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The Relationship Among Selected Variables Influencing Decision Making in the Roles of Public Community College Academic Deans

Sylvan Alphonso Lashley

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THE RELATIONSHIP AMONG SELECTED VARIABLES
INFLUENCING DECISION MAKING IN THE ROLES
OF PUBLIC COMMUNITY COLLEGE
ACADEMIC DEANS

A dissertation
presented in partial fulfillment
of the requirements for the degree
Doctor of Education

by
Sylvan Alphonso Lashley

June 1981
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ABSTRACT

THE RELATIONSHIP AMONG SELECTED VARIABLES INFLUENCING DECISION MAKING IN THE ROLES OF PUBLIC COMMUNITY COLLEGE ACADEMIC DEANS

by

Sylvan A. Lashley

Chairman: Bernard M. Lall
Title: THE RELATIONSHIP AMONG SELECTED VARIABLES INFLUENCING DECISION MAKING IN THE ROLES OF PUBLIC COMMUNITY COLLEGE ACADEMIC DEANS

Name of Researcher: Sylvan Alphonso Lashley
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Problem

Much descriptive research has been undertaken on the academic dean's role which has been determined by the perceptions of significant others.

Since the dean has had several categories of prescribed roles, scholars have tended to emphasize these roles and approach administrator-preparation from a prescriptive basis. This approach, though useful, ignores a crucial dimension—the variables, forces, or stimuli that impinge upon and influence the dean in his/her decision-making areas.

An underlying issue that has been largely ignored is the relationship of environmental forces or stimuli and decision making areas—
it has been unclear what relationship exists between decision making and the environment.

An internal and an external dimension were suggested as categories under which several internal and external variables were grouped. The purpose of the study was to define and analyze the relationship among selected variables which influenced decision making in the academic dean's perception of his/her role in public community colleges in the states of Michigan, Illinois, Kentucky, and California.

Methods

There were nine roles or decision-making areas, and eight internal-external variables or stimuli. Responses were elicited by presenting the internal-external variables as stimuli (that is, each respondent considered the internal-external variables when asked to judge how crucial were the stimuli in influencing decisions within particular roles). Responses were categorically scaled and values assigned for each of the internal-external roles over the nine roles. The Mann-Whitney U test was used to compare the relative ranks of the internal-external variables for each role to determine whether they were statistically and significantly different. Scale values for each role were inspected and the highest cluster in each role selected as indicative of the relative importance for that role. Kendall's coefficient of concordance, W, was used to estimate the consistency of the eight internal-external variables over the nine roles, and chi-square was utilized to determine whether responses differed statistically significantly when the classificatory variables of educational qualifications, educational field, and age were considered.
Results

An appreciable percentage of academic deans possessed doctorates in higher education/educational administration and fell in the 39-55 age bracket; however, more deans were above 55 than under 39. No significant differences occurred between the internal and external variables when each role was considered and an inspection of the scale values over all the roles produced Experiences Gained on the Job, Philosophy of Administration, and Local Community Needs as the most crucial variables influencing decision making.

Academic deans with doctorates placed less emphasis on job descriptions than did deans without doctorates when engaging in academic counseling, but tended to place greater emphasis on formal preparation than did deans without doctorates when engaging in Curriculum Planning. As academic deans increased in age, they tended to place greater emphasis on formal preparation when engaging in academic counseling.

Conclusions

The conclusions were as follows:

1. The earned doctorate in education, specifically in higher education/educational administration, is a feature of community college academic deans

2. The community college academic deanship is primarily a mid-to-late-adulthood profession

3. Experiences Gained on the Job, Local Community Needs, and Philosophy of Administration heavily influence decision making in relation to the other variables, and formal preparation has a major influence on curriculum planning, but less on other areas of academic decision making.

4. Generally, community college academic decision making is not divided along lines of degree, education, field or age.
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Last but not least, I thank my heavenly Father for His kind protection and assurance of health over the past three and one-half years, and now, I do dedicate this dissertation to my wife Rosita and my daughter Sylvean who alone know of the thick and thin through which I have passed. Indeed, this dissertation is as much theirs as it is mine.
One wonders what motivates a graduate student to write a dissertation. My motivation for the selection of this topic stems from my involvement and intimate association over the past several years with a number of Seventh-day Adventist four-year colleges. I have observed that such colleges possess striking similarities to public community colleges in terms of purpose, nature of clientele served, and function. Consequently, I concluded that a study of academic leadership in the community college could strengthen and broaden my perspective of academic leadership in the Seventh-day Adventist four-year college and would help me, perhaps, to avoid the pitfall of being limited in my examination of a system by regarding it solely from within. However, I admit that it is never utterly possible to be totally objective when drawing comparisons to a system with which one is intimately connected. However, this limitation can be recognized for its worth.

The similarities that I have observed are as follows:

1. Both public community colleges and Seventh-day Adventist senior colleges (hereafter referred to as SDA senior colleges) serve a specific community and/or constituency.

2. Both types of institutions primarily emphasize teaching rather than research.

3. The function of the chief academic officer in both types of institutions is comparable—the responsibility for the direction of the educational program.

4. Both systems have strong power blocs—represented in the community colleges by local boards and in the SDA senior colleges by clergy-influenced boards.

5. Each of these power blocs has vested interests—notably the
constituencies they represent.

6. Both systems have developed from high schools and two-year junior colleges.

7. Both types of institutions serve students of specific communities; in the case of the community college, the majority of students reside in a geographical area contiguous to the college; in the case of the SDA senior college, the majority of students reside in a geographical area referred to as a union conference (a union conference is an administrative unit within the Seventh-day Adventist educational system and is comprised of a number of smaller administrative units called conferences which cover a specific geographical area).

I am suggesting that the academic dean's perception and comprehension of the interplay of forces in the community, integrated with his/her formal training, experience, and forces or stimuli in the environment, might determine his/her ability to manage the educational program and influence the decision that he/she will make in the performance of his/her various roles.

Consequently, the environment and/or community in which the academic dean finds him/herself might be a significant variable that will influence his/her decision making. This approach suggests that the community-type college exists in a politically charged and mainly localized environment, and that academic deans who manage to survive have probably developed and refined an awareness and appreciation of the environment.
CHAPTER I

INTRODUCTION

Background

Within the last decade, much research has been undertaken on the role of the academic dean (see survey of dissertation topics in Dissertation Abstracts International—The Humanities and Social Sciences, 1970-1980). Such research has been largely descriptive and taxonomic, and roles have been grouped into divisions or determined by the expectations of significant others, namely, academic administrators, faculty members, and/or students.

Generally, the theoretical framework supporting such research has been developed from the writings of sociological theorists such as Getzels and Guba, who developed and explored the concept of role at the University of Chicago in the 1950s. This research was sociologically and psychologically based and constituted on the concept of the dyad, the sociological theory which suggests that an individual's actions are determined by the expectations of others and examines the interactions between any two members of any organization (Biddle & Thomas, 1966).

Within the last decade, the expectations held for the role of the academic dean have undergone some change as the nature of the demands of the dean's job changed. Such change has had a limiting effect on role studies which were based on the expectations of others, since equation of the dean's role with the expectations of others
produced a constant flux for the former. Such a situation now calls for constant redefinition of the academic dean's role.

**Statement of the Problem**

There is lack of a clear definition and analysis as to the nature of the relationships among selected variables as they influence decision making in the community college academic dean's role. Furthermore, it has not been ascertained how relationships among selected variables combine to influence decision making in these roles.

One underlying issue that has been largely ignored is the study and interactive effects of forces or stimuli in the environment as they affect and influence the academic dean's decision making in his/her varied roles. Research is needed that will analyze the nature of the relationship among selected variables and/or forces (stimuli) as they interact and relate to influence decision making.

Since the academic dean and/or chief academic officer has had categories of roles prescribed and described for him/her, the tendency of scholars in the area of educational administration has been to emphasize these roles heavily, and thus approach the training of educational administrators from a content base of prescribed roles and/or functions. This approach, while useful, ignores a crucial dimension—the area of variables, forces, or stimuli that may impinge upon and influence the academic dean in his/her perception of the various roles assigned him/her.

**Importance of the Study**

An investigation that emphasizes role-factor relationships has far-reaching implications for educational administrators, since the
relationships among various variables may suggest certain decision-making patterns and allow for some measure of relationship between role and stimuli. Educational administrators may be able to determine how academic deans of specified age groups and educational qualifications are likely to be influenced in decision making by forces, stimuli, or factors in the environment. If it can be determined that there are relationships between environmental variables and decision making, then less emphasis may need to be placed on formal training for educational administrators in the traditional content areas, and more emphasis placed on areas related to the comprehension of the environment.

If the nature of the relationships among the selected variables influencing decision making in the community college academic dean's role can be defined and analyzed for patterns and combinations, then suggestions might be made as to how combinations of these variables relate to each other.

Perhaps studies can be conducted as to how such variables in the environment interact and relate to influence decision making. If this approach is employed, educational administrators might be able to effect a finer balance between a content descriptive approach and a theoretical base for action and behavior, the result of which would be to demolish traditional laundry lists of 'do's and don'ts.'

**Purpose of the Study**

The purpose of the study was to define and analyze the relationship among selected variables as they influence decision making in the academic dean's role in public community colleges located in the four states of Michigan, Illinois, Kentucky, and California. Specifically, this
study sought to define and analyze the nature of the relationship between the internal and external variables when compared from role to role; the relative importance of the internal-external variables; the degree of consistency of the internal-external variables over the nine roles and the responses of the academic deans when various classificatory variables were applied, namely, educational qualifications, educational field, and age.

**Hypotheses to be Tested**

The following hypotheses were proposed for testing:

**Hypothesis 1**

Internal and external variables differ in importance with respect to decision making in each of the nine roles.

**Hypothesis 2**

There is high consistency in the relative importance of the eight internal-external variables over the nine roles.

**Hypothesis 3**

The responses of the academic deans with respect to the importance of any internal-external variables on decision in any one of the nine roles varies with the following:

1. the educational qualifications of the community college academic deans as determined by degree
2. the educational field of the academic deans
3. the age bracket in which the community college academic deans fall
Rationale

The rationale for this investigation stemmed from the assumptions made, the history of research in the area, and implications inherent in the review of literature.

One of the assumptions of the rationale was that there is a relationship between environment and behavior within the context of community college academic dean decision making. A studied review of the related literature suggests significant relationships between forces in the environment (stimuli) and the manner in which individuals perceive and make decisions within their roles (Lewin, 1935).

Another assumption of the rationale was that decisions once exhibited or made are either negatively or positively reinforced by forces in the environment so that it is possible for the stimuli to also act as rewards.

Delimitations of the Study

This study dealt specifically with relationships among selected variables and between the independent and dependent variables. It did not attempt to deal with the multitudinous variables which are likely to occur in any study of human behavior, nor did it attempt to explain why the selected variables are significant. The dependent and independent variables were selected on the basis of the literature reviewed, the two-factor dimension suggested, the resulting theoretical framework, and an assumption about the nature of human behavior—that it is related to forces or stimuli in the environment, and that this environment may be roughly divided into external and internal dimensions.
The specified roles were determined through a careful review of the roles of liberal arts and junior college deans, and specifically community college deans. The roles described in chapter III as independent variables have been summarized by Robin (1974).

Other delimitations were geography—the investigation was delimited to four states—and types of institutions—public, two-year community colleges.

Definition of Terms and Concepts

Several terms and concepts used in a specific context demanded definition. They are described below.

Academic Dean

The term 'academic dean' is used in the context of the community college and refers to the individual responsible for the community college academic program. In this study, the terms dean, academic vice-president, vice-president for academic affairs, and dean of instruction are used interchangeably to refer to the academic dean. In quoted materials, the use of 'dean' also refers to the academic dean.

Analysis

Analysis refers to a separation of the fundamental elements within factors and roles into comprehensible parts, in order to determine the essential features of relationships.

Behavior

In terms of decision making, the concept of behavior refers to the choice of an action of any response or non-response to a stimulus.
when such a stimulus is presented. Such behavior impels the subject to a balance-producing adjustment or state.

Anderson and Carter (1978) suggest that "behavior . . . is response and any antecedent condition that produces that behavior is stimulus. . . . If the consequences of behavior augur for a recurrence of the behavior, it is termed a reinforcing stimulus" (reinforcement).

Community College

The community college operates within the context of the junior college definition. Whereas a junior college can be a public or private two-year college, the term community college as used in this study refers to a public, tax-supported, two-year educational institution beyond the secondary level, usually encompassing the freshman and sophomore years of a liberal arts four-year program. A community college is usually geared to the specific needs and interests of one or several local communities, and has relatively liberal admission policies when compared with four-year institutions which provide degrees.

Environment

The surroundings of an individual—the life-space or area he/she occupies, whether physical, social, psychological or mental—form his/her environment. This environment may be posited to have two dimensions—an internal and an external. These dimensions are composed of stimuli, which may also be grouped under an internal-external heading.

Expectations of Community Groups

The expectations represent the desires of the local community in which the community college is located. Through time, members of the
local community come to expect certain exhibitions of behavior as being characteristic of the dean. The dean needs to consider how much weight he/she should allocate to community expectations whenever he/she engages in decision making. Students, faculty, and other administrative personnel are also members of the school community. These groups exert pressures on the dean and in return expect him/her to exhibit a series of conforming behaviors. The dean must allocate weight to this variable in the decision-making process in each of his/her roles.

External Variables

External variables refer to those forces or stimuli in the environment tending to be outside of the dean's span of control—without variables. He/she has little control over the forces or stimuli that make up the external environment.

Factor

Factors are influences, stimuli, forces, constituents, or ingredients that may be related or that contribute to the production of a result or decision. These factors consist of variables operative within the social system; such factors affect the manner in which an individual perceives his/her societal functions and makes a decision.

Homeostasis

This is the system of behavior which allows for an arrangement of checks and balances, so that internal and external pressures and/or stimuli are approximately equal in effect.
Internal Variables

Internal variables refer to those forces or stimuli tending to be within the dean's span of control—within variables. The dean exhibits some degree of control over such variables.

