were oversampled if the state had one, two, or three colleges. In states with 11-25 colleges, at least 5 schools were sampled. In states with 26-50 community colleges, at least 15 were chosen, and in the three states with over 50 such colleges, at least 20 colleges were randomly chosen. From this sampling procedure, 394 colleges became the sample colleges for the study and the AACC directory listed 750 sample deans from these colleges who were placed in a database for mailing purposes.

The proportional number of deans needed for response was determined from a table of suggested sample size based on the total number of academic deans (Krejcie & Morgan, 1970). The total number of academic deans was determined as follows. Since 750 deans were found for the sample of 394 sample colleges, an average of 1.9 academic deans per college suggests there are approximately 1822 academic deans in the population of the 959 AACC institutions.

Following the table for selecting sample size, a representative sample size for 1822 deans in the colleges is 316 (Krejcie & Morgan, 1970). This figure is based on a table for selecting sample size and is based on a finite number of cases (n) where the sample proportion (p) will be within 95 percent confidence level of 0.05 of the true population (P).

To get the desired 317 dean responses, the 750 sample deans were sent surveys with the thought of a return rate of 45% (337 deans) providing the necessary response. The 750 deans represents oversampling by 136%. Oversampling was done to ensure the final representativeness of the group of randomly selected deans and generalizability of the results to the academic deanship in all colleges of the categories involved in this study.

Collection of the Data

Once colleges were sampled from the list of AACC colleges as described in the sample participants section of this chapter, a mailing list of the community college deans was created from the AACC lists. From May 2000 to July 2000, every college in the 394 college sample was sent a packet with the appropriate number of surveys for all listed deans. The self-addressed and stamped surveys were sent along with a cover letter in a survey packet explaining the uses of the survey and the benefits of participating. For each college, a dean was selected to be the college packet recipient. This dean received an addendum to their cover letter listing the known academic deans at the institution but also describing the characteristics of the dean desired for the study. This cover letter and addendum can be found in Appendix D. Deans were informed that the time to complete the survey was approximately 20-30 minutes and that individual responses and data would be held in the strictest confidence. Complete confidentiality of each participant's responses was assured, and each survey was coded to monitor the response rate.

The first mailing resulted in a response from 25% of sampled deans or 190 of the total 750 deans in the sample. The returned surveys were examined for completeness and for suitability of data entry. After three weeks, each nonrespondent was sent a reminder

postcard, which can be found in Appendix E. With 78 more surveys, another 10% of sample deans responded to this follow up. After three more weeks, each college without a response was called and emailed another survey as needed. This resulted in about 10% (73 surveys) more responses.

Out of 344 surveys returned, a total of 324 returns were complete and therefore usable from the sample of 750 deans. Three colleges sent surveys back detailing that the deans' position was currently vacant, and these surveys were included in the 46% response rate. In addition, there were responses from 203 colleges out of 394 for a 52% college return rate and there were responses from 46 out of 50 states for a 92% state return rate.

Data Analysis

As the surveys were returned, the information was entered into an SPSS data file. To answer the questions posed in the study, the analysis of the research questions along with appropriate statistical tests was systematically undertaken. The 34 demographic and institutional variables, the task composite score, the role-conflict and role-ambiguity measures, and the leadership orientation variables constituted the independent variables. The primary dependent variable used was the deans' total stress, but dean's assessed stress and percentage of stress from work also were analyzed as dependent variables. In addition, the individual stress scores for each of the five subdimensions of stress were also analyzed.

The basic objective of the statistical analyses was to determine the extent and nature of the relationships between and among the independent and dependent variables. Initially, a demographic descriptive profile and analysis of the population sample is reported using data from the questionnaire. For many of the demographic variables, frequency distributions by

number and/or percentage are reported when informative as well as means and standard deviations of selected variables. This descriptive portion also includes task scores, stress scores, and leadership frame data.

Because of the differing nature of some of the variables (continuous, bi-variate, and nominal) the analysis of relationships in some cases was focused on crosstabulation associations between variables and did not suggest cause and effect relationships. Specific procedures to find relationships between all variables included crosstabulations, analysis of variance (ANOVA), Tukey's HSD Post Hoc test, Pearson's correlation analysis, and stepwise regression analysis for models of the deans' stress. Each dichotomous variable was subjected to ANOVA for the purpose of determining differences in the measured levels of stress and leadership orientations variables exhibited by deans relative to these independent variables. The significant t-test scores are shown for these variables. In addition, multiple ANOVA is an accepted statistical technique used to determine significant differences between mean scores of three or more sets of data. Any F-values calculated to be significant for these relationships were then further studied with Tukey's Honestly Significant Difference (HSD) procedure. This technique compares and contrast mean differences between all possible pairings of groups. In addition to comparing leadership orientation variables to the stress variables of deans, the study also means-tested any other variables which suggested relationships to deans' stress levels.

Pearson's correlational analysis was also applied to the data variables ($n = 324$). Using correlation matrices, all significant coefficients were determined among groups of variables. A matrix for each of the groups of demographics alone, demographics and stress, demographics and orientations, and orientations and stress were included in the results. Since

most variables had at least 317 valid responses, there were typically 315 degrees of freedom, for which coefficients with $r = 0.141$ were significant at the p level of 0.05 and $r = 0.174$ were significant at the p level of 0.01.

Stepwise regression models were performed to further determine the nature of the relationship between independent and dependent variables. Total stress and its subscales were the dependent variables studied against the independent blocks of: 8 leadership orientation variables; 23 personal dean demographics, 7 institutional demographics, both dean scores for role-conflict and role-ambiguity data, and then all 40 of the variables. The reporting of a summary of the results and a discussion of the research were the last steps in this study and comprise the final two chapters. The next chapter presents the results of data analyses.

CHAPTER IV

RESULTS

This chapter presents an analysis of the data collected from the National Survey of Community and Technical College Academic Deans. The results are divided into five sections which follow the research questions guiding the study:

1. What is the current community college academic dean demographic profile including task, role and stress characteristics?
2. Which and how many leadership frames (Bolman & Deal, 1984) are most commonly used by academic deans at the community college?
3. Do community college deans recognize and perceive correctly the frames of leadership they use most prominently?
4. Are there significant differences between the leadership frames employed by community college academic deans with lower and higher measures of stress than the average?
5. Are there significant differences between the leadership frames of academic deans with low and high measures of stress when deans are compared according to demographics including their number of years of experience, their gender, and/or the size of their institution?

The nonstress demographic variables described in analyses of the first three questions were used as independent variables in questions four and five against the dependent stress variables. These stress variables included the total stress variable resulting from the Dean's Stress Inventory (DSI); an assessed stress variable resulting from one question asking deans to rate their stress from 1 (low) to 5 (high); the percent of stress resulting from work variable; and the five stress subscores of total stress: task, role, faculty, perceived, and relationship stress.

Deans' Demographic, Task, and Stress Data

The responses on the demographics portion of the survey identified 26 contextual characteristics of the deans, including scores from the task, role-conflict and role-ambiguity questions. In addition, there were 7 institutional variables that provided information about the deans' occupation. Taken together, these variables provided the basis for profiling the deans and examining relationships among variables. Because of the use of continuous and bivariate variables in some cases, some of the results were crosstabulated.

The tables in this section show the frequency distributions of the deans' responses and comparisons of the responses of different groupings. Also presented are correlation coefficients (r) and F-test probabilities (p) for all pair-wise correlations which were significant at or above the five percent level.

Through their responses to portions of the survey, the deans provided demographic data that identified 34 different characteristics of a personal, professional or organizational nature. The data provided the basis for completing a current profile of the academic deans and for examining relationships between the variables. Correlations and analysis of variance among selected variables were performed. In addition, these dean characteristics are discussed later in this chapter in relation to the measures of leadership orientations and stress.

Table 1 shows the frequency distribution of 23 of the demographic characteristics of the deans categorized along different personal variables. In the table, frequencies and percentage of total answers are given as percentages from those deans who answered the questions. For further analysis, the means and standard deviations of some of these variables are shown in Table 3. The numbers of respondents for individual characteristics was often different because of participant nonresponses.

Table 1. Personal characteristics of community college academic deans.

Variable	Frequency	Percentage ^a
Gender (n = 322)		
Male	173	53.7
Female	149	46.3
Age (n = 317)		
< 38	14	4.4
38-46	62	19.6
47-55	143	45.1
56-64	92	29.0
> 64	6	1.9
Marital status (n = 323)		
Single	64	19.8
Married	258	79.6
Other	1	0.3
Number of children at home (n = 322)		
0	196	60.9
1	72	22.2
2	40	12.4
>2	14	4.3
Ethnicity (n = 322)		
White	297	92.2
Native American	3	0.9
Hispanic	11	3.4
African-American	3	0.9
Asian-American	4	1.2
Other	4	1.2
Parents' influence (n = 322)		
Stressed high standards	201	62.4
Satisfied with average	103	32.0
Disinterested	5	1.5
A negative obstacle to overcome	13	4.0
Years as dean (n = 324)		
< 1 year	2	0.6
1-2 years	128	39.5
3-4 years	60	18.5
5-6 years	42	13.0
7-8 years	19	5.9
> 8 years	73	22.5
Years additional experience (n = 324)		
< 2	34	10.5
2-4	52	16.0
4-13	157	48.5
14-19	48	14.8
>19	35	10.8

^aPercentages are based on the number of those who responded.

Table 1. (continued)

Variable	Frequency	Percentage^a
Presence of mentor (<i>n</i> = 320)		
No	123	38.4
Yes	197	61.6
Nature of appointment (<i>n</i> = 323)		
Inside	215	66.6
Outside	108	33.4
Why chosen as dean (<i>n</i> = 322)		
Best Suited to facilitate change	76	23.6
Best suited to deal with growth	64	19.9
Best suited to deal with crisis	35	10.9
Dedicated to units programs	128	39.8
Willing to serve as interim dean	19	5.9
Role perception (<i>n</i> = 321)		
Faculty	14	4.4
Administrator	227	70.1
Both	80	24.9
Next move (<i>n</i> = 321)		
Return to faculty	32	10.0
Move to dean position similar	14	4.4
Move to dean position smaller	1	0.3
Move to dean position prestigious	17	5.3
Move to higher administration	122	38.0
Change to nonacademic position	7	2.2
No interest in moving	61	19.0
Retirement	67	20.9
Scholarship level (<i>n</i> = 318)		
Less	50	15.7
Somewhat less	63	19.8
Same as before dean position	124	39.0
Somewhat greater	53	16.7
Greater	28	8.8
Scholarship satisfaction (<i>n</i> = 303)		
Dissatisfied	124	40.9
Satisfied	179	59.1
Satisfaction with role clarity (<i>n</i> = 320)		
Dissatisfied	14	4.4
Somewhat dissatisfied	41	12.8
Neutral	79	24.7
Somewhat satisfied	116	36.3
Satisfied	70	21.9

Table 1. (continued)

Variable	Frequency	Percentage
Satisfaction with work pace (<i>n</i> = 320)		
Dissatisfied	38	11.9
Somewhat dissatisfied	70	21.9
Neutral	85	26.6
Somewhat satisfied	90	28.1
Satisfied	37	11.6
Satisfaction with work load (<i>n</i> = 320)		
Dissatisfied	48	15.0
Somewhat dissatisfied	81	25.3
Neutral	88	27.5
Somewhat satisfied	76	23.8
Satisfied	27	8.4
Satisfaction with control (<i>n</i> = 320)		
Dissatisfied	30	9.4
Somewhat dissatisfied	66	20.6
Neutral	87	27.2
Somewhat satisfied	87	27.2
Satisfied	50	15.6
Satisfaction overall position (<i>n</i> = 320)		
Dissatisfied	3	.9
Somewhat dissatisfied	22	6.9
Neutral	86	26.9
Somewhat satisfied	154	48.1
Satisfied	55	17.2
Quality of faculty (<i>n</i> = 319)		
Poor	0	0.0
Somewhat poor	5	1.6
Average	45	14.1
Above average	171	53.6
Excellent	98	30.7
I am doing a good job (<i>n</i> = 322)		
Disagree	0	0.0
Somewhat disagree	5	1.6
Neutral	23	7.1
Somewhat agree	161	49.7
Agree	133	41.3
I hold strong job loyalties (<i>n</i>=320)		
Disagree	10	3.1
Somewhat disagree	17	5.3
Neutral	49	15.3
Somewhat agree	93	29.1
Agree	151	47.2

Personal Characteristics. Some of the personal characteristics of the deans ($n = 324$)

involved contextual data about the deans and some involved professional data. A slight majority of the deans were males (54%), compared to females (46%). The mean age of the deans was 52 with 42% of the deans between 48 and 55 years old. None of the deans were younger than 30 and none were older than 71 years of age. About 80% of the deans were married and they had an average of just under one child still at home. There were 196 deans who had no children left at home. Most of the deans were White/Caucasian (92%) with the next highest group Hispanic (3.5%). About 66% of the deans had parents who had set high standards for them, 30% had parents who accepted them if they were average, and 4% had parents whom they considered to be a negative influence.

Institutional Characteristics. The seven institutional characteristics provided information about the colleges where the deans work. The majority worked at comprehensive community colleges (70%) with fewer deans at specifically transfer schools (15%) or technical schools (15%). The mean number of students the deans had in their unit was 3000 with the median number of students 2000. The average number of full-time faculty in a dean's unit was 41 but the median was lower with 32 faculty. Including adjunct faculty, institutions averaged 121 faculty but had a lower median of 84. The mean number of support staff in the deans' unit was 5.5 with the median being 4 staff helpers. About 40% of the deans were in a rural location, 30% in a suburban location and 25% in an urban setting. In their units, the deans had an average faculty tenure rate of 78% and most of the deans (83%) consider their faculty above average. Only 1.5% of deans considered their faculty below average with about 14% suggesting their faculty were average. The institutional variables are shown in Table 2.

Table 2. Institutional characteristics of academic deans at two-year colleges.

Institutional Characteristic	Frequency	Percentage^a
College type (n = 324)		
Technical	48	14.8
Transfer	46	14.2
Community College or Both	229	70.7
College location (n = 322)		
Rural	138	42.9
Suburban	100	31.1
Urban	84	26.1
Number of support staff (n = 324)		
< 2	68	21.0
2-3	92	28.4
4-8	97	29.9
> 8	67	20.7
Percent of faculty with tenure (n = 221)		
< 51	25	11.3
51-70	38	17.2
71-90	114	51.5
> 90	64	28.9
No answer	103	Not included
Number of students in unit (n = 247)		
< 1000	79	32.0
1000-1999	45	18.2
2000-2999	39	15.8
3000-3999	23	9.3
> 4000	61	24.3
Number full-time faculty in dean's unit (n = 301)		
< 21	93	30.9
21-30	48	15.9
31-40	60	19.9
41-50	26	8.6
> 50	74	24.6
Number of total faculty in dean's unit (n = 309)		
< 41	70	23.9
41-80	80	25.9
81-120	53	17.2
121-160	40	12.9
> 160	66	21.4

^aPercentages are calculated based on those who responded to the question.

Professional Characteristics. The professional characteristics of the deans involved data about the deans' experience and occupational situation. The mean number of years in the dean position was about 5.4 years with the median being 3 years. About 40% of the academic deans had been in this position for 1 to 2 years. The means and standard deviations for many dean characteristics are shown in Table 3.

Table 3. Personal and institutional statistics for academic deans.

Variable	Mean	Median	σ
Age (<i>n</i> = 317)	51.54	53.00	7.41
Number of children (<i>n</i> = 322)	0.62	0.00	0.93
Years in dean position (<i>n</i> = 324)	5.44	3.00	5.37
Years of additional administration (324)	9.67	8.00	7.31
Number of staff (<i>n</i> = 324)	5.52	4.00	5.51
Scholarship level (<i>n</i> = 318) ^a	2.83	3.00	1.15
Satisfaction with role clarity (<i>n</i> = 320) ^a	3.58	4.00	1.10
Satisfaction with work pace (<i>n</i> = 320) ^a	3.06	3.00	1.20
Satisfaction with work load (<i>n</i> = 320) ^a	2.85	3.00	1.19
Satisfaction with control (<i>n</i> = 320) ^a	3.19	3.00	1.20
Satisfaction w/overall position (<i>n</i> = 320) ^a	3.74	4.00	0.86
Quality of faculty (<i>n</i> = 319) ^a	4.13	4.00	0.70
I am doing a good job (<i>n</i> = 322) ^a	4.31	4.00	0.67
I hold strong loyalties (<i>n</i> = 320) ^a	4.12	4.00	1.05
Role-conflict score (<i>n</i> = 322) ^b	4.02	4.00	1.23
Role-ambiguity score (<i>n</i> = 321) ^b	4.40	4.50	1.28
Percent of faculty tenured (<i>n</i> = 221)	77.80	80.00	19.80
Number of full-time faculty (<i>n</i> = 301)	41.10	32.00	33.30
Number of total faculty (<i>n</i> = 309)	121.00	84.00	150.10
Number of students (<i>n</i> = 247)	2960.00	1950.00	3539.00

^aOn a five-point scale (1 = Low, 5 = High). ^bOn a seven-point scale (1 = Not true, 7 = Extremely true).

In contrast to the few years of average experience in the academic deanship, these deans had an average of about 10 additional years of administrative experience. Most often these deans had come from other administrative positions such as division chair or from other dean positions at other institutions. Also, about 66% of deans had been appointed from inside the institution and 66% had been mentored in their position of academic dean. The mentor was most often of the same gender and race as the academic dean being mentored. The

highest reason for being appointed dean was to sustain the growth of the unit's programs (40%), some were chosen to deal with unit growth (20%), and some to provide the unit a change in direction (23%). On becoming a dean, the deans' scholarship level had increased for 40% and had decreased for 35%. Many deans (124) reported the same scholarship level. The majority of deans (55%) were satisfied with their scholarship level since becoming a dean. Most (70%) considered themselves administrators with some (4%) considering themselves faculty and 25% considering themselves both faculty and administrators. Many (40%) wish to move to a higher administrative position, 20% each considered either no movement or retirement as their next move, and 10% wished to return to a faculty position.

