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Work-related stress factors affecting the community college dean

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Work-related stress factors affecting the community college dean

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For the Major Program

DEDICATION

This

is dedicated

to my husband,

Paul,

whose love, support,

and encouragement

made this dream

possible.

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ABSTRACT

Community college deans support and guide the educational efforts of the community college. This middle manager, charged with productive interaction among students, faculty, and administration, is faced regularly with complex decisions. Furthermore, the dean is challenged today with reduced resources, expanded demands from students, and increased accountability from governing bodies and constituencies. Community college deans are under great stress as they strive to meet the mission of the community college and guide the institution into the future.

Due to the complexity and multiple pressures of the position, it is important to identify the causes of stress for the deans. If stressors can be identified, steps can be taken to manage the effect of these stressors on the deans.

In 2000, a national survey was completed and data compiled from 324 deans. Individuals who hold first-line administrative positions without teaching responsibilities were identified as the desired respondents for this survey. Personal, professional, and institutional data were collected and a 41-item Community College Dean's Stress Inventory was completed as part of the survey.

The items of the stress inventory were analyzed using principal component analysis to determine major stress factors. Nine factors emerged. The stress factor that was identified as the first of these nine factors included items that indicate interactions with supervisors and the organizational culture cause the greatest amount of stress for the deans. In a second phase of the research, selected

independent variables were examined to determine their impact on the stress factors.

Implications for the research are to provide current knowledge about the profile of a community college dean and the factors that cause stress in this position. Little research about the community college dean is available in the published literature. Data gathered from this survey are intended to expand understanding of the dean's position and the stress factors he or she encounters. For each community college, this knowledge will enable the college, supervisors, and dean to recognize and manage the stress-causing elements of the dean's job and enhance the dean's success.

CHAPTER 1. INTRODUCTION

Stress in various work environments has been studied extensively in recent years. A common conclusion of these studies is that stress is often a negative factor in the performance of work and the well-being of the worker.

One area that has not been studied extensively is stress for academic deans in community colleges. This is a deficiency that needs to be overcome for the benefit of both academic deans and community colleges in achieving their mutual objectives of effective education.

With respect to functions, the positions of academic deans are of great importance to community colleges. Sandwiched between administration and instruction, these midlevel academic leaders have been called "jugglers" who are required to manage successfully the frequently competing priorities, interests, agendas, and other matters of concern to the various administrators and faculty members of the colleges (Seagren, Wheeler, Creswell, Miller, & VanHorn-Grassmeyer, 1994).

Robillard (2000) indicated that community college deans were responsible for a great variety and volume of activities. He posited that this was a result partly from the evolving nature of the deanship (p. 4). These positions, like no other in the community colleges, stand at the crossroads of interactions among students, faculty, administrators, and the community. Bragg (2000) wrote that "the most vital functions of the community college—transfer, career preparation, community education, and support services" revolve around the positions of deans (p. 75).

The normal responsibilities of their complex and challenging positions generate stress for academic deans in community colleges. In addition, the deans are being asked to respond to new demands that generate even more stress for them. These new, stressful demands involve broader accountability, restricted or diminished resources, increased expectations for services, and greater challenges in the interactions of the deans between faculty and administration, as the complexities of these two positions increase (Seagren et al., 1994; Tucker & Bryan, 1999; Wharton, 1997).

To enhance management of stress for academic deans, it is important for both the deans and the community colleges to know what functions the deans perform and to understand how they survive in the middle ground between administration and faculty (Fagen, 1997; Gillett-Karam, 1999b). Furthermore, it is important to develop specific knowledge about stress that can be applied to the positions of the deans including identification of the categories of work-related situations that are stressful to the deans.

Two issues in particular complicate one's efforts to understand the stresses of academic deans in community colleges. One issue is the absence of a universally applied definition for "academic dean," making it difficult to identify, research, and discuss the position. The second issue is the reality that community colleges and matters of stress for academic deans are under-researched, judging from the relative abundance of research that has been performed in regards to deans in four-year institutions. Thus, it appears that not enough is known about what kind of people hold community college deanships, what their stress is, and what methods

are working successfully with respect to managing such stress (Byrne, 1997; Robillard, 2000).

Based upon a general review of the literature, it does appear that there is abundant research on the positions of academic administration or faculty in secondary or postsecondary institutions (Brix & Cruise, 1994; Bryant, 1992; Guglielmi & Tatrow, 1998; Hammons & Ivory, 1987; Swent, 1983; Vaughan, 1990; Wolverton, Gmelch, & Montez, 2001; Wolverton, Wolverton, & Gmelch, 1999). A careful review of the literature, however, indicates that there is actually very little research dealing with the role and function of academic deans in community colleges (Robillard, 2000; Vaughan, 1990).

Theoretical Framework

Researching stress has been a topic of interest for social scientists for many years. The study of occupational stress has become a significant branch of stress research. In the field of education, occupational stress research has included studies with various groups of faculty and administrators in secondary and postsecondary education.

In his research, Selye (1974) described the cyclical pattern of stress using the general adaptation syndrome (G.A.S.). He presented the concept that the stress cycle begins in the individual with an alarm reaction to some perceived stress agent and then moves to a resistance stage and finally to a stage of exhaustion.

McGrath (1970) presented the four-dimensional stress paradigm. This theoretical model has guided a multitude of stress research (Cooper & Marshall,

1976; Gmelch & Burns, 1993; Gmelch, Lovrich, & Wilke, 1984; Gmelch & Swent, 1984; Koch, Tung, Gmelch & Swent, 1982; Rasch, Hutchison, & Tollefson, 1986; Sarros, Gmelch, & Tanewski, 1998; Wolverton, Gmelch, Wolverton, & Sarros, 1999).

The theoretical model that was selected for use in this study was the four-stage model developed by Gmelch (1988) and discussed further in Torelli and Gmelch (1993). This model was modified specifically by Gmelch (1988) for school administrators from the McGrath (1976) model that examined the interactions of the environment and the person.

Gmelch (1988), and Torelli and Gmelch (1993) described how the four-stage stress cycle was analyzed and adapted for school administrators in the following manner:

> Stage 1) Factor analysis was used to cluster identified stress items into four categories: role-based stress, task-based stress, boundary-spanning stress, and conflict-mediating stress.
> Stage 2) The individual interprets the stressors based on his or her perception of the situation.
> Stage 3) The individual decides on a response (coping strategy) based on the determination of the situation in Stage 2.
> Stage 4) The individual's health and well-being begin to show the consequences of prolonged stress. (pp. 366-367)

The body of theoretical research by Selye, McGrath, and Gmelch was used to inform this study. Efforts were focused at the first and second stages of the model developed by Gmelch. The first stage was characterized by the stress items being clustered into categories, or factors, that represented the themes of stress in jobs of the deans. Gathering and analyzing information about the perceptions of stress characterize the second stage.

Statement of the Problem

There is inadequate knowledge about work-related stress and demographics of academic deans in community colleges. It is also unknown which demographic variables might impact the stress levels of the community college deans. Most of the published research about stress is focused on deans of four-year colleges or universities.

Purpose of the Study

A purpose of this study was to provide information about the stress factors that affect academic deans in community colleges. This study also examined the perceptions of stress between different groups of deans that were categorized according to the independent variables of age, workload, college location (rural, suburban, or urban), and gender. It was assumed that stress can be harmful for the deans and their job performance. A better understanding of what contributes to stress for the deans would provide information to aid the deans and the colleges in managing such stress.

Research Questions

The research questions were designed to identify work-related stress factors, provide demographics, and analyze the perceptions of workloads and locations on these stress factors. The independent variables for establishing the different groups of deans were age, workload, location of college, and gender.

The research questions that guided this study were:

1. What work-related situations are perceived as causing the most stress?

2. As stress factors emerge from this study of community college deans, what are the characteristics of each factor?
3. How do the independent variables of age, workload, college location (rural, suburban, urban), and gender contribute to the stress factors identified?

Significance of the Study

This study provides knowledge about the stress that affects academic deans in community colleges. This knowledge can potentially aid the deans and the colleges in managing the stress of the deans. It is important to understand these positions, the work environment, and the stress of the deans because such stress can impair job performance, health, and quality of life for the deans and interfere with the objectives of both the deans and the colleges.

The positions of academic deans in community colleges are important in number, as well as in function. Gmelch and Miskin (1993) estimated that 50,000 department chairpersons were in community colleges. The estimated number of these midlevel leaders would be even more, if one considered the full range of job titles that could apply (e.g., chair, division chair, department chair, associate dean, assistant dean, etc.) (Gillet-Karam, 1999; Murray & Murray, 1998).

The large number and significance of academic deans in community colleges make them important to research. Coupling this number and significance with the fact that 44% of all undergraduates were enrolled in community colleges (American Association of Community Colleges, 1997), it is clear that more research is justified to aid comprehension and management of stress for community college deans.

Limitations of the Study

In general, the limitations of the research instrument administered and the circumstances under which the respondents provided information constrained survey results. The study was limited by three constraints as discussed in the following.

1. The research instrument administered was the "2000 National Study of Community and Technical College Academic Deans" and was open to interpretation by the respondent and the researcher. Any time written materials are read by an individual, the individual's experience and perceptions shapes the understanding and interpretation of the material. This lens of individual perception is unique for each person and gives unique interpretation of the written material.
2. The data gathered relied solely upon the responses given on the survey. Individuals who were prone to answering surveys may have biased the information. Such responses may have indicated dissatisfaction with their current job situation, rather than an objective motivation to respond to the survey. Other individuals may have had more time available and enjoyed completing survey instruments. Another bias could have been the variation in day and time the survey was completed. Various details of well-being and comfort could have affected responses. No information was available about individuals who did not complete survey instruments, and it was unknown how their responses might have differed from those who responded to the survey.

3. Variations between institutions and positions also were limitations in that three types of institutions were included (vocational, liberal arts, and technical) and positions can have varied titles and duties assigned in these various institutions. These variations made it extremely difficult to assess and compare the responses of the same position among institutions.

Definition of Terms

The following terms were defined for use in this study:

Academic dean: Russell (2000) defines "academic dean" as the administrator who oversees the operations of various academic discipline areas (units), supervises faculty, and provides leadership for department chairs in multi-disciplined departments or divisions. He or she is a leader who is in the first line of administration in the community college. The academic dean may report to the Vice President of Instruction or to the President (pp. 21, 191).

Academic unit: The survey indicated that the academic dean might be assigned to a college, division, department, etc. This area of responsibility should be considered as the dean's "academic unit."

Community college: A "community college" is defined as a regionally accredited institution of higher education that offers the associate degree as its highest degree (Vaughan, 2000, p. 2).

Stress: "Stress" is defined as an environmental situation that presents a demand that threatens to exceed the person's capabilities and resources for meeting it. The

individual also perceives the threat as presenting a substantial difference in rewards and costs when choosing to meet or not meet the demand (McGrath, 1976, p. 1352).

Summary and Overview

This chapter identified the research problem this study as that of inadequate knowledge about stress for academic deans in community colleges. The purpose of this study was to address this inadequacy. Chapter 2 provides a more extensive literature review of the history of community colleges, the identity and function of community colleges, the evolution of academic deans, the identity and role of academic deans, occupational stress as related to both the general and academic work environments, and stress of academic deans. Chapter 3 describes the research instrument and the design of the study. Chapter 4 provides the results and findings related to the research questions. Finally, Chapter 5 summarizes the study and provides recommendations for practice and further research.

CHAPTER 2. LITERATURE REVIEW

Introduction

The topics encompassed in this literature review are: 1) the history of community colleges; 2) the identity and function of community colleges; 3) the evolution of academic deans; 4) the identity and role of academic deans; 5) stress theory as related to both the general and academic work environments; and 6) stress of academic deans. Based upon the information in the literature on these topics, the data collected from the community college deans' survey, entitled "2000 National Study of Community and Technical College Academic Deans," was examined and interpreted.

History of Community Colleges

The development of community colleges is traced through four periods of educational history in the following major overview. For further illustration, two other overviews that focus specifically on the history of community colleges are provided in brief forms after the presentation of this major overview.

The first period of educational history in accord with this major overview was the "Emergent Nation Period,"—1790 through 1869. Cohen (1998, p. 51) described the early evolution of higher education culture in this period as one that began to shift from a liberal arts curriculum to a more applied curriculum for the purpose of supporting economic and industrial expansion.

The establishment of separate "professional" schools that supported science, engineering, and teaching was another characteristic of this period. These

professional schools were largely the result of influence by German universities and their models of education (Cohen, 1998, p. 63). Also, a new educational entity, the public university, first appeared on the educational horizon during this period.

As a result of federal and judicial decisions during this period that legislated against nationalizing secondary and higher education (Palinchak, 1973, p. 13), the states were left with the power to create the quantity and types of institutions they deemed appropriate. While many of the colleges that were founded did not survive, the ones that did represented the diversity of community needs where they were founded (Cohen, 1998, p. 61). Further, the shift to a more applied, practical educational experience during this early period marked the beginning of the ideas that created community colleges.

The second major period of educational history, considered the "University Transformation Period," encompassed 1870 to 1944. This period was characterized by the passage of two legislative bills that significantly influenced higher education: the Morrill Act of 1862, which established the land-grant colleges; and the Serviceman's Readjustment Act (the GI Bill), which made education possible for World War II veterans (Cohen, 1998).

The establishment of the land-grant university combined theoretical and practical education (Parnell, 1985, p. 83). The Morrill Act and the mission statements of the land-grant colleges reflected practical aspects of the educational spirit of the times. The philosophy that higher education served a practical purpose was reflected in phrases from mission statements such as "open door," "practical

curriculum," and "training in agriculture and the mechanical arts" (Brubacher & Rudy, 1997, pp. 62-64).

The second important legislative act of this period, the GI Bill, committed America to making an investment in education for the men and women who had served in the military. This investment, in addition to making higher education more available, provided increased earning power for individuals and potential revenue for the government (Parnell, 1985).

Another event during this period that was significant in the development of community colleges was the completion of the work and report of the Truman Commission in 1947. President Harry Truman had assigned to the Commission the task of considering and recommending ways to provide educational opportunities for all students that would fit their interests, abilities, and needs (Vaughan, 1983). Having met that assignment, the Commission's report, *Higher Education for American Democracy*, was issued in December 1947. The report "became a blueprint for developing higher education in post-war America and in it the phrase 'community college' first appeared" (Parnell, 1985, p. 84; Vaughn, 1983. p. 21).

This eventful period set the stage for development and acceptance of the concept that going to college was an acceptable aspiration for most people. This period was characterized principally by the swell of demand for higher education by a broad band of citizens in the United States. Snyder (1993) demonstrated these trends by providing the following figures on growth from 1870 to 1945: the number of students enrolled rose from 63,000 to 1,677,000; the number of institutions grew from 250 to 1,768; and the number of degrees conferred (bachelor's, master's, and

doctoral) climbed from 9,372 to 157,349. These figures clearly showed that participation in higher education was becoming a desired and acceptable path for a much broader population group in the United States.

The earliest vestige of a two-year school was found in the private academies in New England and the southern states. These academies provided various combinations of elementary, secondary, and collegiate course work as early as 1835 (Palinchak, 1973). Palinchak (1973) went on to describe that these early academies were permitted to offer a variety of courses that had overlapping function with the colleges of the era (p. 22). A later version of the two-year school appeared in the Midwest, southwest, and western states as normal schools and schools for minority students. Various educational approaches were attempted during this period in order to answer the need for skill and liberal arts education (Palinchak, 1973, p. 23).

Brubacher and Rudy (1997), Cohen and Brawer (1982), Lorenzo (2001), and Vaughan (2000) described the beginning of the community college movement in the late 1800s. After at least a half century of extensive discussion by leading educators, according to these researchers, the first event that signified the emergence of community colleges was William Rainey Harper's proposal of the junior college concept, which resulted in the founding of Joliet Junior College. This first public junior college was founded in 1901.

In the 1850s, one of the early supporters of the concept of junior colleges was Henry Phillips Tappan, President of the University of Michigan. Cain (1999) described Tappan's position to be one that favored the German university model emphasizing graduate and specialist education. Tappan also thought American

students needed two years of basic studies beyond high school that prepared them for the more difficult university programs (Cain, 1999, p. 28). Tappan had little faith in the collegiate level work offered by the secondary school system at the time and continued to support the concept of the public junior college (Palinchak, 1973, p. 41).

Another university leader described by Cain (1999), John Burgess, of Columbia University, declared in 1884 that the American universities were attempting to do too much. He felt that no institution could properly handle both general and specialized education. The position of Burgess was that the general education role belonged to the colleges and the universities should handle the specialized education role (p. 28). A third influential leader involved in the discussions during this period, William Watts Folwell, President of the University of Minnesota, also believed that the secondary schools should take over more of the burden of educating the first two years for the universities (Palinchak, 1973, p. 41).

It is clear that Harper's proposal of the junior college concept around 1900 was a result of the extensive discussions in the late 1800s about when students should leave their secondary education and begin their university or professional studies. Such factors as what was the responsibility of the secondary schools and the university, and when should a person be finished with school and be self-supporting entered into this debate of what would be considered junior or senior college work (Brubacher & Rudy, 1997; Cohen & Brawer, 1982).

Cohen (1998) also described two additional concepts that contributed to the formation of community colleges. These concepts were: 1) the "universities could not or would not matriculate everyone who sought upward mobility through higher

education"; and 2) "university leaders insisted that universities would not become true research and professional development centers as long as they retained their freshman and sophomore classes" (pp. 111, 112).

The development of the two-year, junior college during this period answered several of the questions being debated by university and college leaders. This new concept of higher education for the masses offered convenient, affordable access and was known as a "local," "people's," or "community" college (Brubacher & Rudy, 1997; Parnell, 1985). Events that encouraged the development of the community college during this period included "an increased demand for professional training," rapidly increasing numbers of students graduating from high school, and a belief that higher education was "a means of ascending from lower to middle class and middle to upper class" (Cohen, 1998, pp. 114, 115).

The third educational period was described by Cohen (1998) as the "Mass Higher Education Era"—1945 through 1975. Expansion of mission, structural complexity, and diversity of curriculum characterized this period. Very large universities were being developed. The university system was being expanded to regional scope, with state systems and extension centers to extend its reach throughout the country.