Normative Job Requirements

Each job in an organization has certain requirements which are usually codified by means of a job description. Job descriptions are subject to institutional and organizational influences. As individuals in a position relate to various job descriptions over a period of time, such job descriptions tend to become norms for the position, especially for the individuals presently in office and/or for individuals succeeding them. This set of normative job requirements becomes a variable that influences the dean's decision making in the perception of his/her role.

Perception

Perception refers to an integration of sensory impressions of events in the external and the internal world which serve as a basis for motivated, meaningful action. These perceptions form the basis for theories of action and behavior.

Role

A role is a socially prescribed pattern of behavior which corresponds to an individual's status in a particular society or social setting. An academic dean, as a member of a social setting, has prescribed behavior patterns called roles within which he/she makes certain decisions. In this study, the concept of role is used synonymously with the concept of function.
Stimuli

The constituents or sub-parts of an environment that approach a threshold of significance and cause a subject to respond when presented are here described as stimuli. Such stimuli may be present in several forms—group expectations, peer pressures, and/or forces from within the individual: prejudices, beliefs, and philosophy of administration.

Organization of the Study

In addition to chapter 1, which includes the introduction, the statement of problem, purpose, limitations, hypotheses, and definitions, the remainder of the study is organized into four chapters. Chapter II presents a review of the related literature which includes a comprehensive review of the development of the community college, the development of the role of the academic dean, and the stimuli affecting decision making and behavior. Finally, these portions are synthesized to lead to a theoretical framework which sets the basis for the study.

Chapter III describes the methodology and procedures utilized in the study. The population is described, the dependent and independent variables delineated, the type of research described, and the steps followed in developing the instrument; a summary of the procedures followed in data collection, recording, and analysis is presented and a number of limitations are listed as well as a presentation of each hypothesis and its corresponding medium of analysis.

Chapter IV presents the findings and analyzes the data. Each hypothesis is described in the form of answers to corresponding questions proposed in chapter 1; hypotheses are evaluated according to set criterion levels.
Chapter V presents the summary and conclusion and suggests several recommendations as well as questions for consideration. The appendices include questionnaires, letters, and other supporting materials used in the development of the study.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of the review of the literature has been to provide a background and basis for the development of the theoretical framework upon which the study rests. This theoretical framework or construct has been conceptualized by synthesizing several summaries. These summaries are comprised of the historical evolution and nature of the community college, a general summary of the role of the academic dean in two-year and four-year liberal arts college as well as the community college, and a summary of the development of the academic deanship. A rationale supporting the selection of the internal-external variables and the posited relationship between these variables and decision making within the specified roles was included as part of the synthesis.

The general method of presentation in the literature review has been developmental, moving from the general to the specific so that a broad background could be established.

Historical Evolution and Nature of the Community College—a Summary

Monroe (1972, 1977), in a comprehensive study of the community college, stated that public community colleges were born in the image of the public high schools and rooted in the traditions of universal opportunity of a free public education for all --local control and special
non-tuition educational systems with a curriculum designed to meet the needs of the individual and the country.

The demands for universal educational opportunities were voiced by early colonial American settlers. Leaders such as Horace Mann and Henry Barnard capitalized on the spirit of democracy, the reform of the Jacksonian era (1828-1836), the thrust of the western frontier movement, and the Industrial Revolution. As early as 1857 efforts were made through a congressional bill to sponsor a people's college. Such efforts finally culminated in the 1862 Morrill Act by which each state was to set aside land for the establishment of a college embodying basic educational principles. The Morrill Act summarized the following principles as stated by Monroe (1972, 1977, p. 6):

1. Low-cost college education for the common people
2. Federal support of higher education
3. A college curriculum . . . providing nonclassical education geared to the applied sciences . . . and technology.

Although public community colleges were not established under the Morrill Act, the concept of a "low-cost college education for the common people" was entrenched as an idea that formed a background for the development of the community college.

The first private junior college was started at Monticello, Virginia, in 1835 (Blocker, Plummer, & Richardson, 1965), and the first public junior college was started in 1902 in Joliet, Illinois (Storr, 1966). By the fall of 1972, there were 1,141 community and private junior colleges (American Association of Community and Junior Colleges, 1973). Medsker and Tillery (1971) suggested that greater numbers of community colleges should be started, basing this on the trend of an
increased enrollment through the seventies. The *Chronicle of Higher Education* (1974) stated that the enrollment of all community colleges in the fall of 1974 was about 3,275,947, representing an 11.9 percent increase over the previous year.

The community college has been termed the most significant development in twentieth-century American higher education (Burnett, 1968, cited in Goodman, 1976). It has been further described as "all organized patterns of learning experiences on a two-year basis beyond high school . . ." (ibid., p. 49).

Church-related colleges, private, public, proprietary, federal and county colleges have all come under the rubric of community college.

Community colleges developed out of the desire of the working class to gain some degree of a college education. The lower-class high-school students, traditionally, were unable to obtain entrance to the prestigious Ivy League schools—usually due to lower grades and a lack of adequate finances. They could not afford the luxury of a resident study life, especially when such life demanded full time study away from the opportunity of part-time work (Monroe, 1972, 1977).

However, the perception gradually evolved that education was the road to a better life and that higher education at a low cost should be open to greater numbers. Several arguments were put forward on the behalf of the community college (see Monroe, 1972, 1977). It was felt that national income would increase in proportion to investment in education and national security would be made more secure with an educated citizenry. Furthermore, the quest for the good life would be extended through an increase in educational opportunity.
Community college programs consist of curricula which include transfer options for students desiring to complete a four-year program at another institution and terminal one-year or two-year programs. Fields (1962) suggests that a community college should be characterized by democracy, comprehensiveness, community-centeredness, and adaptability. Provisions for life-long education should also be included. He further suggests that the community college should have the following program patterns: one-year and two-year terminal programs in the technical and semi-professional areas, as well as general education and liberal arts options designed for transferees to a four-year institution. Developmental—remedial and pre-college freshman-level courses in chemistry, etc.—should be available for freshmen with deficiencies; student and community services should also be provided.

A significant milestone in the community-college movement was the implied recommendation from the Harry S. Truman Commission on Higher Education (1946-1947), chaired by George F. Zook. The Commission made a statement which echoed Thomas Jefferson's educational philosophy of equal educational opportunity for all (Nash, 1978):

Equal educational opportunities for all persons to the maximum of their individual abilities and without regard for economic status, race, creed, color, sex, national origin, or ancestry is a major goal of American democracy. Only an informed, thoughtful, tolerant people can maintain and develop a thoughtful society (President's Commission on Higher Education, 1947, 2:7).

The Commission reported that "only 16 percent of the persons eighteen to twenty-one were in college. . . . and concluded that half the college-age population could successfully complete at least two years of college work." The ensuing recommendation was that several community colleges should be established. The Dwight D. Eisenhower
Committee on Education beyond the High School (1955-1966) further suggested that neighborhood communities faced with shortages in higher education should consider the possibility of community colleges. By 1964, the National Education Association (NEA) pleaded for more community colleges, and the 1970 Carnegie Commission on Higher Education recommended that 230 to 280 additional community colleges be in operation by 1980, since an upsurge in college enrollment was expected.

Various challenges confront community colleges. Burnett (1976) cited several of the unresolved issues which hang, Damocles-like, over the colleges: should community colleges with a traditional liberal arts emphasis modify to meet community needs? Should the issue of terminal versus transfer programs be resolved? Should discipline-related Ph.D.'s be hired? Should the open-door concept common in community colleges be reinforced with appropriate program options and adequate resource personnel? What is the true quality of the community college—is it an extension of the high school or is it truly in the realm of higher education?

Essentially, the community college developed out of a need for affordable higher education fostered in a community setting and relevant to its needs. In addition, individuals were to be prepared for further advancement in higher education. Therefore, the community college academic dean must allocate some degree of influence to community expectations and needs as he/she makes decisions within his/her roles.
The Role of the Community College

Attention is now focused on two areas: specifically, (1) a summary of the development of the academic deanship and (2) a summary of studies related to the academic dean's role.

Since much has been written on the role of the academic dean, an extensive coverage would be inappropriate to the needs of this study which uses the summaries to provide a background for intelligent criticism and discussion and for the development of a theoretical framework.

Development of the Academic Deanship

Dibden (1968) stated that the title "dean" was derived from the medieval universities. Here the dean was always involved in administrative and organizational tasks. Milner (1936) in The Dean of the Small College stated that the title 'dean' came from the Latin term decanus, a military grade in the Roman army which designated an officer set over ten people. The term was later used in religious institutions, namely, monasteries, where the deans were given disciplinary, administrative, and spiritual responsibilities.

As higher education became more complex in terms of required tasks and functions, it became evident that the president could not effectively and efficiently conduct all the affairs of the university. The first known dean, E.W. Curney of Harvard, was appointed in 1870 (Hunt, 1977). "Amherst followed in 1880, Yale in 1884, the University of Chicago in 1892, and Columbia in 1896" (Gould, 1964) as the trend continued.

According to Defarrari (1956, p. 55),
The office of the dean was created in many colleges to aid the president. In others, it came into being to meet an emergency. . . . Sometimes it came about through the reorganization of the college, and sometimes it was created outright at the opening of the college.

Henderson (1957) concurred and Brubacher and Rudy (1958) argued that the office of the academic dean evolved partly because of the proliferation of student extracurricular activities in the 1870s.

Research still presents inconclusive evidence on whether the duties of the academic dean should be sharply delineated. Gould (1964, p. 4) feels that the dean's job should be "clean, and characterized by carefully drawn lines of duties and responsibilities." Wriston (1959) disagrees and counters by arguing that the job of the academic dean should be loosely organized.

Studies Related to the Role of the Community College Academic Dean

Hawkes (1930) reported that no prescribed sets of roles exist for deans, but that roles tend to vary according to job demands. However, some consensus emerges when studies on the academic dean's role over the last half-century are examined.

The approach among researchers has been twofold: (1) describe the role of the academic dean in broad terms and/or (2) specifically delineate his/her roles/functions. The following chronologically arranged studies summarize the roles/functions of the academic dean. Criteria for their inclusion were based on whether the study appeared in DATRIX or ERIC searches (computer searches for Dissertations and articles from Education Resources Information Center) when the key words of the title were used, whether the studies aided in creating a foundation for the research report, and whether the studies referred
generally and/or specifically, to two-year and four-year liberal arts colleges and community colleges. The method of reporting the studies was to move chronologically from the broadly general to the specific—from private or public two-year and four-year colleges to the public community colleges.

One of the earliest studies conducted on the subject of deans was undertaken by Collier (1926) who concluded that the duties and functions of deans related to the three general areas of instruction, pupil accounting, and general administration. Collier obtained his data through personal visits with the deans in several colleges and selected a sample based on those institutions close to his locus.

Reeves and Russell (1929,1932) conducted two studies and determined several functions to be frequently assignable to deans. The first study (1929) investigated the administrative duties of deans in sixteen Disciples of Christ colleges and the second in thirty-five colleges related to the Methodist Episcopal Church. Deans were expected to direct the educational activities of the college and advise the president in areas of college policy, especially academic affairs. All academic-related areas such as budget recommendations, curricula, instructional methods, promotion/tenure decisions, and student academic welfare were part of the dean's role. The dean was also responsible for directing the attention of faculty members to changing educational thought (staff development) and served as a representative of the college at meetings of educational institutions. In short, the dean was the educational leader of the college.

Merle Ward (1934b) conducted a study to determine the dean's role in several areas. Among these three areas were curriculum and
instructional improvement, the definition of goals of the college, and the guarding of student welfare. Ward used a seventy-four question multiple-choice instrument to determine the dean's role in curriculum matters, definition of the goals of the college, improvement of instruction, and watching over student welfare.

Milner (1936) published a list of functions for the academic deans based on data submitted by one hundred colleges in thirty-five states. He used a questionnaire which allowed deans to check the type of work for which they were responsible as well as the work they felt to be uniquely theirs. Several functions were listed as being most frequently assigned to deans. These can be grouped into the categories of curriculum and instruction, general and academic counseling, discipline, faculty and student evaluation, admissions and records, and general reporting on the progress of the college. In the same year, Toothman published a study on the academic deanship of self-contained liberal arts colleges. His results were similar to the Collier study, however, an additional role/function was added—the area of public relations.

By 1938, Chen conducted a study which dealt with the administrative duties of deans. This study produced nothing new, but merely emphasized that deans were administrative-minded. In answer to the question, "What does the academic dean do?" McGrath (1947) wrote of three fundamental roles for deans. These were "considering the ends and means of education, selecting faculty members and preparing budgets." (pp. 43-47).

In the same year, Higgins studied 161 college academic deans and agreed in substance with the Reeves and Milner studies. However, the position of academic dean had become supervisory with respect to
registration, discipline, and admissions. Later on, Woodburn (1950) and Finnegan (1951) suggested that the dean of the college was much more concerned with matters of curriculum than with students and that he had staff-related responsibilities such as teaching jobs. Finnegan studied thirty-four Catholic men's colleges and suggested an additional feature—over one-half of the deans possessed membership ex-officio on the Board of Trustees.

From his study of deans in teachers' colleges, Haas (1954) concluded that deans should advise the president on academic matters and act in his absence; deans should take active roles in recruitment, promotion, and faculty tenure and should assume leadership in curriculum development; deans should be responsible for college catalogs and summer bulletins.

The function of the dean . . . was affected by such factors as the philosophy of the particular college, the characteristics and qualities of the persons concerned, and the number and type of other administrative officers on the campus. (Haas, 1954)

Following World War II, the president of the college was forced to relinquish more duties to the academic dean because of the influx of large numbers of students. The Defarrari study (1957) brings this out very clearly:

. . . Many duties which the president used to perform have been transferred to the dean, because the president has had to give his attention more and more to expansion problems, fund raising, and alumni and other public relations. (p. 18)

The rapid growth of higher education with its increasing complexities tended to open gaps within administrative functions so that presidents were able to devote even less time to academic matters.

Mayhew (1957, p. 188) viewed the dean's role as one of conflict—the dean occupies an undefined position between the professors and
the president; he/she attempts to satisfy the conflicting demands placed
upon him/her by both groups and has no clear guidelines to govern
his/her conduct.