The vast majority of deans suggested they are doing a good job (90%) and most felt loyalty to their current job (77%). The deans' views on their profession included their satisfaction with aspects of the job. More were above neutral towards satisfied in their overall job (65%) than were below neutral towards dissatisfied (7%). Fewer leaned towards being satisfied with their role clarity (46%), work control (40%), and work pace (38%). Table 3 shows the mean values for selected demographic variables along with associated standard deviations. The deans had moderate role-conflict ($\mu = 4.02$) and moderate role-ambiguity ($\mu = 4.40$) scores on a scale of 1 = "Not true of my job" to 7 = "Extremely true of my job." Higher role-conflict scores suggest more conflict while higher role-ambiguity scores suggest less ambiguity. These measures were consistent with the dean's higher satisfaction for role clarity.

Relationships Among Demographics. Several crosstabulations of demographic variables illuminated variable relationships. Since stress and satisfaction of the deans might be related, the satisfaction variables were analyzed first, and gender was found to interact

with satisfaction variables. In a crosstabulation between gender and satisfaction with overall position, 4.6% of females were dissatisfied or moderately dissatisfied compared to 10.7% of males. About the same percent (26%) were expressed no amount of satisfaction or dissatisfaction across gender, but more females (68.1%) were satisfied or moderately satisfied compared to males (62%). Table 4 shows the breakdown of female deans' higher satisfaction with overall position in a crosstabulation.

Gender also interacted with satisfaction of both control and scholarship. More females (47.7%) were satisfied or moderately satisfied with control than were males (39%).

Table 4. Gender of deans and satisfaction with position.

Number of deans Gender	<i>n</i>	Satisfaction with Overall Position				
		Dissatisfied Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Satisfied
Female	149	1	6	40	75	27
Male	169	2	16	46	77	28
Total	318	3	22	86	152	55

However, a greater number of females were dissatisfied with their scholarly activities than were males, despite a higher number of males in the sample. Other satisfaction variables were not found to differ by gender as dramatically. The gender relationship to scholarship satisfaction is shown in Table 5.

The number of faculty in each dean's unit was collapsed to a number below or above the median faculty number (32) in order to better observe the variables' crosstabulation. The number of staff in a dean's unit was also collapsed to a number below or above the median staff number (4.0). When gender was viewed across the number of staff, differences were found as shown in Table 6. A similar but weaker relationship was found for the number of

Table 5. Gender and scholarship satisfaction.

Number of deans	Scholarship Satisfaction	
Gender	Dissatisfied	Satisfied
Female	65 (43.6%)	80 (56.4%)
Male	57 (36.5%)	99 (63.4%)
Total	122 (40.5%)	179 (59.5%)

Table 6. Gender and staff group compared to median staff size.

Number of deans in group	Staff Group	
Gender	Below support staff median ^a	Above support staff median
Female	82 (57.3%)	61 (42.7%)
Male	74 (43.8%)	95 (56.2%)
Total	156	156

^aMedian support size was 4.0 staff.

faculty across gender. Female deans may tend to have smaller faculty and unit staff support sizes, but no significant correlations between gender and these groups was found.

Gender also appeared to be slightly related to role-conflict scores. A dean with a role-conflict score below the median of 4.4 was placed in role group one and role group two if above the median. Female deans appeared to have slightly less role-conflict than their male counterparts as shown in Table 7. Crosstabulations for role-ambiguity suggested no differences among gender or marital status.

Role-conflict group and self-described role at college (1 = Administrator, 2 = Faculty,

Table 7. Gender and role-conflict group.

Number of deans in group	Role-conflict Group	
Gender	Below median role-conflict ^a	Above median role-conflict
Female	78 (52.3%)	71 (47.6%)
Male	82 (47.9%)	89 (52.0%)
Total	160	160

^aMedian role-conflict was 4.4 on a 7.0 scale (1 = not true, 7 = extremely true).

3 = Both) also showed a relationship as shown in Table 8. Deans who considered themselves faculty or both faculty and administrators were likely to have more role-conflict than deans who saw themselves as administrators. Role-ambiguity showed a similar relationship, but neither was found to have a significant correlation.

Table 8. Role-conflict group compared to view of role at the college.

Number of deans in group	Role-conflict group	
Self-viewed role at college	Below median role-conflict^a	Above median role-conflict
Administrator	122 (53.7%)	105 (46.3%)
Faculty	4 (28.6%)	10 (71.4%)
Both	34 (42.5%)	46 (57.5%)
Total	160	161

^aMedian role-conflict was 4.4 on a 7.0 scale (1 = not true, 7 = extremely true).

The only satisfaction variable that showed an interesting crosstabulation with marital status was scholarship satisfaction. Single deans were more likely to be dissatisfied (53%) with their scholarship level than were married deans (37%). This result suggested that marital status be studied in relation to role-conflict and role-ambiguity variables as well as stress variables.

Dean's Task Inventory. Each dean also completed a Dean's Task Inventory that listed 32 typical responsibilities of unit deans. Each dean rated the importance of the duty on a scale of 1 to 5 with 5 being the highest. The task composite score was obtained by adding up the 32 variables of task that the deans responded to and then divided by 32. The mean task composite score for all of the deans was 3.99 out of 5.00.

While the deans expressed high numbers on many of task items, the highest task responses indicated which tasks comprise the most common workload of community college deans. These deans did work with faculty on improving teaching, enhancing the college climate, performing evaluations, and recruiting teachers. They did work with administration

in communication, decision-making, budgets and planning. The eight questions that produced the highest task responses and the seven questions that produced the lowest task responses are shown in Table 9.

The standard deviations on the highest tasks were all small suggesting a uniformity to these tasks among most deans. The deans also worked with external constituencies and funds, but to a lesser degree and with less uniformity.

Table 9. Highest and lowest task items.

Highest Academic Dean Tasks	Mean^a	Standard Deviation
Foster good teaching	4.62	0.64
Maintain conducive work climate	4.54	0.62
Maintain effective communication across divisions	4.54	0.61
Represent the unit to the administration	4.53	0.69
Recruit and select chairs and faculty	4.34	0.95
Financial planning, budget preparation and decision-making	4.34	0.80
Evaluate chair and faculty performance	4.33	0.85
Solicit ideas to improve the unit	4.32	0.67

Lowest Academic Dean Tasks	Mean^a	Standard Deviation
Foster alumni relations	2.54	1.11
Obtain and manage external funds	3.06	1.30
Maintain my own scholarship program and professional training	3.47	1.07
Remain current with my own academic discipline	3.58	1.12
Develop and work with community advisory committees	3.61	1.14
Assign duties to chairs and directors	3.63	1.09
Plan and conduct unit leadership team meetings	3.67	1.05

^aMean for task scores was on a five-point scale (1 = low importance, 5 = high importance).

These high items may have formed a basis for what the deans consider their workload and may be related to the lower measures of satisfaction with workload. As expected, the lowest task items suggested that these deans rate maintenance of their scholarship, academic discipline and alumni relations lower than academic tasks.

In order to inform the research on the larger questions of stress and use of frames, the demographic variables were first correlated to look for interactional effects on the results. Table 10 shows the correlation coefficients for all pair-wise demographical variables. For a 317 sample size, the significant coefficients were set at $r = 0.115$ for $p = 0.05$ and $r = 0.145$ for $p = 0.01$. In some cases, the pairs had fewer than 317 responses due to lack of response by deans. Such pairs have higher significant correlation coefficients.

As may be expected, age was significantly correlated to years in position and years of additional experience ($p < 0.01$). In addition, however, there was a similar significance found between age and satisfaction with scholarship ($r = 0.17$), and a less significant relationship to the task score ($p < 0.05$) as the dean's age increased ($r = 0.12$). Gender and years of additional experience ($r = -0.13$) were also significantly correlated ($p < 0.05$) to task score and scholarship satisfaction. The higher the gender number (male = 1, female = 2), the lower the number of years in position and the lower the years of additional experience, significant at $p < 0.05$. Married deans had more staff support in the dean's unit. As the task score increased, typically the satisfaction in position and scholarship also increased.

As the number of faculty at the college increased, the typical dean's satisfaction in position also increased. If a dean were appointed from outside the institution (inside = 1, outside = 2), the dean was typically more likely to have a greater scholarship role in the new position ($r = 0.16$). Finally, satisfaction in overall position was correlated to a satisfaction in scholarship level at the colleges and also to an increased scholarship level at the colleges ($r = 0.22$). All of the satisfaction variables were correlated to one another. Satisfaction in overall position was mostly highly correlated at a significance level of $p < 0.001$ level to the variables of satisfaction with work pace, satisfaction in role, and satisfaction with workload.

Table 10. Pairwise correlation coefficients for selected demographic data.

	Age	Marital Status	Gender	Years dean	Years add.	Task Score	Staff	FT Facul.	Satis. load	Satis. pace	Satis. Control	Satis. over	Satis. Role	Role Conflict	Role Ambig	Satis. Scholar
Marital status																
Gender		.20**														
Years in position	.37**															
Years additional	.33**															
Task score	.12*		.16**			.19**										
Staff size	.12*	-.14*		.12*	.14**											
FT Faculty						.19**			.11*							
Satisfaction load						.14*	.16*	.11*								
Satisfaction pace						.14*	.15**	.17**	.14*	.81**						
Satisfied control										.52**	.55**					
Satisfied overall						.24**	.29**	.20**	.16**	.52**	.62**	.51**				
Satisfaction role						.13*	.19**	.13*		.36**	.44**	.51**	.58**			
Role-conflict										-.41**	-.41**	-.39**	-.41**	-.47**		
Role-ambiguity						.12*	.28**		.13*	.25**	.31**	.32**	.36**	.48**	-.23**	
Scholar. satisfact.	.17**			-.15**	.14*	.16**				-.16**	-.15**	-.12*	.12*		.15**	
Scholar. Change										.17**	.23**	.17**	.22**	.18**	-.12*	.12*
																.37**

* $p < 0.05$. ** $p < 0.01$.

A couple of other variables not shown in Table 10 suggested interesting relationships. The college type variable was labeled technical = 1, transfer = 2, and community college =3. There were significant correlations ($p < 0.05$) between college type and age ($r = 0.17$), marital status ($r = 0.14$), satisfaction with role ($r = 0.15$), job assessment ($r = -0.12$) and percent of tenured faculty ($r = 0.14$). These results reveal that as college type move towards a liberal arts or comprehensive type, deans are more likely older and single, more of their faculty are tenured, they are more satisfied with their role clarity, but they are less likely to assess themselves as doing a good job. In addition, the appointment of a dean from inside = 1 or outside = 2 the institution was significantly and positively correlated with some variables. Marital status, task score and scholarship change correlated with appointment, suggesting that deans appointed from within the institution were more likely to be married and to have fewer scholarship opportunities than in their previous job.

Role-conflict and Role-ambiguity. As can be seen in Table 10, few personal variables interacted with role-conflict score. Lower role-ambiguity scores were associated with a dean's personal variables of higher task score, years of additional administration, and the number of full-time faculty. Satisfaction variables influenced both role variables. As expected, the deans' satisfaction with role clarity was most highly correlated with role-conflict ($r = -0.47$) and role-ambiguity ($r = 0.48$) among satisfaction measures. The satisfaction overall variable showed the next highest correlation suggesting a relationship with these role scores. As deans were more satisfied with their loads, pace of work, control, role, and position, they had less role-conflict and less role-ambiguity.

Not shown in Table 10 was the relationship between the deans' higher rating of the quality of their college faculty and both the deans' higher role-conflict ($r = 0.11$) and lower role-ambiguity ($r = 0.18$) which were both significant at the $p < 0.01$ level. The variable of loyalty to the college was similarly significantly correlated to both variables but was negatively correlated to the role-conflict score ($r = -0.17$). These results suggested that deans tended to be more loyal as they understood their roles better.

Dean's Stress Inventory. The deans completed a Dean's Stress Inventory listing 41 work-related situations that might cause stress on the job. Deans were asked to rate individual aspects of their role as stressful from low = 1 to high = 5. A summary of the stress means and standard deviations follows in Table 11. The inventory items were further broken down into substress scores in the areas of task stress, role-ambiguity stress, faculty-role stress, perceived expectations stress, and administrative relationship stress.

Finally, deans were asked to rate both the overall level of stress they experience as a dean and the percentage of the total stress in life that results from being a dean. The responses to these questions provided a comprehensive model of stress for these deans.

The mean stress composite score was 2.54 out of 5 and is below the theoretical mean of 3.0 from the five-point Likert scale. This result suggested moderate stress for the academic

Table 11. Stress variable means and standard deviations.

Stress (n = 318)	Items	Mean ^a	Standard Deviation
Total stress score	41	2.54	0.64
Task stress score	16	2.62	0.69
Role-ambiguity stress score	7	2.54	0.74
Faculty-role stress score	5	2.74	0.76
Perceived expectations stress score	6	2.39	0.70
Administrative relationship stress score	7	2.36	0.97
Self total stress score	1	3.06	1.01
Percent of stress from job ^b	1	55.86	24.51

^aMeans for all but Percent of stress were on a five-point scale (1 = Low, 5 = High). ^bn = 311.

dean. Compared to the theoretical mean of 3.0, 209 (66%) were below this score and 109 (34%) were above this score. On average, about half (56%) of the stress in these deans' lives came from their work. Compared to the mean stress score, there were 169 deans (53%) below the mean stress score and 149 (47%) above this score. Looking at the percentage of stress resulting from work, 148 deans (48%) had stress percentage below 50% work percentage and 163 deans (52%) had a higher than 50% of stress percentage from work.

Of the five substress scores, faculty-role stress (mean = 2.73) and task stress (mean = 2.62) were above the total stress mean of 2.54. This is an indication that the workload of deans and the academic side of the job may provide higher stresses than other job factors. The lowest stress means belonged to administrative relationships stress (2.34) and perceived expectations stress (2.39). As expected, each substress variable correlated significantly to the total stress variable. Task stress was correlated to total stress at 0.927, role stress at 0.887, perceived expectations stress at 0.835, relationship stress at 0.810, and faculty stress at 0.772.

The highest stress items suggest that several workload and academic tasks cause deans stress including meetings, student and faculty conflicts, drop-in visitors, and paperwork. These stress items appeared to be responsibilities that arise from the deans' own involvement at the college and not from interactions with superiors or with work delegated from above. Many of these highest stress items can be categorized as beyond the dean's control: conflicts between others, meetings scheduled for them, unexpected interruptions, and heavy workload pressures. One concern is the stress item of dean's imposing excessively high self-expectations. This item suggested that these deans do create some unrealistic expectations which in turn creates internal stress.

The lowest stress items suggested that their perceptions about their administrative progress, academic progress, training and job performance do not cause them as much stress as other tasks in their jobs. These deans were confident in their ability to do their job and appear to not feel external pressure to overachieve. The deans also did not appear to feel that supervising the tasks of other people or mediating staff conflicts were stressful unless they were faculty conflicts. Table 12 shows the highest and lowest stress items for the deans.

Table 12. Highest and lowest stress items.

Highest Stress Items	Stress Type	Mean ^a	Std. Dev
Attending meetings which take up too much time	Administrative task	3.51	1.18
Imposing excessively high self-expectations	Perceived expectations	3.29	1.27
Feeling I have too heavy a workload	Administrative task	3.17	1.39
Handling student concerns and conflicts	Faculty-role	3.12	1.15
Attempting to balance my professional and personal lives	Role-ambiguity	3.11	1.34
Meeting report and other paperwork deadlines	Administrative task	3.03	1.22
Being frequently interrupted by calls and drop in visitors	Administrative task	3.02	1.23
Handling concerns and conflicts with faculty	Faculty -role	3.00	1.17

Lowest Stress Items	Stress Type	Mean ^a	Std. Dev.
Having to engage in fund raising activities	Admin. task	1.71	1.02
Feeling I am not adequately trained to handle my job	Perceived exp.	1.80	0.99
Having to travel to fulfill job expectations	Admin. task	1.88	1.08
Believing my academic career progress is not what it should be	Faculty-role	1.95	1.07
Believing my administrative career progress is not what it should	Perceived exp.	1.98	1.15
Promoting diversity among faculty, students and leadership team	Ad. relationship	2.06	0.97
Feeling pressure for better job performance above reasonable	Perceived exp.	2.07	1.14

^aMean of stress items was on a five-point scale (1 = slight, 3 = moderate, 5 = high).

Each of the individual stress items correlated significantly to its own stress dimension, while some correlated to many or all of them which suggested that some task or relationship items relate to dean stress regardless of the context of the stress. In particular, item "s" or "Feeling I have too heavy a workload" correlated highly to many stress dimensions as well as item "cc" which was "Supervising and coordinating the tasks of others."

Correlations. Many of the demographic characteristics of the deans and their colleges appear to interact with the stress measures at a significance level of $p < .05$. The variables that did not appear to interact with stress were number of students, number of full-time and the number of total faculty, suggesting that size of the institution was not a significant stress factor. In addition, the appointment of the dean from inside or outside the institution did not appear to correlate to measures of stress. The correlations between the stress and selected demographic variables are shown in Table 13.

Some personal characteristics of deans correlated to stress measures. One significant negative correlation ($p < 0.01$) was between the years of additional administration and the deans' self assessment of overall stress ($r = -0.154$). There was a negative correlation between the deans' age and their role stress ($r = -0.15$). There was also a significant negative

Table 13. Pairwise correlation coefficients for stress variables and demographics.