The GI Bill, private scholarships, and publicly funded construction fueled campus and enrollment growth. Enrollment patterns shifted from private to public institutions and education became more available. Education was perceived as valuable and practical for the average family (Cohen, 1998, p. 195).

During this period, the development of community colleges was greatly stimulated by the many students who were unable or unwilling to pay the high costs of liberal arts and proprietary school experiences. They sought other, more practical, ways to continue their education, and community colleges were the answer for millions of students. The community college experienced the most "phenomenal growth," reaching five million students in 1975, which was "as many as had been enrolled in all of higher education a dozen years earlier" (Cohen, 1998, p. 195).

A fourth era that was identified by Cohen (1998), encompassing the maturing community college environment, was named the "Contemporary Era"—1975 through 1995. This was primarily a period of consolidation.

Cohen (1998) described expanded services and additional buildings as favorable characteristics of this era that were helpful for the development of community colleges. The rush to create additional community colleges had passed. The community colleges were now faced with determining how they could serve effectively their existing and potential students (pp. 312, 313).

Cohen (1998) wrote that "in 1975 community colleges were enrolling 35 percent of all students in higher education; by 1994 this had risen to 39 percent" (p. 313). Another sign of the significant role community colleges play in higher education, as noted by Cohen (1998), is that around 45 percent of all first-time freshman enrolled in community colleges (p. 313).

This completes the major overview of educational history that was material to community colleges. The following are two brief overviews of history that focus specifically on the development of community colleges.

The first brief overview of the history of community colleges was described by Thornton (1972) to include the following four major stages:

1. The first and longest stage lasted from 1850 to 1920 and saw the idea and practice of a separate institution (the junior college) develop. This institution was able to offer the first two years of baccalaureate curriculum.
2. The second stage, covering 1920 to 1945, added the concepts of terminal and semiprofessional education to the junior college concept.
3. The third stage, encompassing 1945 to 1965, saw the addition of responsibility to the adults in the community as part of the shift to the idea of the "community junior college."
4. The fourth stage began in 1965 and continued to 1972, as the progression of the efforts to provide for all the educational needs of the community. This focus moves the community college towards the full realization of the open-door concept. (p. 47)

The four stages are a succinct description of the development of community colleges in the nineteenth and twentieth centuries.

The second brief overview of community college history was provided by Deegan and Tillery (1985). They broke the developmental periods of the community colleges into four generations, as described below:

Generation 1: Extension of High School (1900 – 1930)
Generation 2: Junior College (1930 – 1950)
Generation 3: Community College (1950 – 1970)
Generation 4: Comprehensive Community College (1970 – current)

Deegan and Tillery (1985) wrote that Generation 1 (Extension of High School) was characterized by increased completion rates from secondary schools which increased demand for higher education that "could not or would not be met by existing colleges and universities" (pp. 5, 6). Cain (1999) further described this generation as a time when leaders of higher education in the United States were debating what vestiges of higher education would follow the European models of

education and how educational institutions would answer the needs of American students. The advocates of the university wanted to protect the specialized functions of the university from students deemed unable to benefit from upper division studies (Cain, 1999, p. 29).

Deegan and Tillery (1985) described Generation 2 (Junior College) as a time when the "goal of equal opportunity for postsecondary education for mature adults as well as younger students was affirmed" (p. 9). Cain (1999) wrote that this generation was characterized as a time when community colleges more clearly defined their role in the scope of higher education. With the economic depression of the 1930s, the community colleges added a new function of occupational retraining to their services. The notion of the community college being an extension of high school disappeared during this time period, and the concept of "local control" was identified as a dominate factor (pp. 30-31).

Generation 3 (Community College) was described as being a time of growth and expansion. This generation was affected by the Truman Commission that was directed by President Truman to explore the expansion of education for all citizens of the United States. The report from this Commission laid the foundation for the "open-door" policy and the expectation that the college would offer whatever the particular community required or desired in terms of courses or programs (Cain, 1999, pp. 32-34; Deegan & Tillery, 1985, pp. 12-15).

The final phase, Generation 4 (Comprehensive Community College), was characterized by tremendous growth for the community colleges (Deegan & Tillery, 1985). Cain (1999) described this generation as a time of identity crisis for the

community colleges. As the Truman Commission doctrine opened the door to all seeking additional education and training, it also added to the confusion over the core charter of the community colleges. The educational needs of the nation also changed at this time. Technology forced students and employees to add and update technological skills to remain competitive in the job market. The community college was situated to respond quickly to these demands (pp. 36-37).

The three historic overviews outlined above each provide a guide to the founding and maturation of community colleges as a unique provider of higher education. The search for identity and maturation of services and programs was unique and supportive of the communities where they were located. This close connection to community needs makes the community colleges a vital and viable option for those seeking additional education near their home.

Community Colleges: Identity and Function

Identity

Various names have been used to identify the two-year college. Cohen and Brawer (1982) described the evolution of the names for these institutions. For example, early names that did not survive were "People's College" and "Democracy's College." After a half-century of transitory names, more promising names emerged. The term "junior college" was first used in the 1950s and 1960s. In the 1970s, the title "community college" became prevalent and was used for both privately and publicly supported schools (p. 5).

O'Banion (1997) commented that in the late 1960s one new community college was opening each week. Between 1966 and 1976, 465 two-year colleges opened in the United States, bringing the total number of community colleges to 1,030 (Levine, 1993, p. 101). Today, there are 1,166 regionally accredited community colleges, located within commuting distance of 90% of the nation's population. These colleges, focused on the communities in which they are located, enroll approximately 5.4 million credit and 5 million non-credit students (American Association of Community Colleges, 2001).

Function

The purposes served by community colleges in the United States can vary from transfer education, to technical education, to remedial courses, to training classes, and to life-enrichment courses. As Vaughan (2000) said, based on their mission statements, community colleges were shaped by these commitments:

- Serving all segments of society through an open-access admissions policy that offers equal and fair treatment to all students.
- Providing a comprehensive educational program.
- Serving the community as a community-based institution of higher education.
- Teaching and learning.
- Fostering lifelong learning. (p. 3)

Roe and Baker (1988) described the role and mission of community colleges in the following manner:

> Community colleges provide the critical link in the continuum of education between the public school and higher education; provide opportunity, often the only opportunity, for postsecondary education; provide two-year transfer programs [to four-year programs]; provide training and retraining for the nation's workforce; provide

> compensatory education; and provide opportunity for lifelong learning. Moreover, community colleges facilitate economic development by providing the necessary connection between the needs business and industry and education. (p. 5)

As reflected in these descriptions, community colleges represented strong beliefs that higher education should meet the expectations of a broad range of student and community needs.

Vaughan (2000) defined the community college as a "regionally accredited institution of higher education that offers the associate degree as its highest degree" (p. 2). This definition provides insight into understanding the dynamics that make community college administration especially challenging and stressful.

The words "regionally accredited" in Vaughan's definition make it clear that external agencies have an interest in how community colleges are operated. Not only do the community colleges have to meet collegiate accreditation standards for their region, but typically they are governed by publicly elected board members, some of whom may not have an objective, unbiased interest in students and curriculum (Cloud, 1991). The community college typically receives public tax dollars (Vaughan, 2000), which adds further to the dynamics of interaction between college and community interests.

The second part of Vaughan's definition of the community college references the level of degree that can be awarded (the associate degree). The associate degree is awarded for a wide range of academic and vocational career areas responding to the needs of local students. The type and quantity of associate

degrees will vary based on the location of the community college and the needs of the community.

The very name of these local educational institutions—community colleges—indicates the strong community connection. Community colleges are known to have their own culture, serving unique geographic locations, with clientele (students) who have unique educational goals (Vaughan, 2000, p. 2). Vaughan (2000) writes that two characteristics of the community college distinguish it from other higher education institutions—open access and equity (pp. 3-4).

Community colleges have been described as nontraditional and untraditional—not adhering to their own traditions (Cohen & Brawer, 1989), thus making and remaking themselves (Levin, 1998a, 1998b). This culture of change and service is fertile ground for producing stress for community college administrators—particularly, the community college dean.

O'Banion (1997) described the development of community colleges, as follows: "Unlike the models of research universities and liberal arts colleges that were imported from Europe, community colleges were designed from the ground up to serve American priorities" (p. ix). A major distinction, O'Banion (1997) noted, was that the European model was built "with the fundamental assumption that only a certain proportion of the population needed or could profit from a college education" (p. ix). In the American educational environment, economic and societal pressures created a much higher demand to educate more than the elite. The community college, with its open-door policies and society's belief in universal access to higher education, was a great partnership that only continued to foster the growth of

programs, curriculum, and practices that met the needs of these new students (O'Banion, 1997).

Community colleges were, and are, noted for their "open admissions policies, faculties rewarded essentially for teaching, and their disproportionate numbers of non-resident, part-time, older, non-white, and working class students" (Pascarella & Terenzini, 1998, p. 156). The variation of the mission of the community college also was stated in Seagren et al. (1994), when the authors described one aspect of the community college mission as providing "mid-career job training" (p. 3).

Seagren et al. (1994) stated that, "response to change has, perhaps more than any other single factor, differentiated two-year, postsecondary from traditional four-year education" (p. 3). The changes that demand this quick response can come in terms of adjustments in public attitudes, financial support, political agendas, general economic conditions, or curricular modifications. The response to these types of changes can confront community colleges with innumerable changes in their working environments.

Evolution of Academic Deans

Prior to the existence of the dean's position in higher education, the college or university president personally served in a multitude of positions. It was not unusual for the president to be scholar, leader, teacher, disciplinarian, keeper of academic records, admissions officer, business manager, and secretary to both the faculty and the board of governors (Tucker, 1993, p. 14).

The creation of the academic dean's position can be traced to Charles W. Eliot, then President of Harvard University, who in 1864 named a dean for its medical school. Initially, Eliot considered the chief function of such a dean's position to be that of maintaining "friendly and charitable intercourse with the students" (Dill, 1980, p. 262).

By 1870, however, seeing the potential of the position for administrative assistance, Eliot stated that he wished this first dean of faculty to "relieve him of some portion of the college's 'administration'" (Martin, Samels, & Associates, 1997; Tucker, 1993). Dill (1980) described Eliot's evolving expectations that a dean would preside at faculty meetings in the president's absence, adjudicate discipline issues in the college, and in general supervise the support staff of the college. Eliot also held the expectation that the dean was to be the president's chief advisor about instruction in his own school (pp. 262-263).

Notwithstanding Eliot's ambitious agenda for the position of dean, the early deans were charged on most campuses to act primarily as "secretaries" for their faculty colleagues (Martin et al., 1997, p. 3). Although these first individuals tended to act as administrative assistants, while keeping their roles as professors, there was little uniformity in their administrative roles and responsibilities. Dill (1980) stated that "a dean for the main college arts and sciences faculty clearly was an extension of the presidency" whereas "department chairmen, an extension of the faculty" (p. 263). This variation in duties and expectations, whether in a college, university, or community college, can still be found today.

Tucker (1993) wrote that "equivalents of academic departments do not show up until the second half of the 1700s" (p. 14). The growth in the number of students, program curriculum, and degrees offered all contributed to larger, more complex, universities that demanded the change in organizational structure (Dill, 1980; Tucker, 1993). Where once the president was responsible for all management functions for students, faculty, staff, and institution the establishment of a structure of deans and other administrators aided the president in carrying out his or her responsibilities (Tucker, 1993). Tucker (1993) noted that it was "in the 1890s the first deans were appointed to whom curricular and disciplinary authority was gradually delegated" (p. 14).

As the university system grew in size and complexity, governance structures evolved to serve the added responsibilities (Dill, 1980). The title of dean was assigned most commonly to those positions that oversaw the operation of several discipline areas or of professional schools (e.g., medicine, law, and theology). This position may have reported to the provost or the president (Martin et al., 1997), and the dean remained involved in teaching and the development of his or her own research agenda.

In general, the evolution of the duties and scope of the deans in community colleges followed a path similar to that of deans in colleges/universities. One exception, however, was that the academic deans in community colleges typically did not retain their faculty roles. Also, there was a difference in the availability of tenure, a difference that signaled the expectation that deans in community colleges were expected to play, in part, a sacrificial role for the institution (Warren, 1972).

This administrative positioning against tenure was considered important so that this middle-management group could act as a shock-absorber for the institution in times of negative public reaction (Warren, 1972, p. 312).

Focusing on the administrative structure of community colleges, Cohen and Brawer (1982) wrote that community colleges, with their roots in secondary schools, usually were managed by former instructors who had become administrators (pp. 110-111). Cohen et al. (1994) stated:

> In fact, in the early years the school board supervised the community colleges and the school superintendent was also superintendent of the colleges. Administrative positions followed lower-school organizational lines, with deans of students and curriculum coordinators prominent. (p. 6)

Cohen et al. (1994) continued the description of the early organization of the community colleges with the note that the dean of instruction was the unique contribution of the community college to higher education management. He also noted that over time this position moved toward the status of vice president in the community college setting (p. 6).

As the community colleges grew in size, the combination of programs and responsibilities changed to reflect the scope of programs that needed to be managed, and, as found in the college/university model, the number and scope of the deans' positions changed. The organization of the academic programs in the community college was found in combinations of academic disciplines or related teaching fields but also in the size and location of the community college campuses and centers. Depending upon the size of the institution, the number of departments may have included several small

program areas or a single teaching field (Cohen & Brawer, 1982, pp.110-111).

Cohen and Brawer (1996) wrote early in their chapter on community college governance that "the one constant is that the colleges are complex entities, and a description of one never quite fits the others" (p. 101). This was true of the dean's role as well as the organization of the departments or programs in the community college. This diversity in organizational structure and position titles makes the position of dean a challenging position to research in the community college.

Academic Deans: Identity and Role

Identity

Dill (1980) wrote that deans and deanships were relatively new in American higher education and their evolution can be traced in terms of decades rather than centuries (p. 261). Dill (1980) described deanships in the following manner:

> Like medieval galleons, deanships come in many sizes and styles. They range widely in cost and complexity and in accommodations for crew and cannon power. Most are built without designs, improvised instead from memories of previous successes and failures and elaborated to the extent that local initiative and creativity will allow. They are often slow and clumsy craft, hard to maneuver, and not well suited for long voyages in stormy seas. Some, like the great Swedish ship *Wasa* in 1628, have been known to capsize in calm water and sink, flags flying, shortly after leaving the dock. (p. 261)

This picturesque description has been, and is, applicable to deans in many community colleges.

A person soon discovers through research the wide variety of titles, functions, and organizational structures that encompass the jobs of academic deans in community colleges. Robillard (2000), in writing about the deans' positions in community colleges, noted that "the first obstacle to performing research on deans is the lack of definition associated with the term *dean*" (p. 3). For example, the responsibilities of a dean may be included in job descriptions labeled chair, division chair, department chair, associate dean, assistant vice president, etc. Even in community colleges that have commonalties in size and type of legal control there may be "substantial differences in the name of various administrative offices and in the grouping of their duties" (Tucker, 1993, p. 113).

The literature review of the dean's position in the community college environment needs to be broad and include the wide range of possible titles to capture the complexity of the job of the community college dean. This broad-based approach to research was followed and is reflected in this report by using the various titles that the researchers used for the midlevel academic positions.

Role

The responsibilities of the academic deans are broad and complex. As Tucker and Bryan (1999) described the multifaceted role of the deans, the deans need to be doves of peace to intervene among warring factions in the colleges that otherwise would cause unacceptable turbulence. The deans, on occasion, need to be dragons, and protect the value system of the academic units as they drive away threatening

forces. Most often, the deans need to assume the roles of diplomats, and encourage, guide, and inspire those who work in the academic environment (p. ix).

The community college deans usually are considered line officers responsible for planning and supervising a single, or a combination of programs. The scope of responsibility might include concerns with instruction, student personnel services, evening or weekend courses, and community services. If the size of the college is sufficient, there might also be a dean of college development or admissions (Cohen & Brawer, 1996).

The community college deans must bridge various groups of the colleges and work in collaborative ways to meet the demands of community college administration and faculty (Gillett-Karam, 1999a; Gillett-Karam, 1999b). These midlevel managers also must respond to rapidly changing demands for curriculum and services. The "ability to change rapidly and in direct response to client demand" (Seagren et al., 1994, p. 3) places the academic deans in a somewhat different environment than their college/university deans in similar positions.

Monroe (1972) indicated that the "prime function of the administration is to coordinate and balance the diverse activities of the college" (p. 310). Cohen and Brawer (1996) described the activities of a community college dean to be:

> That similar to the community college president, each dean becomes involved in legal issues, public relations, intrainstitutional administration and personnel matters, budgeting, and liaison with state and federal agencies. Most deans serve as part of a president's council or cabinet. (p. 125)

In a like manner, Tucker (1993) identified clusters of job duties and responsibilities of the department chair. The areas of focus were department governance, instruction,

faculty affairs, student affairs, external communication, budget and resources, office management, and professional development (pp. 28-29).

More recent research conducted by Gmelch and Miskin (1995) arranged responsibilities into four roles for department chairs. These roles encompassed being a faculty developer, manager, leader, and scholar (pp. 6-7).

Fagin (1997) commented that she believed the "dean exercises great influence in the school...threefold: areas where the dean influences, areas where the dean is directly involved, and areas where the dean is indirectly involved. The dean can influence others rather than act directly in many faculty and student matters" (p. 98). It is apparent that the scope of the dean's influence is considerable.

There are similarities in the functions and responsibilities of deans in community colleges and colleges/universities. Whether entitled dean, chair, associate vice president, or director, both types of institutions rely heavily on the skills, persistence, and success of these midlevel academic leaders.

Even with the similarities, there are striking distinctions between the two positions, as would be expected considering the differences in the missions of the two types of institutions. The four-year college/university positions have strong ties to research, publication, and teaching as part of their job duties. The community college positions are likely to have none of these requirements, but the positions reflect strong expectations for maintaining updated curriculum offerings and having close ties to the communities where the school is located. Further, academic leaders in community colleges are more dependent on self-motivation and self-support to continue scholarly research pursuits (Boggs, 2001; Hawthorne, 1994).