Corson (1960, pp. 75-76) indicated that in many smaller institu-
tions a major portion of the dean's time was spent in handling student
affairs rather than academic matters—leading the faculty in curricular
evaluation. The role of the dean was viewed pragmatically—it emanated
as a consequence of the time the president had remaining after his/her
tasks, the nature of his/her personal interests, whether fundamental
or administrative. Corson further suggested that since the education-
al program consumed a major part of the college's budget, the presi-
dent was more likely to control the curricular and faculty decisions
than was the dean. Curriculum became a question of who controlled
the budget.

In a study for the United States Office of Education, Ayers and
Russell (1962) summarized job descriptions or lists of duties for deans
in 608 colleges and universities. Several basic responsibilities were
found to be shared by the dean and other administrative officers,
while other enumerated duties were cited as belonging exclusively to
the dean's office. The dean was expected to serve as alter ego to
the president (alter ego—a term describing the relationship between
two individuals, each of whom by his/her personality and work in-
fluences what the personality and work of the other will be) and obtain
from the president, in writing, broad and specific delegation of
authority for his/her area of responsibility. The dean was expected
to respect the authority and areas of responsibility assigned by the
president to the others and work with them as equals in helping to
maintain coordinate relationships between and among the various college academic units as well as keep the main objectives of the institution in perspective and make recommendations to the president regarding plans, policies, and procedures in the area of his/her delegated responsibility. The dean was expected to equip and staff his/her unit, subject to presidential concurrence and approval by the board of trustees, and to discharge his/her assigned responsibilities. He/She was expected to integrate and coordinate the work of the administrative subdivisions within his/her area of jurisdiction and articulate the work of this area with other areas of college activity. It was expected that the dean would provide professional leadership through staff recruitment and development and serve as the major adviser on budget development as well as prepare special reports requested by the president.

The other enumerated responsibilities cited as belonging exclusively to the dean's office were that through established channels, he/she was expected to encourage various departments to develop and offer instruction, and service programs of quality as well as formulate criteria for use in establishing honors and/or remedial courses intended to meet the needs of the superior student or remove deficiencies in the basic skills of other students. The dean was expected to set standards for graduation and cooperate with the librarian and other institutional officers so as to make adequate provision for the use of instructional materials, laboratory equipment, visual and auditory aids, and other museum or art sources.

It was felt that the dean should appraise the effectiveness of academic counseling and devise strategies and procedures to improve its effectiveness. The dean was also responsible for appraising and
judging student achievement through various in-house and standardized tests, and work with the directors of the evening and summer programs to coordinate academic offerings.

In 1962, Claude C. Dicks studied the functions and qualifications of deans in private colleges. His results were similar to the Reeves-Russell study, except for the noticeable emphasis on policy making by the faculty and the expectation that the dean would implement such policies.

Coul (1964) conducted an exhaustive study of the liberal arts deans. He contacted 268 deans in fifty states and examined their duties and responsibilities. He suggested that the dean's most important functions were in the areas of faculty morale, curriculum, recruitment, budget work, committee work, and personnel evaluation. He stated that the academic dean considered his/her tasks to be extremely time-demanding. These tasks were in the areas of faculty relations and morale, faculty recruitment, curriculum and budget work, promotion and evaluation of personnel, and routine administrative duties—correspondence, scheduling, cataloging, and filling out questionnaires. Other areas were student counseling, working with other administrators, advising the president, policy making, planning, goal setting, institutional studies, public relations, alumni relations, speaking engagements, professional association meetings, and general college functions. Admissions and registration problems, foreign students, and seeing parents and students were some other task areas.

Blackwell (1968) listed the functions and responsibilities of the academic deans as directing the educational activities of the college, acting as chief adviser to the president in matters pertaining to
academic policies of the college, formulating and presenting policies to the president and faculty for consideration, and directing the attention of the faculty to changing educational thought and practice, with particular reference to present trends in higher education. The dean was expected to transmit budgetary recommendations of the college to the president and make reports relating to the work of the college. The supervision of the curriculum courses, programs, methods of instruction and the academic welfare of students, the classification and assignment of students to classes, as well as representing the college at meetings of educational associations, were part of the dean's responsibility. The dean was also expected to nominate members of the teaching staff in cooperation with the departments concerned.

Weldon E. Day (1968) also conducted a study in which he surveyed 347 academic deans in public community colleges; he listed several functions of deans such as staff selection, evaluation, budgeting, faculty development, and the development of educational policies.

In a 1969 study Vincent Gaurina suggested that the most important roles of public community-college academic deans were in the areas of staff selection, promotion decisions, educational policy formulation, and the coordination and supervision of departments. In a 1970 study, Willis suggested that public community college academic deans had an influence in the areas of promotion, tenure and hiring decisions, policy formulation, and the curriculum.

A series of studies in the 1970s emphasized the role of the community college academic dean. A study by Bruce Paulson (1974) suggested that staff selection, staff development and a very intense
involvement with classroom instruction were important roles. In a 1972 publication entitled *The Community Junior College*, Thornton summarized the job of the community college academic dean as preparing the college bulletin or catalog especially in the areas having to do with the description of programs of study, preparing the class schedule, and planning for and implementing curriculum improvement.

J. Barry McGannon (1973) maintained that the community college dean's most important activities were staff selection, tenure and promotion decisions, budget, curriculum, and instructional improvement. Robin (1974) summarized the roles/functions of public community college deans by stating that the dean was responsible for the total instructional program, instruction improvement, and also curriculum planning. Robin saw the community college academic dean as the curricular leader in the college and one who expected to respond to the changing educational needs of the society. Furthermore, the dean was expected to play a key role in the selection of the faculty, and to participate in collective bargaining, since the element of trust followed negotiation of a teaching contract could have significant effect on his/her role. In the area of evaluation, the dean was viewed as the central figure in the academic focus of the college and acted as the evaluator of the instructional program. In the area of staff development, the academic dean was responsible for organizing an effective in-service development program designed to meet the personal and professional needs of all faculty. He/she was also expected to serve as external liaison/public relations officer representing the college to the community and becoming the spokesman of the college on several issues in communities and councils. Budget development was adjudged to be an
important area since it was directly related to the control of the instructional program.

William Shawl (1974, p. 13) concurs with the roles/functions listed above and says that "one of the major responsibilities of the academic dean is in the area of curriculum planning." He lists staff development, evaluation, and collective bargaining as other functions. Wolotkiewic (1980) also suggested several areas of functioning for public community college academic deans. These were curriculum, collective bargaining, budgeting and planning, staff considerations, and accreditation.

Rationale Supporting the Selection of an Internal-External Dimension

Introduction

A psychobiological and systems approach are now presented as the basis for establishing a relationship between environment and behavior. It has been ably documented and demonstrated by Skinner (1938) that environment has an impact upon behavior. Furthermore, other approaches to the study of behavior have suggested that the basis of behavior is rooted in early life experiences (psychoanalytic), or that behavior is thoroughly dependent upon the free, uninfluenced choice of the individual (third force). The educational trend has been a total-push or eclectic approach to the study of human behavior (Lugo & Hersey, 1979); this study selects a behaviorist-systems approach (environment—stimulus/response—energy transfer) as the basis for experiment.
The Relationship between Environment and Behavior--a Summary

Several variables or stimuli exist in the environment and act as determinants of individual behavior (see fig. 1, p. 38). These variables or factors become determinants through a system of allocations—that is, the individual perceives a variable or stimulus as significant or insignificant based upon his/her expectation of a negative or positive feedback. Dependent upon this perception, an action follows and the variable may be interpreted as a stimulus, the response of which contributes to a balanced, homeostatic condition that acts as an indicator of balance or imbalance (Insko & Schopler, 1972).

The community college is a social system and the academic dean is part of that system. Anderson and Carter (1978, p. 13) use the concept of energy to account for the dynamic movement in a social system. Such energy is not directly observable, but is inferred through its effects on the system, that is, in terms of the community college dean, the effects of the decision on him/herself and others. "Energy and the organization of energy are then the prime characteristics of social systems" (Anderson & Carter, p. 21). Furthermore, all social systems are composed of energy interchange, suggesting that decision making and its effects may be dependent upon an internal and external environment of stimuli.

Laszlo (1972), cited in Anderson and Carter (1972, p. 25) describes the relationship between the individual (system) and the environment by suggesting that "energies" or decisions (supplied) "are continually used to maintain the relationship of the parts to keep them from collapsing in decay" (p. 37). This ensures that the system (the
individual) performs its (his/her) functions in such a manner as to continue its (his/her) existence. The differences and nuances of decision making in various roles then provide for a release or transfer of energy (decision making) across boundaries (boundaries are not to be confused with barriers—an example of boundary here would be decision-making activity (energy) flowing reciprocally between the dean's internal and external environments).

Thus, the use of the concept energy must be construed as a construct, meaning action (decision making) or the potential for action. The interplay between the individual and his/her environment produces this energy (Anderson & Carter, 1978, pp. 13-25).

Thibault and Kelly in Insko and Schopler (1972) presented an article entitled "Norm Formation and Exchange Theory" in which they maintained that all social interaction involved an exchange in terms of rewards and costs. Insko and Schopler (1972) presented Rosenberg's argument for an affective-cognitive consistency theory wherein attitude structure could be conceptualized in homeostatic terms. Consistency was inherent among related components in the environment and reorganizing activity would occur whenever a change in one of the components produced some type of inconsistency.

Wynne-Edwards, in Social Psychology—Experimentation, Theory and Research, edited by Sahakian (1972), suggests a homeostatic theory of social organization which shows that behavior moves toward balance-producing tendencies. Proshansky, Ittelson, and Rivlin (1967) make several suggestions concerning the influence of the physical environment on behavior:
1. An individual's environment exerts considerable influence on his behavior.

2. The components of the environment (stimuli) "are defined by the nature of the interrelationships among them at a given moment and over time." (p. 34)

3. Change in a . . . setting which is not conducive to a behavior pattern "that has been characteristic of the setting will cause the behavior to be expressed at a new time or locus." (p. 33)

Anderson and Carter (1978) state that systems continually maintain themselves at any given moment and that the balance between change and maintenance may shift drastically toward one pole or the other, but if either extreme is reached, then the system ceases to exist. Thus, the system maintains a relationship with its environment so that its functions are being performed in such a way as to ensure its continued existence. The balance achieved is not static but always dynamic and changing which suggests that achieved balances for certain stimuli may have varying configurations or patterns. In equilibrium and homeostasis, fixed balances are denoted, in which some type of particular adjustment is maintained, but the system's structure is not appreciably altered. Homeostasis also suggests a balance through encounter with the environment and systems maintain a balance between status quo and change, between order and disorder.

Stimuli may be classified in two groups--one group associated with the self, such as self-expectancies ("contingencies that people tend to expect in certain situations on the basis of past experience"), and those associated with the external world or external environment (Sarbin, cited in Lindzey and Aronson, 1968, 1:522).

The self is an important concept in role theory and can be viewed...
as a coordinate with role (Sarbin, cited in Lindzey & Aronson, 1968). It can also be conceptualized as an idea or any system of ideas drawn from the communicative life that the mind cherishes as its own (Cooley, cited in Sahakian, ed. 1972). Social roles are perceived and enacted against the background of self and the inferences that an individual makes about this self—such inferences result largely from past experiences. In this manner, a person develops his/her own inner expectations for certain role behaviors and builds a repertoire of action that he/she holds as proper for his/her status position. These inner expectations may be described as the self-expectations referred to above—they operate in an objective environment or stimulus situation, which may be defined as a stimulus or series of stimuli that act upon an individual's perceptual apparatus and upon which his/her motor apparatus acts or responds (Deutsch, cited in Lindzey & Aronson, 1968). Several variables are operative outside of the inner environment. These form the external environment and hold some significance for the actor whose behavior is being analyzed (Parsons, 1959).

Group influences and/or pressures are categorized by the individual; this categorization allows him/her to determine what expectations might be forthcoming from his/her external environment. Behaviors are then rewarded or reinforced through group approval or consent of significant other persons of the action of the individual (Biddle & Thomas, eds., 1966).

Such behaviors or actions, when rewarded through positive feedback from the environment, tend to become normed over time and space and may hence become a part of the job description (see Thomas Wiggins, "The Influence of Role and Organizational Climate upon

The variables in the internal-external environment act as role senders to determine a particular role. These variables/stimuli emit pressures that impinge upon the actor who interprets such pressures in a varied manner and strives to achieve a condition of balance or homeostasis. Role senders have expectations and perceptions regarding the manner in which the focal role should be performed and is being executed. They constantly attempt to correlate both expectations and perceptions; this system builds up pressures upon the actor and forces him/her to comply with group consensus (Biddle & Thomas, eds., 1966). The pressure of group consensus acts as a negative or positive reinforcer of behavior—decisions that may have been made and go unrewarded are discarded.

Field theory suggests that a unit (department of an organization) will maintain "a given pattern as long as a relative balance of forces is maintained . . ." (Brager & Holloway, 1978, p. 31). This concept implies that stability is "seen as a dynamic rather than a static state and is represented by a balance of complementary and opposing forces" (Brager & Holloway, 1978, p. 31).

Field theory further maintains that alterations in the balance system generate stress. These alterations may be the result of forces which can be interpreted as environmental variables such as funding availability and variables from within the organization.

Some actors in an organization may see their environments as threatening or compelling, whereas others may rely more on internal instincts and use the "threatening" environment to heighten opportunity for creativity—environmental and internal forces interact and impinge on
the actors of an organization. This concept forms the base for the following theoretical framework and treats both external and internal forces as dimensions of the environment.

**Theoretical Framework**

The academic dean and/or chief academic officer is influenced by several variables/stimuli in the environment as he/she pursues his/her various roles. Such influences cause him/her to make decisions in a certain manner. The intensity and manner of the influence is directly related to the degree of importance which he/she attaches to these variables that act as stimuli to behavior—decision making.

Behavior operates within two dimensions—internally and externally located variables interrelate to cause a condition of homeostasis, a situation of balance or least stress. The dean strives to maintain this balance through a series of compensating actions which are based on compensating perceptions of his/her environment. The academic dean integrates and arranges the variables and/or forces which act as stimuli in the environment in such a pattern and manner that tends toward a condition of least stress or homeostasis. Each dean receives stimuli from within and without and may have a more intense inner than outer locus of stimuli, or vice versa. Based on psychological dispositions, deans may tend to be either internally or externally influenced (combinations of both may occur, but deans may show a leaning toward one dimension).