	Age	Marital Status	Gender	Years in position	Years additional	Role-conflict	Role-ambiguity
Stress Variable							
Total stress						0.48**	-0.17**
Assess stress					-0.15**	0.43**	-0.19**
Percent stress						0.31**	-0.16**
Task stress						0.38**	
Role stress	-0.15**				-0.12*	0.50**	-0.18**
Faculty stress		-0.14*				0.27**	
Perceived						0.39**	
Relationship	-0.12*	-0.11*		0.12*		0.50**	-0.27**
	Task Score	Staff	FT Faculty	Satisfaction Overall	Scholarship Satisfaction	Scholarship Change	
Stress Variable							
Total stress				-0.37**	-0.18**		
Assess stress	-0.12*	-0.14*		-0.47**	-0.16**		
Percent stress		-0.11*		-0.38**	-0.19**	-0.12*	
Task stress				-0.25**	-0.15**		
Role stress		-0.12*		-0.41**	-0.22**		
Faculty stress				-0.29**	-0.20**	-0.14*	
Perceived stress	0.11*			-0.25**	-0.12*		
Relationship stress				-0.41**			

* $p < 0.05$. ** $p < 0.01$.

correlation between number of staff and the deans' assessment of stress ($r = -0.141$). There were strong negative correlations among the satisfaction overall and all stress variables as well as negative correlations between satisfaction with scholarship and all but one of the stress variables. Significant correlations between role-conflict and all stress measures ($r = 0.30$ to $r = 0.50$) and between role-ambiguity scores and all stress measures except faculty-role and perceived expectation stress were found. Finally, the number of staff in the deans' unit correlated to some stress variables above the $p = 0.01$ level. The many demographics of the deans that correlated to these stress variables help to inform the regression models and means tests later in this chapter. Before those tests were performed, the major topic of deans and leadership orientations was analyzed.

Summary. The general profile of the deans who participated in this study was a moderately stressed 51-year-old married male or female who had about 5 years experience as a dean and about 10 additional years of administrative experience. This dean worked in a comprehensive community college with about 41 high-quality, full-time faculty tenured at a rate of 77%. The dean's college had about 3000 students and the dean had about 5.5 support staff members in the unit. Stress measures of the deans were significantly correlated to his/her satisfaction with the dean position, his/her satisfaction with the scholarship level, and his/her role-conflict scores. The years of additional experience that a dean possessed correlated to many variables as expected, including a higher age, number of staff, and number of faculty, as well as higher satisfaction measures and task score. The deans' highest stress items involved more task and faculty items such as resolving student and faculty conflicts and handling workload, paperwork, and meetings. Many of these items may be less controllable by the deans than the other tasks. Some of these tasks suggested that the nature

of the stress of these academic deans may be less related to work inherently controllable like problem-solving and more related to lesser abilities to control external tasks like paperwork.

Leadership Frames of Community College Academic Deans

The results from the leadership orientation portion of the survey were analyzed first as means, standard deviations, and percentages of each frame. The deans took the 32-item test of orientations resulting in four preference scores of structural, human-relations, political and symbolic. Then they answered questions on each orientation regarding the degree to which they preferred each orientation on a scale of 1 to 5 with 5 the highest. Next, the deans answered questions on each orientation regarding how much they used each orientation on a scale of 1 to 5. The standard deviations were greatest for the symbolic orientation scores, then political scores and then structural scores. The human relations scores were more consistent across all three question types. The resulting mean orientation scores from the 32-item test and other questions are shown in Table 14.

Table 14. Dean orientation scores, preferences, and uses for each type of frame.

Orientation Variable (n = 319)	Test score mean ^a	Standard deviation	Preference mean ^a	Standard deviation	Use mean ^a	Standard deviation
Structural orientation	3.88	0.56	3.53	1.07	3.64	0.92
Human relations orien.	4.14	0.52	4.27	0.83	4.18	0.81
Political orientation	3.59	0.58	2.88	1.13	3.05	1.05
Symbolic orientation	3.60	0.61	2.53	1.20	2.64	1.14
Multiple orientations	3.80	0.46	3.30	0.53	3.38	0.56

^aMeans were on a five-point scale (1 = Never, 2 = Occasionally, 3 = Sometimes, 4 = Often, 5 = Always).

In each of the above three categories: orientation score, orientation preference, and orientation use, the human relations orientation was the highest score, followed by the structural orientation. The human relations orientation also had the lowest standard deviation as well, suggesting a wide uniformity to this frame. While the test scored the symbolic orientation at the same level as the political orientation, respondents listed the symbolic orientation below the political on both the preference questions and the use questions, perhaps because these orientation definitions are not as recognized. The deans preferred the human relations frame more than they said they used the frame. In contrast, they preferred the structural, political, and symbolic frames less than they used these frames.

Frame Scores and Preferences. Analyzing each respondents' orientation subscores showed that several had the same high score on two or more orientations. About 14% of respondents had the same highest score on two or more of the four preferences. The majority scored human relations as or among their highest score (59%), with the structural orientation at or among the highest frame for the next highest percent (26%) followed by the political orientation (8%) and then the symbolic orientation (7%). The vast majority (86%) had a single high orientation score. The percentage of respondents with two evenly high scores was 12%. Five people had all four frames rated equally high for 2%. The most common paired frame was the structural/human relations frame pair as shown in Table 15.

Individual orientation scores above the mean multiple frame score of 3.80, were used to determine which frames deans prefer. Exactly 35 deans (11%) had no strong frame preferences, 82 (25%) had one frame preference, 87 (27%) had two frame preferences, 39

Table 15. Counts and percentages of high preferences by academic deans.

High Orientation (n = 319)	Frequency	Percent
Structural	67	21.0
Human relations	190	59.6
Political	10	3.1
Symbolic	8	2.5
Structural and Human relations	15	4.7
Structural and Political	5	1.6
Structural and Symbolic	5	1.6
Human relations and Political	5	1.6
Human relations and Symbolic	3	0.9
Political and Symbolic	5	1.6
Structural, Human relations and Political	1	0.3
All four orientations	5	1.6

(12%) had three frame preferences and 76 (24%) had all four preferences above the score of 3.80. The largest group of deans therefore had two preferences.

All of the individual orientation items also scored above the 3.0 theoretical average.

The highest items above 4.0 as well as the lowest items are shown in Table 16.

Table 16. Highest and lowest leadership orientation items.

Highest Leadership Orientation Items	Orientation	Mean ^a	Std. Deviation
Show high levels of support and concern for others	Human Relations	4.30	0.66
Build trust through open and collaborative relationships	Human Relations	4.28	0.69
Think very clearly and logically	Structural	4.20	0.55
Approach problems through logical analysis and careful thinking	Structural	4.16	0.69
Show high sensitivity and concern for others' needs and feelings	Human Relations	4.15	0.82
Approach problems with facts and logic	Structural	4.13	0.65
Am a highly participative manager	Human Relations	4.13	0.80
Am consistently helpful and responsive to others	Human Relations	4.12	0.70
Listen well and am receptive to others ideas and input	Human Relations	4.11	0.78
Give personal recognition for work well done	Human Relations	4.06	0.87

Lowest Leadership Orientation Items	Orientation	Mean ^a	Std. Deviation
Am highly charismatic	Symbolic	3.20	1.02
Am a very skillful and shrewd negotiator	Political	3.23	0.92
Am highly imaginative and creative	Symbolic	3.46	1.01
Am politically very sensitive and skillful	Political	3.46	0.92
Am able to be an inspiration to others	Symbolic	3.47	0.84
Am unusually persuasive and influential	Symbolic	3.49	0.88
Anticipate and deal adroitly with organizational conflict	Political	3.53	0.75

^aMeans were on a five-point scale (1 = Never, 2 = Occasionally, 3 = Sometimes, 4 = Often, 5 = Always).

The highest frame items suggested that collaboration, listening, concern, and logical analysis form part of the highest orientations of the deans. Shrewdness, creativity, and charisma were not listed as highly in the deans' orientations.

Correlations. There were several important correlations among variables related to the orientation scores and many of them involve stress variables. First, demographic and institutional variables suggested relationships to the individual orientations and are shown in Table 17. Next, the nonstress and multiple orientation variable correlation results are listed in Table 18. There were no significant correlations between the orientations and years in dean position, number of children at home, appointment inside or outside the institution, marital status, role-conflict score or parents' influence variables.

As deans had more years of additional experience or had higher levels of scholarship change since becoming a dean, their political and symbolic scores typically increased. Deans' task scores and self-assessment of job success were both significantly correlated to all four of the orientations.

Table 17. Correlation coefficients of frames and selected demographics.

Demographic	Structural score	Human relations score	Political score	Symbolic score
Age	0.12*			
Years in job				
Years additional experience			0.18**	0.16**
Gender	0.15*			
Race		0.15**	0.13*	0.12*
Scholarship level change			0.14*	0.15**
Quality of faculty		0.16**	0.11*	
I am doing a good job	0.21**	0.12*	0.29**	0.32**
Loyalty to college		0.18**	0.13*	
Presence of mentor		-0.15*		
Next move		0.11*		
Chosen reason			-0.13*	-0.19**
Role-conflict				
Role-ambiguity	0.15**	0.27**	0.26**	0.22**
Task score	0.33**	0.46**	0.44**	0.45**

* $p < 0.05$. ** $p < 0.01$.

Loyalty to the college and assessment of faculty quality were correlated to the human relations orientation and to the political orientation similarly. Task score was least strongly correlated with the structural orientation and job assessment was least strongly correlated with the human relations orientation. Finally deans who had a mentor were more likely to have higher human relations orientations.

Table 18 shows other orientation variable correlations to demographic variables. The way deans answered the task composite score was correlated to some of the orientation variables suggesting a possible relationship. For example, the task composite score had a significant positive correlation ($p < 0.01$) to the multiple orientation score ($r = 0.519$). Also, the correlation between the number of multiple frames above the average and the task composite score was significant with $r = 0.421$.

Table 18. Correlations of orientation variables and selected demographics.

	Age	Marital status	Gender	Years in position	Years additional	Task score	Appoint.
Orientation score					.15**	.52**	
Highest preference							
Self-stated preference							.14**
Frames over average					.18**	.42**	
	Students	Staff	FT faculty	Total faculty	Satisf. overall	Scholar. satisf.	Scholar. level change
Orientation score					.28**		
Highest preference							
Self-stated preference	.15*						
Multiple frames above average			.13*		.24**		.12*
	Role-conflict	Role-ambiguity	Satisfaction w/role	Satisfaction w/load	Satisfaction w/pace	Satisf. w/control	
Orientation score		.27**	.21**	.13*	.16**		
Highest preference							
Self-stated preference					.14**		
Multiple frames above average	.24**		.18**	.12*	.14*		

* $p < 0.05$. ** $p < 0.01$.

The use of multiorientations ($r = 0.344$) and the number of orientations preferred ($r = 0.289$) both showed similarly significant correlations with the task composite score. Other personal characteristics correlated to the frame scores at a significance of $p < 0.01$. The deans' years of additional administration ($r = 0.177$) showed a positive relationship to the multiple frames above average. The years in the dean position variable ($r = 0.113$) and years of additional administrative work variable ($r = 0.154$) both exhibited positive correlations with the multiple orientation score. The number of staff in the dean's unit showed a significant correlation to a deans' use of multiple orientations ($r = 0.183$) as well as a dean's preference for multiple frames ($r = 0.174$). The task composite score also correlated significantly with the multiple orientation score ($r = 0.52$) and the number of orientations above the average ($r = 0.42$). Interestingly, satisfaction overall appears to be related to the multiple orientation score ($r = 0.28$) and to multiple frames above average ($r = 0.24$). The role-ambiguity score was correlated to all four frames suggesting that as the dean used each frame more, they also tended to know the extent of their authority, responsibility and expectations.

There were also a few interesting correlations between orientation measures suggesting an ipsative nature to the orientations survey. For example, the preference for a structural orientation correlated negatively with the preference for the political orientation ($r = -0.148$) and with the symbolic orientation ($r = -0.195$). Similarly, the preference for a political orientation correlated positively to the preference for a symbolic orientation ($r = 0.246$). A preference for multiorientations was correlated with the self-stated preference (from structural = 1 to symbolic = 4) at a significant level ($r = 0.334$). Crosstabulations of these variables showed that of those deans with a structural high preference, 20% had three

or four frame preferences, compared to 36% of human relations high preferences deans, 50% of political high preference deans, and 88% of symbolic high preference deans. Therefore, having a symbolic or political orientation appeared to be more strongly related to having multiple high preferences than a structural orientation.

Looking further into satisfaction overall and individual orientations found the highest correlation between a political score and satisfaction at $r = 0.29$. Next was a symbolic score ($r = 0.26$), a human relations score ($r = 0.22$) and then structural score ($r = 0.15$). Satisfaction with role clarity was significantly correlated ($p < 0.01$) with all but the structural score and highest with the political score. In contrast, satisfaction with workspace was significantly correlated with all but the human relations score and highest with the symbolic score. Satisfaction with workload was significantly correlated ($p < 0.05$) with only the structural and human relations scores. Satisfaction with control had no significant correlations to any orientation score.

ANOVA. Since several correlations suggested strong relationships between variables, further analysis of means was undertaken to confirm the relationships. Using the multiple orientation score as the test variable, all demographic variables from Table 18 were used as grouping variables in t-tests and F-tests where appropriate. In order to reduce the possibility of Type I errors when using multiple ANOVAS, Tukey HSD adjustments were applied. The variables that resulted in significant mean differences were the additional years of experience group and the faculty size group. The mean orientation score for those with less than mean additional experience was 3.76 compared to a mean score of 3.88 for those with more experience than the mean. This resulted in a t-value of -2.4 which was significant at $p = 0.017$. The ANOVA F statistic for years of additional administration and number of frame

preferences was 4.11 ($p = 0.003$) and was found with Tukey's HSD to be between three frame preferences and all other categories except four frame preferences.

The mean orientation score for those deans ($n = 147$) with less than the median faculty size of 32 was 3.75 compared to a mean of 3.86 for those with a larger faculty size ($n = 150$). This resulted in a t-value of -1.99 which was significant at $p = 0.048$. The task composite score means were also related to multiple frames above average with ANOVA showing an F statistic of 17.57 ($p < 0.001$). As preference number increased from no preferences to four preferences, task score increased from 3.61 to 4.26. Tukey's HSD showed that individual mean comparisons of those deans with no strong preferences were significant with every other dean category of number of preferences ($p < 0.05$). Another point of interest to the study was how these orientation scores matched up with the deans' perceptions of their orientations.

Summary. The majority of deans were oriented toward the human relations frame in both practice and preference. Most deans had one highest orientation score, but they had two orientations above the mean orientation score. The highest paired combination was the structural/human relations frame pair, and the ten highest orientation items involved these two frames. Higher multiple orientation scores showed relationships to lower role-ambiguity scores, higher scores on dean's important tasks, higher years of experience of deans, higher numbers of support staff in the unit and higher measures of satisfaction. The use of multiple orientations was lower for those with structural and human relations preferences than for those with symbolic and political preferences. There was also a higher mean orientation score for those deans with more full-time faculty than the median of 32.

Perceptions of Frames among Academic Deans

The highest frames detailed above were compared to deans' perceptions of their highest preference. Two-thirds of deans' perceptions of highest orientation frame were correct, while a third of deans' perceptions did not match. Those deans who did match their frames correctly did not correlate any differently to measures of stress than deans with a mismatch. The following crosstabulation in Table 19 suggested this result as well.

Table 19. Stress group compared to mean stress and recognition of orientation.

Number of deans in group	Recognition of preference group	
Stress group by mean	Recognition	Nonrecognition
Below mean stress ^a	113 (66.9%)	56 (33.1%)
Above mean stress ^a	97 (65.9%)	50 (34.0%)
Total	210 (66.5%)	106 (33.5%)

^aMean total stress for deans was 2.54 on a five-point scale(1 = slight, 5 = high).

Recognition of highest preference was related to the type of orientation found to be the dean's highest frame. Having human relations as the highest preference accounted for almost two-thirds of the recognition matches with structural accounting for about one-fourth. Human relations preferences also accounted for 50% of the recognition nonmatches as well, however, with structural accounting for about one-third. In addition, almost three-fourths of those with human relations as the high preference recognized that this was their preference, and those with the structural frame as high recognized this at a rate just under two-thirds. In contrast, only half of each of the political and symbolic high orientation deans recognized this as a preference.

Correlations and Means. A few interesting correlations to recognition of preference were found. Recognition was labeled a 1 while nonrecognition was labeled with a 2. At a significance level of $p < 0.01$, nonrecognition of frames was correlated to a higher use of

multiple orientations ($r = 0.166$) and also correlated to multiple frames above average ($r = 0.155$), suggesting that the highest orientation is not perceived correctly when more orientations are used. In addition, the number of support staff ($r = 0.176$), number of full-time faculty ($r = 0.182$) and number of total faculty ($r = 0.145$) were positively and significantly related to preference nonrecognition at $p < 0.01$. This result suggests that when working with more people, deans did not correctly distinguish their high frame. The preference variable was not correlated to any of the stress variables, the role-conflict or role-ambiguity variables, nor age, gender, marital status or years of experience variables.

The different frames of deans are associated with some differences of scores on the Bolman and Deal leadership orientations measures and to other variables such as the number of faculty and staff in the unit. The other variables related to the size of the institution such as number of students and total number of faculty did not appear to be related to orientation frames. Gender does not show significant mean differences across the variable of recognition of preference. Neither the number of years of experience as dean or overall, nor any of the satisfaction or role variables showed significant mean differences when grouped by recognition of highest preference. Surprisingly, recognition of preference suggests lower orientation scores and lower use of multiple frames. This variable had been hypothesized to be related to higher orientation scores. Table 20 shows some of the interesting variable means when grouped according to recognition of preference.

The structural, political and symbolic subscores showed significant mean differences ($p < 0.01$) when grouped by recognition of highest preferences as shown in Table 20.

Table 20. Variable means compared across match preference to stated preference.