Stress Theory: General and Academic Work Environments

General Work Environment

An aspect of stress research that has been studied more in recent years is that of stress in the work place. The consequences of stress have been studied widely in that stress is a major concern for today's workers and the organizations for which they work.

Buunk, de Jonge, Ybema, and de Wolff (1998) stated the following regarding the increase of occupational stress:

> According to some authors, occupational stress has increased in recent years because more and more is demanded from workers in terms of long periods of intense time pressure and rapid changes in the nature of jobs due to, among others, introduction of new technologies, international competition, market vacillations, and governmental budget cuts (Houtman & Kompier, 1995; Johnson & Hall, 1994; Levi, 1994; Offermann & Gowing, 1990).

Furthermore, the wide variety of research into stress in the work environment has developed increased awareness that stress, particularly unrelieved stress, contributed to psychological and physiological illnesses (Cloud, 1991).

The *Handbook of Work and Organizational Psychology* (1998) reported on several studies that indicated the magnitude of the problem of work-related stress. One such study, by Northwestern National Life (1991), stated that the proportion of workers who said they had more than one stress-related illness had nearly doubled between 1985 and 1990 (p. 146). The federal National Institute for Occupational Safety and Health (NIOSH) reported, in the *Journal of Occupational and*

Environmental Medicine (1998), that "health care expenditures are nearly 50% greater for workers who report high levels of stress" (p. 8).

Hans Selye (1936), a medical researcher, is credited with the first definition of the word "stress" for work-related purposes and with undertaking research on such stress in a paper he wrote while working at McGill University. Selye (1936) defined stress as "the nonspecific response to any demand" (p. 32). His work endeavored to explain the physiological reactions brought about by a wide range of stimuli.

Selye's (1974) explanation of this process resulted in development of the General Adaptation Syndrome (G.A.S.) model. He described the development of G.A.S. this way:

> This reaction was first described, in 1936, as a "syndrome produced by various nocuous agents" and subsequently became known as the general adaptation syndrome (G.A.S.), or the biological stress syndrome. Its three stages—(1) the alarm reaction; (2) the stage of resistance; and (3) the stage of exhaustion... (p. 38)

Selye (1974, 1980) further explained the G.A.S. as having certain characteristics for each of the three stages. The first stage, the alarm reaction, was characterized by reaction to the stressor. This alarm stage was known by the famous "fight or flight" reaction. At the same time the body's resistance was reduced. The second stage, the resistance (counter-shock) stage, was characterized by the alarm reaction disappearing and resistance rising above normal. The final stage was exhaustion—the stage when the adaptation mechanisms of the body fail after the body was exposed to the same stressor for long periods of time without reprieve. Should this stage be prolonged, stress-induced diseases or death may follow.

As various disciplines (psychology, sociology, medicine, and anthropology) engaged in research on stress, the definitions of stress expanded from Selye's original work. Social scientists have been more likely to view stress from a psychological point of view. McGrath (1976) explained stress as an interaction of person and environment, with the level of stress that is felt determined by the individual's perception of the event. He stated:

> So there is a potential for stress when an environmental situation is perceived as presenting a demand which threatens to exceed the person's capabilities and resources for meeting it, under conditions where he expects a substantial differential in the rewards and costs from meeting the demand versus not meeting it. (p. 1352)

Jex, Beehr, and Roberts (1992) provided an overview of the variation in stress definitions in their study. These researchers noted that stress definitions could be found linked to a stimulus (job stressor) definition, a response (strain) definition, or a stimulus-response (the interaction between job stressors and strains) definition. The stimulus-response definition also was described as the mediational approach (Buunk et al., 1998).

Studies of various occupational groups provided a growing body of evidence that occupational stress adversely affected performance, productivity, health, and job satisfaction of professionals (e.g., teachers—Schwab & Iwanicki, 1982; dentists—Howard, Cunningham, & Rechnitzer, 1978; administrators—Gmelch & Miskin, 1993; Gmelch & Swent, 1984). Professionals dealing with other people have been found to be more vulnerable to occupational stress than have workers dealing with product-oriented jobs (Cloud, 1991; Cooper & Marshall, 1976).

Because of the type of work in which administrators or managers participate, they constitute a segment of the workforce subject to certain types of stressors more so than other employees (Marshall & Cooper, 1979). Marshall and Cooper (1979) identified seven reasons for administrators and managers to be stressed.

Six of the seven types of stress were tied to the interaction of the organization and the manager. The items included:

1. Stresses intrinsic to the job (e.g., working conditions, work overload).
2. Stresses developing from the person's role in the organization (e.g., role ambiguity, role conflict, and role responsibility).
3. Stresses caused by the human relationships in the organization (e.g., those with superiors, subordinates, and peers).
4. Stresses resulting from career development traumas (e.g., lack of job security or incongruence in status).
5. Stresses which are part of the organizational structure and culture (e.g., lack of participation in making decisions, lack of effective communication, restrictions on behavior, and office politics).
6. Stresses caused by extra-organizational sources (e.g., conflict of company with family demands, financial difficulties, and conflict of personal beliefs with those of the company and conflict of job mobility).
7. Stresses from within the individual (e.g., personality type, behavior patterns, and ambition). (pp. 76-95)

Early research efforts to define and develop models for the study of stress can be found in the work of McGrath (1970) and Kahn (1970). In this early work, McGrath and Kahn focused on the social-psychological aspects of stress rather than on the physical and physiological aspects.

McGrath wanted this early framework to be guided by comprehensiveness. He wrote "this framework and paradigm should take into account, as much as possible, all of the widely advocated definitions of stress and all the phenomena to which that term has been applied" (p. 11).

McGrath (1970) continued his description of the framework as one that would include four factors, or stages. McGrath (1970) considered the first stage to be what takes place in the environment. This is the "physical-social setting in which the focal organism (the individual, group or organization whose relation to stress is to be studied) is embedded" (p. 15). He described this phase as being called *demand* (input, or stressor). The second stage that he described as *reception* included the idea of the focal organism having recognized or perceived this objective demand (p. 15). This set of events he described as *subjective demand* (pp. 15-16). *Response(s)* to the subjective demands constitutes the third stage. McGrath described this stage in terms of the physical, mental, behavioral, and interactional responses to the stress event (p. 16). The fourth stage was then the consequences of the response. The response(s) by the focal organism and the larger organizational system in which it is embedded were part of this stage (p.16).

Kahn's (1970) conceptualization of stress believed that both individuals and organizations had to be considered as objects of stress. Kahn (1970) also believed that stress was a process and that more could be learned by following the sequence of events (p. 98). His concept started with some occurrence in the objective environment that made a demand on the individual or the organization. The next stage was whether the demand was recognized. The third stage was the response to the perceived demand. The last stage was the effect on the person or organization (pp. 98-99).

As a model for the study of stress, the framework described by McGrath (1976) used a four-stage analysis of the stress process and connecting, or linking,

processes between stages (p. 1356). Between Stage 1 and Stage 2, there was an appraisal process. This was a subjective analysis of the threat by the person whether the appraisal is accurate or not (p. 1356). A decision-making process linked Stage 2 and Stage 3, when the individual considered the available alternatives and chose a response (p. 1356). The linking process between Stage 3 and Stage 4 was the response, or performance process. The process evaluated the level of performance in terms of quantity, quality, and speed (pp. 1356-1357). A fourth process was placed between Stage 4 and Stage 1. This fourth process was identified as the outcomes process, which included not only the change in behavior of the individual but also on factors outside the control of the individual (p. 1357).

This analysis model described how McGrath (1976) envisioned sorting a complex set of responses and outcomes for various stress events. This framework of research into occupational stress set the foundation for exploring stress in the academic environment.

Academic Work Environment

Gmelch (1988) described stress in the academic environment as a four-stage stress cycle. The four stages were 1) stressors or demands, 2) interpretation or perception of the stressors or demands, 3) response, and 4) consequences.

Koch, Tung, Gmelch, and Swent (1982) found four sources of stress for school administrators through factor analysis. The four sources of stress found by these researchers were role-based stress, task-based stress, boundary-spanning stress, and conflict-mediating stress (pp. 495-498).

Identifying categories of stress characterized Stage 1 of the stress model developed by Gmelch (1988) for stress of school administrators. This model of the stress cycle was expanded in Gmelch and Wilke (1991), and Gmelch and Burns (1991) to include school administrators.

The school-administrator model developed by Gmelch was described in the Torelli and Gmelch (1993) discussion of occupational stress and burnout in the academic environment. The four stages of this model were described by the authors in the following manner:

Stage 1 was characterized by demands, or factors, placed on the academic administrator. The factors were grouped into four categories, with the following characteristics:

1. role-based stress was defined as role ambiguity and role conflict;
2. task-based stress was outlined as work overload, task difficulty, and the need for high achievement;
3. boundary-spanning stress was based on the need for negotiations and gaining public support for school budgets; and
4. conflict-mediating stress was described as the need to manage conflict within the school such as student discipline or conflicts between parents and the school (p. 365).

Stage 2 encompassed how the stressors were perceived (pp. 365, 367).

Stage 3 represented the options, or choices, presented to the individual. The selection of response depended upon whether the individual perceived the demand to be harmful or positive (p. 367).

Stage 4 was the consequence stage of the cycle. This stage showed the effects on the individual if they have not learned to manage stress. Consequences can be impaired "mental, behavioral, and physical illness" (Gmelch, 1988, p 138). The four stages were connected by "filters." These filters introduced the effect of interaction and influence among the various stages. These filters were considered to be in two categories: 1) the disposition of the individual; and 2) personal and organizational characteristics (e.g., age, gender, hereditary factors, size of school, level of school) (p. 367).

Academic Deans

Academic deans hold midlevel administrative positions in community colleges. Research about these midlevel positions was found under various titles (e.g., chair, division chair, department chair, associate dean, assistant dean, etc.) (Gillet-Karam, 1999; Murray & Murray, 1998).

To gain the broadest understanding of the issues with respect to stress affecting these midlevel academic positions, research was conducted for the various job titles and has been reported with those titles in this section of the study. Regardless of the title used in the research, the issues affecting these midlevel positions were selected based on the authenticity of the work-related stress for the holders of the positions.

Researchers refer to the academic deans being in a role of "middleness" (Fagin, 1997). Seagren et al. (1994) in their research of such positions described this middle role in this manner:

> A juggler who initiates, controls, and halts objects being juggled. These objects may be competing priorities, interests, agendas, and expectations. And the chair is in the middle, feeling the pressures of the objects in flight, delicately balancing interests, and hoping that the final act will receive a standing ovation. (p. ix)

These researchers have described effectively the stressful aspects of the deans' responsibilities in their midlevel positions.

Other researchers examined the mixed messages and unclear definition of such work delving into the stresses of role conflict and ambiguity for deans and department chairs (Sarros et al., 1998; Wolverton et al., 1999). Not knowing clearly what is expected and needing to respond to conflicting demands in these midlevel positions created stress for these academic administrators.

Byrne (1997) noted that there is a long tradition of the chair's role in the community college being overlooked or ignored by prior researchers. He attributed this to the chairs not being seen as career administrators since the position was often filled on a rotating basis by faculty members who were only too glad to return to their teaching assignments at the end of their appointment. He stated that these midlevel managers were seen as amateurs, since position postings often indicate that successful administrative experience was not required for the position (p. 10).

Hecht, Higgerson, Gmelch, and Tucker (1999) stated that "chairs enjoy, at best, limited financial rewards ... Insofar as the commonest standard of success and importance in our society is dollars earned, we have not been accustomed to think of chairs as major campus leaders" (p. 8). If higher education is to keep the best and most experienced midlevel managers in critical positions, compensation will have to be considered and adjusted in accord with the equities of the positions.

Many of the pressures for the deans, in their midlevel positions of leadership, stem directly from the challenges facing community colleges. Byrne (1997), in his overview of past and present literature, considered the changes in the roles of the chairs to be due to factors that were changing the traditional bureaucratic governance model of community colleges. These factors included:

1) collective bargaining, which brings uncertainties;
2) extensive use of part-time faculty who often exhibit low attachment to the institution, department, or discipline;
3) increasing experimentation with professionalization of faculty through scholarship;
4) increasing experimentation with participatory management;
5) an increasing percentage of PhDs in academic departments;
6) changing demands on the part of the communities, which may be addressed best by faculty or the chair; and
7) changes in the structure of student demand for courses and programs that may be addressed by faculty and the chair. (p. 7)

Another researcher, Wharton (1997), described changes in community colleges in the following list:

- Being held more acutely accountable by various external agents.
- Having to respond ever more flexibly to the increasingly diverse expectations of students.
- Needing to adjust major aspects of curriculum and course content substantially to meet the requirements of education reform.
- Having to reorganize and rebudget continually to deal with level or diminished finances. (p. 15)

The interface with these types of changes on a daily basis keeps deans searching for balance and experiencing stress. Notwithstanding the value of these changes, whether good or bad, the transitional state of the community colleges increases the complexity of stress for the deans.

As financial resources are strained or eliminated, additional stress is generated for the deans in community colleges. The deans play a key role in the

utilization of community college resources (Robillard, 2000). The deans are responsible for significant amounts of resources and good stewardship of resources may mean the success or failure of an academic unit. If an institution has invested heavily in faculty members and technology, it is not apt to be tolerant of poor management and stewardship practices in the deployment of those resources by a midlevel manager.

If this position is to carry the academic world through the transitions required by constituencies, the repeated request for preparation and training must be heeded. Wolverton et al. (1999) stated that "early preparation may be key to understanding the expectations placed upon deans as they enter the position. The academy, especially business colleges, abounds in opportunities for such preparation. For instance, learning solid managerial and interpersonal skills may go a long way toward eliminating the uneasy feeling of not knowing what is expected" (p. 101). Other college and program areas, such as public administration and political science, may well hold complementary topics that would enhance the preparation found in the curriculum of a college of education.

In research conducted in Australian universities, Sarros, Gmelch, and Tanewski (1998) found that deans wanted to have access to fellow deans to discuss new ideas and major work issues which helped deans cope with job demands (p. 70). This same research indicated that deans "want some type of formal training as preparation for the job. Some deans wrote of the need to be trained in conflict resolution and management generally" (p. 86).

Gmelch and Miskin (1993) also noted that one of the practical applications of coping with job stress for chairs was recognizing the lack of training for the position. The authors stated:

> The cost of leadership is too great not to invest in the most critical unit in the university. Both managerial skills and leadership perspectives will be needed to equip department chairs to meet stresses and challenges facing higher education in the 21st century. (p. 266)

One can project from this insightful research that understanding and managing stress levels may be significant reasons to justify the preparation that is needed to be successful in these positions.

Other sources of preparation and support were outlined in Laden's (1996) article on professional associations and their roles in preparing academic leaders. Laden's research noted that graduate programs in higher education administration may be credited most often for preparing academic leaders (p. 47). Laden (1996) stated:

> Professional associations complement university study in a number of ways. First, they often provide insights into the day-to-day operational problems of administrative life, augmenting the theoretical knowledge offered by university courses. Second, they can help recent graduates adjust to their new administrative roles by helping them to negotiate unfamiliar institutional cultures. Third, they provide new administrators with sponsors or mentors who can build confidence, offer guidance, make introductions, and use their expertise and experiences to assist in the socialization of the newly appointed. (p. 47)

It is clear that preparation and training of deans is a significant factor in providing the deans with knowledge and skills to manage the stress of their jobs in this complex environment of the community college.

Summary

The literature review examined five areas for the purpose of this study: 1) history of community colleges; 2) the identity and function of community colleges; 3) the evolution of academic deans; 4) the identity and role of academic deans; and 5) occupational stress as related to both the general work and academic environment, and the stress of academic deans. This literature review provided the basis to examine and interpret the data of this study.

The evolution of higher education in the United States was predicated on European educational philosophies, but the creation of the community college system was premised on American philosophies for American needs. Leadership by deans in colleges/universities and leadership by deans in community colleges share some commonalties but also have some distinctly different characteristics. These differences affect how these midlevel leaders succeed or fail and how stress may impact them. Stress research has been reviewed as it pertains to both general work and academic environments and how it impacts the health of the individual experiencing it.

This selection of topics was provided to increase knowledge regarding stress for the academic deans and for the community colleges. It helps one understand the need for additional research into the preparation, support, and retention of experienced midlevel academic leadership in community colleges. Understanding these topics will aid the deans and the community colleges in managing the stress that does develop for the deans. This is necessary information if the deans and the

community colleges are to thrive and meet the needs of an increasingly complex academic organization.

CHAPTER 3. METHODOLOGY

Information about the planning and procedures used to develop the research instrument and to collect the data are presented in this chapter. This study of community college deans was completed in conjunction with doctoral candidate Chris Russell (2000).

From the sample of 750 deans who were identified to receive the survey in the 394 colleges surveyed, 324 usable surveys were returned from 200 colleges. The dean-response rate was 43.2% (324 of 750). The college-return rate was 50.8% (200 of 394). The state-return rate was 92.0%, and represented responses from 46 of the 50 states.

Study Design

This study was conducted using a quantitative survey questionnaire to inquire about the roles of community college deans and the stress factors that affect these positions. The survey questionnaire consisted of five parts formatted in eight pages. The questionnaire was sent to community college deans across the nation to gather a wide range of data about the individuals who hold the positions.

The data gathered from the survey provided a current database of information regarding stress and demographic profiles for community college deans. In addition to providing the data for this study, it was anticipated that the Educational Leadership and Policy Studies Department might use this database for future research at Iowa State University.

Instrument Development

The survey was developed based on a prior survey instrument, the *National Survey of Chairs*, which was created by Gmelch, Burns, Carroll, Harris, and Wentz (1992). For the purposes of this study, the prior survey instrument was adapted for community college deans and a section added to gather data on leadership frames.

The survey is reproduced in Appendix A. Documentation for permission to conduct research with human subjects was obtained from Iowa State University (Russell, 2000).

This survey questionnaire was sent to community colleges across the nation to gather demographic information regarding the individual deans and their institutions. The survey was used to gather data on a variety of aspects of the deans' roles and how deans react to the many facets of their positions.

The five sections of the questionnaire to the deans included: 1) demographic and institutional profiles; 2) task inventory; 3) stress inventory; 4) role-conflict and ambiguity scale; and 5) leadership orientation. The survey also included a section for open-ended responses regarding other aspects of the job that were major challenges.