As perceiver, an individual also works with his/her own set of categories for interpreting the actions of others and stops at the level of inference that enables him/her to act effectively, that is, to achieve a state tending toward homeostasis (Jones & Gerard, 1976).
Insko and Schopler (1972) state that whenever the individual experiences a state of imbalance, or his/her internal and external environments are disproportionate, changes are made to restore this balance and these changes are exhibited in the form of behaviors—decisions.

The dean, then, must make a decision concerning the degree of significance that he/she will attach to the variables within each dimension. The perception he/she makes about the significance of these factors affects the manner and the intensity of his/her role perception and hence his/her decision. Thus, his/her behavior in any given situation can only be defined and analyzed in the context of the relationship among the variables and/or forces influencing decision making in the perception of his/her roles. This interaction is crucial to decision making and should receive more attention in the study of the role/functions, and duties of academic deans as perceived by significant others.

The Theoretical Framework: Elements and a Construct

The theoretical framework consists of a series of substantive elements which together suggest a construct. The academic dean must allocate a degree of significance to community expectations and needs as he/she makes decisions. Furthermore, decision making may be regarded as a behavior which is a response to environmental stimuli. This environment consists of two areas—the dean him/herself (internal environment) and others (external environment). This environment is comprised of stimuli/forces both internal and external and academic deans strive to maintain psychological homeostasis between their internal and external environments so as to experience the least
conflict. Such balance is necessary for psychological survival.

Therefore, there may be a relationship between stimuli and the areas for decision making, namely, roles. Moreover, deans tend to allocate differing weights of importance to stimuli, according to their locus of decision making, that is, whether mainly internal or external. This may suggest that the environment plays a greater part in academic decision making that has been heretofore suggested.

Figure 1 charts the relationship between selected variables as they influence decision making in the community college academic dean's role (p. 38), and demonstrates how the environment is subdivided into external and internal dimensions. Furthermore, stimuli comprise this environment and act upon the areas for decision making or roles, which action produces a response. The response is evaluated in terms of whether it leads to survival or non-survival of the decision. Whether the action is rewarded determines if it will become a base for further similar actions. Anderson and Carter (1978) suggest that organisms repeat behaviors for which they are rewarded and avoid those for which they are ignored and punished. An internal feedback system allows for an appraisal of each step, that is, an individual appraises the environment, the stimuli, each decision-making area, and so forth, and uses the information gained to make future decisions within the system.

**Summary**

Community college education developed in an atmosphere of a quest for free, public higher education. It was rooted in the belief that education should be open to all and that local control and free or inexpensive education would be community-college characteristics.
along with the concepts of democracy, comprehensiveness, community-centeredness, and adaptability.

Although the land grant colleges could not be regarded as precursors of the community college movement, their establishment clearly paved the way for the latter by emphasizing a low-cost education for the common people, federal support of higher education, and a non-classical college curriculum.

The position of community college academic dean was borrowed from universities and the liberal arts colleges. The academic deanship was an outgrowth of the college presidency which steadily became a hub of such diverse activities that many presidents were forced to relinquish direct control of the academic affairs of their respective colleges. Although research presents inconclusive evidence as to the exact, prescribed roles of the college academic dean, and of the community college dean in particular, several broad roles emerge after a review on the literature of deanship of two-year and four-year liberal arts colleges and public community colleges. The community college dean is responsible for all educational areas such as curriculum development and instruction; he/she is responsible for academic counseling and evaluation and faculty development as well as promotion/tenure decisions and public relations; he/she is responsible for staffing, and submitting recommendations on budgeting, and of late, in several community colleges, collective bargaining.

Relationships exist between the environment and behavior. Decision making (behavior) results from a series of environmental stimuli categorized along internal and external dimensions. Any decision-making activity or behavior is symbolized by the construct of energy.
a concept used to describe unobservable activity that occurs when a decision is made. For the system (individual) to continue its (his/her) existence, decisions must produce some psychological homeostasis or balance.
Fig. 1: Diagramatic episode showing the relationship between selected variables as they influence decision making in the academic dean's role.
CHAPTER III

METHODOLOGY AND PROCEDURES

Introduction

The purpose of this chapter is to detail the method and procedures used to undertake the research. The chapter sections are stated below:

1. Type of research
2. Description of the population—this description is limited to a listing of the states involved in the study and the numbers of deans in each state (an in-depth analysis is presented in chapter IV)
3. The development of the instrument and steps taken to achieve content validity
4. A listing of the independent, dependent, and classificatory variables
5. Data collection and recording
6. Data processing and analysis
7. Limitations

Type of Research

This study followed a correlational approach among several independent variables with respect to each of the nine dependent variables. The study investigated the relationship among several independent variables with regards to selected roles. The methodology suggested procedures whereby relationships could be determined among the dependent and independent variables with respect to the roles selected.
Description of the Population

The population for this study consisted of all public community college academic deans in four states: Michigan, Illinois, Kentucky, and California. These states were selected at random with the knowledge that their community college programs were based on the comprehensive model, that is, liberal arts and sciences coupled with industrial and technological offerings. Colleges in some of the other states were not selected because of inherent differences in nature— for example, community colleges in the states of Wisconsin and Indiana are primarily technically oriented.

The total population of community college academic deans in the four states was utilized as a sample. Table 1 shows the distribution of academic deans by state and appendix A lists the names of the community colleges contacted.

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>106</td>
</tr>
<tr>
<td>Illinois</td>
<td>40</td>
</tr>
<tr>
<td>Michigan</td>
<td>29</td>
</tr>
<tr>
<td>Kentucky</td>
<td>14</td>
</tr>
<tr>
<td>Totals</td>
<td>189</td>
</tr>
</tbody>
</table>

A response rate of 87.30 percent indicated an acceptable level of confidence which suggested that the power of the study to make
correct decisions and inferences was strong (at least .80). Appendix F discusses the power of this study.

A description of the characteristics of the population with respect to the classificatory variables of educational qualifications (degree), educational field, and age bracket is included in chapter IV, Presentation and Analysis of Data; community college lists were obtained through telephone calls and letters to state departments of education and state community-college associations.

Instrumentation

An instrument was developed over an eleven-month period between March 1979 and January 1980, since a review of the related literature yielded no instrument suitable for realizing the purpose of the study. The aim of the instrument was to measure how academic deans perceived the selected independent variables or stimuli as being crucial to decision making in each of nine researcher-selected roles.

The instrument was divided into two sections, A and B, each with separate instructions. Both sections were photomechanically reduced to a single 8½" x 11" page for convenience of response and handling. Appendix C presents the instrument after the revisions were made following the validity study.

Section A elicited information on the classificatory variables of educational qualifications (degree), educational field, and age, in terms of forced choices for educational qualifications and age and an open-ended choice for educational field.

Section B consisted of a 9 x 8 matrix of nine horizontal roles and eight vertical internal-external variables or stimuli. There was one
common question to which respondents were expected to answer for a total of seventy-two times. Each answer, for each of the nine roles, was recorded in cells on a Likert-type scale of decision making, ranging from a response value of (1) indicating a state of Hardly Crucial according to the dean's perception of the stimulus, to a response value of (5) indicating a state or condition of Extremely Crucial.

Content validity was achieved through the following steps:

1. The questionnaire in its prevalidated form was submitted to professors of educational administration, psychology, and measurement at Andrews University and scrutinized for its relation to the purpose of the study in order to determine if it could supply the answers required (see appendix B for prevalidated questionnaire).

2. The questionnaire format was submitted to the Andrews University Computing Center consultants for verification of appropriateness for computer analysis.

3. The questionnaire was revised on the suggestions of (1) and (2) above and sent to all the community-college academic deans in the state of Ohio. Each dean was contacted by telephone, then sent a cover letter requesting participation in the validity study (see appendix B for a sample of the cover letter).

4. The letter contained three enclosures including the questionnaire:
   (a) The first enclosure consisted of a statement detailing the theoretical base and aim of the study, with an example of a typical questionnaire (see appendix B).
   (b) The second enclosure consisted of the instrument (see appendix B for prevalidated form of the instrument).
   (c) The third enclosure consisted of a Validity Evaluation Form which was to be completed after each dean had evaluated the questionnaire. This form requested a simple evaluation of the questionnaire in terms of how well it solicited the necessary information as requested in the stated aim of the study (see appendix B for Validity Evaluation Form).

5. The questionnaire was revised and finally published after the comments of the Ohio deans were received (see appendix C for the final form of the questionnaire).
6. No major revisions in content were made. The suggestions made for revision were with the quality of the questionnaire paper, the size of the envelopes, and the deletion of federal funding as one of the environmental variables.

**Independent, Dependent, and Classificatory Variables**

For purposes of clarification, independent, dependent, and classificatory variables are listed here. The classificatory variables were:

1. Education Qualifications (degree)
2. Educational field
3. Age bracket

The dependent variables were:

1. Requirements of the job description
2. Experiences gained on the job
3. Formal preparation
4. Length of time in position
5. Philosophy of administration
6. Needs of the local community
7. Expectations of community groups
8. State funding

The independent variables were:

1. Curriculum planning
2. Staff selection
3. Staff development
4. Collective bargaining
5. Budgeting
6. Promotion and tenure decisions
Data Collection and Recording

When the data went to the computer, there was an overall response rate of 87.30 percent, with a 100 percent response from two of the four states under study—Michigan and Illinois. These results were obtained with two mailings including the reminder. Since it was deemed unnecessary, a second reminder was not used. Appendix D shows examples of the first and second reminders.

Table 2 shows the response rate by states per mailing:

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Deans</th>
<th>First Mailing: Number</th>
<th>First Mailing: %</th>
<th>Second Mailing: Number</th>
<th>Second Mailing: %</th>
<th>Total Number</th>
<th>Total: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>106</td>
<td>67</td>
<td>63.20</td>
<td>19</td>
<td>17.92</td>
<td>86</td>
<td>81.13</td>
</tr>
<tr>
<td>Illinois</td>
<td>40</td>
<td>29</td>
<td>72.50</td>
<td>11</td>
<td>27.50</td>
<td>40</td>
<td>100.00</td>
</tr>
<tr>
<td>Michigan</td>
<td>29</td>
<td>21</td>
<td>72.41</td>
<td>8</td>
<td>27.58</td>
<td>29</td>
<td>100.00</td>
</tr>
<tr>
<td>Kentucky</td>
<td>14</td>
<td>11</td>
<td>78.51</td>
<td>0</td>
<td>----</td>
<td>11</td>
<td>78.51</td>
</tr>
<tr>
<td>Totals</td>
<td>189</td>
<td>128</td>
<td>67.72</td>
<td>38</td>
<td>20.10</td>
<td>166</td>
<td>87.30</td>
</tr>
</tbody>
</table>

Each academic dean was written a personal, original letter, signed by the researcher and his chief dissertation adviser. The letter,
written on university stationery, described the purpose of the study, requested participation, and promised anonymity as well as an abstract of the results (see appendix C). The letters were mailed in special commemorative-stamped envelopes and self-addressed stamped envelopes with an attached university sticker-emblem were enclosed for the return of the questionnaire. Questionnaires were color-coded according to state and date of mailing for facility of recognition and sorting.

The first mailing yielded a 71 percent return within eight and one-half weeks; the first reminder yielded an additional 16.30 percent return. A second reminder was prepared but not used (see appendix D). At the time the data went to computer, 23 percent of the population had requested an abstract of the results. Appendix E lists by state the names of the college that requested a copy of the abstract.

Table 3 shows the distribution by state of the number and percentage of deans requesting a copy of the abstract.

**TABLE 3**

DEANS BY STATE REQUESTING AN ABSTRACT OF RESULTS

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>Percentage of the Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>26</td>
<td>30.23</td>
</tr>
<tr>
<td>Illinois</td>
<td>9</td>
<td>22.50</td>
</tr>
<tr>
<td>Michigan</td>
<td>5</td>
<td>17.86</td>
</tr>
<tr>
<td>Kentucky</td>
<td>4</td>
<td>36.36</td>
</tr>
</tbody>
</table>
Data Analysis

This section of the study presents analyses that satisfy the aim of the study, answers the questions posed, and allows the hypotheses to be statistically tested. The hypotheses are repeated in the null form and followed by a brief statement of the statistical procedure used to analyze the data and evaluate the hypotheses. Some steps of the analyses are as follows:

1. Responses were analyzed by categorical scaling and interval scale values developed (see appendix F for explanation of categorical scaling procedures). This procedure allowed each role to be examined separately with respect to each of the eight dependent variables.

2. The relative rank of the internal-external variables was compared.

3. A degree of agreement or concordance was calculated to determine consistency of response for the internal-external variables over the nine roles.

4. Differences in response were calculated with respect to the classificatory variables when the following were considered:
   (a) educational qualifications as evidenced by degree
   (b) educational field
   (c) age bracket

Several types of statistical analyses were used:

1. Categorical scaling techniques
2. The Mann-Whitney U test
3. Kendall's coefficient of concordance, \( W \)
4. Chi-square

Computer analyses and calculations are listed in the appendices.

Thurstone's categorical scaling technique was used to produce scale values for each role or independent variable with respect to each
of the eight internal-external or dependent variables (computer printout of transformation from raw scores to scale values--see Appendix F. According to Thurstone (1927a) as cited in Torgerson (1967, p. 157), a series of stimuli is presented to the subject who responds differentially with respect to some stated attribute. In this case, the stimuli were represented by the dependent variables and the attributes on which the subjects or community college deans responded were represented by the roles or independent variables.

When these stimuli were presented, the subject went through a process whereby the stimulus value was statistically ordered depending on the intensity of the reaction from any given stimulus. Since the mode, median, and mean tend to coincide in a normal distribution, the scale value of a stimulus can also be considered as the mean or mode of the discriminai process associated with it (Torgerson, 1967, p. 157).

The statistical procedure took as its data the $9 \times 8$ matrix showing the number of times each stimulus was rated in each category (see transformation: raw scores to scale values--appendix F). A set of scale values considered to be on an interval scale was then produced for the stimuli under consideration. The values of the boundaries between the categories were also listed.