Variable	(n)	Ratio	Mean	F or t	σ
Total stress ^a					
1. Recognition	211		2.53		0.61
2. Nonrecognition	106		2.57		0.72
		t		-0.45	
Multiple orientation score ^a					
1. Recognition	211		3.75		0.45
2. Nonrecognition	106		3.91		0.47
		t		-3.04**	
Use of Multiple Frames ^a					
1. Recognition	211		3.31		0.53
2. Nonrecognition	106		3.51		0.62
		t		-2.99**	
Multiple Frames above average ^b					
1. Recognition	211		1.97		1.27
2. Nonrecognition	106		2.41		1.39
		t		-2.69**	
Task ^a					
1. Recognition	211		3.96		0.50
2. Nonrecognition	106		4.84		0.44
		t		-1.87	
Number of Staff					
1. Recognition	211		4.90		4.34
2. Nonrecognition	106		6.97		7.24
		t		-2.71**	
Full Time Faculty					
1. Recognition	194		36.86		30.93
2. Nonrecognition	101		49.70		36.69
		t		-3.01**	
Structural Subscore ^a					
1. Recognition	211		3.82		0.54
2. Nonrecognition	106		4.03		0.49
		t		-3.28**	
Human Relations ^a					
1. Recognition	211		4.16		0.52
2. Nonrecognition	106		4.10		0.52
		t		0.94	
Political Subscore ^a					
1. Recognition	211		3.50		0.58
2. Nonrecognition	106		3.75		0.55
		t		-3.75***	
Symbolic Subscore ^a					
1. Recognition	211		3.51		0.61
2. Nonrecognition	106		3.76		0.57
		t		-3.58***	

^aMean on a five-point scale. ^bMean on a four-point scale.

p < 0.01. *p < 0.001.

The means are lower for these orientations when the dean recognized his/her own preference. The number of multiple frames above average was also significantly lower when the dean recognizes an orientation preference. In contrast, the human relations subscore did not show a significant mean difference across this variable, but in fact was slightly higher for those who recognize a preference.

Summary. Deans appeared to know their high preference best when it was the human relations frame and second best when it was the structural frame. Dean recognition of their preferences did not appear to be related to stress means or other demographic variables. However, recognizing one's preference did suggest lower measures of multiple orientation scores and also showed a relationship with being at a college with fewer support staff and faculty in the dean's unit.

Leadership Frames and Stress

The major focus of this study was to investigate the relationship between leadership orientations and stress. The earlier results identified the general profile of the community college academic deans and also provided a profile of the orientations and stresses of the deans. The next step was to examine some of the interesting relationships between frame orientations and stress. When groups of deans are compared with regard to being above or below the mean stress of 2.54, deans with more frames above the multiframe average of 3.8 showed a greater likelihood of being in the lower stress group. The ratios increased notably for the data crosstabulated in Table 21.

If the high preference(s) was one that included a structural or human relations orientation, there was a greater chance that the dean would be in the higher stress group

Table 21. Stress groups of deans compared to multiple frames above average.

Stress Group	No strong preferences <i>n</i> = 35	One preference <i>n</i> = 81	Two Preferences <i>n</i> = 87	Three Preferences <i>n</i> = 39	Four Preferences <i>n</i> = 76
Stress below mean ^a	19	39	46	22	43
Stress above mean ^a	16	42	41	17	33
Ratio below/above	1.18	0.93	1.07	1.29	1.30

^aMean total stress was 2.54 on a five-point scale (1 = slight, 5 = high).

Because, as stated earlier, these deans were more likely to have only one frame of preference. In contrast, if the high preference(s) was one that included a political or symbolic orientation, the dean was more likely to be in the lower stress group. Moreover, Table 21 shows that having three or four of the orientations gave deans a higher chance of being in the lower stress group. Also, possession of no preferences for orientations gave deans a better chance of being in the below mean stress group than if they had one set preference. Interestingly, having a human relations high orientation led to the highest chance of having more of the deans' stress come from work than from the other frames. Table 22 shows this stress result in detail. Further crosstabulations between deans' self-stated preference and stress showed similar ratios to these tested high preferences.

Correlations. Correlations significant at $p < 0.01$ between orientations and stress variables also suggested relationships. In particular, the deans' assessment of their overall stress correlated negatively to the multiple orientation score ($r = -0.222$) and to the multiple

Table 22. Stress percentage from work compared to highest frame preference.

Stress % Group	Structural <i>n</i> = 96	Human Relations <i>n</i> = 212	Political <i>n</i> = 28	Symbolic <i>n</i> = 25
Work stress below 50%	54	93	16	17
Work stress above 50%	42	119	12	8
Ratio below/above	1.28	0.78	1.33	2.13

frames above average ($r = -0.157$). The total stress score correlated similarly to the multiple orientation score but not to frames above average. The amount of stress from the job also correlates to some of these variables as seen in Table 23. Following up with ANOVA, the mean stress percentage of those with a human relations high preference is 59.41 compared to a 50.59 mean for those with a structural high preference. The means were significant at $p < 0.05$. No other significant mean differences across highest frame were found.

Table 23. Stress correlation coefficients to orientation variables.

Stress Variable	Orientation Score	Orientation Preference	Orient. Use	Highest Preference	Self Preference	Frames Above Average
Total stress	-0.19**					
Assess stress	-0.22**			-0.16**		-0.16**
Percent stress	-0.18**			-0.17**		-0.16**

* $p < 0.05$. ** $p < 0.01$.

For two of the substress measures, orientation scores suggested interesting and significant relationships at $p < 0.01$. The preference for a structural orientation correlated negatively to the faculty stress composite ($r = -0.170$), and the preference for a human relations frame correlated negatively to the relationship stress composite ($r = -0.174$).

Table 24 shows the correlation coefficients for stress variables and individual

Table 24. Stress correlation coefficients to individual orientations.

Orientation Variable	Structural	Human Relations	Political	Symbolic
Stress variable				
Total stress	-0.15**	-0.20**	-0.16**	-0.13*
Assess stress	-0.16**	-0.17**	-0.20**	-0.20**
Percent stress	-0.19**		-0.19**	-0.13*
Task stress	-0.14*	-0.15**	-0.13*	-0.13*
Role-ambiguity stress	-0.17**	-0.22**	-0.17**	-0.14*
Faculty-role stress	-0.17**	-0.11*	-0.22**	-0.19**
Perceived expectations stress				
Administrative relationship stress	-0.12*	-0.27**	-0.17**	-0.13*

* $p < 0.05$. ** $p < 0.01$.

orientations. Almost all four frames had negative correlations to the stress variables at less than the $p = 0.05$ level as shown in Table 24. The substress variable perceived expectations stress did not have any significant correlations, however. For example, faculty-role stress was not as strongly correlated to the human relations orientation as to the political orientation; role-ambiguity stress was not as strongly correlated to the symbolic orientation as to human relations; and administrative relationship stress was not as strongly correlated to structural or symbolic orientations as to the human relations.

Regression. The pattern of correlations reported in Table 24 suggested that the level of total stress felt by the deans could be partially predicted by knowing their multiple orientation scores. The higher the orientation score, the lower the total stress score for the deans. To determine the influencing variables on stress using the orientation variables as independent variables, the eight variables of total stress, assessed stress, percent stress from job, and each of task, role, faculty, perceived, and relationships stress were each regressed as the dependent variable. Regression was completed in a forward stepwise process against the independent variables of multiple orientation score, multiple frames above average, highest tested frame, self reported highest frame, and recognition of highest frame. A second grouping of the eight stress variables against the four individual frames was then completed.

All significant influencing variables in the stepwise regression were significant at $p < 0.001$. The stepwise regression analysis for the first group identified the multiple orientation score, and multiple frames above average as the predictor variables with significant influence on total stress and task stress. They accounted for above 6% of the variation in stress.

Multiple orientation score and highest preference were the significant predictor variables for

the deans' assessed stress (7%) and percent of stress from work (5%). For role-ambiguity stress, and administrative relationships stress, only the multiple orientation score was a significant predictor with about 5% of the variance explained for both. Interestingly, the faculty-role stress dependent variable was influenced by all three mentioned orientation variables accounting for 10% of this stress. No orientation variables significantly influenced perceived stress. Recognition of preference and self reported highest frame had no significant predictive power on measures of dean stress.

The regression of the eight dependent stress variables against the four orientation frame scores revealed some differing influences on the deans' stress scores. For the total stress dependent variable, each of the four orientations were predictor variables at a significance level of $p < 0.02$. Each accounted for a percentage of variance in total stress in order of human relations frame (4 %), political frame (2.5%), structural frame (2.1%), and symbolic frame (1.8%). For the dependent variable of assessed stress, only the political orientation was influential ($p < 0.001$) and accounted for about 4% of the stress. For the percent of stress from work variable, only the structural orientation was influential ($p < 0.001$) accounting for 4.1% of this measure of stress. For the substress scores, task, role, and relationships stress were influenced only by the human relations orientation all at a significance level below $p = 0.01$. The perceived stress was not influenced by any of the orientations. About 3 to 5 % of the variance in these substress scores was predicted. Interestingly the faculty stress score was influenced only by the political orientation ($p < 0.001$) with 7% of this stress variance accounted for.

Summary. The possession of multiple frame preferences correlated to and influenced different categories of dean stress. Having only one solid frame preference appeared to be associated more with dean stress than even possession of no preferences at all. The regression analysis suggested this result because as a dean moves more toward just a human relations preference, which many deans had as their only preference, total stress was influenced upwards. However, the way deans assessed their stress and denoted their percentage of stress from work were not influenced by the human relations orientation. The dean's political orientation score appeared to influence both how deans assess their stress and the amount of faculty stress that they report.

Leadership Orientations and Stress with Other Selected Factors

Since some interplay between orientations and stress was found, other characteristics were studied for interactions as well to achieve a more predictive model of stress. A major goal of the study is to determine the variables that influence stress including leadership orientations, demographic variables, and institutional variables. To determine these variables, one-way analyses of variances were performed on measures of the deans' total stress with different variables. Since total stress was found to be associated with all four orientations and a stress model was influenced by all four orientations, this was the dependent variable chosen for these means tests. In addition, this stress variable has been associated with a test whose reliability for measuring stress has been established in other research (Gmelch & Swent, 1994; Sarros, et al., 1999). The other stress variables were found to have some similar stress relationships, but not to the influential degree that these variables had with the total stress variable.

ANOVA. Notably, the stress variable regarding percentage of stress from work showed some significant mean differences when subjected to ANOVA and the variables of multiple frames above average and satisfaction with control. For the variable of multiple frames above average the F statistic was 2.71 ($p = 0.030$) and Tukey's HSD showed that the difference was significant only between those deans with one frame preference and four frame preferences.

For the variable of satisfaction with control, the F-statistic was 14.66 ($p < 0.000$) and Tukey's HSD showed that the differences were between those satisfied with their control and all of the other satisfaction categories at $p < 0.005$. The ANOVA statistics are shown in Table 25. Multiple ANOVA was performed with regard to the variables from Table 25 with special attention given to those variables suggesting an influence on the total stress dependent variable. One multiple ANOVA of interest to the total stress variable suggested an interaction with multiple preferences above average and the faculty group above/below the median number. The F-statistic for these variables' interaction was 3.31 ($p = 0.012$) and suggested that there may be stress differences for the deans across multiple preferences and faculty size combinations. No other significant interactions were found among the demographic and orientation variables.

Regression. The eight dimensions of stress were regressed against a block of 27 personal variables in a forward stepwise procedure. Next the dimensions of stress were regressed against the seven institutional variables. Finally the eight stress variables were regressed against all 41 demographic, institutional and orientation variables. Table 26 presents the data for multiple R's, R²'s and the F-tests for the personal demographic variables identified as being significant to the dependent variable's regression equations. The

Table 25. One-way ANOVA for mean total stress of deans by selected variables.

Demographic Variable	(n)	Ratio	Total stress mean	F or t	σ
Gender					
1. Male	170		2.59		0.63
2. Female	147		2.49		0.66
		t		1.38	
Appointment					
1. Internal	213		2.57		0.63
2. External	105		2.49		0.67
		t		1.14	
Satisfaction with level of scholarship ^a					
1. Satisfied	177		2.44		0.63
2. Dissatisfied	123		2.70		0.67
		t		-3.49***	
Age Group					
1. Below 52	156		2.56		0.63
2. Above 52	157		2.54		0.67
		t		0.11	
Marital Status					
1. Married	255		2.58		0.63
2. Single	62		2.39		0.68
		t		2.09*	
Faculty Group					
1. 0-32	147		2.50		0.68
2. > 32	150		2.61		0.60
		t		-1.50	
Staff Group					
1. 0-4	154		2.53		0.63
2. >4	156		2.56		0.66
		t		-0.37	
Years of Additional Administration Group					
1. 0-4	203		2.56		0.67
2. >4	116		2.52		0.61
		t		0.47	
College Type					
1. Technical	48		2.68		0.67
2. Transfer	45		2.69		0.71
3. Community	225		2.49		0.62
		F		1-3, 2-3	

^aMean on a five-point scale. ^bMean on a four-point scale.

*p < 0.05. **p < 0.01. ***p < 0.001.

Table 25. (continued)

	(n)	Ratio	Total stress mean	F or t	σ
Satisfaction Overall ^a					
1. Dissatisfied	3		3.02		0.13
2. Somewhat Diss.	22		2.80		0.71
3. Neutral	85		2.84		0.59
4. Somewhat Satis.	153		2.50		0.57
5. Satisfied	54		2.10	14.25***	0.66
		F		5-2, 5-3, 5-4, 3-4	0.65
Role-conflict Group ^b					
1. Below Median	160		2.28		0.58
2. Above Median	159		2.81		0.60
		t		-8.16***	
Role-Ambig.Group ^b					
1. Below Median	158		2.66		0.61
2. Above Median	160		2.43		0.67
		t		3.21**	
Satisfaction Control ^a					
1. Dissatisfied	30		2.63		0.78
2. Somewhat Diss.	65		2.79		0.58
3. Neutral	86		2.79		0.51
4. Somewhat Satis.	87		2.33	15.9***	0.59
5. Satisfied	49		2.10	5-1,5-2,5- 3, 4-2, 4-3	0.63
		F			
Reason Chosen for position					
1. Growth	64		2.49		0.81
2. Change	76		2.60		0.62
3. Crisis	34		2.29		0.57
4. Programs	125		2.60		0.57
5. Interim	19		2.60		0.68
		F		1.86	
Multiple Frames over Average					
1. No frames	35		2.61		0.77
2. One frame	82		2.62		0.50
3. Two frames	87		2.53		0.59
4. Three frames	39		2.48		0.61
5. Four frames	76		2.46		0.79
		F		0.935	
Recognition of Frame					
1. Recognition	211		2.53		0.61
2. Nonrecognition	106		2.56		0.72
		t		0.20	

Table 25. (continued)

	(n)	Ratio	Total stress mean	F or t	σ
Presence of Mentor					
1. No	122		2.55		0.66
2. Yes	194		2.54		0.64
		t		0.00	
Role Perception					
1. Administrator	224		2.52		0.64
2. Faculty	14		2.76		0.68
3. Both	80		2.58		0.63
		F		0.98	
College Location					
1. Rural	135		2.54		0.63
2. Suburban	100		2.58		0.69
3. Urban	83		2.50		0.62
		F		0.33	

stepwise regression for the demographic block of variables identified that a dean's role-conflict score was a major influencer of all eight stress variables. In addition, the variables of satisfaction overall, scholarship satisfaction and satisfaction with workload, control, and role clarity contribute to many of the stress variables. A deans' marital status affected total stress,

Table 26. Demographic variables influencing regression models of stress types.

Stress Variable	Regression Model Variables in order of importance	R	R ² * 100	F
Total stress	Role-conflict score, Satisfaction overall, Job loyalty, Marital status, Scholarship satisfaction	.562	31.6%	26.38***
Assess stress	Satisfaction overall, Role-conflict score, Satisfaction of work load, Role at college, Scholarship satisfaction	.585	34.2%	29.60***
Percent stress	Satisfaction with work load, Satisfaction overall, task score, Role at college, Role-conflict score	.557	31.0%	25.12***
Task stress	Role-conflict score, Job loyalty, Satisfaction overall, Marital status	.503	25.3%	17.66***
Role stress	Role-conflict score, Satisfaction overall, Age, Scholarship satisfaction, scholarship level change	.587	34.4%	30.01***
Faculty stress	Satisfaction overall, Scholarship satisfaction, Marital status, Role-conflict score	.396	15.7%	13.28***
Perceived stress	Role-conflict score, Satisfaction with control	.415	17.2%	30.01***
Relation. stress	Satisfaction with role clarity, Role-conflict score, Marital status, Race, Years in position	.621	38.5%	36.06***

***p < 0.001.

task stress, faculty-role stress, and relationship stress. A dean's loyalty to the college influenced the total and task stress variables. A dean's assessed role at the college as faculty, administrator or both also affected the assessed and percent of stress from work variables. Task score interacted with percent of stress from work, age interacted with role stress, and race, presence of mentor, and years in position interacted with relationships stress. The demographic variables accounted for variation in stress from a low of 15% (faculty-role stress) to a high of 38% (administrative relationship stress).

The stepwise regression for the institutional variable block identified only two variables with influence on the stress measures. The college type variable (technical = 1, transfer = 2, and community = 3) was found to influence the total stress (4.6% of variance explained) and percent of stress from work variables (5.2% variance explained). The college type variable also influenced all substress measures except faculty stress. In particular college type accounted for 2.7% of task stress, 3.5% of role stress, 4.0% of perceived stress, and 3.7% of relationship stress. The number of staff in the unit was found to influence the amount of stress assessed by the deans. For this model, $r = .155$ with 2.4% of assessed stress accounted for by college type.

Table 27 shows the data for all 46 independent variables significant to the eight stress regression equations. The stepwise regression for all demographic and orientation variables identified larger models of influence on the stress measures. Table 27 shows the independent variables that made up the stepwise regression models for the dependent stress variables. No new model differences were found for the administrative task stress variable.

The stress variable regression models shown in Table 27 still are influenced by satisfaction variables, but five of the eight variables were also influenced by orientation

Table 27. Orientation variables and demographics influence on stress models.