The sections of the survey were based on developmental work of previous researchers. The sections that inquired about demographic profiles (personal and institutional) were based on corresponding sections of the *National Survey of Chairs* (Gmelch et al., 1991/1992). There were 19 statements that dealt with personal characteristics and 8 statements that dealt with institutional characteristics.

Personal characteristics in this section included: age; gender; marital status; number of children at home; ethnic background; length of time in current dean's position; length of time in additional administrative positions; nature of appointment; reasons for selection as dean; personal reasons for becoming 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. Institutional characteristics included: college type; location of college; number of full-time faculty; number of adjunct faculty; institutional climate; number of students; number of support staff; networking perceptions; percent of faculty tenured; and challenges facing the dean.

The Dean's Stress Inventory of the survey questionnaire evolved from the Administrative Stress Index (ASI) (Gmelch & Swent, 1984), the Faculty Stress Index (FSI) (Gmelch, Lovrich, & Wilke, 1984), and the Department Chair Stress Index (DCSI) (Gmelch & Burns, 1991). The instrument development and validation process for each stress inventory are detailed in the following paragraphs.

The ASI and the FSI were developed and validated using the same processes for each index. The ASI asked 40 public school administrators to keep stress logs for a period of one week. The administrators were asked to report the following in their stress logs: "1) the most stressful single incident of the day; and, 2) the most stressful series of related incidents (e.g., recurring telephone interruptions, pending grievances, parent-teacher conflicts, etc.)" (Koch et al., 1982, p. 494; Gmelch & Swent, 1984, p. 195). The administrators also were asked to identify other

sources of stress that did not happen to occur during the week that they kept the stress logs.

From these stress logs and public school administrator publications, additional items were developed that were directed to the general role of administrators and specifically to the roles of administrators of public schools. When fully developed, the final ASI consisted of 23 items and was field-tested by 25 practicing administrators. The survey was then used to conduct a study of 1,156 school administrators and their responses were factor analyzed (Koch et al., 1982, p. 494; Gmelch & Swent, 1984, pp. 195-196).

The FSI (Gmelch, Lovrich, & Wilke, 1984) was developed by inviting 20 faculty members to maintain stress logs for a period of one week. They were asked to report daily on the following: "1) the most stressful single incident occurring that day and 2) the most stressful series of related incidents (e.g., recurring telephone interruptions, colleague conflicts, etc.)" (Gmelch, Lovrich, & Wilke, 1984). They also were asked to identify other common sources of stress, even if they had not occurred during the week the stress logs were kept (Gmelch, Lovrich, & Wilke, 1984, p. 481).

After pilot testing and revision for content validity and clarity with a group of faculty members, the FSI consisted of 45 items. A high-degree of consistency of measurement was found in the faculty survey by an item-reliability assessment conducted by a test and retest, occurring within a two-week interval, which resulted in a mean item-reliability coefficient of .83 (Gmelch et al., 1986).

The UACQ was developed from the ASI by Rasch et al. (1986) to measure different types of stress for administrators in higher education. Questionnaire items were modified to assess the situations encountered by administrators in higher education. The instrument was field-tested to assure content validity and clarity by central administrators, deans, and department chairs. Four factors were identified from this research: 1) role-based stress; 2) task-based stress; 3) conflict-mediating stress; and 4) social-confidence stress.

To illustrate the dual administration/faculty role of university department chairs, a single, multidimensional instrument combining factors from the ASI, UACQ, and FSI was developed by Gmelch and Burns (1991). This combined instrument was identified as the Department Chair Stress Index (DCSI), and was tested initially as part of a national survey instrument in 1990 that was sent to university department chairs (Burns, 1992).

The DCSI included questions drawn from the highest-loading components of the emergent factors reflecting the dual role of the administrator and faculty roles pertaining to department chairs from the ASI and the FSI. The five factors used in the development of the DCSI were: 1) task-based, which represented both the administrative and faculty stresses; 2) role based; 3) conflict-mediating; 4) reward and recognition; and 5) professional identity (Burns, 1992; Gmelch & Burns, 1991).

Gmelch and Burns (1991) determined that the DSCI needed further refinement. Survey items were refined that drew a closer alignment from the ASI, FSI, and UACQ. The researchers were interested in finding a concise document that

represented the multidimensional sources of stress that resulted from the dual faculty/administrator role of department chairs (Burns, 1992).

The resulting questionnaire was known as the Chair Stress Index (CSI) and consisted of 41 items. Burns (1992) identified five factors for the CSI: 1) faculty role stress; 2) administrative relationship stress; 3) role ambiguity stress; 4) perceived expectations, and 5) administrative task stress (pp. 73-81).

The CSI was used as part of a national survey sent to university department chairs in 1991. Later, the CSI was adapted for the community college environment by Houchen (1994) to examine the stresses experienced by department chairs in community colleges.

After the foregoing development steps were completed, the survey questionnaire was selected and adapted for the current survey of community college deans. The Dean's Stress Inventory was part of a larger survey, *2000 National Study of Community and Technical College Academic Deans* (Gmelch, Ebbers, Russell, & Wild, 2000).

As part of this preparation, the questionnaire was field-tested with seven individuals who were, or had been, deans in Iowa community colleges. These individuals confirmed the content validity and clarity of the items in the questionnaire. Those individuals who assisted with the field test were not part of the group who received the final questionnaire.

During the field test, participants were asked to complete all items and keep notations on any questions they had regarding the interpretation of any item. The feedback was reviewed to determine if the clarity of all items was intact, whether the

items elicited the types of reactions sought, whether any perspective of the position had been omitted, and whether the items were accurate in their inquiry area.

After a summary of the pilot feedback had been completed, modifications to demographic questions were made and phrases were added in some questions to provide the potential for more useful responses. New questions were added on the basis of the feedback from the pilot study. Typographical errors (spacing, capitalization, numbering) were also corrected as identified.

Throughout the survey wording was modified to fit the community college environment versus that of a four-year college or university. Question 5 was added to gather a picture of the various titles used for this position. Question 6 added an option for selecting "technical" as the type of college along with "transfer," "both," or "other." Question 13 changed the wording to garner a participant's experience in college rather than high school or college. Dillman's (1978) Total Design Method for surveys was reviewed as a benchmark for instrument preparation and administration. Upon completion of the modifications, the survey was printed and packets were prepared for mailing and distribution to the selected sample.

Participants

All academic deans from the American Association of Community Colleges (AACC) member schools were identified as the target population for the study. The 2000 membership directory of the AACC was used to identify public, two-year community and junior colleges. Private and special interest institutions were excluded. Excluding these institutions provided a more homogeneous sample of

community colleges for the database. This procedure identified 959 colleges for the study.

A stratified random sampling method was selected to provide equitable dean and college samples across the states in the United States. This sampling method allowed findings to be compared across state and regional groups. The stratified random sampling method permitted equitable samples to be taken regardless of geographic distance or population distribution. This method maintained the proportion of sampling done in each stratum (state) (Hinkle, Wiersma, & Jurs, 1998). The strata, or states, permitted the greatest opportunity for individuals within the states to have homogeneous organizational structures, statutory guidelines, and perspectives regarding the questions posed to them.

The sampling scheme was to sample two colleges for every five per state group. This resulted in 394 colleges identified randomly.

The sampling scheme was conducted by listing the AACC institutions in each state with numbers; the colleges, along with their academic deans, were identified using a random number table (Russell, 2000). The general guide for sampling within states was: 1) for states with 0-10 community colleges, a minimum of 3 were sampled—if the state had one, two, or three community colleges, the state was oversampled; 2) for states with 11-25 community colleges, a minimum of 5 were sampled; 3) for states with 26-50 institutions, a minimum of 15 were selected; and 4) for states with over 50 community colleges (there are 3), a minimum of 20 community colleges were identified.

As a result of this procedure, 394 community colleges became the sampling frame for this study. The AACC directory listed 750 deans from these colleges, and a mailing list was constructed for purposes of distributing the survey instrument (Russell, 2000).

A table presented in Krejcie & Morgan (1970) assisted the researchers in identifying from the total of 1,822 deans in the entire set of community colleges 317 dean responses would produce data representative of the entire population. Russell (2000) explains the procedure used to determine the sample size necessary.

> 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 the 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 represent oversampling of 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. (pp. 97-98)

Data Collection

From the selected sample of colleges, a mailing list was constructed from the AACC directory listing for the community college deans who were to be surveyed. During the summer of 2000 (May to July), each of the identified colleges (394) was sent a packet with the appropriate number of surveys for the number of deans identified (a total of 750). At each college, one dean was identified to be the recipient of the college packet.

The packet mailed to the recipient included an additional memorandum listing the identified deans at the institution and describing the characteristics of the type of

dean who the researcher desired to answer the survey. The survey packet for each dean consisted of a self-addressed and stamped envelope, a survey, and a cover letter explaining the intent of the survey. The survey letter and recipient-dean addendum are shown in Appendix B.

Participants were notified that it would take 20 to 30 minutes to complete the survey. They also were assured that their responses were confidential and would be held in the strictest confidence. The surveys were coded to monitor response rates in an appropriate manner.

After appropriate follow-up procedures were completed (see postcard in Appendix C), 324 complete and usable surveys were returned. The 324 returned surveys provided a response rate of 43.2% from the 750 deans surveyed in the 394 colleges. Of the 394 colleges that were sampled, 200 returned usable surveys, for a college-return rate of 50.8%. The state-return rate was 92.0%, representing responses from 46 of the 50 states.

Data Analysis

Data were analyzed using the Windows version 10.0 of the Statistical Package for the Social Sciences (SPSS). The analysis technique employed for the three research questions were:

Research Question 1: What work-related situations are perceived as causing the most stress?

Frequency, mean, standard deviation, and rank order of stress inventory items were used to answer this question.

Research Question 2: As stress factors emerge from this study of community college deans, what are the characteristics of each factor?

Principal components factor analysis with varimax rotation was used to reduce the items in the stress inventory into clusters that reveal the underlying dimensions of stress. These clustered dimensions, or factors, could then be analyzed further. Factors having eigenvalues of 1 or greater were considered for further study. Mertler and Vannatta (2001) describe factor analysis as "essentially a process by which the number of variables is reduced by determining which 'cluster' together" (p. 249). A review of the elements in each factor was completed, and then a title assigned based on the characteristics of these elements.

Research Question 3: How do the independent variables of age, workload, college location (rural, suburban, urban), and gender contribute to each stress factor identified?

The objective of the statistical analysis was to determine the extent and nature of the relationships among the dependent and independent variables. Descriptive statistics were used to present a profile of the population that was sampled. For selected variables, frequency distributions were reported to add additional information. Calculation of means, standard deviations, and analysis of variance (ANOVA) were used to identify any significant relationships. Post-hoc analysis of significant F-ratios using the Sheffé method was applied as appropriate. Hinkle et al. (1998) state that the Sheffé method is "used when combinations of means, rather than simply pairs of means, are contrasted" (p. 387).

CHAPTER 4. RESULTS AND DISCUSSION

The current study was designed to identify and explore the sources of stress perceived by community college deans and to generate current demographics about these deans that would be useful in understanding such stress. Overall, it was expected that this study would enhance the capacities of the deans and community colleges to manage stress for the benefit of all interested parties.

The *2000 National Survey of Community and Technical College Academic Deans*, sponsored by the Center for Academic Leadership and the Research Institute for Studies in Education (RISE) at Iowa State University, was sent to 750 community college deans (in 394 community colleges). This national sample of community college deans was identified from the 2000 membership directory of the American Association of Community Colleges (AACC). The Community College Dean's Stress Inventory (CCDSI) was included as part of the national survey.

This chapter, in general, presents the analyses and discussions of the data collected from the respondents. The survey (Appendix A) gathered information that identified personal, professional, and institutional characteristics of the deans and measured their perceptions of stress.

The first section of the chapter sets forth a demographic profile of the deans based on the information provided from the responses. Table 1 presents the frequency distribution and comparisons of responses with respect to selected demographic characteristics.

Table 1. Selected personal, professional, and institutional characteristics of community college deans

Variable	Frequency	Percentage*
Gender (n = 322)		
Female	149	46.3
Male	173	53.7
Age (n = 317)		
< 47	76	24.0
47 – 52	72	22.7
53 – 56	92	29.0
> 56	77	24.3
Marital status (n = 322)		
Single	64	19.9
Married	258	80.1
Number of children at home (n = 322)		
0	196	60.9
1	72	22.4
2	40	12.4
> 2	14	4.3
Ethnicity (n = 322)		
White	297	92.2
Hispanic	11	3.4
Asian-American	4	1.2
Other	4	1.2
Native American	3	.9
African-American	3	.9
Nature of appointment (n = 323)		
Inside	215	66.6
Outside	108	33.4
Length of time in current position (n = 324)		
< 1.6 yrs	84	25.9
1.6 – 3 yrs	83	25.6
3.1 – 7 yrs	74	22.8
> 7.1	83	25.6
Type of community college (n = 324)		
Technical	48	14.8
Transfer	46	14.2
Both Technical and Transfer	229	70.7
Other	1	.3
Location of College (n = 322)		
Rural	135	42.6
Suburban	99	31.2
Urban	83	26.2
Role Perception (n = 321)		
Administrator	227	70.7
Faculty	14	4.4
Both	80	24.9
Total Faculty (n = 323)		
< 41	85	26.3
41 – 80	80	24.8
81 – 145	78	24.1
> 145	80	24.8

*Percentages are based on the number of participants who responded to each item.

The second section of the chapter describes the results of the factor analysis of the stress inventory. The deans' perceptions of stress were evaluated through examination of their responses on the stress inventory. The inventory of stress items, which contained 41 items, was analyzed through principal components factor analysis to determine what items might cluster together to identify common themes—stress factors—in the perceived stress experienced by the academic deans. The characteristics of these stress factors are discussed in this chapter.

The last section of the chapter presents the analyses of the data to determine if there are differences between groups of deans with respect to selected independent variables and the stress factors. Analysis of variance (ANOVA) was used to analyze the variables. The Scheffé post hoc multiple comparison procedure was selected for its versatility and conservativeness to determine whether there were any significant differences between categories of deans (Hinkle, Wiersma, & Jurs, 1998). Finally, the characteristics of any differences between groups are discussed in this chapter.

Demographics of the Sample

The responses gathered from the respondents provided a current demographic profile of community college deans. Questions concerning personal, professional, and institutional characteristics were included in the survey.

Table 1 presents the frequency distributions and percentages for various demographic characteristics. The percentage of total responses varies from characteristic to characteristic because the number of deans who responded to

specific stress items differed. The highlights of the demographic characteristics are summarized as follows.

The numbers of male and female deans who responded were similar. As presented in Table 2, 149 (46.3%) of the respondents were female and 173 (53.4%) were male.

Table 2. Gender comparisons among community college deans, community college chairs, and university deans

Research	Wild (2002) Community College Deans		Houchen (1994) Community College Chairs		Burns (1992) University Deans	
Gender	Number	Percentage	Number	Percentage	Number	Percentage
Female	149	46.3	100	42.6	54	10.3
Male	173	53.4	135	57.4	460	87.9

The mean age of the community college deans was 51.5 years. The range of ages for the group was from 30 to 71 years. Over half (51.7%) of the respondents were between the ages of 47 and 56. The most frequently reported age was 55.

This nearly even distribution between male and female respondents for this study was similar to the responses that Houchen (1994, p. 86) found among community college department chairs. Houchen's (1994) distribution of males and females and the distribution in this study for community college deans were quite different from the results found by Burns (1992, p. 67) in the study of university department chairs. It seems logical that the community college deans of the sample were selected from those who had experience as department chairs, and the moves to the deans' positions by these individuals reinforced the equitable representation of men and women. The comparisons of these various studies are shown in Table 2.

The marital status of the deans was reported as 64 (19.9%) single and 258 (80.1%) married. The largest group of responding deans—169, or 60.9%—indicated they had no children living at home.

The ethnicity of the group was predominately Caucasian (92.2%). The next largest single group was Hispanic (3.4%). Combined, the minority categories (Hispanic, Asian-American, Native American, African-American, and Other) accounted for 7.6% of the deans responding to the survey questionnaire.

When identifying the type of community college in which they worked, 229 (70.7%) deans indicated their institutions were both technical and transfer. When totaling full-time and adjunct faculty members, 85 (26.3%) were supervising fewer than 41 faculty members, and 80 (24.8%) were supervising more than 145 faculty members.

Responding to the question regarding location of their college, 135 (42.6%) said they were in a rural setting. The responses to location varied within multi-campus colleges, depending on where the campus, center, or unit was located. Deans reporting from larger community colleges reported different perceptions of location within the same system. This type of perception indicated deans are disbursed throughout a college system and not in a central administrative site.

The deans indicated that 215 (66.6%) of them had been appointed from inside the institution. When asked about their perceptions of their role (administrator, faculty, or both), 227 (70.1%) perceived themselves as administrators. This was consistent with the statements of Dill (1980) and Cohen et al. (1994), who described

the deanship as an extension of the presidency or vice presidency and not an extension of the faculty.

Ranking of Stress Items

The 41 items in the Dean's Stress Inventory were ranked by the mean score derived from averaging respondents' answers. The deans responded to the items by indicating their perceived stress for each item on a five-point Likert scale. The scale ranged from 1 = Slight to 5 = High. The range of means was from 3.51 to 1.71. The rank order of the stress items by their mean score is listed in Table 3.

The stress item ranked the highest by the deans was 31t, *Attending meetings that take up too much time.* This also was the stress item ranked the highest for males in the Houchen (1994) study of community college chairs. This same stress item was ranked fourth by university department chairs (Burns, 1992). In their research of four-year college and university deans, Gmelch, Wolverton, Wolverton, and Sarros (1999) found that this same stress item had the highest mean rank.

In reviewing the stress items ranked in the top ten stessors by the deans (Table 3), one develops a sense of the many demands on the time of the deans. Interaction with people is a constant factor of the job. While these positions experience heavy demands with respect to leadership and administration, they also require extensive communication and human relations' skills (Findlen, 2000; Gillett-Karam, 1999; Jensen, 2000; Robillard, 2000).