The object of categorical scaling was to "locate these stimuli on a psychological continuum in such a way . . . to account for the responses given by the observer" (Thurstone, 1927a, cited in Torgerson, 1958, p. 156). Thurstone further identified a "discriminal process" whereby the "organism identifies, distinguishes or reacts to stimuli" (Ibid).

The Mann-Whitney U test was used to determine whether the internal and the external variables differed statistically significantly for
each of the nine roles or whether the normal distribution of the internal variables was statistically significantly different from the normal distribution of the external variables for a specific role (Siegel, 1956).

The U test was applied by denoting \( N_1 \) and \( N_2 \) respectively as the number of cases (variables) in the internal and the external dimensions. Observations of the scale values obtained from categorical scaling for both the internal and external variables were combined and ranked in order of increasing size. The value of the U statistic was given "by the number of times a score in the group with \( N_2 \) cases preceded a score in the group with \( N_1 \) cases in the ranking" (Siegel, 1956, p. 116). A small value of U would show that no statistical significant differences existed (see appendix F).

Kendall's coefficient of concordance, W, determined the measure of relation among the rankings of the internal-external variables over the nine roles. To compute W, the scale values obtained from categorical scaling were ranked vertically, and the sum of ranks in each column was found then divided by \( N \) (number of items ranked) to obtain the mean value of the columns. The value of each column was then expressed as a "deviation from the mean value . . . finally, \( s \), the sum of squares of these deviations was found" (Siegel, 1956, p. 231). Appendix F presents the computational procedures for Kendall's coefficient of concordance, W.

Chi-square was used to determine whether there was a significant statistical difference between observed and expected frequencies (theoretical frequencies generated on the basis of the hypothesis) when the classificatory variables of degree, educational field, and age were presented. "In this context, the null hypothesis was that no difference
existed between the observed and theoretical frequencies" (Ferguson, 1976, p. 187), which constituted evidence for the rejection of the null hypothesis.

Tally of the Academic Deans

A tally program was used to determine by state the numbers and percentages of academic deans in the various classification categories. Academic deans were tallied for each state in the following selection categories:

1. Deans with earned doctorates
2. Deans with Master's degrees
3. Deans with doctorates in higher education and/or educational administration
4. Deans with doctorates in other education-related areas
5. Deans with doctorates in the sciences
6. Deans with doctorates in the humanities

The same tally regarding the area of education was done for deans with Master's degrees. Tallies were also made for each age bracket with respect to the categories listed above.

Hypotheses Resulting from the Independent-Dependent Variables

Hypothesis 1

There is no significant difference in the importance between the internal and external variables with respect to decision making in each of the nine roles.

Analysis 1

For each of the nine roles separately, the Mann-Whitney U test
was used to compare the relative ranks of the internal and external variables (Siegel, 1956). Appendix F carries an explanation of the formula and the procedure for the use of the Mann-Whitney U test.

Hypothesis 2

There is no significant difference in consistency in the relative importance of the eight internal-external variables from role to role.

Analysis 2

The scale values from the categorical scaling techniques were ranked for each of the internal-external variables on the nine roles and the ranking submitted to Kendall's coefficient of concordance, W, to measure the consistency between the internal-external variables over the nine roles (Siegel, 1956). Appendix F carries the formula and procedural calculations used in computing Kendall's coefficient of concordance, W.

Hypotheses Resulting from the Classificatory Variables

Hypothesis 3

There is no significant difference in the responses of the academic deans with respect to the importance of any internal-external variables on any of the nine roles with respect to the following:

1. Educational qualifications of the academic dean as evidenced by degree
2. Educational field of the academic deans
3. Age bracket of the academic deans

Analysis 3

The above hypothesis was tested by chi-square. A special
two-dimensional contingency $9 \times 8$ table with category of respondents
as one dimension and response category as the other dimension was used
for analyzing the hypothesis. For each of the three classification vari­
ables above, there were seventy-two analyses with tables drawn up for
all significantly different variables of chi-square.

**Levels of Significance**

An alpha level of .05 was used as the level of significance for
the rejection or acceptance of the null hypothesis. In the case of de­
ciding the most important scale values for each role, the three largest
values were taken as a criterion guide to indicate degree of importance
of the eight variables for a particular role.

**Limitations**

Several limitations are existent in research of this nature:

1. The forced-choice method restricts the range of answers a
respondent may render to those suggested by the researcher.

2. Questionnaires have natural limitations—they are impersonal
and some error of measurement is likely to result. However,
when personal interview techniques are not feasible, the
questionnaire remains the best alternative.

3. Human organizations cannot be studied except through the
biases and perceptions of the principal actors who, for the
purposes of measurement, make observations of the impact
of organizations upon them—in other words, to study the re­
sponses of the individual about the organization is to study
the organization itself.

4. Decisions determined by statistical inference are always in­
terpreted in terms of probable truth. Truth may only be
determined by obtaining the responses of the total population.
However, the magnitude of the response can suggest some
level of confidence at which decisions and/or findings can be
declared.
CHAPTER IV

DATA ANALYSIS AND PRESENTATION OF FINDINGS

Introduction

The purpose of this chapter is to present the findings resulting from the statistical data generated. Findings were derived through the following sequence:

1. A hypothesis with its corresponding question was stated. Where there was no hypothesis, the question alone was stated.

2. The question and/or hypothesis was followed by a table or series of tables relating to the respective hypothesis or question.

3. Each respective table or series of tables was followed by a summary narrative.

4. As a result of these summaries, a series of data-based findings were issued based on inspection of the tables. Where applicable, hypotheses were rejected and/or retained according to set criterion levels of significance and standards.

Questions Resulting from the Classificatory Variables

1. What are the numbers and percentages of academic deans in each state according to degree?

2. What are the numbers and percentages of academic deans in each state according to educational field?

3. What are the numbers and percentages of academic deans in each state according to age?

Tables 4-7 provide the information for the above questions. Summaries are also provided.

The state of Kentucky (table 4) has the smallest single population of any one state in the study. Here the greatest percentage of
deans had their preparation in educational administration and other educational areas. All the deans possessed earned doctorates and more fell into the 39-55 age group than in the other two age groups, although there were no appreciable differences between the numbers of deans in the 25-38 and the over 55 age groups.

TABLE 4
DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF KENTUCKY DEANS

<table>
<thead>
<tr>
<th>Area Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D./Ed.D.</td>
<td>11</td>
<td>100.00</td>
</tr>
<tr>
<td>General fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational administration</td>
<td>7</td>
<td>63.64</td>
</tr>
<tr>
<td>Other educational areas</td>
<td>1</td>
<td>9.09</td>
</tr>
<tr>
<td>Science</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>27.27</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-38</td>
<td>3</td>
<td>27.27</td>
</tr>
<tr>
<td>39-55</td>
<td>5</td>
<td>45.45</td>
</tr>
<tr>
<td>Over 55</td>
<td>3</td>
<td>27.27</td>
</tr>
</tbody>
</table>

Sixty-five percent of the Illinois deans (table 5) possessed earned doctorates. Of the total number of deans in Illinois, 80 percent were in the field of education and 70 percent in the area of educational administration. There were as many deans in the sciences as there were in the humanities, and approximately 73 percent of the deans were in the 39-55 age bracket. There were approximately twice as many deans over 55 as there were under 39 years of age.

Approximately 57 percent of the Michigan deans (see table 6) possessed earned doctorates. Of the total number of Michigan deans,
### TABLE 5

**DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF ILLINOIS DEANS**

<table>
<thead>
<tr>
<th>Area Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D./Ed.D.</td>
<td>26</td>
<td>65.00</td>
</tr>
<tr>
<td>M.A.</td>
<td>14</td>
<td>35.00</td>
</tr>
<tr>
<td>General fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational administration</td>
<td>28</td>
<td>70.00</td>
</tr>
<tr>
<td>Humanities</td>
<td>4</td>
<td>10.00</td>
</tr>
<tr>
<td>Sciences</td>
<td>4</td>
<td>10.00</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-38</td>
<td>3</td>
<td>7.50</td>
</tr>
<tr>
<td>39-55</td>
<td>29</td>
<td>72.50</td>
</tr>
<tr>
<td>Over 55</td>
<td>8</td>
<td>20.00</td>
</tr>
</tbody>
</table>

Approximately 71 percent were in the field of education, and 57 percent were in the area or field of educational administration. Approximately 86 percent of the deans fell in the 39-55 age bracket, but there were more deans over 55 than there were under 39.

### TABLE 6

**DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF MICHIGAN DEANS**

<table>
<thead>
<tr>
<th>Area Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D./Ed.D.</td>
<td>16</td>
<td>57.14</td>
</tr>
<tr>
<td>M.A.</td>
<td>12</td>
<td>42.86</td>
</tr>
<tr>
<td>General fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational administration</td>
<td>16</td>
<td>57.14</td>
</tr>
<tr>
<td>Other educational areas</td>
<td>4</td>
<td>14.29</td>
</tr>
<tr>
<td>Humanities</td>
<td>1</td>
<td>3.57</td>
</tr>
<tr>
<td>Sciences</td>
<td>7</td>
<td>25.00</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-38</td>
<td>1</td>
<td>3.57</td>
</tr>
<tr>
<td>39-55</td>
<td>24</td>
<td>85.71</td>
</tr>
<tr>
<td>Over 55</td>
<td>3</td>
<td>10.71</td>
</tr>
</tbody>
</table>
In California (table 7) approximately 61 percent of the deans possessed earned doctorates. Of the total number of deans, approximately 57 percent had doctorates in the field of education, with 38 percent of these in the field of educational administration. There were more deans in the humanities than in the sciences, and an overwhelming percentage of the deans fell in the 39-55 age bracket, while a much greater percentage were in the over-55 age bracket than in the 25-38 age bracket.

### TABLE 7

**DISTRIBUTION OF THE NUMBER AND PERCENTAGE OF CALIFORNIA DEANS**

<table>
<thead>
<tr>
<th>Area Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Ph.D./Ed.D.</td>
<td>53</td>
<td>61.63</td>
</tr>
<tr>
<td>M.A.</td>
<td>33</td>
<td>38.37</td>
</tr>
<tr>
<td>Educational administration</td>
<td>33</td>
<td>38.37</td>
</tr>
<tr>
<td>General fields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sciences</td>
<td>17</td>
<td>19.77</td>
</tr>
<tr>
<td>Humanities</td>
<td>20</td>
<td>23.26</td>
</tr>
<tr>
<td>25-38</td>
<td>2</td>
<td>2.33</td>
</tr>
<tr>
<td>39-55</td>
<td>71</td>
<td>82.56</td>
</tr>
<tr>
<td>Over 55</td>
<td>13</td>
<td>15.12</td>
</tr>
</tbody>
</table>

Findings: Tables 4-7

An overwhelming number of community college academic deans possessed an earned doctorate. The majority of these were in the field education (combination of educational administration and other education areas) with the largest percentage in the sub-field of educational administration. A larger percentage tended to be in the area of the
It was found that the majority of deans fell in the 39-55 age bracket; however, there were more deans in the over-55 age group than in the 25-38 age group.

**Hypotheses and Questions Resulting from the Independent and Dependent Variables**

**Hypothesis 1**

There is no statistically significant difference between the internal and external variables with respect to decision making in each of the nine roles.

**Questions for Hypothesis 1**

Is there any statistically significant difference between the internal and external variables with respect to decision making in each of the nine roles?

How important are the internal-external variables in influencing decision making in each of the nine stated roles?

**Response for Hypothesis 1**

Tables 8-16 present the responses to the question for hypothesis 1 where the equation for calculating the statistic U of the Mann-Whitney test determines whether there is a statistically significant difference between the internal and external variables for each of the nine roles or whether the internal and external variables for each role represents a significant departure from a normal distribution of the dimensions. The internal and external scale values in each table are based on the scale values obtained from categorical scaling techniques (see table 17). Appendix F explains the data from tables 8-16.
Table 8 shows the scale values of the four \((N_1)\) internal and the four \((N_2)\) external variables as obtained from categorical scaling. These are ranked overall from lowest to highest, and the resulting ranks for internal and external variables are summed, yielding \(R_1\) and \(R_2\). The resulting value of \(U\) is 6, which with \(N_1 = 4\), has a probability of occurrence under \(H_0\) of \(p = .343\). Hence, with respect to role 1, null hypothesis 1 is retained (there is insufficient evidence for rejection).

Table 9 shows the scale values and ranks for the internal and external variables with respect to role 2, Staff Selection. For these data, a \(U\) statistic of 5 is obtained with \(p = .243\), and the null hypothesis 1 is retained.

Table 10 also shows the scales and ranks for the internal and external variables with respect to role 3, Staff Development. For these data, a \(U\) statistic of 6 is obtained with \(p = .343\), and null hypothesis 1 is retained.
<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4, 6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.79</td>
<td>3</td>
<td>.74</td>
<td>2</td>
</tr>
<tr>
<td>1.46</td>
<td>7</td>
<td>2.33</td>
<td>8</td>
</tr>
<tr>
<td>.69</td>
<td>1</td>
<td>1.31</td>
<td>5</td>
</tr>
<tr>
<td>1.28</td>
<td>4</td>
<td>1.38</td>
<td>6</td>
</tr>
<tr>
<td><strong>N₁ = 4</strong></td>
<td></td>
<td><strong>N₂ = 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>R₁ = 15</strong></td>
<td></td>
<td><strong>R₂ = 21</strong></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 10**

Comparision between the internal and external variables for role 3, staff development

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4, 6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10</td>
<td>6</td>
<td>.86</td>
<td>4</td>
</tr>
<tr>
<td>1.67</td>
<td>8</td>
<td>.90</td>
<td>5</td>
</tr>
<tr>
<td>.35</td>
<td>1</td>
<td>.70</td>
<td>3</td>
</tr>
<tr>
<td>1.18</td>
<td>7</td>
<td>.55</td>
<td>2</td>
</tr>
<tr>
<td><strong>N₁ = 4</strong></td>
<td></td>
<td><strong>N₂ = 4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>R₁ = 16</strong></td>
<td></td>
<td><strong>R₂ = 14</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 shows the scale values and ranks for the internal and external variables with respect to role 4, Collective Bargaining. For
these data, a U statistic of 3 is obtained with \( p = .10 \), and null hypothesis 1 is retained.