Stress Variable	Demographic Variables with influence	R	100*R²	F statistic
Total stress	Role-conflict score, Satisfaction overall, College type, and Marital status, Highest orientation	.608	37.0%	30.70***
Assess stress	Satisfaction overall, Satisfaction with workspace, Highest orientation preference, Role at college, Scholarship level change, and Structural score	.622	38.6%	14.59***
Percent stress	Satisfaction work load, satisfaction overall, role-conflict score, role at college, highest orientation, structural score, task score	.611	37.3%	17.01***
Task stress	No Change from Demographic model	See Table 26		
Role stress	Role-conflict score, Satisfaction overall, Number of staff	.636	40.4%	47.48***
Faculty stress	Satisfaction overall, Highest orientation, Number of full-time faculty	.416	17.3%	9.93***
Perceived stress	Role-conflict score, Satisfaction with control, Full time faculty, Task score, Satisfaction overall	.527	27.8%	16.03***
Relations. stress	Satisfaction with role clarity, Role-conflict score, Human relations score, Marital status, Job loyalty, and satisfaction overall	.641	41.0%	33.07***

*** $p < 0.001$.

variables. Adding the institutional and orientation variables increased stress model explanations from 2% (faculty-role stress) to 10% (perceived expectations stress). Total stress, assessed stress, percent stress and the substress faculty-role stress were influenced by highest orientation preference. The assessed and percent stress categories were also influenced by the structural scores of the deans, and the relationship stress category was influenced by the deans' human relations score. Almost 40% of the variance in a deans' own assessment of stress was accounted for by these two orientation variables together with satisfaction overall and work pace, and the self-role viewed by the deans.

The orientation variables added about 4% explanation to the assessed stress and 6% to the percent of stress from work score. Adding college type and highest orientation to the total stress model increased the total stress model by 5%. For role stress, when some variables were replaced by number of staff the model explanation increased by 5.5%. The

number of full time faculty also added explanation to the faculty stress and perceived expectations stress models. Orientation variables did not appear to interact significantly in models of task stress, role stress, and perceived expectations stress.

Summary. The results of the data analysis identified a general profile of the academic deans at community colleges across the nation. These deans had moderate stress and moderate role-conflicts, but those that have higher role-conflict and lower satisfaction in their jobs also showed higher stress. The dominant leadership orientation of these deans was the human relations orientation, and there was a significantly more common use of multiple frame preferences exhibited by the deans who were more satisfied. Most notably, the study determined that a significant negative correlation exists between having an orientation towards multiple frames and measures of stress. Thirty-seven percent of the amount of total stress variance a dean described can be predicted by measures of multiple orientations in combination with selected demographic and institutional variables. Substress measures can be similarly modeled except for faculty-role stress variance that was explained at about the 17% level.

The role of the academic dean in community colleges is demanding and multifaceted. The ability to control interactions, tasks and other work demands appears to be related to the use of multiple orientations. However, some of the highest influences on stresses appeared to be more typically unmanageable even by the most flexible of leaders, such as work load, and college type. The implications found in this study in the relationship between stress and leadership orientations will be further discussed in the next chapter. Chapter 5 summarizes the study, makes conclusions based on this chapter's results, and makes recommendations for further study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The initial two chapters of this dissertation introduced the need for this study, described the problem to be addressed, and identified a basis for the study through a literature review on community college academic deans as well as leadership orientations and stress. The third and fourth chapters described the methodology employed in the study and presented the results of the data obtained from the *2000 National Survey on Community and Technical College Academic Deans*. The final chapter presents a summary of the key points of the dissertation, discusses findings and conclusions obtained from the data analysis, and makes recommendations for further research related to the issues of academic deans, leadership orientations, and stress.

This was a study about the leadership of academic deans in two-year colleges across the nation and the conditions that relate to the stress and leadership orientations of those deans. One guiding research question in educational leadership has been to determine what kind of leaders are right for what kind of situations, but this question has yet to be answered (Hoy & Miskel, 1991). Part of the answer may be revealed by determining which leaders are more satisfied and less stressed in their leadership positions. The increased responsibilities of academic deans in higher education, and the career trajectories of deans to higher administration are two reasons that the deanship should be studied with regard to the effects of recent changes to their satisfaction and stress (McCarty & Reyes, 1987; Tucker & Bryan, 1988). A rationale for the study was based on the increasing importance and demands placed

on community college academic deans who are middle manager leaders in higher education. Determining how the stress and demands on deans affected deans and how deans interacted with their tasks and stresses were the primary questions this study investigated.

The literature suggested that the nature of community colleges has been changing. In the past, two-year colleges were rooted in more bureaucratic traditions than four-year colleges (Birnbaum, 1988). Recent reports called for stronger leadership in community colleges as these institutions were being asked to provide more education and services with the same or less funding and resources (American Association of Community and Junior Colleges, 1988; AACJC, 2000; The National Commission on Excellence, 1983). Leadership at these colleges remains important because the leaders of community colleges interact with the diverse entities of students, staff, faculty, higher administration, the community, and governmental bodies. Therefore, the academic deans must possess multiple skills and methods for obtaining information, building consensus, and setting agendas and goals (Baldridge, 1971; Mintzberg, 1983). Since little research has concentrated on determining a profile of these important community college leaders, part of this study was designed to form a current demographic picture of these leaders.

The position of dean, as scholar, as businessperson, and as administrator, has caused the dean to play roles often in conflict with each other. In past research, this aspect of the dean's leadership interacted with the dean's satisfaction, stress and style of leadership. In fact, the role-ambiguity of leaders has been shown to contribute to low job satisfaction, increased stress, and role-conflict for deans at four-year colleges (Gmelch & Miskin, 1993). Recent leadership theory has suggested ways that leaders can cognitively affect their job satisfaction and manage their roles. Bolman and Deal (1991) have asserted that the use of

four frames--structural, human relations, political and symbolic--give leaders more personal control over roles and resources. In this study, relationships between stress, satisfaction, role-conflict and orientations were hypothesized to demonstrate similar relationships for deans at two-year colleges. Bolman and Deal's framing leadership theory was chosen as a basis for this study because of its more comprehensive nature, cognitive base, wide empirical testing, and practicality for higher education leaders.

The leadership frames were primarily investigated for interactions with dean stress measures. Research suggested that stress can be measured over a four-stage cycle: situation, perception, response selection, and behavior. Researchers have studied the leaders' processes of appraisal, decision, performance, and outcomes. The processes have been shown to be affected by the leader's capability, decisions, perceptions and values (McGrath, 1983).

Gmelch and Wilke (1991) expanded on these stages with a Stress Cycle Model that involved the stages of demands/stressors on the leader, perceptions/interpretations by the leader, the responses of the leader, and the consequences to the leader. To measure these stages, a job-related stress scale, specific to higher education, was created by Gmelch and Burns (1991) to reflect the multidimensionality of educational leader stress.

Since a prevalence of stress is a deterrent to effective leadership, knowledge of the stress items and stress levels of academic deans in community colleges was an important aspect of this study. A leader's ability to handle stressful situations has seriously affected leadership ability and can cost organizations time and money (Fiedler, 1967; Gardner, 1990). Other leadership stress studies in higher education had found demographic variables to be of varying importance in understanding leader stress including size of institution, more years of experience, and academic discipline (Anderson & King, 1987; Bowman, 1994; Cantu, 1997;

Warner, 1992). Task scores, role-conflict and role-ambiguity scores interacted minimally with academic dean stress at the university level in another study (Sarros, et al., 1998). Most stress studies of deans have not included community college deans. In this study, demographic, task, satisfaction, and role variables of two-year deans formed an important part of the research on how stress interacts for these deans.

Leader cognition has also been shown to interact with stress and formed an important part of the study. If physical and mental resources are not present in leaders to meet a demand, the demand is perceived as stress by the leader (Gmelch & Miskin, 1993). The current research sought to not only determine the leaders' stress but how they control stress. The leader's anticipation of the "ability to respond adequately to a perceived demand, accompanied by anticipation of a positive consequence for an adequate response" will lead to control of the situation (1993, pp. 136-137). The ability to control situations and therefore stress should be higher if a leader has more leadership frames to use in situations. Therefore, the Bolman and Deal (1984) leadership orientation measures were studied in concert with leader stress to determine if perception of control of situation improves flexibility of control or lessens stress.

The primary purpose of the study was to examine how leadership orientations, based on the Bolman and Deal frames model (1984), affected the job stress that academic deans felt from their jobs. The model described four different frames that leaders use to make sense of a leadership situation, including the structural, the human relations, the political and the symbolic frames. The model suggested that different frames work better with different problems, and more effective leaders often have more than one leadership orientation at their disposal.

This study showed that the dean's possession of more frames predicted lower levels of dean stress probably because they have more control over their approaches and solutions to problems that cause stress. The study not only identified a current demographic profile of community college deans but also determined the primary orientations, tasks, and stresses of the deans. The study found that leadership characteristics such as multiple frame preferences were related to levels of satisfaction, stress and role-conflict felt by these leaders. Specifically, this study addressed the following research questions:

1. What is the current community college academic dean demographic profile including task, role and stress characteristics?
2. Which and how many leadership frames (Bolman & Deal, 1984) are most commonly used by academic deans at the community college?
3. Do community college deans recognize and perceive correctly the frames of leadership they use most prominently?
4. Are there significant differences between the leadership frames employed by community college academic deans with lower and higher measures of stress than the average?
5. Are there significant differences between the leadership frames of academic deans with low and high measures of stress when deans are compared according to demographic variables including their number of years of experience, their gender, and/or the size of their institution?

The population selected for the study included all technical, transfer, and community college academic deans at the desired institutions identified from the 2000 membership directory of the AACC, numbering 959 institutions. The study found that 750 deans at 394 sample institutions suggested the population size of all two-year academic deans to be approximately 1822 academic deans in the population of the 959 colleges.

After pilot testing the survey among a small number of and former academic deans, survey packets were mailed to current deans at each campus. The packet included previously used task, stress and role-conflict instruments as well as the self-portion of the Leadership Orientations questionnaire by Bolman and Deal (1984). After postcard reminders and telephone follow-ups with the deans, a total of 324 deans responded for a dean response rate of 46%, a college response rate of 52% and a state response rate of 92%.

The demographics portion of the survey resulted in 37 personal, professional, and organizational characteristics of the deans including a task score, a role-conflict score and a role-ambiguity score. Eight stress variables were obtained from the survey based on 44 stress items. The leadership orientation portion of the survey contained 32 frame items from which four frame means, a multiple orientation score, and four other orientation variables were obtained. Open-ended questions were also included in the surveys to allow respondents to comment about the key concerns they felt their jobs as deans involved.

The statistical techniques used to analyze the data included correlation analysis, analysis of variance (ANOVA) and stepwise regression analysis. Tukey's HSD post hoc test was employed for those ANOVA where several categories might be significantly related among each other. The study determined relationship levels between orientation scores of: tested leadership orientation, self-perceived orientation, flexibility of orientation, and demographic variables as the independent items with the eight measures of job-related stress for the academic deans as the dependent variable. In addition, the demographics variables were analyzed for relationships in order to more fully describe a general profile of academic deans at these institutions.

An underlying motive for this study was the intent that the study contribute to a greater understanding of leadership at two-year colleges and the levels of stress of academic deans. Leaders in higher education may use this study to gain information about leadership orientation interactions with satisfaction and stress.

Conclusions

Personal Demographics. The general profile of the deans participating in this study showed a surprisingly narrow gender gap with about 54% of the respondents being male and about 46% of the deans being female. This gender gap is smaller than that found in recent dean studies at the 4-year college level in which the gap was as large as two males to one female (Anderson & King, 1987; Sarros, et al., 1998). The result suggested that the deanship at community colleges is reaching equality among gender faster than observed in research of other branches of higher education. In race/ethnicity demographics, however, minorities made up only 8% of the deans with Hispanic deans accounting for the largest group at 3.5%. While the deanship might be breaking the gender gap, a large race gap was still apparent at these colleges.

Almost half of the deans were between the ages of 47 and 55, and about 80% were married, consistent with other studies of the deanship (Anderson & King, 1987; Bowman, 1994; Wolverton, et al., 1997). Also similar to these other studies, the deans had about five years of dean experience on average and as might be expected, older deans had a higher number of years being dean and more years of additional administrative experience. Older deans were also likely to have greater numbers of support staff, but did not necessarily have the largest faculty size at their institutions. The number of faculty in these dean units varied

substantially and was higher at comprehensive colleges than at either transfer and technical colleges. As expected, most of the deans worked in the more prevalent comprehensive community colleges, which offered both transfer and technical programs to students.

This study found that a large number of deans (61%) had received the benefits of a mentor and about the same number (66%) were chosen from inside the organization, suggesting that the colleges were investing in their leaders through mentorship. The colleges also found faculty qualified to be leaders. Another possibility was that with over 42% of the deans at rural colleges, these institutions were having difficulty finding qualified deans outside of the institution. Interestingly, most colleges were hiring deans who would help sustain academic programs although significant numbers had also been chosen for the purposes of facilitating change, dealing with growth, and dealing with crises. The large and varied responses to the hiring categories suggested that the dean's role varied significantly from college to college depending on the college's current circumstances. These circumstances may have resulted in different stress and leadership frame outcomes.

A significant percentage of the deans also possessed or perceived themselves in various roles as almost 25% of the deans suggested they were both administrators and faculty. The role-conflict and role-ambiguity means for all deans are near neutral, however, which suggested that overall the deans are juggling their roles moderately well if not effectively. Deans who were hired for change purposes or as interim deans had the highest role-conflict levels. Clearly, prospective deans should have knowledge of different leadership roles to prepare to take on their differing college needs.

The largest percentage (38%) of deans saw a move to higher administration in their future, which suggested that deans were not necessarily satisfied with the deanship as an

endpoint. This result also suggested they were not frustrated with their administrative roles either. This study also found that 20% of deans were both planning on retirement or planning no movement as their next move which suggested that many deans were satisfied with the deanship as an endpoint in their careers. As further evidence of their satisfaction, these deans had lower role-conflict and role-ambiguity scores. As the college type changed from a technical college to the comprehensive college, deans were more likely older, single and also more satisfied with their role. Overall, the deans were typically married, most worked at comprehensive community colleges and the deans had an average of 41 full-time faculty in their units. Since the same percentages of both male and female deans chose a technical college, transfer college or comprehensive college, the growing gender equality extended across college type.

Tasks and Satisfaction. The dean's task scores suggested that they have to balance the divide between higher administration and faculty. The tasks emerged to show that these middle managers were important to the institutions, and that they had many diverse tasks. Task analysis showed that the deans were the leaders who implement the details of policy as other research has shown for academic deans (Trice & Beyer, 1993). The deans' highest-rated tasks involved working with the faculty on teaching, giving evaluations and creating college climate, but also involved the administrative tasks of communicating the plans of administration and evaluating faculty work. The deans created budgets and accomplished many tasks that can be viewed as time-consuming. They have lower priority for tasks that involve their own scholarship and rarely work with external constituencies. The tasks showed that academic deans at two-year colleges often can be considered to be the "highest among equals," and their tasks are also related to scores of both role-conflict and role-ambiguity.

ambiguity. According to the low task item score, the deans did not plan many meetings, but the stress items analysis suggested that meetings still caused much of dean stress. These results taken together suggested that a number of the meetings and perhaps other tasks of the deans are not necessarily controllable by the deans themselves but instead formed part of the workload created from above or below them. In a bureaucratic institution like a community college, the authority of middle managers to control resources and manage outcomes to protect the public interests is more limited than in a private organization. This study suggested that these deans do show this gap between having the responsibility for outcomes without the authority to determine all the processes to achieve outcomes. Such a gap likely created moderate stress as the Stress Cycle Model would predict (Gmelch & Wilke, 1991). That the task load of deans was rated towards somewhat dissatisfied suggests a possible lack of control over the amount of work they undertake. This finding was the initial evidence in this study that found that a dean's workload had significant relationships to a dean's stress, frame orientations and satisfaction.

Other satisfaction variables also gave insight into the dean's effectiveness. Despite their varied roles, deans were moderately satisfied with their overall position and role clarity. Deans with more experience, and more staff and faculty were more satisfied overall perhaps because they had more relationships or more distribution of the workload. About 60% of deans were satisfied with their scholarship level and for most deans (75%) this level was the same or less than their previous level before becoming a dean. If the scholarship level had changed, the dean was likely to have more role-conflict perhaps because the dean had come from an institution with more or less scholarship. Older deans appeared to be more satisfied with their scholarship level. As in findings by Bowman (1994), perhaps older deans, who

were likely to be responsible for larger organizations, had more responsibilities and less time for scholarly work, but were not dissatisfied with less scholarship. This finding revealed an emphasis on instruction over research among older deans at the community college level.

The deans were somewhat satisfied in their control and their work pace, more satisfied than they were with their workload. Female deans tended to be more satisfied than male deans with regard to overall job satisfaction but were less satisfied for the area of scholarship. This difference was not correlated to a level of scholarship change in the female dean, but perhaps to the fact that more female than male deans were single, and they wished more time or presence of scholarly activities. Significantly more single deans were dissatisfied with their scholarship than married deans who perhaps had more prevalent family concerns than scholarly ambitions. Female deans also tended to have smaller faculty size and support staff size, a result that suggested that even though deans were about equal in gender percentages, they were not equal across gender in degree of responsibility in their units.

As the deans self-reported more control with their jobs, they had higher satisfaction replicating previous studies (Mintzberg, 1983; Trice & Beyer, 1993). For these academic deans, this study reproduced some of the satisfaction relationships of studies of other higher education leaders, showed some task differences compared to these other leaders, but also showed that the deans completed many diverse tasks and were moderately satisfied.

Stress. This study also found that community college academic deans had moderate to low levels of stress in all stress categories. The highest type of stress was faculty-role stress. This finding indicated that part of a deans' role-conflict may involve a perception of lack of recognition for achievements and performance in the tasks of evaluating faculty, handling faculty and student conflicts, and working on academic self-progress. The second

highest stress, also above the mean total stress, was task stress or the everyday duties of deans. and suggested that workload was a major factor in the stress of deans. Together with some high expectations imposed on themselves, these stress levels were related to less personally controllable events. The imposed meetings, workload, paperwork, drop-ins and conflicts were often outside of the dean's authority to delegate, and created the highest stress items. The deans did not appear to feel the pressure for better performance externally, and most felt they had done a good job overall, but the deans were not perceiving enough praise for their work. While the total stress composite indicated lower average levels of stress than the theoretical mean of 3.0, the deans' mean self-assessment of their stress was somewhat higher than the mean, and the percentage of stress from work was slightly above half of all stress. Deans tended to reduce their role-stress and their assessment of their overall stress as they gained experience or aged. Perhaps these deans have improved the management of their roles between faculty and administration. In addition, because they had more frames to choose from as they gained experience, they may have increased their effectiveness, as other leadership studies have suggested occurs with the use of multiple frames (Bensimon, 1989; Gilson, 1994; Warner, 1992).