Table 3. Ranking of stress items

Rank	Stress Item	Mean
1	31t – Attending meetings which take up too much time	3.51
2	31e – Imposing excessively high self-expectations	3.29
3	31s – Feeling I have too heavy a work load	3.17
4	31f – Handling student concerns and conflicts	3.12
5	31oo – Attempting to balance my professional and personal lives	3.11
6	31kk – Meeting report and other paperwork deadlines	3.03
7	31gg – Being frequently interrupted by telephone calls and drop-in visitors	3.02
8	31n – Handling concerns and conflicts with faculty	3.00
9	31mm – Trying to gain financial support for unit programs	2.97
10	31cc – Supervising and coordinating the tasks of many people	2.93
11	31h – Having insufficient time to stay current in my academic field	2.84
12	31a – Participating in work related activities outside the regular working hours which conflict with personal activities	2.84
13	31ll – Preparing budgets and allocating resources	2.81
14	31aa – Evaluating chair, faculty, and staff performance	2.76
15	31u – Trying to influence the actions and decisions of my supervisor	2.75
16	31ii – Having to make decisions that affect the lives of faculty, staff, and students (e.g., tenure, promotion, advancement)	2.74
17	31p – Feeling required paperwork is not utilized	2.57
18	31i – Having insufficient authority to perform my unit responsibilities	2.57
19	31r – Writing letters and memos, and responding to other paperwork	2.49
20	31w – Seeking compatibility among unit and personal goals	2.47
21	31nn – Attempting to balance my leadership and scholarship responsibilities	2.45
22	31g – Resolving differences with my supervisor	2.43
23	31z – Receiving inadequate salary	2.41
24	31m – Handling concerns and conflicts with chairs	2.39
25	31b – Meeting social obligations expected of deans (e.g., clubs, parties, volunteer work)	2.38
26	31c – Complying with unit rules and regulations	2.37
27	31dd – Feeling others don't understand my goals and expectations	2.36
28	31v – Adapting to technology changes (e.g., distance learning, e-mail, computers)	2.36
29	31o – Receiving insufficient recognition for performing administrative functions	2.35
30	31ff – Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me	2.32
31	31x – Receiving insufficient recognition for my performance	2.30
32	31d – Participating/presenting at professional meetings	2.22
33	31bb – Trying to satisfy the concerns of constituent groups (e.g., alumni, legislators, community)	2.21
34	31y – Not knowing how my supervisor evaluates my performance	2.17
35	31hh – Feeling pressure for better job performance above what I feel is reasonable	2.07
36	31jj – Promoting diversity among faculty, students, and the leadership team	2.06
37	31j – Believing my administrative career progress is not what it should be	1.98
38	31k – Believing my academic career progress is not what it should be	1.95
39	31l – Having to travel to fulfill job expectations	1.88
40	31ee – Feeling I am not adequately trained to handle my job	1.80
41	31q – Having to engage in fund raising activities	1.71

The stress item with the lowest mean (1.71) was 31q, *Having to engage in fund raising activities*. This item was part of a stress factor that represents a theme by which community college deans need to work with funding sources and outside constituencies.

In addition to the 41 items in the stress inventory, the deans were asked to measure their perceived level of stress in regard to two general estimates of stress. The first asked the deans to assess the overall level of stress they experienced as deans. The mean of the responding deans was 3.06. The second asked the deans to give a percentage of the total stress in their lives that resulted from being deans. The mean reported by the deans was 55.68%. The stress variable means and standard deviations for these two additional assessments of stress are listed in Table 4.

The community college deans attributed an average of 55.68% of the stress in their lives to their work as a dean. Houchen (1994) found that community college department chairs perceived 49% (n=235) of the stress in their lives to be from their work. Staten's (1989) research on administrator stress in community colleges found that overall stress was reported to be in the moderate range, at 48% (n=195).

Table 4. Stress variable means and standard deviations

Category	Items	Range		Mean	Standard deviation
		Min	Max		
Stress Inventory (n = 319)	41	1	5	2.54*	0.64
Assessment of overall stress (n = 318)	1	1	5	3.06*	1.01
Percent of stress from job (n = 312)	1	0	100	55.68	24.67

*Mean based on five-point Likert scale (1 = Slight, 5 = High).

The mean response for the stress items in this study was 2.54. This is lower than the average mean (M = 2.69) of the stress items in the study of community college department chairs completed by Houchen (1994).

Factor Analysis

Principal components factor analysis with varimax rotation was used to determine associations among the inventory of stress items. Nine factors emerged. Table 5 lists the factors, eigenvalues, and percent of variance for each factor.

Kachigan (1991) explained that an eigenvalue is "associated with each derived factor" and that it "corresponds to the equivalent number of variables which the factor represents" (p. 246). Using Kachigan's explanation, Factor 1, *Role Strain*, represented the strongest factor (with an Eigenvalue of 4.671, or 11.392% of variance in the 41 items explained) and would account for as much variance in the data collection as would 4 or 5 variables (Kachigan, 1991, p. 246) selected at random.

Kachigan (1991) described the purpose of factor analysis as follows:

> One of the most important uses of factor analysis is in the identification of factors underlying a large set of variables. By clustering a large number of variables into a smaller number of homogeneous sets and creating a new variable—a factor—representing each of these sets, we have simplified our data and consequently are more likely to gain insight into our subject matter. (p. 238)

Kachigan (1991) continued the explanation of principal components factor analysis as providing a result with "the first factor accounting for the largest portion of variance of information inherent in the entire set of variables, and each succeeding factor accounts for less and less" (p. 239).

To determine the clearest picture possible of the factors that were extracted, rotation was employed to redefine the factors following their extraction. This redefinition, or rotation, of factors permits sharper distinctions in the meanings of the factors (Kachigan, 1991, p. 248). Hair, Anderson, Tatham, and Black (1998) described varimax rotation as providing a "clearer separation of factors" as well as having proved "very successful as an analytic approach to obtaining an orthogonal rotation of factors" (p. 110).

Eigenvalues and percent of variance after rotation are listed in Table 5. The nine factors accounted for a total of 62.612% of the variance among the 41 items.

Based on the commonality of the stress items within each factor, names were selected that were descriptive of the theme represented by the items that loaded highly on each factor. The names selected *were:* Factor 1, *Role Strain;* Factor 2, *Managing Human Interactions*; Factor 3, *Intrinsic Job Demands;* Factor 4, *Managing Professional/Personal Life;* Factor 5, *Professional Maturity*; Factor 6, *Balancing Leadership and Scholarship*; Factor 7, *Administrative Identity*; Factor 8, *Fiscal Responsibilities*; and Factor 9, *External Constituency Demands.*

Table 5 Eigenvalues and percent of explained variance for stress factors

No.	Factor	Eigenvalue	Percent of variance
1	Role Strain	4.671	11.392
2	Managing Human Interactions	4.019	9.803
3	Intrinsic Job Demands	3.436	8.380
4	Managing Professional/Personal Life	2.684	6.545
5	Professional Maturity	2.556	6.234
6	Balancing Leadership and Scholarship	2.339	5.705
7	Administrative Identity	2.243	5.471
8	Fiscal Responsibilities	2.130	5.196
9	External Constituency Demands	1.593	3.886

Stress Factors

A principal components factor analysis using varimax rotation was conducted, with nine stress factors emerging. The first factor, *Role Strain*, relates to the deans' organizational positions, and reveals the push and pull of having to interact creatively among administration, faculty, constituencies, and students whenever the need arises. The next two factors—*Managing Human Interactions* and *Intrinsic Job Demands*—represent the highly interactive personal dynamics associated with the positions and the demands of day-to-day management duties. The next four factors—*Managing Professional/ Personal Life*, *Professional Maturity*, *Balancing Leadership and Scholarship*, and *Administrative Identity*—represents the themes of professional identity and the awareness of balancing personal and professional commitments. The final two factors—*Fiscal Responsibilities* and *External Constituency Demands*—identify the emergent themes of financial expectations for areas of responsibility and interactions with multiple constituencies that are necessary in carrying out the roles of the deans.

Stress items that loaded below .40 were not used, because such loadings indicate only a low correlation of that particular item with the factor. One stress item, 31v, *Adapting to technology changes (e.g., distance learning, e-mail, computers)*, did not load clearly on any factor and was eliminated. Five stress items were found to load on more than one factor. Those items that loaded on more than one factor were: 1) 31j, *Believing my administrative career progress is not what it should be*; 2) 31p, *Feeling required paperwork is not utilized*; 3) 31cc, *Supervising and coordinating the tasks of many people*; 4) 31kk, *Meeting report and other paperwork*

deadlines; and 5) 31oo, *Attempting to balance my professional and personal lives*. Appendix D provides a summary listing of the results of the factor analysis, including the item that did not load on a factor and the items that loaded on more than one factor.

Factor 1: Role Strain

Factor 1 was labeled *Role Strain*. It was made up of eight items from the stress inventory. Table 6 lists the item identification character, the description of the item, and the factor loading score.

In this factor the highest loading stress item (.778) was 31y, *Not knowing how my supervisor evaluates my performance*. The lowest loading stress item (.420) was item 31j, *Believing my administrative career progress is not what it should be*. Cronbach's alpha coefficient, which measures the internal reliability of a summated scale based on a set of items, was calculated for *Role Strain* to be .87. A result of this magnitude indicates that the set of items all fit together and could be summed or averaged to form a single composite measure of the underlying trait of *Role Strain*.

Table 6. Factor 1: Role Strain

Item	Description	Loading
31y	Not knowing how my supervisor evaluates my performance	.778
31u	Trying to influence the actions and decisions of my supervisor	.773
31g	Resolving differences with my supervisor	.769
31i	Having insufficient authority to perform my unit responsibilities	.717
31ff	Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me.	.607
31p	Feeling required paperwork is not utilized	.540*
31dd	Feeling others don't understand my goals and expectations	.446
31j	Believing my administrative career progress is not what it should be	.420*

*Loaded on more than one factor.

These stress items identify the deans' perceptions of being in the middle of interactions and their expectations in conjunction with their supervisors and others in authority. The highest loading item represents the importance of the deans being acutely aware of the interdependent positions they hold. The need for a good match in personalities and work style was evident in the items grouped together on this factor. The deans are in positions of being held accountable, yet not having authority over the decisions that affect themselves and the units for which they are responsible.

Two stress items loaded on other factors in addition to loading on Factor 1, *Role Strain*. The first stress item, 31p, *Feeling required paperwork is not utilized*, loaded primarily on Factor 8, *Fiscal Responsibilities*, and secondarily on Factor 1, *Role Strain*. The second stress item that loaded on more than one factor was item 31j, *Believing my administrative career progress is not what it should be*, which loaded on Factor 7, *Administrative Identity*, at nearly the same strength.

Factor 2: Managing Human Interactions

Factor 2 was labeled *Managing Human Interactions* and was composed of nine stress items. Table 7 lists the item identification character, the description of the item, and the factor loading score.

In this factor, the highest loading stress item (.814) was 31n, *Handling concerns and conflicts with faculty.* The lowest loading stress item (.399) was 31w, *Seeking compatibility among unit and personal goals*. The internal reliability (Cronbach's alpha) of this sample for *Managing Human Interactions* was .84. Item

Table 7. Factor 2: Managing Human Interactions

Item	Description	Loading
31n	Handling concerns and conflicts with faculty	.814
31f	Handling student concerns and conflicts	.695
31m	Handling concerns and conflicts with chairs	.671
31ii	Having to make decisions that affect the lives of faculty, staff, and students (e.g., tenure, promotion, and advancement)	.555
31aa	Evaluating chair, faculty, and staff performance	.533
31e	Imposing excessively high self-expectations	.453
31cc	Supervising and coordinating the tasks of many people	.410*
31jj	Promoting diversity among faculty, students and the leadership team	.403
31w	Seeking compatibility among unit and personal goals	.399

*Loaded on more than one factor.

31cc, *Supervising and coordinating the tasks of many people*, loaded more strongly on Factor 3, *Intrinsic Job Demands*, and secondarily on Factor 2, *Managing Human Interactions*.

Four of the stress items in this factor were among the top 10 stress items when ranked by mean (Table 2). The four items were 31e, *Imposing excessively high self-expectations* (M = 3.29) (the mean for this item was ranked second among the stress items); 31f, *Handling student concerns and conflicts* (M = 3.12); 31n, *Handling concerns and conflicts with faculty* (M = 3.00); and 31cc, *Supervising and coordinating the tasks of many people* (M = 2.93).

Deans are likely to have been faculty members at some time in their career, and fully understand the concerns of faculty. This close affiliation and understanding of the faculty role likely adds to the stress of conflicts with this group.

For most individuals, it is a natural desire to avoid conflict. By the nature of their positions, the community college deans are placed in a position of having to

address conflicts between faculty, students, and chairs. Providing supervision and evaluation for others also holds the potential for conflicts and stress.

Factor 3: Intrinsic Job Demands

Factor 3 was labeled *Intrinsic Job Demands*. This factor was made up of seven stress items. The stress items are listed by item identification character, the description, and the factor loading score in Table 8.

The top loading stress item (.729) was 31s, *Feeling I have too heavy a workload*. The lowest loading stress item was item 31r, *Writing letters and memos, and responding to other paperwork* (.451). Reliability for Factor 3, *Intrinsic Job Demands*, was .85.

Table 8. Factor 3: Intrinsic Job Demands

Item	Description	Loading
31s	Feeling I have too heavy a workload	.729
31t	Attending meetings which take up too much time	.671
31gg	Being frequently interrupted by telephone calls and drop-in visitors	.588
31oo	Attempting to balance my professional and personal lives	.549*
31kk	Meeting report and other paperwork deadlines	.541*
31cc	Supervising and coordinating the tasks of many people	.535*
31r	Writing letters and memos, and responding to other paperwork	.451

*Loaded on more than one factor.

Three stress items from Factor 3, *Intrinsic Job Demands*, loaded on other factors. Item 31oo, *Attempting to balance my professional and personal lives*, loaded primarily on Factor 3, *Intrinsic Job Demands*, but also loaded secondarily on Factor 4, *Managing Professional/Personal Life*. The second item, 31kk, *Meeting report and other paperwork deadlines*, had a stronger loading on Factor 3, *Intrinsic Job*

Demands, but loaded secondarily on Factor 8, *External Constituency Demands.* The third item loading on more than one factor, 31cc, *Supervising and coordinating the tasks of many people*, loaded more strongly on Factor 3, *Intrinsic Job Demands,* but loaded secondarily on Factor 2, *Managing Human Interactions.*

Factor 3, *Intrinsic Job Demands*, included five stress items that were in the top ten stress items when ranked by mean (Table 2). These items were: 31t, *Attending meetings which take up too much time* (M = 3.51) (this item was first in the top ten stress items when ranked by mean); 31s, *Feeling I have too heavy a workload* (M = 3.17); 31oo, *Attempting to balance my professional and personal lives (M = 3.11)*; 31kk, *Meeting report and other paperwork deadlines* (M = 3.03); and 31gg, *Being frequently interrupted by telephone calls and drop-in visitors* (M = 3.02).

The items in Factor 3, *Intrinsic Job Demands*, clearly describe the sentiments of the deans regarding these multifaceted jobs and represent the pressure of administrative duties that impose continuous demands on the time of the deans. The wide range of duties and expectations requires the deans to determine what is personal time and what is professional time. The deans find that they do not have a job that begins and ends on precise hours or days.

Factor 4: Managing Professional/Personal Life

Factor 4 was labeled *Managing Professional/Personal Life* and included five stress items. Table 9 lists the item identification character, the description of the item, and the factor loading score.

Table 9. Factor 4: Managing Professional/Personal Life

Item	Description	Loading
31b	Meeting social obligations expected of deans (e.g., clubs, parties, volunteer work)	.809
31a	Participating in work related activities outside the regular working hours which conflict with personal activities	.766
31d	Participating/presenting at professional meetings	.604
31oo	Attempting to balance my professional and personal lives	.451*
31l	Having to travel to fulfill job expectations	.431

* Loaded on more than one factor.

The highest loading stress item (.809) was 31b, *Meeting social obligations expected of deans (e.g., clubs, parties, volunteer work).* The lowest loading stress item was 31l, *Having to travel to fulfill job expectations* (.431). Reliability for Factor 4, *Managing Professional/Personal Life*, was .78.

One stress item loaded secondarily on Factor 4, Managing Professional/ Personal Life. That was stress item 31oo, *Attempting to balance my professional and personal lives*, which loaded more strongly on Factor 3, *Intrinsic Job Demands*.

Factor 4, *Managing Professional/Personal Life*, had one stress item that was ranked in the top ten stress items when listed by mean. That stress item was 31oo, *Attempting to balance my professional and personal lives*.

Factor 4, *Managing Professional/Personal Life*, was comprised of stress items that indicate the social expectations of the deans' positions. These types of social activities are expected due to the positions and may be more of a professional expectation than a personal choice. These types of expectations thus add to the stress of managing time for their own professional and personal lives.

Factor 5: Professional Maturity

Factor 5, *Professional Maturity*, consisted of two stress items. Table 10 lists the item identification character, the description of the item, and the factor loading score.

The highest loading stress item (.723) was 31ee, *Feeling I am not adequately trained to handle my job*. Reliability was calculated as .63 for Factor 5, *Professional Maturity*.

Table 10. Factor 5: Professional Maturity

Item	Description	Loading
31ee	Feeling I am not adequately trained to handle my job	.723
31hh	Feeling pressure for better job performance above what I feel is reasonable	.676

The two stress items in Factor 5, *Professional Maturity*, identify the stress deans perceive in response to the level of experience and comfort they have in such jobs. Those individuals who have made the first step into academic administration will have to decide if they will remain in an administrative role or if they are not suited for this type of position (Murray & Murray, 1998).

The two stress items in Factor 5, *Professional Maturity*, were among the lowest 10 stress items when ranked by mean (Table 3). This factor represents the stress that can be experienced when deans are new to their work, as opposed to those who have been in the position for a period of time (Robillard, 2000).

Factor 6: Balancing Leadership and Scholarship

Factor 6 was labeled *Balancing Leadership and Scholarship* and was composed of three stress items. Table 11 lists the item identification character, the description of the item, and the factor loading score.

The highest loading stress item was 31h, *Having insufficient time to stay current in my academic field.* Reliability for Factor 6, *Balancing Leadership and Scholarship*, was calculated at .70.