Table 12 likewise shows the scale values and ranks for the internal and external variables with respect to role 5, Budgeting. For these data, a U statistic of 6 is obtained with \( p = .343 \), and the null hypothesis 1 is retained.

### TABLE 11

**COMPARISON BETWEEN THE INTERNAL AND EXTERNAL VARIABLES FOR ROLE 4, COLLECTIVE BARGAINING**

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4,6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.64</td>
<td>5</td>
<td>.66</td>
<td>6</td>
</tr>
<tr>
<td>1.18</td>
<td>7</td>
<td>.61</td>
<td>4</td>
</tr>
<tr>
<td>.54</td>
<td>3</td>
<td>.37</td>
<td>1</td>
</tr>
<tr>
<td>1.28</td>
<td>8</td>
<td>.52</td>
<td>2</td>
</tr>
<tr>
<td>( N_1 = 4 )</td>
<td></td>
<td>( N_2 = 4 )</td>
<td></td>
</tr>
<tr>
<td>( R_1 = 23 )</td>
<td></td>
<td>( R_2 = 13 )</td>
<td></td>
</tr>
</tbody>
</table>

Table 13 also shows the scale values and ranks for the internal and external variables with respect to role 6, Promotion and Tenure Decisions. For these data, a U statistic of 8 is obtained with \( p = .56 \) and the null hypothesis 1 is retained.
### TABLE 12
**Comparison between the Internal and External Variables for Role 5, Budgeting**

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4, 6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.34</td>
<td>4.5</td>
<td>.66</td>
<td>6</td>
</tr>
<tr>
<td>.30</td>
<td>3.0</td>
<td>.26</td>
<td>2</td>
</tr>
<tr>
<td>.34</td>
<td>4.5</td>
<td>.24</td>
<td>1</td>
</tr>
<tr>
<td>.94</td>
<td>8.0</td>
<td>.85</td>
<td>7</td>
</tr>
</tbody>
</table>

\[ N_1 = 4 \quad R_1 = 20 \]
\[ N_2 = 4 \quad R_2 = 16 \]

### TABLE 13
**Comparison between the Internal and External Variables for Role 6, Promotion and Tenure Decisions**

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4, 6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.85</td>
<td>4</td>
<td>.84</td>
<td>3</td>
</tr>
<tr>
<td>1.37</td>
<td>7</td>
<td>.90</td>
<td>5</td>
</tr>
<tr>
<td>.55</td>
<td>1</td>
<td>.61</td>
<td>2</td>
</tr>
<tr>
<td>1.14</td>
<td>6</td>
<td>2.41</td>
<td>8</td>
</tr>
</tbody>
</table>

\[ N_1 = 4 \quad R_1 = 18 \]
\[ N_2 = 4 \quad R_2 = 18 \]
Table 14 shows the scale values and ranks for the internal and external variables with respect to role 7, Public Relations. For these data, a U statistic of 4 is obtained with $p = .171$ and the null hypothesis $H_0$ is retained.

Table 15 shows the scale values and ranks for the internal and external variables with respect to role 8, Academic Counseling. For these data, a U statistic of 5 is obtained with $p = .243$ and the null hypothesis $H_0$ is retained.

Likewise, table 16 shows the scale values and ranks for the internal and external variables with respect to role 9, Evaluation. For these data, a U statistic of 5 is also obtained with $p = .243$ and the null hypothesis $H_0$ is retained.
### TABLE 15

**COMPARISON BETWEEN THE INTERNAL AND EXTERNAL VARIABLES FOR ROLE 8, ACADEMIC COUNSELING**

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4,6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.38</td>
<td>3</td>
<td>.50</td>
<td>4</td>
</tr>
<tr>
<td>.90</td>
<td>5</td>
<td>1.52</td>
<td>8</td>
</tr>
<tr>
<td>.25</td>
<td>1</td>
<td>1.37</td>
<td>7</td>
</tr>
<tr>
<td>.87</td>
<td>6</td>
<td>.28</td>
<td>2</td>
</tr>
</tbody>
</table>

N₁ = 4  \quad R₁ = 15  
N₂ = 4  \quad R₂ = 21

### TABLE 16

**COMPARISON BETWEEN THE INTERNAL AND EXTERNAL VARIABLES FOR ROLE 9, EVALUATION**

<table>
<thead>
<tr>
<th>Internal Scale Values (Variables 1-3,5)</th>
<th>Rank</th>
<th>External Scale Values (Variables 4,6-8)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>.11</td>
<td>2</td>
<td>.54</td>
<td>6</td>
</tr>
<tr>
<td>.64</td>
<td>8</td>
<td>.53</td>
<td>5</td>
</tr>
<tr>
<td>.35</td>
<td>4</td>
<td>.26</td>
<td>3</td>
</tr>
<tr>
<td>.63</td>
<td>7</td>
<td>.04</td>
<td>1</td>
</tr>
</tbody>
</table>

N₁ = 4  \quad R₁ = 21  
N₂ = 4  \quad R₂ = 15

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Findings, Question 1: Hypothesis 1

In tables 8-16, the results yielded no statistically significant differences between the internal and external variables for each role where the null hypothesis could be rejected at the .05 level. Therefore, the null hypothesis that the internal and external variables bear no statistically significant differences in their distribution for each role must be retained for each of the nine roles.

Inspection of the Scale Values on each Role

Table 17 presents the scale values of the eight variables for each of the nine roles. Since each set of scale values for a particular role is uniquely different, the values may not be compared across roles. However, the scale values for a single role may be inspected. In the case of each role, the three largest values were singled out, and the internal-external variables representing those values listed. Furthermore, a cluster of highest values was used to include values that were close to the three highest values and which would have been otherwise omitted.

Thus for role 1, Curriculum Planning, the three largest values indicative of the degree of importance attached to decision making were variable 3, Formal Preparation (1.37), variable 6, Local Community Needs (1.36), and variable 2, Experiences Gained on the Job (1.05). The cluster criterion produced no additional values.

In the case of role 2, Staff Selection, the three largest scale values were variables 6, 2, 8, respectively, in order of highest value. These were Local Community Needs (2.33), Experiences Gained on the Job (1.46), and State Funding (1.38). When the cluster criterion was
TABLE 17

SCALE VALUES OF THE INTERNAL-EXTERNAL VARIABLES ON EACH OF THE NINE ROLES

<table>
<thead>
<tr>
<th>Roles:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>al-Ex-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ternal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.00</td>
<td>.79</td>
<td>1.10</td>
<td>.64</td>
<td>.34</td>
<td>.85</td>
<td>.61</td>
<td>.38</td>
<td>.11</td>
</tr>
<tr>
<td>2</td>
<td>1.05</td>
<td>1.46</td>
<td>1.67</td>
<td>1.18</td>
<td>.30</td>
<td>1.37</td>
<td>1.18</td>
<td>.90</td>
<td>.64</td>
</tr>
<tr>
<td>3</td>
<td>1.37</td>
<td>.69</td>
<td>.35</td>
<td>.54</td>
<td>.34</td>
<td>.55</td>
<td>.21</td>
<td>.25</td>
<td>.35</td>
</tr>
<tr>
<td>4</td>
<td>.57</td>
<td>.74</td>
<td>.86</td>
<td>.66</td>
<td>.66</td>
<td>.84</td>
<td>.69</td>
<td>.50</td>
<td>.54</td>
</tr>
<tr>
<td>5</td>
<td>.70</td>
<td>1.28</td>
<td>1.18</td>
<td>1.28</td>
<td>.94</td>
<td>1.14</td>
<td>.96</td>
<td>.87</td>
<td>.63</td>
</tr>
<tr>
<td>6</td>
<td>1.36</td>
<td>2.33</td>
<td>.90</td>
<td>.61</td>
<td>.26</td>
<td>.90</td>
<td>.26</td>
<td>1.52</td>
<td>.53</td>
</tr>
<tr>
<td>7</td>
<td>.46</td>
<td>1.31</td>
<td>.70</td>
<td>.37</td>
<td>.24</td>
<td>.61</td>
<td>.05</td>
<td>1.37</td>
<td>.26</td>
</tr>
<tr>
<td>8</td>
<td>.28</td>
<td>1.38</td>
<td>.55</td>
<td>.52</td>
<td>.85</td>
<td>2.41</td>
<td>.31</td>
<td>.28</td>
<td>.04</td>
</tr>
</tbody>
</table>

employed, additional values were obtained for variables 5 and 7, respectively. These were Philosophy of Administration (1.28) and Expectations of Community Needs (1.31).

With respect to role 3, Staff Development, the three largest scale values were identified as variables 2, 5, and 1, in order of descending value. These were Experiences Gained on the Job (1.67), Philosophy of Administration (1.18), and Requirements of the Job Description (1.10). No additional values were produced when the cluster
criterion was applied to role 3, Staff Development.

In the case of role 4, Collective Bargaining, the three largest scale values obtained were for variables 5, 2, and 4, respectively, Philosophy of Administration (1.28), Experiences Gained on the Job (1.18), and Length of Time in the Job (.66). When the cluster criterion was used, two additional values were added, variables 1 and 6, respectively, Requirements of the Job Description (.64) and Local Community Needs (.61).

For role 5, Budgeting, variables 5, 8, and 4 yielded the largest scale values, respectively, for Philosophy of Administration (.94), State Funding (.85), and Length of Time in the Job (.66). No additional values were produced when the cluster criterion was employed.

For role 6, Promotion/Tenure Decisions, the three largest values obtained were the scale values on variables 8, 2, and 5, in order of highest value. These respectively were State Funding (2.41), Experiences Gained on the Job (1.37), and Philosophy of Administration (1.41). The cluster criterion produced no additional values.

For role 7, Public Relations, the three largest scale values obtained were on variables 2, 5, and 4. These internal-external variables were Experiences Gained on the Job (1.18), Philosophy of Administration (.96), and Length of Time on the Job (.69). The cluster criterion produced one additional value, that of variable 1, Job Requirements (.61).

Role 8, Academic Counseling, yielded the three largest scale values on variables 6, 7, and 2, these respectively being, Needs of the Local Community (1.52), Expectations of Community Groups (1.37), and Experiences Gained on the Job (.90). The cluster criterion produced
a single additional value, that of variable 5, Philosophy of Administration (.87).

In the case of role 9, Evaluation, the three largest scale values obtained were on variables 2, 5, and 5, these respectively being Experiences Gained on the Job (.64), Philosophy of Administration (.63), and Length of Time on the Job (.54). For role 9, the cluster criterion produced another one additional value, variable 6, Local Community Needs (.53).

Table 18 shows the three largest scale values for each of the nine roles with asterisks denoting additional values derived from the use of the cluster criterion.

### TABLE 18
THE THREE HIGHEST SCALE VALUES FOR EACH OF THE NINE ROLES

<table>
<thead>
<tr>
<th>Roles:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.10</td>
<td>.64*</td>
<td>.61*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.05</td>
<td>1.46</td>
<td>1.67</td>
<td>1.18</td>
<td>1.36</td>
<td>1.18</td>
<td>.90</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.37</td>
<td></td>
<td></td>
<td>.66</td>
<td>.66</td>
<td>.69</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>1.28*</td>
<td>1.18</td>
<td>1.28</td>
<td>.94</td>
<td>.96</td>
<td>.87*</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>1.36</td>
<td>2.33</td>
<td>.61*</td>
<td></td>
<td>1.52</td>
<td>.53*</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.31*</td>
<td></td>
<td></td>
<td></td>
<td>1.37</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*values produced when the cluster criterion is used
Of the nine roles, it can be stated that the scale values for the internal-external variables of Experience Gained on the Job and Philosophy of Administration appeared most frequently with regards to the level of importance attached to decision making for each of the nine roles.

**Findings, Question 2: Hypothesis 1**

Using the criteria of the three largest scale values for each of the nine roles and the cluster criterion, Experiences Gained on the Job appeared on eight of the nine roles, as did Philosophy of Administration. The external variable, Local Community Needs, yielded highest scale values on five of the nine roles. Therefore, the internal-external variables, Experience Gained on the Job, Philosophy of Administration, and Local Community Needs, appeared to be appreciably more important overall with regards to decision making. Even without the use of the cluster criterion, variables 2 and 5 would still have emerged as those variables having the largest number of scale values of all the other variables.

**Hypothesis 2**

There is no statistical consistency in the relative importance of the eight internal-external variables over the nine roles.

**Response for Hypothesis 2**

Consistency or the degree of association of the internal-external variables over the nine roles was expressed by the Kendall coefficient of concordance, W. Appendix F provides the transformation for the equation of the W statistic. Table 19 shows the role rankings for the
<table>
<thead>
<tr>
<th>Roles</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Planning</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Staff Selection</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Staff Development</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Collective Bargaining</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Budgeting</td>
<td>5</td>
<td>4.5</td>
<td>3</td>
<td>4.5</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Promotion/Tenure Decisions</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Public Relations</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Academic Counselling</td>
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<td>3</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Evaluation</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>$R_j$</td>
<td>33.5</td>
<td>60</td>
<td>25.5</td>
<td>41</td>
<td>57</td>
<td>47</td>
<td>26</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

$R = 40.5; k = 8$ (number of ranks); $N = 9$ (number of items ranked)
scale values obtained from categorical scaling (table 17) over the
eight internal-external variables. The scale values for each role are
ranked overall horizontally from lowest to highest values and the re-
sulting columns summed. For these data, the value of $W$ is .32, which
with $k = 8$ (number of ranks) and $N = 9$ (number of items ranked)
has a probability of occurrence under the null hypothesis of $p \leq .01$
(see appendix F for formulae which test the statistical significance of
the obtained $W$). Therefore, the null hypothesis that there is no con-
sistency in the relative importance of the eight internal-external vari-
ables over the nine roles must be rejected at less than the .05 level.

Findings for Hypothesis 2

The rejection of the null hypothesis at less than .05 (actual re-
jection level was .01) suggests that there is consistency in the rela-
tive importance of the eight internal-external variables over the nine
roles. This means that the internal-external variables are consistent-
ly influencing the roles and can most definitely be regarded as stimu-
li. Moreover, their influence is not by chance—the influence occurs
in a consistent manner—there is high consistency as to how the
community college academic deans record their responses over the
nine roles.