There were no correlations between number of faculty or students at the college with any type of stress. Most of the variables related to the size of the institution did not appear to affect the stress of these deans either. However, as the support staff increased, the deans' lower percent of stress from work, role stress, and assessed stress appeared to relate to increased feelings of control and understanding of role. Having a support staff may have helped separate the administrative dean from the role of faculty as well as lighten the workload. Additional years in the dean position likely helped the deans foster positive

relationships with both sides of the aisle as observed in the lower faculty-role and administrative relationships stress levels. More experience also related to less role-ambiguity stress, but was not necessarily related to lower overall stress on the DSI, perhaps because these deans had more and varied tasks adding to stress. Marital status affected administrative relationship stress and faculty-role stress with single deans having lower stress levels. Single deans probably had more flexibility to transact coworker interactions, had less external pressure to receive recognition, or had more time to complete more of their tasks than their married counterparts because of reduced family pressures or more role flexibility.

At the time of this study (April/June, 2000), most community colleges were likely experiencing in a demanding and stressful time of the year for academic deans because of the closing of the academic semester, the end-of-year budget closing, and the faculty changes that come at the end of academic terms. Despite this possibly stressful time of year, the academic dean stress measures were moderate as measured on the DSI instrument. This result is encouraging compared to higher levels of stress found in studies of department chairs (Gmelch & Burns, 1991) and university administrators (Gmelch & Wilke, 1991). Similar low stress results were seen in four-year college academic deans in California but were attributed by the author in part to the fact that 99% of the sampled academic deans were tenured faculty whose job ineffectiveness was not as highly consequential or stressful to the deans (Bowman, 1994).

A concern with the lower stress results might be whether the stress measures reflected reality or were a result of how deans were choosing to answer the stress questions. However, the low standard deviations for all of the stress measures indicated that the responses of the sample as a whole were consistent and suggestive of low stress.

Leadership Frames. This study showed that the primary leadership frame of deans at community colleges was the human relations orientation. In contrast to the study of community college presidents (Bensimon, 1989) that found most of the leaders using the structural frame, administrators at the dean level were more likely to value a relationships leading style and sought to lead through facilitation or by fitting the organization to the people. Previous research had suggested that leaders using appropriate human relations leadership in the right settings could accomplish more than with directive leadership, and this result was borne out in the significant correlations between the use of human relations and task scores (McCarty & Reyes, 1987; Thor, et al., 1998). Perhaps in the middle manager situations requiring multiple roles, a human relations frame is instrumental to relating and controlling effectiveness within competing agendas. That a majority of deans used this primary frame gave a glimpse of community college culture. Human relations frames work best where there is an unstructured task structure, when leaders have weak position power and with leaders who elicit good relationships (Galbraith, 1994). The community college deanship has been described as a role in which lines of authority are not well-established and where tasks are not always controllable. This finding and other survey data suggested that the academic deans overall had good relationships with superiors and subordinates.

Interestingly, for each of the four orientation frames, the deans' average score was higher than the theoretical mean of three on the five-point scale, and the average multiple orientation score was also moderately high (3.8). Thus, this study found that on average, these deans self-reported using multiple frames in their work. Previous research indicated that the use of one frame of reference furnishes a leader with too narrow a view of the organization and that multiple viewpoints enhanced leader information (Blake & Mouton,

1982; Cohen & Brawer, 1994; Harrison & Shirom, 1999). Since this study showed deans with use of more than one frame, the deans may be making decisions from more information, and may have more choices from which to select. In addition, since the means of both preference and use questions of frames by the deans were mostly lower than the 32-item orientation test scores, the deans viewed themselves as using multiple frames even more strongly than the results from the Bolman and Deal instrument. The deans appeared to realize the importance of using multiple frames even if their multiple orientation scores were lower than they perceived.

Most deans had a definite high preference falling into either the human relations or structural orientations. The other frames showed interesting interactions, however. Political and symbolic orientations were correlated to additional years of experience but not to years as dean. This result suggested that the role of dean may not be one that encourages these two skills as much as other administrative levels do. In addition, as deans had more years of experience, they were more likely to use multiple frames and score higher in multiple orientations. This finding was consistent with previous research that experienced leaders are more likely to use power connections and political and symbolic skills (Bensimon, 1989; Gilson, 1994; Warner, 1992). Perhaps as they gained control and added responsibility, they also mastered conflict and problems with more and multiple strategies. Since two-thirds of the deans had more than one orientation higher than the mean of 3.8 on the multiple orientation test, a majority of the deans were using multiple strategies to control the tasks in their leadership. There were strong relationships between dean satisfaction with: role, pace of work, workload, and overall satisfaction along with the dependent variable of multiple frames. Therefore, the use of multiple strategies did interact with dean contentment.

Confounding this hypothesis, however, was the finding that satisfaction with control and scholarship showed no such interaction with multiple frames. This result was unexpected because as deans use more frames they should be more satisfied in their control of tasks. Perhaps in the deans' perceptions, the satisfaction of control variable reflected more of those tasks that are beyond their control, such as faculty conflicts, heavy workloads, and office interruptions rather than the tasks that multiple frames help leaders control. The study of possible differences in perceptions of control of different types of tasks is suggested.

The highest orientation items showed that the deans work both logically and empathetically with their coworkers. These structural and human relations items had low standard deviations and indicated a broad use of both sensitivity to coworkers and the use of clear thinking in the average dean's leadership style. In contrast, deans did not assess themselves as charismatic or imaginative which revealed that they do not consider themselves influential or inspirational to others to a high degree. Perhaps in the paperwork, dual relationships and a position in the middle, these orientations were harder to develop and use.

As deans aged, they tended to become more structural and directive in orientation, perhaps because they became familiar with what job outcomes should result from their direction. Females also were more directive than their male counterparts who used more human relations frames as demonstrated in previous research of academic deans (Bowman, 1994). Bowman concluded that female deans felt they had to be more focused on the job tasks to be effective, while male deans felt they should work more on interpersonal relationships. Perhaps this study also showed that the self-reported preferences reflected more what the deans wished their style to be than what they actually used. No significant

relationships were found between role-conflict and the individual frames, suggesting that no one frame was more likely to help or hinder deans in managing their faculty versus administrative roles. However, every individual frame correlated significantly to role-ambiguity measures suggesting that deans with more frames at their disposal also had more sufficient information to perform required tasks.

If deans were chosen for their position to facilitate change or foster growth, they were more likely to have higher political and symbolic orientations. Previous research suggested that in order to implement TQM programs, the middle managers needed to attend to an institution's cultural differences, be able to bargain and have negotiation skills (Bolman & Deal, 1991; Thor, et al., 1998). This study also found that deans who were put in charge of changing their organization used skills from the political and symbolic frames in addition to the other frames. The low overall use of these frames by deans suggested that the use of these frames was greater in higher administrative roles than in the deanship as Mintzberg (1983) has suggested. In addition, the use of these skills may have hindered the deans in building effective relationships. The community college deans' ability to influence others may therefore be related more to the human relations frame.

Human relations orientation scores related to some college culture items. For instance, deans placing more emphasis on the development of relationships were more likely to be loyal to their institution. In addition, as deans became more tied to an institution through a mentor, they had higher human relations scores. Colleges seeking to retain deans using human relations frames should encourage mentoring programs.

The negative correlation between the structural and symbolic frames suggested that deans found it hard to be both directive and an inspiration at the same time and that these two

frames might be hardest for deans to master simultaneously. If a dean had a primary frame of either symbolic or political, he/she was more likely to be able to switch among three or four frame preferences depending on the situation. As stress appeared to be related to the use of multiple orientations, this result offered evidence that if deans use political and symbolic skills, greater control of the job tasks and less stress for the dean may follow.

ANOVA results added evidence that years of administration experience were related to higher mean orientation scores and to the number of frames used above the average. Deans with more experience outside of the deanship or with higher task scores apparently were also more versed in political and symbolic orientations. While identification of the administrative tasks that influenced the use of these added frames was not an aim in this study, the results may provide practical implications for deans. Interestingly, deans with larger faculty sizes also used multiple frames to a larger degree. This finding implied that more frames of reference are often used and perhaps needed in larger schools with more coworkers and conflicts. The lack of interaction between stress and larger faculty sizes could be partially explained by the finding that these deans used more frames. As the number of frame preferences increased, the tasks that deans listed high also increased the mean task score. These results suggested that as deans gained experience, the deans simultaneously became more flexible in their orientations and assessed that they had more responsibility. Whether the added responsibility required the use of multiple frames or whether the possession of additional frames allowed the dean to take on added responsibility is a question for further study.

This study showed that a majority of deans both tested and self-listed a preference for the human relations frame at community colleges, with the structural frame second most

prevalent. Over half of the deans had a high use of only one or two frames, with about a fourth of the deans well-versed in the use of all four frames.

Recognition of Frames. This study found that those deans with high and low stress equally recognized their highest preferences. This unexpected result contrasted with previous research that leader self-knowledge of their method of controlling meaning reduces their stress (Bolman & Deal, 1991; Ganster in Sauter, et al., 1989; Miller, 1979). Deans with high stress were still able to match their knowledge of leadership style to their actual tested leadership style at the same percentage as those with lower stress (66%). That two-thirds of deans recognized their primary frame is explained partly by the large number of human relations oriented deans who were able to recognize this more recognizable leadership style or because the frame was used to a great extent. Deans also found it harder to match their preference if their high preference was political or symbolic and to a lesser degree structural, probably because these are harder to perceive in oneself than a human relations orientation. The deans with these last three orientations were also more likely to have multiple orientations making the selection of a highest frame more difficult. Added evidence for this possibility appears in the result that nonrecognition is correlated with use of multiple frames and multiple orientation score. Those deans who did not recognize their preferences tended to have more full time faculty, more staff, and more faculty overall, suggesting that they were using more diverse framing skills with more people and thus found it more difficult to choose their highest preference. The age, number of years of experience, and years as dean variables did not interact with recognition of preference, suggesting that time alone does not help a dean recognize their primary leadership frames. Overall, most deans did recognize their high preference, but the recognition of their preference was not important to the models of stress

as expected. To the contrary, dean nonrecognition of frame preference was related to the positive outcome of multiple frames.

Stress and Leadership Frames. The major goal of this study was to determine relationships between stress measures and dean orientations. Dean possession of under three frames above the average or a low multiple orientation score was found to be related to higher dean stress levels. Usually these one or two frames were human relations or structural frames that did not appear to aid in controlling satisfaction with the job or stress. Perhaps some aspects of the job relate to a political or symbolic frame and were not as manageable to those deans without the frames to view them. Possession of no high frames was found to make the dean more likely to be in the lower stress group than even possession of one frame because these deans may have been equally likely to use any frame. Deans with possession of three or four high orientations provided the highest likelihood of being in the lower mean stress group.

Those deans who approached their work with the human relations preference suggested that more than 50% of their stress was from work. In contrast, those with any of the three other high orientations suggested that work was a smaller percentage of their overall stress. Whether the orientation was related to stress at work, stress outside of work, or both is unclear. More research could investigate reasons why those with the human relations frame self-reported these differences would illuminate reasons for lower stress.

A major finding of this study was that dean assessment of their overall stress was highly and negatively correlated to both the multiple orientation score and to the use of multiple frames above the average. Since the survey responses suggested that deans had moderate satisfaction with the control of some aspects of their work and they assessed the

stress from these tasks as moderate, deans have leadership strategies that work. Further evidence of this possibility was seen in the broad negative relationships between each individual orientation frame and almost every stress variable. Each frame played a part in influencing lower stress levels among deans. The only substress measure not correlated to any orientation item was that of perceived expectations stress where deans feel pressures to meet the needs of various constituents. This type of stress might be more likely lessened through completion of goals rather than through perceiving the ability to meet those goals through frames. Since the perceived stress was near the lowest stress score of all stress variables, this lack of the orientations' influence on stress may be due to the already low average stress scores. However, since administrative relationship stress was the lowest category of stress, and orientations do significantly correlate to this type of stress, further study of the reasons behind the lack of correlation is warranted.

The ability to work with the political orientation had a strong negative influence on the faculty-role stress task suggesting that this frame of reference allowed deans to perceive recognition for their achievements perhaps from the power base they have built or from their realism and pragmatism about their roles. Despite the human relations frame relationship to higher percent and total stress measures, a higher human relations orientation score also significantly influenced lower administrative relationships and lower role-ambiguity stress. By looking at their work through interpersonal terms, these deans appeared to more successfully influence their relationships with superiors and to fit the goals of the institution to match their own goals.

Overall the orientation items accounted for between 5 and 10% of most stress variables' variation, which suggested a moderate influence. Faculty-role stress was on the

high end of the influence, while perceived expectation stress was not as largely influenced by multiple orientations. The ability to more flexibly frame situations thus appeared to be more related to enhancing perception of recognition for work achievements than for meeting the needs of others. The latter stress might be lessened by dean completion of the tasks with such completion having questionable frame influence. The result that the task stress model was not influenced by either orientation or institutional variables also suggested that the workload portion of the deanship may be less controllable by a dean's cognitive and surrounding characteristics. Since a use of multiple frames related to higher task importance scores for the deans, these deans could be completing more work effectively, however. Each individual orientation accounted for between 2 to 7 percent of the eight different measures of stress which suggested that the different stress types in a dean's work interact with all four different orientations of preference. Since earlier these orientations were shown to interact with lower measures of stress, deans should consider using multiple frames to influence their stress levels downward.

Previous research has suggested that leaders have higher satisfaction and lower stress when the leadership style is in-match with the leadership situation (Chemers et al., 1985; Fletcher, 1991). Since most deans using a human relations frame had moderate stress and high measures of satisfaction, the reasons for this most prevalent frame should be studied. Does the community college setting prescribe a human relations frame for dean effectiveness or do deans learn this frame preference from their superiors? While a majority of deans may have preferred the frame of human relations at community colleges, more research is needed to determine if this frame alone is the most practical or effective style for these deans.

Indeed, a familiarity and use of three or four frames tended to relate to a dean's higher satisfaction and lower stress.

Models of Dean Stress. Accounting for other variables in models of stress, regression analyses found significant portions of stress could be predicted for each of the stress variables using role and orientation scores along with various demographic independent variables. Many demographic variables previously found to interact with stress measures had little influence on two-year academic dean stress (Bowman, 1994). These included gender, age, appointment, and years of experience. In addition, while a previous study found that role-conflict influenced stress levels of four-year deans minimally, this study found that the role-conflict of academic deans formed a large portion of the stress regression models (Wolverton, et al, 1999). In addition to the role scores, the deans' satisfaction, orientations, and some institutional variables contributed to the stress models.

The total stress variable was the primary dependent variable researched. About 40% of the variance in this stress variable was accounted for by the role-conflict score, overall satisfaction with the dean position, the college type, the dean's marital status, and the dean's highest leadership orientation. That combinations of these variables were strong predictors of academic dean total stress has practical implications for research and for academic leaders. The demands of the middle manager role was a large component of stress for these deans. Those who better manage their diverse roles, who find satisfaction in their job and who have a high leadership orientation other than the human relations orientation may be able to reduce their total stress and thereby increase effectiveness. Research into ways to lessen the higher stress levels of married deans to the lower levels of single deans should also be studied. In addition, further research on the reasons why comprehensive community college deans have

significantly lower stress means than their technical and transfer counterparts (Table 25) is needed to understand why this variable contributes to the total stress model. The college type variable tended to account for about 2 to 5 percent of a dean's stress across several stress types. Different job stability or more role authority and control might be possible reasons.

Since demographic variables in the stress models accounted for between 12 and 30% of stress measure variation alone, the orientation items were not as great an influence on stress measures as expected. The personal characteristics of deans clearly had an influence on dean stress especially when considering role-conflict status and dean satisfaction. Satisfaction with aspects of their job, considerations of their next job, and marital status all made a significant contribution to stress models when personal demographics are considered alone. Future studies aimed at limiting dean stress must continue to consider these demographic variables as significant influencers of stress models.

Most of the stress variable models were influenced by at least one of the following variables: a dean's role-conflict, satisfaction with role, or perceived role at the college. This finding differed from a similar analysis of deans at four-year institutions where role-conflict played a lesser role in the stress levels of deans (Sarros, et al., 1998). In this study, too, the variable of role-conflict was found to be more important to the model of stress than perceived at the beginning of this study of stress. The deans' role-conflict score, obtained from the 14-question role-conflict and role-ambiguity questionnaire, influenced stress models significantly and the predicted variance in total stress increased 10%. The addition of role-conflict to the model also accounted for about 5% additional predicted variance in each of the task, role and perceived stress measures. Most remarkably, with seven significantly influencing variables, the administrative relationship stress measure increased to predict 43%

of the stress variance which was an increase of 60% over other models for this stress variable. The factors of role-conflict and role-ambiguity should be part of future models of stress in academic deans at the community college in addition to variables from leadership orientations, college type and satisfaction variables.

Community college academic deans who perceived themselves solely as administrators, who were clearer about their role, or who were given fewer conflicting demands were more likely to have lower measures of stress. Since the presence of multiple orientations correlated significantly to lower role-ambiguity, and to higher satisfaction with role-clarity and perception of role, the development of multiple frames may be a practical method for increasing some deans' effectiveness through a reduction in stress.

Most of the stress variable models also had a critical dean satisfaction component. As deans were more satisfied with their work load, work pace, control of work, scholarship, or overall job, they tended to have lower stress measures especially in assessed stress, role-ambiguity stress, and administrative relationships stress. These deans also usually had larger support staffs and more years of experience. Determining relationships among factors associated with a deans' satisfaction remain be a component of future dean stress research.