Table 11. Factor 6: Balancing Leadership and Scholarship

Item	Description	Loading
31h	Having insufficient time to stay current in my academic field	.735
31nn	Attempting to balance my leadership and scholarship responsibilities	.657
31k	Believing my academic career progress is not what it should be	.628

Factor 6, *Balancing Leadership and Scholarship*, indicates the stress of deans as they attempt to balance the conflicts between being an administrator and a scholar. The roles of these midlevel leaders demand a great deal of time from the deans. These positions do not leave adequate time for the pursuit of individual scholarship, nor does the mission and purpose of the community college find the scholarship role a priority for community college administrators (Perkins, 1991; Vaughan, 1986). The community college environment has been touted as focused on teaching versus research. This choice between teaching or pursuing research is being re-examined as community colleges continue to define, and redefine, their role in higher education. The measure and balance of teaching and research is one of

the elements that will help define that role (Perkins, 1991; Sims & Sims, 1991; Vaughan, 2001).

The third stress item in this factor was 31k, *Believing my academic career progress is not what it should be*, which needs to be considered through the lens of the priorities of community colleges for academic accomplishment. This item may represent the desires of the deans to complete additional academic credentials (master's or doctorate) and the stress of not having sufficient time to work on other degrees when coupled with job and family commitments. The deans know that other individuals may have completed, or be completing, advanced degrees, thus making those others more marketable for positions in academic administration.

Factor 7: Administrative Identity

Factor 7 was labeled *Administrative Identity* and was composed of four stress items. Table 12 lists the item identification character, the description of the item, and the factor loading score.

The highest loading stress item (.681) was *Receiving insufficient recognition for my performance*. Reliability was .81 for Factor 7, *Administrative Identity*.

Table 12. Factor 7: Administrative Identity

Item	Description	Loading
31x	Receiving insufficient recognition for my performance	.681
31z	Receiving inadequate salary	.660
31o	Receiving insufficient recognition for performing administrative functions	.656
31j	Believing my administrative career progress is not what it should be	.455*

*Loaded on more than one factor.

Factor 8: Fiscal Responsibilities

Factor 8 was labeled *Fiscal Responsibilities* and consisted of four stress items. The factor items are listed by item identification character, the description of the item, and the factor loading score in Table 13.

The highest loading stress item (.593) was 31ll, *Preparing budgets and allocating resources*. The reliability for Factor 8, *Fiscal Responsibilities*, was .76.

Table 13. Factor 8: Fiscal Responsibilities

Item	Description	Loading
31ll	Preparing budgets and allocating resources	.593
31mm	Trying to gain financial support for unit programs	.498
31kk	Meeting report and other paperwork deadlines	.478*
31p	Feeling required paperwork is not utilized	.437*

*Loaded on more than one factor.

Two stress items loaded on other factors. Item 31kk, *Meeting report and other paperwork deadlines*, loaded more strongly on Factor 3, *Intrinsic Job Demands*, and secondarily on Factor 8, *Fiscal Responsibilities*. Item 31p, *Feeling required paperwork is not utilized*, loaded more strongly on Factor 1, *Role Strain*, and secondarily on Factor 8, *Fiscal Responsibilities*. One item, 31mm, *Trying to gain financial support for unit programs*, was ranked the ninth highest in the top ten individual stress items when ranked by mean (Table 2).

These stress items speak to the requirements for reports and paperwork that typically ask for justifications of unit needs and goals. Too often the perceptions are that justifications were insufficient, or not utilized, and fail to garner the resources requested, becoming a source of stress for the deans. The continual need to

request, lobby, justify, and defend the need for resources is intrinsically interwoven in the jobs for the deans (McBride, 2000).

Factor 9: External Constituency Demands

Factor 9 was labeled *External Constituency Demands* and included two stress items. Table 14 lists the items by item identification character, description of the item, and factor loading.

The highest loading stress item (.707) was 31q, *Having to engage in fund raising activities*. Reliability calculated for *External Constituency Demands* was .48.

Table 14. Factor 9: External Constituency Demands

Item	Description	Loading
31q	Having to engage in fund raising activities	.707
31bb	Trying to satisfy the concerns of constituent groups (e.g., alumni, legislators, community)	.606

The two stress items of Factor 9, *External Constituency Demands*, in addition to one stress item in Factor 8, *Fiscal Responsibilities*, 31mm, *Trying to gain financial support for college programs*, were identified in Gmelch, Wolverton, Wolverton, and Sarros (1999). The study of these researchers was based on deans in four-year colleges and universities. They identified a new theme made up of three stress items (*Having to engage in fund raising*, *Trying to gain financial support for faculty programs*, and *Trying to satisfy constituent groups—e.g., alumni, legislators, community*) that indicated fund raising and interactions with constituencies were a source of stress for academic deans. This theme also appeared in this current study

and served to identify a dimension of stress that was the basis of this stress factor for community college deans.

Factor 9, *External Constituency Demands*, identifies the need for deans to interact with constituencies outside the community college to meet demands. It is no longer feasible for the deans to remain focused only on the internal function of the unit for which they are responsible. This factor focuses on fund-raising activities and expresses the increased pressure to look to external sources for funding. The abilities of the deans to negotiate and win a priority position internally in the institution may not be sufficient to gain the fiscal resources needed for the units of the deans.

Item That Did Not Load Onto Stress Factors

One stress item did not load onto any of the stress factors. The item that did not load on any factor was 31v, *Adapting to technology changes (e.g., distance learning, e-mail, computers)*.

Item That Was Discarded

One stress item, 31c, *Complying with unit rules and regulations,* loaded on Factor 1, *Role Strain*, Factor 2, *Managing Human Interactions*, and Factor 8, *Fiscal Responsibilities*, with loadings of .428, .405, and .422, respectively. Since the stress item did not load with any strength on one factor, the item was discarded. Hair et al. (1998) described a variable with several high loadings as a candidate for deletion (p. 113).

Harada (1991) presented criteria for evaluating community college instructional deans. One criterion was the deans' knowledge of "restrictions of policies, rules, regulations, and traditions that guide the college" (p. 3). Harada (1991) described such knowledge as a major part of the deans' jobs and pointed out that it was appropriate to find the stress item concerning rules and regulations in every facet of the deans' jobs and not strongly linked with any one factor.

Stress Factors Ranking

The average of each stress factor was obtained by determining the average of the means of the stress item means in each stress factor (Table 15). A Likert scale of 1 = Slight and 5 = High was used to gain responses for each stress item. All ranked factors indicate an average that is below the theoretical mean of 3.0 on the five-point Likert scale. Factors with the highest averages are Factor 2, Managing Human Interactions ($\underline{M}$ = 2.994), and Factor 3, Intrinsic Job Demands ($\underline{M}$ = 2.675).

Table 15. Rank of stress factors by factor mean

Rank	Factor	Factor Name	Factor Mean*
1	2	Managing Human Interactions	2.994
2	3	Intrinsic Job Demands	2.675
3	4	Managing Professional/Personal Life	2.487
4	1	Role Strain	2.454
5	6	Balancing Leadership and Scholarship	2.416
6	8	Fiscal Responsibilities	2.370
7	9	External Constituency Demands	2.298
8	7	Administrative Identity	2.262
9	5	Professional Maturity	2.077

*Mean based on five-point Likert scale (1 = Slight, 5 = High).

Analysis of Selected Independent Variables and Stress Factors

Independent variables selected for further examination were gender, age, location of college (rural, suburban, or urban), and the perception of having too heavy a workload. Further examination of these independent variables is expected to aid in greater understanding of the situations that contribute to the stress of community college deans.

These independent variables were addressed by estimating an analysis of variance (ANOVA) for each stress factor and the various groups of the independent variables. The Scheffé post hoc test was used to examine any significant differences found. Tables in the following sections identify the mean scores for the groupings within the various independent variables.

To protect against a Type I error with the large number of analyses (9 dependent variables and 4 independent variables with various subgroups), a Bonferroni inequality adjustment was calculated (controlled Type I error = .05/36 = .0013) (Green, Salkind, & Akey, 2000; Hair et al., 1998). Thus, for the results of any given analysis to be considered statistically significant, it had to have a significance level of .0013 or less. This maintained a familywise alpha level of .05.

Age and Stress Factors

The ages reported by community college deans were divided into four groups. Group 1 consisted of 76 deans who were 46 years of age and younger. Group 2 consisted of 72 deans who were 47 through 52 years of age. Group 3 consisted of 92 deans who were 53 through 56 years old. Group 4 consisted of 77 deans who

were 57 years of age or older. Table 16 presents the means and standard deviations for each stress factor and age group.

A one-way ANOVA was conducted to evaluate the relationship between age groups and the stress factors. For Factor 4, *Managing Professional/Personal Life*, the ANOVA was significant, F (3, 309) = 8.550, p = .000. There were no other significant differences between age groups on the other stress factors.

Follow-up tests were conducted to evaluate pairwise differences among the means. The Scheffé method was used for post hoc comparisons. The results of the ANOVA tests, as well as the means and standard deviations for the age groups are reported in Table 16. There were significant differences between age group 46 and under and age groups 53 through 56 and 57 and over. The average stress score for the age group 46 and under was M = 2.83 and was the highest of the groups with significant differences. The average stress score for the 53 through 56 age group was M = 2.47 and was the lowest of the groups with significant differences. The stress score for the group 57 and over was M = 2.17 (Table 16). This indicated the deans, as they age, seemed to perceive less stress in the deans' positions in response to Factor 4, *Managing Professional/Personal Life*.

Additional breakdown of these age groups between females and males supports the research finding that women are well represented in positions of community college deans in two age groups, 46 and under and 47 through 52 (Table 17), for which there virtually was an even division of males and females in the deans positions. The two age groups that represent those 53 through 56 and those 57 and older show approximately 59% of the deans are male.

Table 16. Differences between groups for effects of age groups of deans on dependent variables

Variable	Age: 46 and under (n = 75)		Age: 47 – 52 (n = 71)		Age: 53 – 56 (n = 92)		Age: 57 and over (n = 75)		F (3, 309)	P	η^2
	M	SD	M	SD	M	SD	M	SD			
1. Role Strain	2.49	.89	2.41	.96	2.53	.94	2.38	.94	.442	.723	.004
2. Managing Human Interactions	3.07	.83	2.98	.89	3.09	.87	2.85	.93	1.224	.301	.012
3. Intrinsic Job Demands	2.73	.76	2.69	.78	2.78	.78	2.53	.76	1.553	.201	.015
4. Managing Professional/ Personal Life*	2.83	.80	2.52	.78	2.47	.84	2.17	.80	8.550	.000	.077
5. Professional Maturity	2.00	.77	2.08	.87	2.21	.88	1.99	.80	1.275	.283	.012
6. Balancing Leadership and Scholarship	2.40	.86	2.33	.92	2.53	1.01	2.37	.91	.671	.571	.006
7. Administrative Identity	2.23	1.00	2.25	1.08	2.36	1.02	2.22	1.06	.348	.790	.003
8. Fiscal Responsibilities	2.27	1.00	2.48	1.21	2.52	1.09	2.23	.95	1.540	.204	.015
9. External Constituency Demands	2.26	.77	2.43	.81	2.32	.91	2.23	.74	.832	.477	.008

*Significant at .0013 level.

Table 17. Age groups of deans by gender

Group	Male	Female	Total
46 and under	38 (50%)	38 (50%)	76 (24%)
47 through 52	34 (48%)	37 (52%)	71 (23%)
53 through 56	55 (60%)	36 (40%)	91 (29%)
57 and over	45 (58%)	32 (42%)	77 (24%)
Total	172 (55%)	143 (45%)	315 (100%)

Heavy Workload and Stress Factors

Values for the responses to stress item 31s, *Feeling I have too heavy a workload*, were given on a five-point Likert scale. These responses were grouped into three levels and treated as an independent variable to ascertain the differences in these groups and the nine stress factors. On the five-point Likert scale, responses of 1 or 2 were grouped to identify "low stress" in response to feeling that there was too heavy a workload. Responses of 3 were identified as "moderate stress" in response to the feeling that there was too heavy a workload and group 3 was identified as "high stress" in response to the feeling of too heavy a workload and included responses of 4 and 5. This resulted in 108 responses that indicated "low stress," 71 responses that indicated "moderate stress," and 140 responses that indicated "high stress."

The results of the ANOVA produced several significant results. The review of statistically significant differences indicated that the deans' perceptions of feeling they have too heavy a workload were significant at some level across all of the factors. These significance levels were: Factor 1, *Role Strain*, F (2, 316) = 26.656, p = .001; Factor 2, *Managing Human Interactions*, F (2, 316) = 137.478, p = .001;

Factor 3, *Intrinsic Job Demands*, F (2, 316) = 21.415, p = .001; Factor 4, *Managing Professional/ Personal Life*, F (2, 316) = 28.951, p = .001; Factor 5, *Professional Maturity*, F (2, 316) = 30.741, p = .001; Factor 6, *Balancing Leadership and Scholarship*, F (2, 316) = 19.232, p = .001; Factor 7, *Administrative Identity*, F (2, 316) = 27.535, p = .001, Factor 8, *Fiscal Responsibilities*, F (2, 316), p = .001, and Factor 9, *External Constituency Demands*, F (2, 316), p = .001. The results of the ANOVA tests as well as means and standard deviations are listed in Table 18.

Follow-up tests were conducted to evaluate pairwise differences among the means. The Scheffé method was used for post hoc comparisons. For Factors 1, 3, 4, 5, 6, 7, and 9—*Role Strain*, *Managing Professional/Personal Life*, *Intrinsic Job Demands*, *Professional Maturity*, *Balancing Leadership and Scholarship*, *Administrative Identity*, and *External Constituency Demands*, respectively—there were significant differences such that Group 1, "low stress," was significantly lower than Groups 2 and 3—"moderate stress" and "high stress." There was no significant difference between Group 2, "moderate stress" and Group 3, "high stress."

Follow-up tests for Factor 2, *Managing Human Interactions*, found that Group 1, "low stress," Group 2, "moderate stress" and Group 3, "high stress" were each significantly higher than the previous group. Follow-up tests for Factor 8, *Fiscal Responsibilities,"* found Group 1 – "low stress," was significantly lower than Group 3, "high stress."

Table 18. Differences between groups for effects of feeling I have too heavy a workload (recoded) on dependent variables

Variable	Low Stress n = 108		Moderate Stress n = 71		High Stress n = 140		F (2,316)	p	η^2
	M	SD	M	SD	M	SD			
1. Role Strain*	1.97	.80	2.56	.83	2.77	.92	26.656	.000	.144
2. Managing Human Interactions*	2.24	.69	2.95	.59	3.60	.64	137.478	.000	.465
3. Intrinsic Job Demands*	2.31	.70	2.78	.60	2.90	.81	21.415	.000	.119
4. Managing Professional/ Personal Life*	2.04	.67	2.63	.62	2.76	.90	28.951	.000	.155
5. Professional Maturity*	1.62	.60	2.20	.82	2.37	.83	30.741	.000	.163
6. Balancing Leadership and Scholarship*	2.00	.91	2.55	.72	2.67	.92	19.232	.000	.109
7. Administrative Identity*	1.74	.74	2.31	.95	2.64	1.09	27.535	.000	.148
8. Fiscal Responsibilities*	2.09	.96	2.35	1.06	2.59	1.12	6.880	.001	.042
9. External Constituency Demands**	1.97	.78	2.32	.58	2.54	.86	16.948	.000	.097

*Significant at .0013 level.

Stress Factors and College Location

Respondents were asked to identify whether they perceived their institutions to be in a rural, suburban, or urban location. Investigating college location was a purely exploratory examination to ascertain whether one location was perceived by the community college deans to be less stressful than another. Table 19 lists the means, standard deviations, and ANOVA test results for each stress factor along with the locations of the colleges as identified by respondents. There were no significant differences between groups (Table 19).

Stress Factors and Gender

There were 147 (45%) females and 170 (55%) males who responded to the survey questionnaire. Table 20 lists the means, standard deviations, and results of ANOVA tests for each factor and the gender of the respondents. The test results found no significant differences between females and males for the nine stress factors at the .0013 level.

Future Challenges for Deans

In the survey, the deans were asked to identify three challenges facing them in the next three to five years. These responses provide qualitative data in their own words that add another dimension to understanding the types of stress the deans were contemplating. There were 251 (77%) responses to this question from the 324 usable surveys that were returned from community college deans.

From these responses, key words that appear repetitively were grouped to gain a sense of the themes that the deans foresee as challenges. The themes that

Table 19. Differences among groups for effects of college location (rural, suburban, or urban) on dependent variables

Variable	Rural n = 135		Suburban n = 99		Urban n = 83		F (2, 314)	p	η^2
	M	SD	M	SD	M	SD			
1. Role Strain	2.43	.94	2.49	.96	2.41	.83	.211	.810	.001
2. Managing Human Interactions	2.97	.91	3.11	.93	2.90	.75	1.411	.245	.009
3. Intrinsic Job Demands	2.68	.72	2.75	.85	2.60	.77	.790	.455	.005
4. Managing Professional/ Personal Life	2.53	.85	2.48	.83	2.43	.83	.384	.682	.002
5. Professional Maturity	2.08	.80	2.09	.91	2.05	.79	.055	.946	.000
6. Balancing Leadership and Scholarship	2.47	.91	2.32	.87	2.45	1.00	.852	.427	.005
7. Administrative Identity	2.26	.98	2.24	1.10	2.26	1.02	.005	.995	.000
8. Fiscal Responsibilities	2.36	1.09	2.42	1.15	2.34	.97	.174	.840	.001
9. External Constituency Demands	2.28	.78	2.34	.85	2.26	.82	.272	.762	.002

*Significant at .0013 level.