Hypothesis 3

There is no statistical significant difference in the responses of
the academic deans with respect to the importance of any of the in-
ternal-external variables on any of the nine roles with respect to the
following:
1. Educational qualifications of the community college academic deans as evidenced by degree
2. Educational field of the community college academic deans
3. Age bracket of the community college academic deans

Response for Hypothesis 3

Only the statistically significant differences at the .05 level were reported. When the classificatory variable, educational qualifications of the academic deans as evidenced by degree, is considered, two statistically significant chi-square values are obtained. These are the responses for role 8, Academic Counseling, on variable 1, Requirements of the Job Description and role 1, Curriculum Planning, on variable 3, Formal Preparation. In the response analysis for role 8, Academic Counseling, on variable 1, Requirements of the Job Description, community college academic deans with doctorates placed much less emphasis on variable 1, Requirements of the Job Description, when making decisions in the area of Academic Counseling than did deans with M.A.'s (see table 20); and in the response analysis for role 1, Curriculum Planning, on variable 3, Formal Preparation, deans with doctorates tended to place greater emphasis on variable 3, Formal Preparation, than deans with M.A.'s (see table 21). Tables 20 and 21 present the data for these response analyses.

When the classificatory variable, age bracket, is considered, a single statistically significant value of chi-square is yielded—the response analysis for role 8, Academic Counseling, on variable 3, Formal Preparation. For this analysis, deans in the various age brackets tended to place more emphasis on formal preparation as age increased—deans over 55 placed greatest emphasis on formal preparation when
Table 20

Response Analysis for Role 8, Academic Counseling on Variable 1, Requirements of the Job Description

<table>
<thead>
<tr>
<th>Respondent Category</th>
<th>Response Category</th>
<th>Row Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Doctorates:</td>
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<td></td>
</tr>
<tr>
<td>Frequencies</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>Percentages</td>
<td>29.90</td>
<td>19.59</td>
</tr>
<tr>
<td>Non-doctorates:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequencies</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Percentages</td>
<td>21.05</td>
<td>19.30</td>
</tr>
<tr>
<td>Totals:</td>
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<td></td>
</tr>
<tr>
<td>Frequencies (Column)</td>
<td>41</td>
<td>30</td>
</tr>
<tr>
<td>Percentages (Row)</td>
<td>26.62</td>
<td>19.48</td>
</tr>
</tbody>
</table>

Obtained chi-square = 3.6061 with 4 degrees of freedom and a probability of .04

Making decisions in the area of academic counseling. Table 22 presents the data for this response.

No statistically significant analyses were obtained for educational field when the alpha of .05 was used.

Findings for Hypothesis 3

The null hypothesis, that there is no statistically significant difference in the responses of the academic deans, was rejected in three instances at the .05 level when the classificatory variables of
TABLE 21
RESPONSE ANALYSIS FOR ROLE 1, CURRICULUM PLANNING,
ON VARIABLE 3, FORMAL PREPARATION

<table>
<thead>
<tr>
<th>Respondent Category</th>
<th>Response Category</th>
<th>Row Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>2</td>
</tr>
<tr>
<td>Doctorates:</td>
<td></td>
<td></td>
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<tr>
<td>Frequencies</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Percentages</td>
<td>3.77</td>
<td>12.26</td>
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<tr>
<td>Non-doctorates:</td>
<td></td>
<td></td>
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<tr>
<td>Frequencies</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Percentages</td>
<td>3.51</td>
<td>19.30</td>
</tr>
<tr>
<td>Totals:</td>
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<td></td>
</tr>
<tr>
<td>Frequencies (Column)</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Percentages (Row)</td>
<td>3.68</td>
<td>14.72</td>
</tr>
</tbody>
</table>

Obtained chi-square = 10.5952 with 4 degrees of freedom and a probability of .032.

...educational qualifications as evidenced by degree, field, and age were considered.

In the first instance (table 20), for role 8, Academic Counseling on variable 1, Requirements of the Job Description, academic deans with doctorates responded differently than those without doctorates—deans with doctorates placed less emphasis on the variable, Requirements of the Job Description, than did deans without doctorates.

In the second instance (table 21), for role 1, Curriculum Planning, on variable 3, Formal Preparation, deans with doctorates responded differently than those without doctorates—deans with doctorates...
<table>
<thead>
<tr>
<th>Respondent Category</th>
<th>Response Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Row Totals</th>
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<tbody>
<tr>
<td>Age (25-38)</td>
<td>Frequencies</td>
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<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>7</td>
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<tr>
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<td>Percentages</td>
<td>28.57</td>
<td>28.57</td>
<td>28.57</td>
<td>14.29</td>
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<td>100.00</td>
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<tr>
<td>Age (39-55)</td>
<td>Frequencies</td>
<td>19</td>
<td>24</td>
<td>55</td>
<td>22</td>
<td>7</td>
<td>127</td>
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<tr>
<td></td>
<td>Percentages</td>
<td>14.96</td>
<td>18.89</td>
<td>43.31</td>
<td>17.32</td>
<td>5.51</td>
<td>100.00</td>
</tr>
<tr>
<td>Age (Over 55)</td>
<td>Frequencies</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>15</td>
<td>1</td>
<td>27</td>
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<tr>
<td></td>
<td>Percentages</td>
<td>3.70</td>
<td>3.70</td>
<td>33.33</td>
<td>55.56</td>
<td>3.70</td>
<td>100.00</td>
</tr>
<tr>
<td>Totals</td>
<td>Frequencies (Column)</td>
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<td>27</td>
<td>66</td>
<td>38</td>
<td>8</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Percentages (Row)</td>
<td>13.66</td>
<td>16.77</td>
<td>40.99</td>
<td>23.60</td>
<td>4.97</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Obtained chi-square = 16.7450 with 8 degrees of freedom and a probability of .03

placed greater emphasis on formal training than did deans without doctorates.

In the third instance (table 22), role 8, Academic Counseling, on variable 3, Formal Preparation, deans of various age brackets responded differently—as deans increased in age, they tended to place greater emphasis on formal preparation. Thus, in each of these three instances, the null hypotheses that there was no statistical significant difference in the response of the academic deans for these analyses was rejected at the .05 level.
Summary of Findings

In each state, academic deans with doctorates were more numerous than deans without, while deans in the area of education outnumbered deans from the humanities and sciences (tables 4-7). In the area of education, more deans were in the field of educational administration/higher education than in the other fields. The majority of deans fell in the 39-55 age bracket for each state, although there were more deans over 55 than under 39.

Deans with doctorates tended to place greater emphasis on formal preparation in the decision-making area of curriculum planning than deans with Master's degrees. However, deans with doctorates placed less emphasis on formal preparation in the area of academic counseling than deans without doctorates and an increase in age seemed to have been positively associated with greater emphasis placed on formal preparation in the area of academic counseling.

There was no statistically significant difference between the internal and external variables with respect to decision making in each of the nine roles. With respect to internal-external variables influencing decision making, Experiences Gained on the Job, Philosophy of Administration, and Local Community Needs, respectively, appeared among the highest scale values eight out of nine times in the first two instances and five out of nine times in the third instance.

For hypothesis 2, the findings suggest that the there was significant statistical consistency for the eight internal-external variables over the nine roles, so that the null hypothesis was rejected at $p < .05$.

For hypothesis 3 there were only three significant statistical
responses obtained from a possible total of 216 analyses (72 analyses for each of the three questions resulting from the classificatory variables). These were for role 8, Academic Counseling, on variable 1, Requirements of the Job Description; for role 1, Curriculum Planning, on variable 3, Formal Preparation; and for role 8, Academic Counseling on variable 3, Formal Preparation.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary, conclusions, and recommendations. A summary is made of each of the chapters—the Introduction, Review of Literature, the Methodology and Procedures, and the Presentation and Analysis of the Findings.

Summary

Introduction

The background of the study centered on the research which had been undertaken during the 70s on the role of the academic dean. This research was largely descriptive and taxonomic, and the role of the academic dean was examined from a sociological and theoretical base developed by Getzels and Guba at the University of Chicago in the 1950s. This theoretical base suggested that the role of an individual was determined by the expectations of significant others, in this case, namely, other academic administrators.

It was therefore felt that a study which would emphasize how selected environmental variables influenced decision making within the roles of the community college academic dean would be worthwhile since numerous studies already existed on the role of the academic dean in general and, to a lesser extent, the community college in particular. It was further felt that this approach could have far-reaching implications for the training of educational administrators.

Consequently, the problem of the study centered on the lack of
clarity and definition and analysis as to the nature and relationship among selected variables as they influenced decision making in the role of the community college academic dean. The purpose of the study, therefore, was to define and analyze the relationships among selected variables as they influenced decision making in the role of the community college academic dean. The sub-purposes were as follows:

1. Identify and analyze the nature of the relationship between the internal and external variables from role to role

2. Identify and analyze the relative importance of the internal-external variables in each role

3. Identify and analyze the degree of statistical consistency of the internal-external variables over the nine roles

4. Identify and analyze the responses of the academic deans when various classification variables were applied, namely, educational qualifications, educational field, and age.

Three hypotheses were stated: (1) internal and external variables differ in relative importance with respect to decision making in each of the nine roles; (2) there is high consistency in the relative importance of the eight internal-external variables over the nine roles; (3) the responses of the community college academic deans with respect to the importance of any of the internal-external variables on decision making in any of the nine roles varies with the following:

1. the educational qualifications of the community college academic deans as determined by degree

2. the educational field of the academic deans

3. the age bracket in which the community college academic deans fall.

A rationale and delimitations were stated and definitions of terms and concepts relevant to the study were listed.
Literature Review

The review of literature discussed the historical evolution and nature of the community college and stated that the community college developed out of the concept that higher education should be open to the masses at low cost. The community college was a blend between liberal arts and technical programs and was characterized by democracy, comprehensiveness, and curricular flexibility. The role of the community college academic dean was examined by tracing the development of the academic deanship as a whole, by reviewing studies that had been undertaken on the academic dean's role in two-year and four-year liberal arts college in general, and then by specifically examining that role in the community college.

A rationale was presented to support the selection of an internal-external dimension under which the independent variables were grouped, and a relationship was drawn between the environment and behavior, namely, that environment is related to behavior because the former influences the latter.

The theoretical framework summarized the statements of conceptualization underlying the study as follows:

1. The academic dean allocates a degree of significant community expectations in decisions that he/she makes
2. Roles/functions of the academic dean are substantive elements that constitute the job and that are spheres of decision making
3. Decision making is a behavior which is a response to stimuli in an environment
4. The environment is mainly bi-dimensional—it is composed of internal and external stimuli (variables)
5. The academic dean strives to maintain psychological homeostasis between the internal and external dimensions.

Methodology

The study followed a correlational approach and investigated the relationship among several dependent and independent variables with regards to decision making. The population consisted of all the public community college deans in the states of Michigan, Illinois, Kentucky and California. An instrument was developed and pilot-tested over an eleven-month period and used to measure the varying degree of importance academic deans perceived each stimulus to have for each role area of decision making. The instrument consisted of two sections, A and B: section A gave general instructions and elicited information for the classificatory variables, namely, educational qualifications as evidenced by degree, educational field, and age bracket; section B consisted of a 9 x 8 matrix of nine roles (independent variables) and eight stimuli or internal-external variables (dependent variables). The independent variables or roles were Curriculum Planning, role 1; Staff Selection, role 2; Staff Development, role 3; Collective Bargaining, role 4; Budgeting, role 5; Promotion and Tenure Decisions, role 6; Public Relations, role 7; Academic Counseling, role 8; and Evaluation, role 9. The dependent variables or internal-external stimuli were Requirements of the Job Description, variable 1; Experiences Gained on the Job, variable 2; Formal Preparation, variable 3; Length of Time in Position, variable 4; Philosophy of Administration, variable 5; Needs of the Local Community, variable 6; Expectations of the Community Groups, variable 7; and State Funding, variable 8.

Several types of statistical techniques and tests were used,
namely, categorical scaling techniques, the Mann-Whitney U test, Kendall's Coefficient of Concordance, W, and chi-square. An alpha level of .05 was used as the standard for rejection or retention of the null hypothesis in all cases, and a cluster—scale value criterion—was employed to determine the relative importance of the internal-external variables in hypothesis 1.

Conclusions
Classificatory Variables

These conclusions are as follows:
1. That whereas the majority of academic deans in each state possess earned doctorates in educational administration/higher education, this feature is a characteristic of community college academic deans.
2. That whereas in each state the majority of community college academic deans fall in the 39-55 age bracket, and that whereas more deans fall outside of the 39-55 age bracket, are above 55 than under 39, the community college academic deanship is a mid-to-late adulthood profession, and academic deans are probably more likely to obtain their positions after several years of experience. This suggests that the community college academic deanship may be approached by a stepwise progression.

Implications

Since the earned doctorate in educational administration/higher education is a feature of community college academic deans in the states surveyed, and since the position tends to be a mid-to-late adulthood profession, several implications follows: perhaps experience may be as valuable a factor as formal education in the preparation of
educational administrators or community college academic deans. Schools of education and departments of educational administration/higher education may need to plan inservice and continuing education for community college academic administrators who may not possess the earned doctorate, and programs and schedules may need to be tailored to the work program and needs of the busy administrator. This implies that enrollment in higher education may well tend to come from the ranks of administrators who may prefer part-time to full-time programs.

Hypothesis 1 and Its Questions

Is there any significant statistical difference between the internal and external variables with respect to decision making in each of the nine roles and what is the relative importance of the internal-external variables in influencing decision making in each of the nine roles?

Results: Hypothesis 1 and Its Questions

In each of the nine roles, the null hypothesis was retained at the .05 level of significance. There was no statistical significant difference between the internal and external variables with respect to decision making. The relative importance of the internal-external variables in influencing decision making over the nine roles was judged to be more important for three of the eight variables.

Conclusions

The conclusions are as follows:

1. That whereas the theoretical framework (see literature review) suggests a relationship between the environment (internal-external variables) and roles (decision-making areas), and that whereas
the results of hypothesis 1 and its questions suggest that both internal and external variables are equally influential on decision making in each of the nine roles, the internal and external variables both have a relatively important influence on decision making in each of these roles.