The size of the college as measured by full-time faculty did influence the faculty-role stress and the perceived expectation stress variables. Since academic deans at community colleges usually had fewer faculty-role tasks and scholarly tasks than their four-year counterparts, these stress variables were expected to be low and were.

Orientation variables affected models of stress more than the variables of age, gender, years of experience, and college size. Therefore, leadership orientation variables are worthy of further research examining models of leader stress. With the inclusion of role-conflict and

role-ambiguity variables, orientation items played a smaller part in these regression models, but still influenced the models of five of the eight stress variables. In particular, the relationships between the three main categories of stress (total, assessed, and percent from work) and highest orientation preference suggested an influence on academic dean stress even when subjected to other demographic variables.

In particular, correlations suggested that possession of a high political or symbolic orientation probably accounted for much of the reduction in stress, while possession of a structural or human relations frame influenced higher stress levels. Further evidence is that the structural score accounts for a portion of the dean's higher stress assessment and the human relations score accounts for part of the dean's higher administrative relationship stress.

After the influence of the role-conflict score, the satisfaction variables, and the orientation variables, the five stress subscores were also found to be influenced to a smaller degree by the dean's marital status, the dean's scholarship level, and the size of the college defined by number of faculty or staff. Further study of the degree of influence of the demographic variables on stress levels should also determine the reasons and their importance. This study illuminated several variables that exert some influence on stress levels of academic deans. Further research is needed to understand precisely the interactions of these variables that contribute to and detract from the effective leadership of these deans.

Recommendations for Further Study and for Academic Deans

This was a study about the leadership attributes of academic deans in higher education and the conditions under which those deans' occupational stresses can be predicted

or controlled. Underlying the study was a theory that any variables found to be associated with the stress that affects academic leaders could also aid in understanding the leader's effectiveness and satisfaction. Based upon the findings and limitations of this study, a number of recommendations for future research can be made. One recommendation involves the increasing of a leader's orientation flexibility and another involves controlling job-related stress. In addition, practical recommendations for academic deans, dean in-service supports, and academic leadership programs are made.

Orientation Flexibility. The ability to problem-solve, manage conflicts, and complete tasks in a demanding environment has been an ever-present challenge to leaders in all occupations, but certainly in higher education and critically in two-year colleges. The Bolman and Deal Leadership Orientation model suggested that through framing organizational tasks, a leader has a wider variety of choices to be effective, as well as new avenues of leadership freedom (Bolman & Deal, 1984, 1991). While many leaders view a situation through one or two frames, stepping back from a situation and viewing it through all four frames can help leaders see better what is occurring and gain control over the occurrence.

This study examined the characteristics of academic deans that interacted with leadership orientation variables, and found that these interactions were varied. The significant relationships found between orientations and satisfaction, role-conflict, and stress all suggested that possession of frame flexibility was at least associated with more effective leadership in the deanship. It is recommended that future studies examined the reasons these variables interact with leadership orientations and research the conditions that contribute to or detract from these associations. In addition, some measure of the academic dean's ability

to be flexible in frame use from the subordinate and/or superior's view would be helpful in determining more accurate and independent assessments of leader flexibility and effectiveness. Frame use may be connected to organizational culture, and that culture may be changing in community colleges such as a move to a business atmosphere (Levin, 1998; Thor, et al., 1998). Therefore, organizational variables should be studied for their effects on leadership orientations so as to continue determining an answer to what kind of leaders are right for what kind of situations.

Finally, the high human relations frame preference of academic deans raises research questions about the reasons for this preferred style. Do community colleges have a culture that requires a more supporting human relations style and less directing style from the academic deans than is found in their presidents? Does this supporting style result in more effective deans from the faculty and/or a superior's point of view? If the need for a human relations and structural frame of leadership results in a lack of political and symbolic leadership at the community college, what challenges does this present for the future of the community college?

Control of Stress. The human and financial costs alone of work-related stress qualifies stress as a subject of future research. The Gmelch and Wilke (1991) Stress Cycle Model suggested that when a gap occurs between perceived demands and a leader's resources, stress results. This study examined a wide-range of characteristics that were shown to interact with stress, but there may be many more variables such as leadership development, dean networking, or college culture that can influence stress and should be studied. In particular, additional research on controlling stress should distinguish between those occupational tasks that leaders consider within their control and outside of their control.

Which variables affect the stress related to tasks within dean's control? What factors affect the stress related to tasks outside of the dean's control?

In addition, many of the demographic variables found to be associated with stress, including role-conflict, satisfaction variables, marital status, and task score, were not studied in depth for the reasons they affect stress. Determining job conditions that give leaders higher job satisfaction may enlighten these variables' influence on stress. Additional research on the deans' institution values and culture may also help to determine the influences of these stresses on the organization's leaders.

Recommendations for Practice. This study suggested practical implications for academic deans in community colleges. First, deans should understand the frame(s) they use in order to know what predilections and viewpoints they prefer. Deans should gain experience in using all four frames in order to increase their choices and effectiveness in decision-making. The ability to use three or four frames successfully should give deans more control over some aspects of their occupations, and reduce some types of stress. The dean should also endeavor to understand his/her role to the highest extent possible as well as those aspects of the job which are not satisfactory. An understanding of role and satisfactions will enlighten these academic leaders as to possible sources of stress and conflict.

In-service support workshops and academic preparation programs for higher education leaders can aid the deans in identifying and practicing different leadership orientations in different situations. In addition, an emphasis on understanding which tasks are within the dean's control and which tasks are harder to master with frames will aid deans in knowing when to use their orientations appropriately. Workshops and academic

preparatory programs should also provide methods and research on how and why academic dean workloads cause the highest stress levels in deans.

Workshops on leadership should also delineate how community college leaders vary across the demographics, the leadership frames, and the stress measures. For example, in-service workshops can instruct married and single deans on the differences in their sources of stress. Since leadership is multifaceted, the varied stress and frame results across demographics were not unexpected. Future insights from research on stress interactions with demographics, the reasons that particular leadership orientations are chosen by leaders, and reasons deans feel more satisfied and understanding of their roles, would help move community college leaders toward healthier lives and work environments. Faculty, staff, students, and the deans themselves will all benefit from the leaders' higher occupational control, satisfaction, and lower stress levels.

APPENDIX A
SURVEY INSTRUMENT

2000 National Study of Community and Technical College Academic Deans

**Center for Academic Leadership
College of Education
Iowa State University
Ames, Iowa 50010**

PERSONAL BACKGROUND INFORMATION: Code _____

1. Age _____ 2. Gender _____ 3. Marital Status Single Married
Number of children living at home _____

4. Race/ethnicity
 White Native American Hispanic African-American Asian American Other

5. Title of your position _____
College _____

6. Your position may be academic dean of a college, division, department, etc. This will be referred to as your unit:

Name of your unit _____
You are the leader primarily in a Technical College Transfer College Both Other _____

7. How long have you served in your current dean position? _____ years

8. What position did you hold prior to assuming your current dean's position? _____

9. How many years of administrative experience did you have in each of the following job categories prior to assuming your current dean's position?

- | | | | |
|---------------------|-------------|---|-------------|
| a. Dean | _____ years | d. Senior Management (outside academia) | _____ years |
| b. Associate Dean | _____ years | e. Other (specify) | _____ years |
| c. Department Chair | _____ years | | |

10. Was your appointment to dean from inside or outside of your current institution? Inside Outside

11. In your opinion, which of the following best describes why you were chosen for your current position (select one).

- a. - I was best suited to deal with the growth of the unit.
- b. - I was best suited to facilitate change.
- c. - I was best suited to deal with crisis (financial, academic, or other) in the unit.
- d. - I understood the unit's programs and was dedicated to sustaining them.
- e. - I was willing to serve as interim dean.

12. Rank (from 1 to 8, with 1 being the most important) the following reasons for hiring you.

- | | | | |
|----------|---------------------------|----------|------------------------|
| a. _____ | Gender | e. _____ | Scholarship |
| b. _____ | Racioethnicity | f. _____ | Political Acuity |
| c. _____ | Administrative experience | g. _____ | My reputation |
| d. _____ | Fund-raising ability | h. _____ | Human relations Acuity |

13. Rate the degree to which you took a leadership role in the following activities when you were in college.

	Low	2	3	4	High
	1	2	3	4	5
a. Athletics	—	—	—	—	—
b. Student government	—	—	—	—	—
c. Fraternities/sororities/Residence life	—	—	—	—	—
d. Literary/newspaper	—	—	—	—	—
e. Service organizations	—	—	—	—	—
f. Social club activities	—	—	—	—	—
g. Department/Division clubs/committees	—	—	—	—	—
h. Did not participate in activities because _____					

14. Thinking back to your formative years, would you classify your parent(s)/guardian(s) as (select one):

- a. — Stressing high standards of excellence.
- b. — Interested in your achievements, but satisfied with average performance.
- c. — Disinterested regarding your personal achievements.
- d. — A negative influence and an obstacle I had to overcome.

15. Rate the items below regarding why you first became an academic dean:

	Low	2	3	4	High
	1	2	3	4	5
a. Financial gain	—	—	—	—	—
b. Advancement of my administrative career	—	—	—	—	—
c. Power and authority of my position	—	—	—	—	—
d. Personal growth	—	—	—	—	—
e. Influence the development of faculty	—	—	—	—	—

16. Has a mentor played an important role in advancing your administrative career? _____ Yes _____ No

If you answered yes, was the mentor.... _____ From inside your college? _____ From outside your college?

Male? _____ Female? _____ White? _____ Minority?

17. From the list below, rank the 3 activities that have been the most important to your development as a leader (1 being the highest)

- _____ Time and space for reflection _____ Travel _____ Mentoring _____ Peer support
- _____ Holding a leadership position _____ Skills training _____ Learning plans _____ Networking
- _____ Information technology _____ Experiential learning _____ Professional Development Training
- _____ Other organization leadership _____ Community participation _____ Other

18. Assuming you are to seek a vice president of academic affairs position, which of the following activities would be most important to you in preparation for this position? Rank 3 with 1 being the highest.

- _____ Time and space for reflection _____ Travel _____ Mentoring _____ Peer support
- _____ Holding a leadership position _____ Skills training _____ Learning plans _____ Networking
- _____ Information technology _____ Experiential learning _____ Professional Development Training
- _____ Other organization leadership _____ Community participation _____ Other

19. Assess your level of scholarship (publishing, presentations, on-going research) and satisfaction with your level of scholarship since becoming a dean.

Less 1	2	Same 3	4	Greater 5	With your level of scholarship are you....	
					Satisfied?	Dissatisfied?
—	—	—	—	—	—	—
20. How satisfied are you with your dean's position with regard to:					Dissatisfied 1 2 3 4 5	Satisfied 1 2 3 4 5
a. Clarity of Role					— — — — —	— — — — —
b. Pace of your work					— — — — —	— — — — —
c. Work Load					— — — — —	— — — — —
d. Control of work environment					— — — — —	— — — — —
e. Compensation package					— — — — —	— — — — —
f. Program/Curricular development					— — — — —	— — — — —
g. Faculty mentoring					— — — — —	— — — — —
h. Prior preparation for role					— — — — —	— — — — —
i. Overall job satisfaction					— — — — —	— — — — —

21. As a community college unit employee, do you consider yourself to be

- a. — An academic faculty member?
- b. — An administrator?
- c. — Equally a faculty member and an administrator?

22. Given the opportunity, what would you consider as your next move? (Check the most appropriate response.)

- a. — Returning to a faculty position.
- b. — A move to another dean's position at a similar institution.
- c. — A move to another dean's position at a smaller institution.
- d. — A move to another dean's position at a more prestigious institution.
- e. — A move to a higher position in academic leadership (e.g., provost)
- f. — Change to a non-academic leadership position
- g. — I have no interest in moving.
- h. — Retirement

INSTITUTIONAL BACKGROUND INFORMATION

23. Rate your unit in each of the following areas.

	Poor 1			Excellent 4 5
a. Personal relations among faculty and staff	—	—	—	— —
b. Relations between faculty and students	—	—	—	— —
c. Academic ability of students	—	—	—	— —
d. Quality of faculty	—	—	—	— —
e. Reputation of vocational programs	—	—	—	— —
f. Reputation of arts and sciences programs	—	—	—	— —

24. Rate your community college in each of the following areas.

	Disagree 1			Agree 4 5
a. This community college is a good place to work.	—	—	—	— —
b. This community college has a strong private funding base.	—	—	—	— —
c. The state has a strong financial commitment to the college.	—	—	—	— —
d. I work well with other senior administrators.	—	—	—	— —

- e. I am doing a good job at my present position. — — — —
f. I could be as effective at another college as I am here. — — — —
g. I will probably leave this college in two or three years. — — — —
h. I hold strong loyalties to this community college. — — — —

25. Rate your community college unit in each of the following areas. **Poor** **Excellent**

	1	2	3	4	5
a. Faculty Salaries	-	-	-	-	-
b. Intellectual climate	-	-	-	-	-
c. Academic standing among peer institutions	-	-	-	-	-
d. Quality of instruction	-	-	-	-	-
e. Racial climate	-	-	-	-	-
f. Gender equity	-	-	-	-	-
g. Quality of location	-	-	-	-	-
h. Administrative leadership	-	-	-	-	-
i. Clarity of mission	-	-	-	-	-

26. How many of each of the following are in your unit? (use 0 if none or not applicable)

- a. Department Chairs _____ d. Vocational students (headcount) _____
b. Full-Time Faculty _____ e. Liberal arts/transfer students(heads) _____
c. Adjunct Faculty _____

27. How many people work in your dean's office in each of the following categories? (use 0 if none)

- a. Associate/Assistant Dean _____
 - b. Directors/Coordinators _____
 - c. Clerical/Adm. Assistant _____
 - d. Technical support/staff _____
 - e. Other _____

28. Would you classify your institution's location as _____ urban, _____ suburban, or _____ rural?

29. Dean's Task Inventory

Listed below are 32 typical responsibilities of unit deans. Please rate the importance to you of each of the following duties of deans.

- a. Recruit and select chairs and faculty - - - -
 - b. Evaluate chair and faculty performance - - - -
 - c. Maintain conducive work climate (i.e. manage conflict situations) - - - -
 - d. Encourage faculty, chair and staff professional development activities - - - -
 - e. Develop and initiate long-range unit goals - - - -
 - f. Plan and conduct unit leadership team meetings - - - -
 - g. Solicit ideas to improve the unit - - - -
 - h. Assign duties to chairs and directors - - - -
 - i. Inform unit employees of college and community concern - - - -
 - j. Develop and evaluate programs and curriculum - - - -
 - k. Coordinate unit activities with constituents - - - -
 - l. Represent the unit to the administration - - - -
 - m. Represent the unit at professional meetings - - - -
 - n. Participate in unit work - - - -

- o. Obtain and manage external funds (grants, contracts and donations) _____ - - - - -
- p. Supervise department chairs, coordinators, or directors. _____ - - - - -
- q. Manage unit resources (grants, facilities and equipment) _____ - - - - -
- r. Keep current with technological changes _____ - - - - -
- s. Manage clerical/administrative support, technical staff. _____ - - - - -
- t. Assure the maintenance of accurate unit records _____ - - - - -
- u. Remain current with my own academic discipline _____ - - - - -
- v. Build relationships with external community/stakeholders _____ - - - - -
- w. Maintain my own scholarship program and associated professional activities _____ - - - - -
- x. Financial planning, budget preparation and decision making _____ - - - - -
- y. Foster gender and ethnic diversity in the unit _____ - - - - -
- z. Maintain and foster my own professional growth _____ - - - - -
- aa. Maintain effective communication across departments/divisions _____ - - - - -
- bb. Communicate goals/mission to unit employees/constituents _____ - - - - -
- cc. Foster good teaching _____ - - - - -
- dd. Comply with state, federal and certification agency guidelines _____ - - - - -
- ee. Maintain timely and accurate program evaluations _____ - - - - -
- ff. Foster alumni relations _____ - - - - -
- gg. Develop and work with community advisory committees _____ - - - - -
- hh. Schedule and coordinate classes _____ - - - - -

30. Role-conflict and Ambiguity Questionnaire

The following related statements pertain to potential role-conflict and role-ambiguity for unit deans. Please indicate the extent that each item is true of your job as unit (school) dean.

Extent that the statement is...	Not true of my job				Extremely true of my job		
	1	2	3	4	5	6	7
a. I have to do things that should be done differently _____	-	-	-	-	-	-	-
b. I have to work on unnecessary things _____	-	-	-	-	-	-	-
c. I receive an assignment without the proper staffing to complete it _____	-	-	-	-	-	-	-
d. I receive an assignment without the proper resources and materials to execute it _____	-	-	-	-	-	-	-
e. I work with two or more groups who operate quite differently _____	-	-	-	-	-	-	-
f. I have to buck a rule or policy in order to carry out an assignment _____	-	-	-	-	-	-	-
g. I receive incompatible requests from two or more people _____	-	-	-	-	-	-	-
h. I do things that are apt to be accepted by one person and not accepted by others _____	-	-	-	-	-	-	-
i. I know exactly what is expected of me _____	-	-	-	-	-	-	-
j. I feel certain about how much authority I have _____	-	-	-	-	-	-	-
k. Clear, planned goals exist for my job _____	-	-	-	-	-	-	-
l. I know that I have divided my time properly _____	-	-	-	-	-	-	-
m. I know what my responsibilities are _____	-	-	-	-	-	-	-
n. Explanation is clear regarding what has to be done _____	-	-	-	-	-	-	-

31. Dean's Stress Inventory

The next page lists work-related situations that have been identified as potential sources of stress. It is likely that some of these situations cause you more concern than others. Indicate to what extent each is a source of work-related stress by checking the appropriate response.