Table 20. Differences between groups for effects of gender on dependent variables

Dependent Variable	Female n = 147 M	Female n = 147 SD	Male n = 170 M	Male n = 170 SD	F (1, 315)	p	η^2
1. Role Strain	2.34	.96	2.55	.88	3.845	.051	.012
2. Managing Human Interactions	2.99	.94	3.00	.82	.002	.962	.000
3. Intrinsic Job Demands	2.63	.81	2.72	.75	1.103	.294	.003
4. Managing Professional/ Personal Life	2.51	.84	2.47	.83	.195	.659	.001
5. Professional Maturity	2.01	.78	2.14	.86	1.850	.175	.006
6. Balancing Leadership and Scholarship	2.40	.89	2.41	.95	.014	.905	.000
7. Administrative Identity	2.10	1.03	2.39	1.01	6.196	.013	.019
8. Fiscal Responsibilities	2.20	1.11	2.51	1.02	6.347	.012	.020
9. External Constituency Demands	2.30	.87	2.29	.77	.016	.899	.000

*Significant at .0013 level.

are evident from a frequency of key terms mentioned were technology, faculty, and financial issues.

Technology was mentioned 171 (68%) times among the 251 responses. A sample of the phrases with the word "technology" included "technology changes," "technology competition," and "upgrading technology." Many of the responses simply listed the word "technology." The emergence of this theme is in contrast to the stress item 31v, *Adapting to technology changes (e.g., distance learning, e-mail, computers)*, that did not load on any of the stress factors.

The word "faculty" was identified 103 (41%) times among the 251 responses. An overwhelming majority of the phrases with the word "faculty" dealt with hiring, recruiting, or retaining faculty members. Nine responses used the phrase "faculty retirement." It is unknown how many of the other references to faculty were concerned with the matter of faculty retirement.

References to financial issues appear from a variety of phrases. When the words, "resources," "finance(s)," "funding," and "budget" are combined, this theme of financial issues is mentioned 94 (37%) times among the 251 responses. McBride (2000) stated that "academic economics is a major concern of instructional administrators everywhere" and that "deans are usually not prepared for their financial management roles" (p. 51). This theme of concern over financial issues was represented in the factor analysis results in Factor 8, *Fiscal Responsibilities* and Factor 9, *External Constituency Demands*. When ranked by mean of the stress items, Factor 8, *Fiscal Responsibilities*, was ranked sixth, and Factor 9, *External Constituency Demands*, was ranked seventh of the nine stress factors.

CHAPTER 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was designed primarily to identify and investigate stress factors and selected independent variables related to stress experienced by community college deans. Another important purpose of the study was to identify the demographic profile of community college deans.

The knowledge gained about stress and how it affects deans in community colleges will aid in the effective management of stress by the deans and their colleges. It is important to understand these positions, the work environment, and the stress of the deans because such stress can impair job performance, health, and quality of life for the deans and interfere with the objectives of both the deans and their colleges (Bergin & Solman, 1988).

The large number and significance of community college deans make them an important group to research. Coupling their number and significance with the facts that 44% of all undergraduates have been enrolled in community colleges at a given time (American Association of Community Colleges, 1997), and that community college deans typically have provided the employment pool for the selection of community college presidents and upper administration, it is also important to understand and attempt to manage the causes of stress in the deans' positions in order to better prepare and support these community college administrators (Getskow, 1996; McFarlin, Crittenden, & Ebbers, 1999; Twombly, 1986).

In general, the first two chapters of this study provided an introduction to the research problem and identify in a literature review the underlying foundation for the study. Chapters 3 and 4 identified the methodology used in the study and presented the results based on the data obtained from the survey. The fifth, and final, chapter provides a summary of the study and gives recommendations that could enhance the knowledge of individuals interested in the subject of stress with respect to community college deans.

The four-stage stress cycle initially developed by McGrath (1970, 1976) was used as a theoretical guide for this research. Gmelch (1988) further developed the McGrath model as a theoretical foundation in his research regarding professionals in higher education. This theoretical model guided the development of this survey for community college deans, as well as the analysis of the data collected.

Stage 1 of the stress cycle model was characterized by the set of demands, or stressors, placed on the individual—in this study, the community college deans.

Stage 2 of the stress cycle model consisted of the perceptions and interpretations of the stressors by the individual. The responses to the survey were the first indication of how, and to what degree, the community college deans perceived stressors in their environment.

The Chair Stress Index (CSI) was adapted to the community college environment and used in this study. It resulted in the Community College Dean's Stress Inventory (CCDSI), which enabled respondents to provide indicators of what the deans perceived as causing stress.

Three research questions guided this study:

1. What work-related situations are perceived as causing the most stress?
2. As stress factors emerge from this study of community college deans, what are the characteristics of each factor?
3. How do the independent variables of age, workload, college location (rural, suburban, urban), and gender contribute to the stress factors identified?

Potential respondents were identified from the 2000 membership directory of the American Association of Community Colleges (AACC). The research questions were sent to 750 deans in 394 colleges. Responses to the *2000 National Survey on Community and Technical College Academic Deans* were collected from 324 deans—a 43% return rate—located in 200 different colleges—a 51% return rate. These responses represented the population of all technical, transfer, and community colleges as listed in the 2000 membership directory of the AACC.

The results of the survey confirmed the existence of stress factors for community college deans. Exploration of the variable, "Feeling I have too heavy a workload," found that all nine of the stress factors were related to some degree with this independent variable.

Inventory of Stress Items

The 41 items in the stress inventory were ranked by their mean values to aid in the identification of which work-related situations caused the most stress (Table 3). A summary was compiled of the means and standard deviations for the total stress inventory, the overall assessment of stress, and the percent of stress that

comes from being deans (Table 4). The deans were asked to identify their overall stress level on a Likert scale of 1 to 5—Slight to High. Their responses resulted in a mean value of 3.06 ($\underline{M}$ = 3.06) on a Likert of 1 to 5—Slight to High. Another question asked the deans to estimate the amount of stress in their lives as a result of their jobs. The response average to this question was 55.68%.

Stress Factors

The study confirmed the existence of stress factors for the community college deans. Nine stress factors were discovered by principal components factor analysis with varimax rotation. These factors identified the dimensions of stress experienced by the community college deans.

The stress factors found in this study and the stress factors found in prior research studies are presented in Appendix E. This is provided as a resource to examine the differences and similarities among related studies for department chairs or deans in both colleges/universities and community colleges.

The first stress factor, *Role Strain*, relates to the deans' positions within the organization. The stress items in this factor indicate the stress and strain of being placed in a position of not being sure what is expected of the deans and what authority is extended to the deans' positions. Factors with many of these same stress items are found in the research of others: Burns (1992)—Factor 2, *Administrative Relationships Stress;* Gmelch et al. (1999)—Factor 2, *Provost/Supervisor Related Stress*; Houchen (1994)—Factor 2, *Conflict and*

Expectations Stress; and Rasch et al. (1986)—Factor 1, *Role-Based Stress* (Appendix E – dimensions/factors of stress).

The next two stress factors—*Managing Human Interactions* and *Intrinsic Job Demands*—represent the competence in human relations skills needed in these positions and the demands of the day-to-day administrative tasks. These two factors also are represented in other research. Factor 2, *Managing Human Interactions*, is found dispersed across several factors in the research of Rasch et al. (1986), Burns (1992), and Houchen (1994). The elements of conflict and human interactions with faculty and chairs are found in Factor 3, *Faculty/Chair (Head)-Related Stress* in Gmelch et al. (1999). An overview of this related research is found in Appendix E (note: the table that is entitled, dimensions/factors of stress – various studies)

Factor 3, *Intrinsic Job Demands*, which encompasses the day-to-day administrative tasks, is found in Factor 1, *Administrative Tasks*, of Gmelch et al. (1999). Rasch et al. (1986) finds similar stress items in Factor 2, *Task-Based Stress*. Houchen (1992) and Burns (1994) have these management tasks dispersed across several factors.

The next four stress factors—*Managing Professional/ Personal Life*, *Professional Maturity*, *Balancing Leadership and Scholarship*, and *Administrative Identity*—represent the themes of professional identity, awareness of self as an academic leader, and with the awareness of balancing personal and professional commitments. Factor 4, *Managing Professional/Personal Life*, is comparable to the stress factor of *Perceived Expectations* found by Burns (1992). It is also very similar to the stress factor, *Time/Personal Stress*, found by Gmelch et al. (1999). Factor 6,

Balancing Leadership and Scholarship, is the same as the factor of *Scholarship Stress* in Gmelch et al. (1999). The remainder of the stress items in Factors 5 and 7, *Professional Maturity* and *Administrative Identity*, respectively, are found scattered among the factors derived in other research and not in a specific category.

The final two stress factors—*Fiscal Responsibilities* and *External Constituency Demands*—identify the emergent themes of financial expectations and responses to constituencies that have risen to the forefront as financial resources shrink or are eliminated. The shrinking pool of resources for education has forced deans to be more involved with collaborative efforts with various constituency groups, to gain the resources needed to survive and thrive in their communities.

The research by Gmelch et al. (1999) identified a similar factor entitled *Fund Raising Stress*. Burns (1992) identified the four stress items in Factor 8, *Fiscal Responsibilities*, within *Administrative Task Stress*, but did not find a separate factor involving financial issues.

Influence of Variables

Identifying the stress factors helped to recognize the stressors that are present for the community college deans. Exploration of independent variables then enhanced the knowledge about the influence of the stress factors on the community college deans.

The independent variables selected for further review in this study were: age, workload, college location, and gender. The findings indicated various levels of influence by the variables on the perception of stress by the deans.

Age

Factor 4, *Managing Professional/Personal Life*, was the only factor that was influenced by the independent variable of age. Those in the 46 and under age group indicated higher average stress scores than did those in the age groups from 53 through 56 and 57 and over. This may be the result of greater experience in the position, since experience tends to diminish the perception of stress over time. Those in the two older age brackets also may have been indicating family responsibilities have lessened and professional development goals have been reached, thus further reducing the deans' perceived levels of stress (Findlen, 2000; Wolverton, Gmelch, & Wolverton, 2000).

Workload

The independent variable, "Feeling I have too heavy a workload," was divided into three levels of stress—low, moderate, and high. This variable indicated significant differences between groups for all of the stress factors. Volkwein and Parmley (2000) stated that "job and workload stress exert negative influences," and it would be appropriate that perceptions of stress would reflect a reaction to a feeling of too heavy a workload. To some degree, the pattern of interaction with each of the stress factors also suggested that workload was perceived as an element of stress in all aspects of the deans' positions.

College Location

The independent variable for college location (rural, suburban, urban) yielded no significant differences between groups for this variable. This may be an indication

that the nature of the job and the challenges faced are similar regardless of the location of the college.

Gender

There were no significant differences between males and females for the stress factors. This is an important note, considering the nearly even division of males and females in the deans' positions, and it indicates that individuals who perceive the range of stress in similar ways filled the positions.

Conclusions

Based on the data gathered, the national profile of community college deans was determined to be only slightly more likely to be male (53.7%) than female (46.3%). They typically are white (92.2%), age 53 or older (53.3%), married (80.1%), and had no children living at home (60.9%). The dean usually was appointed from inside the institution (66.6%) and had held the dean's position for 3 years or less (51.5%). He or she worked at a community or technical college that has both technical and transfer programs (70.7%). The dean saw himself or herself primarily as an administrator (70.7%) working in a location perceived as rural (42.6%) and having more than 80 faculty reporting to him or her (48.9%).

Nine stress factors were identified in this study of stress for community college deans. The nine factors are identified as: Factor 1, *Role Strain;* Factor 2, *Managing Human Interactions*; Factor 3, *Intrinsic Job Demands;* Factor 4, *Managing Professional/Personal Life;* Factor 5, *Professional Maturity*; Factor 6, *Balancing*

Leadership and Scholarship; Factor 7, *Administrative Identity*; Factor 8, *Fiscal Responsibilities*; and Factor 9, *External Constituency Demands*.

When ranked by the mean of each factor, Factor 2, *Managing Human Interactions* (M = 2.99), and Factor 3, *Intrinsic Job Demands* (M = 2.68), respectively, caused the most stress for the deans. Overall, the nine stress factors had means that ranged from 2.99 to 2.08. This indicated that overall the deans perceived low to moderate levels of stress in their deans' positions. The means of all of the stress factors fell below the theoretical midpoint of 3.00 for the five-point response scale that would indicate a neutral response.

Two factors—*Managing Human Interactions and Intrinsic Job Demands*—repeatedly appeared in the research of department chairs or deans in community colleges and colleges/universities. These stress factors underline the importance for the community college deans to identify and hone their skills in human relations, communications, conflict-resolution, and management techniques to reduce the perceived stress they feel when encountered with the daily interactions and tasks that are part of the job of being a dean.

The ANOVA results indicated that age made a significant difference in how the deans perceived stress for Factor 4, *Managing Professional/Personal Life*. As was discussed above, the deans who were younger reported higher levels of stress than did older deans. This may be attributed to a combination of life experience, as well as experience with challenges faced in their positions. As the deans learned what would be effective in various situations, their perceived level of stress declined.

The increased perception of stress from the younger group of deans may also be the result of little or no training for the individuals in these positions. For example, inadequate training may cause the dean to spend extra hours in the evening or during the weekend attempting to keep up with paperwork and researching the background about each situation as it arises. Use of evening and weekend time for work by the deans takes away from personal and family time and may increase the levels of their stress.

The feeling of having too heavy a workload affected each of the stress factors to some degree. This may be an indication that not only do the deans have too much work to do but that the scope of responsibility is too great, thereby creating an environment that is stressful for the deans.

Gender did not produce significant differences in this study. This may indicate that, at this institutional administrative level, individuals have prepared for and self-selected into these types of positions. It may also mean that, in the community college environment, the culture has enabled men and women to advance in their work environment based on abilities and achievement rather than on some perceived gender bias.

There were no significant differences with respect to the location of the college. Having no significant differences in location of college would seem to indicate a comfort level between the expectations of the individual and the location where they work, and, therefore, location of college does not seem to contribute to stress levels of the deans.

This study contributes to stress theory through findings that apply to a new group of academic administrators. This study identified the stress factors for community college deans and explored the interaction of independent variables (age, feeling of too heavy a workload, college location, and gender) with these stress factors. This information about sources of stress for community college deans can lead to strategies that can reduce their levels of stress. Hopefully, the reduction in stress will make deans more productive and efficient, with attendant benefits for the faculty, staff, and students of institutions.

Recommendations

Recommendations for Future Study

This was an exploratory study to identify stress factors among community college deans. This study also explored the extent to which different perceptions of stress among community college deans were based on selected independent variables (age, the feeling of too heavy a workload, college location, and gender). The study further provided a demographic profile of the deans that may be generalized for community college deans across the United States.

Despite the information this study has provided, there are additional questions that could be answered in the future. For example, the study of the perceptions of stress for community college deans provided information for the four-stage stress model developed by Gmelch (1988) at the Stage 1 (demands on individuals) level and at the Stage 2 (individual perceptions) level for the stressors identified in Stage 1. Questions to explore in the future should ascertain what happens at Stage 3

(selection of responses by the individual) and Stage 4 (consequences for the individual).

Further study could be conducted to gather additional data regarding health (sick days taken, number of doctor or hospital visits, etc.) and perceptions of well-being by the deans. These variables may provide valuable insight into Stage 3 and Stage 4 of the stress cycle. This information would add additional independent variables that might further explain stress levels when compared to stress factors.

Several questions come to mind when considering that no gender differences were found in this study. Exploring whether it is the maturity level of the individual who has self-selected to enter the field of administration or whether there is something about the culture of these organizations that dilutes gender bias might begin to answer these questions.

Another area of future research that would enhance knowledge about the deans would be to learn more about the academic credentials deans hold and the credentials they perceive are necessary for them to function successfully. This question could encompass the view of "scholarship versus administration," or the role of "administrator versus faculty" member, from the lenses of the individual deans or through the lenses of different cultures within the community colleges.

The title and scope of the community college deans' positions are complex and inconsistent. Additional study of job descriptions and organizational structures in community colleges would aid in placing these midlevel administrative positions in proper light in available research.

Considering the themes that are recognizable in the comments from deans—technology, faculty, financial issues—new stress items may emerge that could be added to the stress inventory for future surveys. Such improvements would gather data about additional stressors that arise as the issues facing education change (Levin, 1998b).

In addition to gathering more quantitative data, applying qualitative research methodology as well would add to a holistic understanding of the deans' perspectives of their jobs. Given the nearly equal division of females and males in these community college positions, there is the potential for gathering a number of new insights into leadership, career paths, job satisfaction, or coping strategies to name just a few topics that could aid both current and prospective community college deans in managing stress.

Recommendations for Practice

Since mean perceived stress levels reported were in the low-to-moderate range for each of the nine stress factors, it is clear that stress is part of each and every day for community college deans. Anyone who is in a dean's position can benefit from the findings of this study. Such individuals would be better equipped to identify stress and better equipped to manage potentially stressful situations.

The results of this study would also be beneficial as a training and development tool for those individuals contemplating a move into an administrative position. By providing applicable information about the position, individuals moving into such jobs can be effective more quickly. Furthermore, benefits can be gained by

the supervisors and staff members of the deans being aware of this information and working with the deans to adapt proactive strategies with regard to stress.

A staff development program could be developed by various groups (local, state, regional, or national) to educate current and future deans about the sources of stress. Along with receiving information about stress, such a program could provide ideas for coping strategies that would help the deans be more effective and more satisfied with their career choice.

Information about the general perceptions that deans have too heavy a workload can aid supervisors in delegating and organizing work assignments to enhance productivity and satisfaction. Wolverton, Wolverton, and Gmelch (1998) stated that "deans have no problem working hard as long as they have the autonomy to do the job their way and the flexibility to do it on their own time line" (p. 11). Supervisors can assist deans in managing or reducing stress by providing training through selected staff development opportunities, mentoring programs to provide a support system within the organization, and applying realistic expectations for work assignments that can aid both the deans and their supervisors in identifying accomplishments.

Concluding Statement

Community colleges are unique educational creations in the United States. Among the many important actions and developments, the report of the Truman Commission, issued in 1947, proposed an educational initiative that identified

community colleges and forever changed the landscape of higher education in the United States.

The missions of community colleges charge them with serving students and businesses in the communities where they are located. These educational missions encompass the expectations of offering open access to higher education throughout a person's life. The availability of access is expected whether the educational goals are transfer to a four-year college or university or gaining current workforce training. The strength and vitality of these institutions rests with carrying out their unique missions.

The community college deans are at the heart of these organizations. These midlevel academic leaders are positioned to carry out the day-to-day business of the colleges, and they also are the talent pool for the future leadership of the community colleges (Shults, 2001).