WORK ACTIVITY	Level of Stress:				
	Slight 1	Moderate 2	3	4	High 5
a. Participating in work related activities outside the regular working hours which conflict with personal activities	-	-	-	-	-
b. Meeting social obligations (clubs, parties, volunteer work) expected of deans	-	-	-	-	-
c. Complying with unit rules and regulations	-	-	-	-	-
d. Participating/presenting at professional meetings	-	-	-	-	-
e. Imposing excessively high self-expectations	-	-	-	-	-
f. Handling student concerns and conflicts	-	-	-	-	-
g. Resolving differences with my supervisor	-	-	-	-	-
h. Having insufficient time to stay current in my academic field	-	-	-	-	-
i. Having insufficient authority to perform my unit responsibilities	-	-	-	-	-
j. Believing my administrative career progress is not what it should be	-	-	-	-	-
k. Believing my academic career progress is not what it should be	-	-	-	-	-
l. Having to travel to fulfill job expectations	-	-	-	-	-
m. Handling concerns and conflicts with chairs	-	-	-	-	-
n. Handling concerns and conflicts with faculty	-	-	-	-	-
o. Receiving insufficient recognition for performing administrative functions	-	-	-	-	-
p. Feeling required paperwork is not utilized	-	-	-	-	-
q. Having to engage in fund raising activities	-	-	-	-	-
r. Writing letters and memos, and responding to other paperwork	-	-	-	-	-
s. Feeling I have too heavy a work load	-	-	-	-	-
t. Attending meetings which take up too much time	-	-	-	-	-
u. Trying to influence the actions and decisions of my supervisor	-	-	-	-	-
v. Adapting to technology changes (e.g. distance learning, e-mail, computers)	-	-	-	-	-
w. Seeking compatibility among unit and personal goals	-	-	-	-	-
x. Receiving insufficient recognition for my performance	-	-	-	-	-
y. Not knowing how my supervisor evaluates my performance	-	-	-	-	-
z. Receiving inadequate salary	-	-	-	-	-
aa. Evaluating chair, faculty, and staff performance	-	-	-	-	-
bb. Trying to satisfy the concerns of constituent groups (e.g., alumni, legislators, community)	-	-	-	-	-
cc. Supervising and coordinating the tasks of many people	-	-	-	-	-
dd. Feeling others don't understand my goals and expectations	-	-	-	-	-
ee. Feeling I am not adequately trained to handle my job	-	-	-	-	-
ff. Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me	-	-	-	-	-
gg. Being frequently interrupted by telephone calls and drop-in visitors	-	-	-	-	-
hh. Feeling pressure for better job performance above what I feel is reasonable	-	-	-	-	-
ii. Having to make decisions that affect the lives of faculty, staff, and students (tenure, promotion, advancement)	-	-	-	-	-
jj. Promoting diversity among faculty, students and the leadership team	-	-	-	-	-
kk. Meeting report and other paperwork deadlines	-	-	-	-	-
ll. Preparing budgets and allocating resources	-	-	-	-	-
mm. Trying to gain financial support for unit programs	-	-	-	-	-
nn. Attempting to balance my leadership and scholarship responsibilities	-	-	-	-	-
oo. Attempting to balance my professional and personal lives	-	-	-	-	-
Assess the overall level of stress you experience as a dean	-	-	-	-	-

What percentage of the total stress in your life results from being a dean _____ %

32. LEADERSHIP ORIENTATIONS (with permission of Bolman and Deal)

You are asked to indicate how often each of the items below is true of you. Please use the following scale in answering each item. You would answer '1' for an item that is never true of you, '2' for one that is occasionally true, '3' for one that is sometimes true of you, and so on.

	Never	Occasionally	Sometimes	Often	Always
	1	2	3	4	5
1. Think very clearly and logically.	-	-	-	-	-
2. Show high levels of support and concern for others.	-	-	-	-	-
3. Have exceptional ability to mobilize people and resources to get things done.	-	-	-	-	-
4. Inspire others to do their best.	-	-	-	-	-
5. Strongly emphasize careful planning and clear time lines.	-	-	-	-	-
6. Build trust through open and collaborative relationships.	-	-	-	-	-
7. Am a very skillful and shrewd negotiator.	-	-	-	-	-
8. Am highly charismatic.	-	-	-	-	-
9. Approach problems through logical analysis and careful thinking.	-	-	-	-	-
10. Show high sensitivity and concern for others' needs and feelings.	-	-	-	-	-
11. Am unusually persuasive and influential.	-	-	-	-	-
12. Am able to be an inspiration to others.	-	-	-	-	-
13. Develop and implement clear, logical policies and procedures.	-	-	-	-	-
14. Foster high levels of participation and involvement in decisions.	-	-	-	-	-
15. Anticipate and deal adroitly with organizational conflict.	-	-	-	-	-
16. Am highly imaginative and creative.	-	-	-	-	-
17. Approach problems with facts and logic.	-	-	-	-	-
18. Am consistently helpful and responsive to others.	-	-	-	-	-
19. Am very effective in getting support from people with influence and power.	-	-	-	-	-
20. Communicate a strong and challenging sense of vision and mission.	-	-	-	-	-
21. Set specific, measurable goals and hold people accountable for results.	-	-	-	-	-
22. Listen well and am unusually receptive to other people's ideas and input.	-	-	-	-	-
23. Am politically very sensitive and skillful.	-	-	-	-	-
24. See beyond current realities to generate exciting new opportunities.	-	-	-	-	-
25. Have extraordinary attention to detail.	-	-	-	-	-
26. Give personal recognition for work well done.	-	-	-	-	-
27. Develop alliances to build a strong base of support.	-	-	-	-	-
28. Generate loyalty and enthusiasm.	-	-	-	-	-
29. Strongly believe in clear structure and a chain of command.	-	-	-	-	-
30. Am a highly participative manager.	-	-	-	-	-
31. Succeed in the face of conflict and opposition.	-	-	-	-	-
32. Serve as influential model of organizational aspirations and values.	-	-	-	-	-

33. There are four primary frames used in leadership situations: structural, human resource, political and symbolic. The following questions refer to these frames defined below:

Leaders who exhibit characteristics of the **structural frame** value analysis and data, keep their eye on the bottom line, set clear directions, hold people accountable for results, and try to solve organizational problems with either new policies and rules or through restructuring.

Leaders who exhibit characteristics of the **human resource frame** value relationships and feelings and seek to lead through facilitation and empowerment. They tend to define problems in individual or interpersonal terms and look for ways to adjust the organization to fit people—or to adjust the people to fit the organization (for example, through training and workshops).

Leaders who exhibit characteristics of the **political frame** are advocates and negotiators who value realism and pragmatism. They spend much of their time networking, creating coalitions, building a power base, and negotiating compromises.

Leaders who exhibit characteristics of the **symbolic frame** instill a sense of enthusiasm and commitment through charisma and drama. They pay diligent attention to myth, ritual, ceremony, stories, and other symbolic forms.

What is your preference for each of the frames:

	Slight 1	Moderate 2	High 3	4	5
a. Structural	—	—	—	—	—
b. Human relations	—	—	—	—	—
c. Political	—	—	—	—	—
d. Symbolic	—	—	—	—	—

How are each of the following frames used in your leadership: Never Occasionally Sometimes Often Always

	1	2	3	4	5
a. Structural	—	—	—	—	—
b. Human relations	—	—	—	—	—
c. Political	—	—	—	—	—
d. Symbolic	—	—	—	—	—

34. To what extent do you rely on networking with other deans....

	Never 1	2	3	4	Always 5
a. As a means of exploring ideas?	—	—	—	—	—
b. When making major job-related decisions?	—	—	—	—	—
c. When making difficult personal decisions?	—	—	—	—	—
d. When coping with frustrations (venting)?	—	—	—	—	—
e. Other? _____	—	—	—	—	—

35. Identify, and rank in the order of importance, the three biggest challenges facing you as dean in the next 3 to 5 years (1 is the most important), and rate how effective you believe you will be at addressing each challenge.

	Ineffective 1	2	3	4	Very Effective 5
1. _____	—	—	—	—	—
2. _____	—	—	—	—	—
3. _____	—	—	—	—	—

36. What percentage of your unit's full-time faculty is tenured?

_____ %

APPENDIX B

HUMAN SUBJECTS APPROVAL FORM

Information for Review of Research Involving Human Subjects
Iowa State University

(Please type and use the attached instructions for completing this form)

1. Title of Project Community College Academic Deans: Leadership Frames and Stress

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I agree to request renewal of approval for any project continuing more than one year.

<u>Christopher A. Russell</u> Typed name of principal investigator	<u>3/24/00</u> Date	<u>Christopher A. Russell</u> Signature of principal investigator
<u>Higher Education</u> Department	<u>N243</u> <u>N248 Lagomarcino</u>	Campus address
<u>294 - 1941</u> Phone number to report results		

3. Signatures of other investigators

Linda C. Wild

<u>3/25/00</u> Date	<u>3/27/00</u> Date	Relationship to principal investigator <u>Major Professor</u> <u>Co-Doctoral Student</u>
------------------------	------------------------	--

4. Principal investigator(s) (check all that apply)
 Faculty Staff Graduate student Undergraduate student

5. Project (check all that apply)
 Research Thesis or dissertation Class project Independent Study (490, 590, Honors project)

6. Number of subjects (complete all that apply)
adults, non-students: Approx. 800 # minors under 14: _____ # minors 14 - 17: _____
ISU students: _____ other (explain): _____

7. Brief description of proposed research involving human subjects: (See instructions, item 7. Use an additional page if needed.)

(A) A number of research questions have been devised to elicit a wide variety of information on the academic deanship at community colleges. The only method to gather data will be through a survey which is attached. Generally it is hypothesized that the dean's leadership behavior (use of frames) will affect measures of job-related stress. Specifically, this study will answer the following research questions:

1. What is the current typical community college academic dean demographic?
2. Which and how many leadership frames are most commonly used by academic deans at the community college?
3. Are there significant differences between the leadership frames employed by community college academic deans with lower and higher measures of stress than the average?
4. Are there significant differences between the leadership frames of academic deans with low and high measures of stress when deans are compared according to their number of years of experience, their gender, and/or on the size of their institution (measured by

number of faculty)?

5. Do community college deans recognize and perceive correctly the frames of leadership they use most prominently?

Thus, the nature of the data is demographical, as well as measures of dean stress and leadership orientation through instrument measures.

(B) The method for selecting the deans first required selecting the community college/technical college institutions. From a list of all American Association of Community Colleges divided by state, states with few colleges (less than 10) were randomly sampled at a higher rate in case of nonresponse. States were divided into the groupings 10 to 20 colleges; 25 to 50 colleges and over 50 colleges. The ratio for these latter groupings was chosen to be as close to 2/5 as possible. Within each state, the colleges were randomly chosen. Once the institution was selected (392 overall), all the applicable deans at these colleges were listed (800 overall) and are to be sent the enclosed survey. No incentives or compensation will be given to the survey participants. Followup postcards and letters will be sent to those deans not sending back surveys, but followup questions will not be asked as part of this research. The survey sent is attached.

(Please do not send research, thesis, or dissertation proposals.)

8. Informed Consent: Signed informed consent will be obtained. (Attach a copy of your form.)
 Modified informed consent will be obtained. (See instructions, item 8.)
 Not applicable to this project.
 All applicants will receive a cover letter explaining the use of the survey and that the responses are confidential. The return of the survey implies modified informed consent. The cover letter is attached.

9. Confidentiality of Data: Describe below the methods you will use to ensure the confidentiality of data obtained. (See instructions, item 9.)

Each survey packet sent to an academic dean includes a sealable envelope. The survey does not require the respondent to use his/her name, but only his/her title and demographic characteristics. Upon return of the survey to the researcher, the data will be entered in by code into a statistical software package, with the institution coded first and then dean respondent coded subsequent. The code "key" will be kept separate from the data to insure confidentiality. All staff and students who assist principal investigators and who handle data must be informed about the need to insure confidentiality and agree to maintain confidentiality.

10. What risks or discomfort will be part of the study? Will subjects in the research be placed at risk or incur discomfort? Describe any risks to the subjects and precautions that will be taken to minimize them. (The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological or emotional risk. See instructions, item 10.)

No discomfort or risks will result from taking part in answering the enclosed survey.

11. CHECK ALL of the following that apply to your research: (NONE)
- A. Medical clearance necessary before subjects can participate
 B. Administration of substances (foods, drugs, etc.) to subjects
 C. Physical exercise or conditioning for subjects
 D. Samples (blood, tissue, etc.) from subjects

- E. Administration of infectious agents or recombinant DNA (NONE)
 F. Deception of subjects
 G. Subjects under 14 years of age and/or Subjects 14 - 17 years of age
 H. Subjects in institutions (nursing homes, prisons, etc.)
 I. Research must be approved by another institution or agency (Attach letters of approval)

If you checked any of the items in 11, please complete the following in the space below (include any attachments): **NONE**
 Items A-E Describe the procedures and note the proposed safety precautions. **NONE CHECKED ABOVE**

Items D-E The principal investigator should send a copy of this form to Environmental Health and Safety, 118 Agronomy Lab for review.

Item F Describe how subjects will be deceived; justify the deception; indicate the debriefing procedure, including the timing and information to be presented to subjects.

Item G For subjects under the age of 14, indicate how informed consent will be obtained from parents or legally authorized representatives as well as from subjects.

Items H-I Specify the agency or institution that must approve the project. If subjects in any outside agency or institution are involved, approval must be obtained prior to beginning the research, and the letter of approval should be filed.

Last name of Principal Investigator RUSSELL

Checklist for Attachments and Time Schedule

The following are attached (please check):

12. Letter or written statement to subjects indicating clearly:
 a) the purpose of the research
 b) the use of any identifier codes (names, #'s), how they will be used, and when they will be removed (see item 17)
 c) an estimate of time needed for participation in the research
 d) if applicable, the location of the research activity
 e) how you will ensure confidentiality
 f) in a longitudinal study, when and how you will contact subjects later
 g) that participation is voluntary; nonparticipation will not affect evaluations of the subject

13. Signed consent form (if applicable)

14. Letter of approval for research from cooperating organizations or institutions (if applicable)

15. Data-gathering instruments Survey

16. Anticipated dates for contact with subjects:

First contact

4/20/00

Month/Day/Year

Last contact

6/1/00

Month/Day/Year

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

7/15/00

Month/Day/Year

18. Signature of Departmental Executive Officer

Date

3/23/00

Department or Administrative Unit

RISE/COEduca...

19. Decision of the University Human Subjects Review Committee:

Project approved

Project not approved

No action required

Name of Human Subjects in Research Committee Chair

Patricia M. Keith

Date

3/20/00

Signature of Committee Chair

APPENDIX C

BOLMAN AND DEAL'S INSTRUMENT APPROVAL

From: "Lee Bolman" <bolmanl@umkc.edu>
To: <crussell@iavalley.cc.ia.us>
Subject: Instruments

Chris,

If you need a formal letter, we can provide it, but otherwise my e-mail permission statement is fine as far as we're concerned.

Lee Bolman

APPENDIX D

DEAN'S COVER LETTER AND ADDENDUM

April 4, 2000

Dean «FirstName» «LastName»
 «Address»
 «City», «StateOrProvince» «PostalCode»

Dear Dean «LastName»,

Though the importance of leadership at the community college level is essential to successful community college education, there is still limited knowledge about the leadership of academic deans in these colleges. For this reason, I am requesting your special assistance in this investigation of academic dean leadership.

Under the direction of Dr. Larry Ebbers, this academic dean demographic study is being conducted by the Center for Academic Leadership at Iowa State University. The study is also designed to investigate the leadership frames (cognitive perspectives) of academic deans at community colleges in combination with measures of dean stress. We anticipate this research will elicit information essential to better understanding of how to help academic dean's increase their effectiveness.

Enclosed is the 2000 National Survey of Community and Technical College Academic Dean leadership survey including the leadership orientations and stress instruments. The survey will take approximately twenty minutes of your time to complete. Be assured all names of participants and institutions will remain anonymous in the final research report. Your questionnaire will be identified by a code that will be removed once data is entered and all information will be confidential. No research reports will list any institution or dean by name. Please return your questionnaire to me by May 1, 2000. If you decide not to take part in this study, please call me at 515-457-7378 by the same date. A summary of findings will be sent to those involved in the study.

Thank you **very much** for your time and cooperation.

Sincerely,

Christopher A. Russell

Christopher A. Russell
 Doctoral Candidate
 Higher Education
 Dept. Chair, IVCCD, Marshalltown Comm. College

Linda L. Wild

Linda L. Wild
 Doctoral Candidate
 Higher Education
 Asst. Director, CLIC, ISU

Addendum to cover letter for primary college academic dean:

ATTENTION RECIPIENT OF THIS PACKET:

Your position appeared to fit the criteria of the survey contained within, but this may not be the case:

This survey is for those **leaders who are in the first line of administration at community colleges, (just over the faculty and in charge of some unit)**. The dean desired for this survey should not have teaching responsibilities, but might teach a class outside of the job assignment. Usually, this position has the title dean, but this may not be the case at your institution. The position may report to a higher chief academic officer, to which the survey is not directed.

If you fit the position of dean desired in this survey (described above), please complete the survey and distribute any other surveys contained within to your companion deans in other units/campuses. (The names of those thought to fit the criteria are listed below). If you received this survey and **do not fit the position described above**, please pass on to the correct dean(s) at your institution. Feel free to copy the survey as needed. Since there exist a great number of titles for this position that vary greatly across community colleges throughout the nation, finding the correct survey participant is not simplistic.

Thank you very much for helping us identify the correct leader(s) at your institution.

There may be other leaders that fit this description at your institution. Some of them may be listed below:

APPENDIX E

DEAN REMINDER POSTCARD

May 14, 2000

Dear Academic Leader,

Approximately three weeks ago one or more *2000 National Study of Community and Technical College Academic Deans* surveys were sent to you for use in a study of the academic deanship. If you have already returned the questionnaire or distributed them to the appropriate academic deans, please overlook this reminder. If not, please know that a response from you is very important to the research study. I know how busy you must be, but I hope you can find the time in the next day or two to complete the questionnaire and return it to me. Should you have any questions about the study, or need an additional questionnaire, I can be contacted by phone, (515)-***-*** or by email at carussel@iastate.edu. I can't thank you enough for your assistance.

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