Gaining knowledge about the deans and their perceptions of stress is important in order to keep dynamic, creative leadership available to community colleges. It is known that unrelenting stress may lead to health problems and burnout, which leaves the organization without productive, proactive administrators (Cloud, 1991).

It is important to carry out research that may aid administrators, specifically deans, to be successful in managing the stresses they encounter in executing their role in community colleges. Levin (1998b) described the environment of community colleges in ways that present opportunities, but certainly also exposes the potential

of increasing stress for midlevel administrators. Levin (1998b) portrayed this dynamic environment in the following way:

> Community colleges are not static organizations: they alter, change their approaches, their programs, and their relationship with their environment. But they are not transformed institutions; they have not become another institution: they are neither universities nor secondary schools; they are neither corporations nor small businesses. They possess the attributes of many other organizations; they do so because on the one hand their external environment pushes them in that direction, and on the other hand because in order to survive yet maintain their purposes, community colleges themselves change course and adopt new approaches, new technologies, and new employees. (p. 53)

Keeping this environment in mind as well as the challenges being presented to education, in general, and to community colleges, in particular, it is critical that the deans are aware of the factors causing stress. In addition, deans should have the support they and their colleges need to manage stress and maintain a healthy work environment. These midlevel administrators, community college deans, are at the heart of keeping community colleges vital to serve their students and the broader community of which they are a part.

APPENDIX A. SURVEY AND HUMAN SUBJECTS APPROVAL

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, not listed

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				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				High
1	2	3	4	5

a. A desire to contribute to and improve the unit
b. Financial gain
c. Advancement of my administrative career
d. Power and authority of my position
e. Personal growth
f. 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 conferences
_____ 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 conferences
_____ 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		Same		Greater	With your level of scholarship are you....	
1	2	3	4	5	Satisfied?	Dissatisfied?

20. How satisfied are you with your dean's position with regard to:

	Dissatisfied				**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				**Excellent**
	1	**2**	**3**	**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	2	3	4	**Agree** 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 1	2	3	4	**Excellent** 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 _____
b. Full-Time Faculty _____
c. Adjunct Faculty _____
d. Vocational students (headcount) _____
e. Liberal arts/transfer students (headcount) _____

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.

Rate the importance to you of each dean's duty.	**Low** 1	2	3	4	**High** 5
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 concerns					

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**		**Moderate**		**High**
		1	2	3	4	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)**

Behaviors

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

How are each of the following frames **used** in your leadership:	**Never** 1	**Occasionally** 2	**Sometimes** 3	**Often** 4	**Always** 5
a. Structural					
b. Human relations					
c. Political					
d. Symbolic					

Additional Information

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				**Very Effective**
	1	**2**	**3**	**4**	**5**
1. _____					
2. _____					
3. _____					

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

THANK YOU **VERY MUCH** FOR COMPLETING THE SURVEY

Human Subjects Approval

Russell, Christopher

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	Last contact
4/20/00	6/1/00
Month/Day/Year	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/COEducation

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 3/31/00 | Signature of Committee Chair

APPENDIX B. CORRESPONDENCE MATERIALS

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 I 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 chare 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 of 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 listed below:

APPENDIX C. POSTARD FOLLOW-UP

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 the 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 contact by phone, (515)-***-*** or by email at carussel@iastate.edu. I can't thank you enough for your assistance.

Chris Russell
Doctoral Candidate
Educational Leadership and Policy Studies
Iowa State University

APPENDIX D. RESULTS OF FACTOR ANALYSIS

Nine Factors – 2002

Factor 1: (8 items) Role Strain

- 31y - Not knowing how my supervisor evaluates my performance
- 31u - Trying to influence the actions and decisions of my supervisor
- 31g - Resolving differences with my supervisor
- 31i - Having insufficient authority to perform my unit responsibilities
- 31ff - Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me.
- 31dd - Feeling others don't understand my goals and expectations
- 31p* - Feeling required paperwork is not utilized
- 31j* - Believing my administrative career progress is not what it should be

Factor 2: (9 items) Managing Human Interactions

- 31n - Handling concerns and conflicts with faculty
- 31f - Handling student concerns and conflicts
- 31m - Handling concerns and conflicts with chairs
- 31ii - Having to make decisions that affect the lives of faculty, staff, and students (e.g., tenure, promotion, advancement).
- 31aa - Evaluating chair, faculty, and staff performance
- 31e - Imposing excessively high self-expectations
- 31cc* - Supervising and coordinating the tasks of many people
- 31jj - Promoting diversity among faculty, students and the leadership team
- 31w - Seeking compatibility among unit and personal goals

Factor 3: (7 items) Intrinsic Job Demands

- 31s - Feeling I have too heavy a work load
- 31t - Attending meetings which take up too much time
- 31gg - Being frequently interrupted by telephone calls and drop-in visitors
- 31oo* - Attempting to balance my professional and personal lives
- 31kk* - Meeting report and other paperwork deadlines
- 31cc* - Supervising and coordinating the tasks of many people
- 31r - Writing letters and memos, and responding to other paperwork

Factor 4: (5 items) Managing Professional/Personal Life

- 31b - Meeting social obligations expected of deans (e.g., clubs, parties, volunteer work)
- 31a - Participating in work related activities outside the regular working hours which conflict with personal activities
- 31d - Participating/presenting at professional meetings
- 31oo* - Attempting to balance my professional and personal lives
- 31l - Having to travel to fulfill job expectations

Factor 5: (2 items) Professional Maturity

- 31ee - Feeling I am not adequately trained to handle my job
- 31hh - Feeling pressure for better job performance above what I feel is reasonable

Factor 6: (3 items) Balancing Leadership & Scholarship

- 31h - Having insufficient time to stay current in my academic field
- 31nn - Attempting to balance my leadership and scholarship responsibilities
- 31k - Believing my academic career progress is not what it should be

Factor 7: (4 items) Administrative Identity

- 31x - Receiving insufficient recognition for my performance
- 31z - Receiving inadequate salary
- 31o - Receiving insufficient recognition for performing administrative functions
- 31j* - Believing my administrative career progress is not what it should be

Factor 8: (4 items) Fiscal Responsibilities

- 31ll - Preparing budgets and allocating resources
- 31mm - Trying to gain financial support for unit programs
- 31kk* - Meeting report and other paperwork deadlines
- 31p* - Feeling required paperwork is not utilized

Factor 9: (2 items) External Constituency Demands

- 31q - Having to engage in fund raising activities
- 31bb - Trying to satisfy the concerns of constituent groups (e.g., alumni, legislators, community)

*Items loading on more than one stress factor.

- 31j* - Believing my administrative career progress is not what it should be (1, 7)
- 31p* - Feeling required paperwork is not utilized (1, 8)
- 31cc* - Supervising and coordinating the tasks of many people (2, 3)
- 31kk* - Meeting report and other paperwork deadlines (3, 8)
- 31oo* - Attempting to balance my professional and personal lives (3, 4)

Item that did not load on any stress factor.

- 31v - Adapting to technology changes (e.g., distance learning, e-mail, computers)

Item omitted.

- 31c - Complying with unit rules and regulations

APPENDIX E. STRESS FACTORS IN CURRENT AND PRIOR STUDIES

DIMENSIONS/FACTORS OF STRESS – VARIOUS STUDIES

Research	Rasch, Hutchison, & Tollefson – 1986 – Sources of stress among administrators at research universities (College & University administrators)	Burns – 1992 – Dimensions of university academic depart. chair stress: A national study (University dept chairs)	Houchen – 1994 – Study of stress factors with rel'ship to demographics, time allocation, and social support for depart chairs at community colleges	Gmelch, Wolverton, Wolverton, & Sarros – 1999 – An imperiled species searching for balance (US & Australian University Deans)	Wild – 2002 – Work-related stress factors affecting the community college dean – 9 factors
Factor 1	**ROLE-BASED** J: Feeling staff members or colleagues do not understand my goals and expectations 6: Thinking that I will not be able to satisfy the conflicting demands of the person(s) who has the authority over me 7: Feeling not enough is expected of me by my superior(s) 12: Trying to resolve differ's with my superior(s) 15: Not knowing what my superior thinks of me or how he/she evaluates my perform. 18: Feeling that I have too much responsibility delegated to me by my superior 23: Feeling that I have too little authority to carry out responsib. assigned to me 27: Feeling that the progress on my job is not what it should be or could be 28: Being unclear about the scope and respon. of my job 31: Having to work with people who have more authority but are not as skillful or knowledgeable as I 33: Trying to influence my immediate super.'s actions and decisions that affect me	**FACULTY ROLE** O: Preparing manuscripts for publication N: Securing financial support for my research L: Believing my academic career progress is not what it should be V: Receiving insufficient recognition for research performance I: Having insufficient time to stay current in my academic field P: Receiving insufficient recognition for performing admin responsibilities	**TIME DEMAND** P: Feeling I have too heavy a work load I: Having insufficient time to perform my departmental responsibilities N: Having inadequate time for teaching preparation E: Imposing excessively high self-expectations AK: Handling interruptions to work time H: Having insufficient time to stay current in my academic field B: Meeting social obligations K: Having to travel to fulfill job expectations A: Participating in work-related activities outside regular working hours O: Writing letters and memo and handling other paperwork Q: Attending meetings which take up too much time	**ADMINISTRATIVE TASKS** ➢ Meeting report and other paperwork deadlines ➢ Preparing budgets and allocating resources ➢ Writing letters & memos, and responding to other paperwork ➢ Feeling I have too heavy a work load ➢ Being frequently interrupted by phone calls & drop-in visitors ➢ Attending meetings which take up too much time	**FACTOR 1: Role Strain** 31y: Not knowing how my supervisor evaluates my performance. 31u: Trying to influence the actions and decisions of my supervisor. 31g: Resolving differences with my supervisor. 31i: Having insufficient authority to perform my unit responsibilities. 31ff: Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me. 31dd: Feeling others don't understand my goals and expectations. 31p: Feeling required paperwork is not utilized. 31j: Believing my administrative career progress is not what it should be.

Factor 2	**TASK-BASED** 1: Being interrupted frequently by telephone calls 8: Having my work frequently interrupted by staff members who want to talk 9: Imposing excessively high expectations on myself 11: Writing memos, letters, and other communication 17: Feeling that much of the paperwork required by others is not utilized after I complete it 19: Preparing budget proposals and allocating budget resources 25: Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day 29: Feeling that meetings take up too much time 30: Trying to complete reports and other paperwork on time	**ADMINISTRATIVE RELATIONSHIPS** Z: Not knowing how my dean/super evaluates my perform V: Trying to influence the actions and decisions of my dean/ supervisor P: Receiving insufficient recognition for performing admin responsibilities J: Having insufficient authority to perform departmental responsibilities IIII: Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me. II: Resolving differences with my dean/super JJ: Feeling pressure for better job performance above what I feel is reasonable. K: Believing my administrative career progress is not what it should be. Q: Feeling required paperwork is not utilized. EE: Feeling others don't understand my goals & expectations C: Complying with college & university rules and regulations AA: Receiving inadequate salary	**CONFLICT AND EXPECTATIONS** U: Not knowing how my dean/super evaluates my perform G: Resolving differences with my dean/supervisor AC Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me R: Trying to influence the actions and decisions of my dean/super AD: feeling not enough is expected of me by my dean/super Z: Feeling others don't understand my goals and expectations AE: Feeling pressure for better job performance above what I feel is reasonable AB: Believing I can't get all of the information I need to carry out my job properly C: Complying with college rules and regulations	**PROVOST/SUPERVISOR RELATED** ➢ Resolving differences with my provost/superior ➢ Trying to influence the actions and decisions of my provost/superior ➢ Having insufficient authority to perform my college responsibilities ➢ Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me ➢ Feeling unreasonable pressure for better job performance ➢ Not knowing how my provost/superior evaluates my performance	**FACTOR 2: Managing Human Interactions** 31n: Handling concerns and conflicts with faculty. 31f: Handling student concerns and conflicts. 31m: Handling concerns and conflicts with chairs. 31ii: Having to make decisions that affect the lives of faculty, staff, and students (tenure, promotion, advancement). 31aa: Evaluating chair, faculty, and staff performance. 31e: Imposing excessively high self-expectations. 31jj: Promoting diversity among faculty, students and the leadership team. 31w: Seeking compatibility among unit and personal goals.

Factor 3	**CONFLICT-MEDIATING** 20: Trying to resolve parent/institution conflicts 21: Feeling I have to participate in university activities outside of the normal working hours at the expense of my personal time 26: Complying with state, federal, and organizational rules and policies 32: Trying to resolve differences between/among staff members and/or colleagues 34: Trying to gain public approval/or financial support for university programs 35: Trying to satisfy concerns of constituent groups (alumni, the community, etc.)	**ROLE AMBIQUITY** FF: Feeling I am not adequately trained to handle my job LL: Feeling I have too much responsibility delegated to my by my dean/super II: Feeling not enough is expected of me by my dean/supervisor GG: Believing I can't get all of the information I need to carry out my job properly KK: Having to make decisions that affect the lives of faculty, staff, and students. EE: Feeling others don't understand my goals & expectations JJ: Feeling pressure for better job performance above what I feel is reasonable CC: Trying to satisfy the concerns of constituent groups (alumni, community, etc.)	**MANAGEMENT ROLE** AI: Preparing budgets and allocating resources AH: Meeting report and paperwork deadlines AF: Having to make decisions that affect the lives of faculty, staff, and students Y: Supervising and coordinating the tasks of many people W: Evaluating faculty and staff performance AJ: Trying to gain financial support for department programs AB: Believing I can't get all of the information I need to carry out my job properly AA: Feeling I am not adequately trained to handle my job. F: Handling student concerns and conflicts AK: Handling interruptions to work time AG: Feeling I have too much responsibility delegated to me by my dean/super O: Writing letters & memos and handling other paperwork X: Trying to satisfy the concerns of constituent groups (alumni, community, etc.)	**FACULTY/CHAIR (HEAD) RELATED** ➢ Handling concerns and conflicts with faculty ➢ Handling concerns and conflicts with chairs ➢ Evaluating chairs, faculty, and staff performance ➢ Having to make tenure, promotion, and advancement decisions	**FACTOR 3: Intrinsic Job Demands** 31s: Feeling I have too heavy a work load. 31t: Attending meetings which take up too much time. 31gg: Being frequently interrupted by telephone calls and drop-in visitors. 31oo: Attempting to balance my professional and personal lives. 31kk: Meeting report and other paperwork deadlines. 31cc: Supervising and coordinating the tasks of many people. 31r: Writing letters and memos, and responding to other paperwork.

Factor 4	**SOCIAL-CONFIDENCE** 4: Feeling that I am not fully qualified to handle my job 13: Speaking in front of groups 14: Attempting to meet social expectations	**PERCEIVED EXPECTATIONS** M: Having to travel to fulfill job expectations. A: Participating in work-related activities outside regular working hours which conflict with personal activities. B: Meeting social obligations (clubs, parties, volunteer work) expected of chairs. E: Making presentations at professional meetings. F: Imposing excessively high self-expectations.	**REWARD & RECOGNITION** J: Receiving insufficient recognition for my teaching performance V: Receiving inadequate salary L.. Receiving insufficient recognition for performing administrative responsibilities O: Writing letters and memos and handling other paperwork	**TIME/PERSONAL STRESS** ➢ Participating in work-related activities outside regular working hours that conflict with personal activities ➢ Meeting social obligations (clubs, parties, volunteer work) expected of deans ➢ Having to travel to fulfill job expectations ➢ Attempting to balance my professional and personal lives	**FACTOR 4: Managing Professional/ Personal Life** 31b: Meeting social obligations (clubs, parties, volunteer work) expected of deans. 31a: Participating in work related activities outside the regular working hours which conflict with personal activities. 31d: Participating/presenting at professional meetings. 31oo: Attempting to balance my professional and personal lives. 31l: Having to travel to fulfill job expectations.
Factor 5		**ADMINISTRATIVE TASK** MM: Meeting report and other paperwork deadlines NN: Preparing budgets and allocating resources OO: Trying to gain financial support for department programs S: Writing letters & memos, responding to other paperwork BB: Evaluating faculty and staff performance KK: Having to make decisions that affect the lives of faculty, staff and students T: Feeling I have too heavy a work load DD: Supervising and coordinating the tasks of many people C: Complying with college and univer rules and regs U: Attending meetings which take up too much time G: Handling student concerns & conflicts Q: Feeling required paperwork is not utilized X: Seeking compatibility among institutional, departmental, and personal goals		**SCHOLARSHIP** ➢ Having insufficient time to stay current in my academic field ➢ Attempting to balance my leadership and scholarship responsibilities ➢ Believing my academic career progress is not what it should be	**FACTOR 5: Professional Maturity** 31ee: Feeling I am not adequately trained to handle my job. 31hh: Feeling pressure for better job performance above what I feel is reasonable.

Factor 6				**SALARY/RECOGNITION** ➢ Receiving inadequate salary ➢ Receiving insufficient recognition for performing administrative functions ➢ Receiving insufficient recognition for my scholarly performance	**FACTOR 6: Balancing Leadership & Scholarship** **31h: Having insufficient time to stay current in my academic field.** **31nn: Attempting to balance my leadership and scholarship responsibilities.** **31k: Believing my academic career progress is not what it should be.**
Factor 7				**FUND RAISING** ➢ Having to engage in fund raising activities ➢ Trying to gain financial support for college programs ➢ Trying to satisfy constituent groups (e.g., alumni, legislators, community)	**FACTOR 7: Administrative Identity** **31x: Receiving insufficient recognition for my performance.** **31z: Receiving inadequate salary.** **31o: Receiving insufficient recognition for performing administrative functions** **31j: Believing my administrative career progress is not what it should be.**
Factor 8					**FACTOR 8: Fiscal Responsibilities** **31ll: Preparing budgets and allocation resources.** **31mm: Trying to gain financial support for unit programs.** **31kk: Meeting report and other paperwork deadlines.** **31p: Feeling required paperwork is not utilized.**
Factor 9					**FACTOR 9: External Constituency Demands** **31q: Having to engage in fund raising activities.** **31bb: Trying to satisfy the concerns of constituent groups (e.g., alumni, legislators, community).**

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