2. That whereas the internal variables, Experience Gained on the Job, Philosophy of Administration, and Local Community Needs, are consistently among the highest scale values over the nine roles, when each role is taken singly, these three internal-external variables, are having a greater influence on decision making than the other internal scale values when viewed.

3. That whereas, using the cluster criterion, variable 3, Formal Preparation, emerged among the three highest scale values (table 18) on Curriculum Planning, Formal Preparation has a greater influence on curriculum planning than it does on any other areas of academic decision making.

Implications

Community college academic deans may actually depend on environmental variables much more than formal preparation when making decisions generally. Since the position of community college academic dean is more than likely a step up from other administrative positions or comes in mid-to-late adulthood, perhaps experience can be a dominating factor in decision making. This could imply that outside of curriculum planning and, possibly, academic counseling (tables 20,21), departments of educational administration/higher education could have less influence on the academic decision making of the community college.
academic dean. This raises the issue as to whether community colleges should be administered academically by administrators (used broadly) or educational administrators. However, if it is agreed that curriculum planning is the heart of the academic decision-making enterprise, and that formal preparation influences this planning, then probably community college academic deans should be drawn from the ranks of educational administrators.

Experience Gained on the Job, Philosophy of Administration, and Local Community Needs emerged as relatively important variables. The implication here for educational administration is that universities may be able to do little for deans-to-be in the area of philosophy shaping, especially if these future deans decide to pursue their doctorates in mid-to-late adulthood. Another issue arises—can departments of educational administration/higher education consciously train/prepare academic administrators, or is such preparation simply and largely inferred by the fact that future administrators have fulfilled a series of requirements? Furthermore, how should academic administrators be prepared?

Hypothesis 2

How consistent is the relative importance of the eight internal-external variables over the nine roles?

Results: Hypothesis 2

The null hypothesis was rejected at $p < .05$ which answers the question by stating that there is high consistency in the relative importance of the eight internal-external variables over the nine roles.
Conclusion

The conclusion for hypothesis 2 is as follows: that whereas there is high consistency in the relative importance of the eight internal-external variables over the nine roles, there is a high agreement among community college academic deans that the internal-external variables are influencing their decisions. Therefore, the environment is playing a crucial part in decision making among academic deans.

Implications

Several implications can be derived from the above conclusion. If the environment does play a part in influencing decision making, then this environment may need to be further operationally defined. It may mean that departments of educational administration/higher education may need to adapt preparation programs to meet this suggestion. Each academic administrator is very likely to relate his/her world view to administrative theory. His/her world view may very likely also reflect the environment(s) to which he/she has been subjected. The implication here is that this situation can spell great diversification and flexibility for departments of educational administration/higher education, as academic administrators may tend to select schools and departments that afford them program flexibility and allow them to integrate and approximate some of their philosophies concerning the relationship between environment and decision making.

Hypothesis 3

There is no significant difference in the responses of the academic deans with respect to the importance of any of the internal-
external variables on any of the nine roles when the classificatory variables of educational qualifications, educational field, and age bracket are considered.

**Results: Hypothesis 3**

There were three instances where the null hypothesis was rejected. When the classification of educational qualifications was considered, there was a difference in response for Academic Counseling when the internal variable or stimulus, Requirements of the Job Description was presented—deans with doctorates placed less emphasis on requirements of the job description when engaging in Academic Counseling than did deans without doctorates. There was also a difference in response for Curriculum Planning when the internal variable or stimulus, Formal Preparation, was presented—deans with doctorates placed greater emphasis on formal preparation than deans without doctorates.

When the classification of age bracket was considered, there was a difference in response for Academic Counseling when the internal variable or stimulus, Formal Preparation, was presented—as deans increased in age, they tended to rely more on formal preparation.

**Conclusions**

The following conclusions are for hypothesis 3: that whereas overall there were few instances (3 out of 216) where there were significantly appreciable differences between the responses of the community college academic deans when the classificatory variables of degree, educational field, and age bracket were considered, these variables were not lines along which deans differed in decision making.
Apparently, experience and administrative philosophy tended to have leveling effects on these classificatory variables by rendering their effect insignificant over time.

Implications

Community college academic deans are generally not likely to differ in their responses, especially in the area of educational field. However, since the majority of deans surveyed were prepared in education and/or educational administration/higher education and since the majority of the community college academic deans possessed earned doctorates in this field, it may suggest that formal preparation does have an influence on curriculum planning and that whereas deans with doctorates placed more emphasis on formal preparation in the area of Curriculum Planning, formal preparation is viewed with some importance by the majority of deans (those in educational administration/higher education and education-related fields. This might imply, perhaps, that deans with doctorates in curriculum might have as great a chance at success as deans in educational administration/higher education, all other things being equal.

Recommendations

The following recommendations result from the study:

1. Community college academic administrators and other administrators aspiring to the community college academic deanship should consider the earned doctorate in educational administration/higher education with a possible curriculum cognate

2. More attention should be given to the role of the environment in the preparation of academic administrators for the community
college—there should be a broad background of preparation in the social and behavioral sciences—psychology, sociology, and human behavior (the environment is represented by these areas).

3. Preparation programs for community college academic deans and other academic administrators in the community college should be characterized by the following:

(a) broad flexibility in program planning to fit individual needs

(b) supporting cognates in areas such as sociology, psychology, curriculum planning, and development (referred to in the second recommendation above).

(c) well-defined internship periods for appreciable lengths of time where the administrator-in-training has actual job responsibility (waived for administrators who already have a number of years of a determined quality of experience)

(d) attention paid to the dynamics of decision making

(e) a balanced emphasis between traditional "nuts-and-bolts" courses and courses related to the environment as referred to above

4. Formal preparation as it relates to curriculum development and planning be re-emphasized as a crucial variable in the preparation programs of community college academic administrators.

5. Seventh-day Adventist four-year senior colleges were not part of the research design, and consequently no conclusions were made in this area. However, since parallels between the public community college and Seventh-day Adventist four-year senior colleges were drawn in the preface, it is recommended that study be given to determine whether Seventh-day Adventist senior colleges should
fulfill a community function comparable to the public community college in terms of the following:

(a) a broader definition of community to include all individuals (SDA and non-SDA) especially in the light of the Seventh-day Adventist purpose to disseminate its philosophy universally

(b) curricula to meet the needs of the local Seventh-day Adventist grassroots community and the community at large

(c) diversified program options to allow for six-month, one-year, and/or two-year certificate courses in vocational areas or in specific areas of community need in addition to liberal arts options

(d) provision for varied approaches to financing through fundraising on a broad scale--import-export trade and planned giving where the situation allows, etc., (if the SDA community can capture more jobs in industrial and vocational sectors, its membership might be more capable of financial contributions on a larger scale)

Further Research

The following recommendations are for further research:

1. Research should be undertaken to determine whether similar institutions to community colleges in terms of structure, function, clientele served, and purpose can learn from adapting the model of the community college

2. Research should be undertaken to determine the nature of the loci in academic dean decision making, that is, whether decisions come from an internal or external locus or a combination of both with regards to environmental variables
3. Research should be undertaken to determine whether an internal-external scale can be constructed by which the 'internalness' and 'externalness' of deans can be measured in the various areas of decision making.

4. Research should be undertaken to determine whether the doctorate degree is really necessary for community college academic deanship.

5. Research should be conducted to determine whether departments of educational administration/higher education consciously or unconsciously mold the administrative philosophies of their students.

6. Research should be undertaken where comparisons are made between the impact of environmental and non-environmental variables on community college academic dean decision making.

7. Research should be undertaken to determine what the future of educational administration/higher education preparation programs might be in the context of community college academic administration.

Conclusions and Recommendations:

A Brief Summary

Doubtless, the community college has become a central feature of American higher education and is here to stay. It may be the last expression of truly local control, perhaps its last vestige—a dying fulfillment of a bastion of American democracy. The feature which allows the community college to remain alive and vibrant is its compatibility with society through the following:

1. its broad appeal

2. its relevancy of offerings
3. its relatively low tuition rates
4. its relatively unrestricted open admission policies thus making it less difficult for individuals to use education as a ladder for upward mobility
5. its program allowance for part-time or full-time work in the community while study is yet maintained
6. its provision for terminal and transfer programs
7. its close alliance with the community.

Since the crux of community college academic administration is the decision, more attention needs to be paid to the preparation of educational administrators in the ingredients of decision making. This study maintains that these ingredients are found in the environment and are an integral part of it. This study further maintains that these environmental ingredients act as stimuli and influence community college academic deans in the importance which they attach to the various environmental variables.

If the population of community colleges continues to increase, other types of educational institutions may be forced to re-examine goals and priorities in the context of the general and specific communities which they serve.

The decision in the environment of the community college remains its most crucial feature. Attention must be constantly given to the quality of the decision and the variables which can influence its quality.
APPENDIX A

LISTS OF COMMUNITY COLLEGES:

CALIFORNIA COMMUNITY COLLEGES
ILLINOIS COMMUNITY COLLEGES
MICHIGAN COMMUNITY COLLEGES
KENTUCKY COMMUNITY COLLEGES
OHIO COMMUNITY COLLEGES
## CALIFORNIA COMMUNITY COLLEGES

<p>| 2. | Allan Hancock College | 27. | Diablo Valley College       |
| 3. | American River College| 28. | East Los Angeles College    |
| 4. | Antelope Valley College| 29. | El Camino College           |
| 5. | Bakersfield College   | 30. | Evergreen Valley College    |
| 6. | Barstow College       | 31. | Feather River College       |
| 7. | Butte College         | 32. | Foothill College            |
| 8. | Cabrillo College      | 33. | Fresno City College         |
| 9. | Canada College        | 34. | Fullerton College           |
| 10. | College of the Canyons| 35. | Gavilan College             |
| 11. | Cerritos College      | 36. | Glendale College            |
| 12. | Cerro Coso Community College| 37. | Golden West College         |
| 13. | Chabot College        | 38. | Grossmont College           |
| 15. | Citrus College        | 40. | Imperial Valley College     |
| 16. | Coastline Community College| 41. | Indian Valley Colleges      |
| 17. | Columbia College      | 42. | Lake Tahoe Community College|
| 18. | Compton Community College| 43. | Laney College               |
| 19. | Contra Costa Community College| 44. | Lassen College              |
| 20. | Crafton Hills College | 45. | Long Beach City College     |
| 21. | Cosumnes River College| 46. | Los Angeles City College    |
| 22. | Cuesta College        | 47. | Los Angeles Harbor College  |
| 23. | Cuyamaca College      | 48. | Los Angeles Mission College|
| 24. | Cypress College       | 49. | Los Angeles Pierce College  |
| 25. | De Anza College       |     |                             |</p>
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<td>102</td>
<td>Vista College</td>
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103. West Hills College
104. West Los Angeles College
105. West Valley College
106. Yuba College
**ILLINOIS COMMUNITY COLLEGES**

1. Belleville Area College  
2. Black Hawk College  
3. City Colleges of Chicago  
4. Danville Area Community College  
5. College of Dupage  
6. Elgin Community College  
7. William Rainey Harper College  
8. Highland Community College  
9. Illinois Central College  
10. Illinois Eastern Community College  
11. Joliet Junior College  
12. Kankakee Community College  
13. Kaskaskia College  
14. Kishwaukee College  
15. Illinois Valley Community College  
16. College of Lake County  
17. Lake Land College  
18. Lewis and Clark Community College  
19. Lincoln Land Community College  
20. John A. Logan Community College  
21. McHenry County College  
22. Moraine Valley Community College  
23. Morton College  
24. Oakton Community College  
25. Prairie State College  
26. Parkland College  
27. Rend Lake College  
28. Richland Community College  
29. Rock Valley College  
30. Carl Sandburg College  
31. Sauk Valley College  
32. Shawnee College  
33. Illinois Valley Community College  
34. Southeastern Illinois College  
35. Spoon River College  
36. State Community College  
37. Thornton Community College  
38. Triton College  
39. Waubonsee Community College  
40. John Wood Community College

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1. Alpena Community College
2. Bay de Noc Community College
3. Charles Stewart Mott Community College
4. Delta College
5. Gogebic Community College
6. Grand Rapids Junior College
7. Henry Ford Community College
8. Highland Park College
9. Jackson Community College
10. Kalamazoo Valley Community College
11. Kellogg Community College
12. Kirtland Community College
13. Lake Michigan Community College
14. Lansing Community College
15. Macomb County Community College
16. Mid-Michigan Community College
17. Monroe County Community College
18. Montcalm Community College
19. Muskegon Community College
20. North Central Michigan College
21. Northwestern Michigan College
22. Oakland Community College
23. St. Clair Community College
24. Schoolcraft College
25. Southwestern Michigan College
26. Washtenaw Community College
27. Wayne County Community College
28. West Shore Community College
KENTUCKY COMMUNITY COLLEGES

1. Ashland Community College
2. Elizabethtown Community College
3. Hazard Community College
4. Henderson Community College
5. Hopkinsville Community College
6. Jefferson Community College
7. Lexington Technical Institute
8. Madisonville Community College
9. Maysville Community College
10. Paducah Community College
11. Prestonsburg Community College
12. Somerset Community College
13. Southeastern Community College
14. University of Kentucky Community Colleges
OHIO COMMUNITY COLLEGES**

1. Cuyahoga Community College
2. Edison State Community College
3. Lakeland Community College
4. Lorain County Community College
5. Rio Grande Community College
6. Shawnee State Community College
7. Sinclair Community College
8. Southern State Community College

** validation population
APPENDIX B

PREVALIDATED QUESTIONNAIRE MATERIALS:

QUESTIONNAIRE
SAMPLE COVER LETTER
STATED AIM OF THE STUDY
VALIDITY EVALUATION FORM
PRE-VALIDATION QUESTIONNAIRE

RESPONSE SHEET

SELECTED VARIABLES AFFECTING DECISION-MAKING
IN COMMUNITY COLLEGE ACADEMIC DEANS

#A: INDICATE YOUR RESPONSES TO EACH OF THE QUESTIONS BELOW AS FOLLOWS:

(1) Indicate by a CHECK-MARK (✓) the appropriate response item . and list, where applicable, what you consider to be at least one of your major and minor areas of academic preparation on the corresponding blank.

(2) EXAMPLE:

<table>
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<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D or Ed.D Ed. Admin.</td>
<td>History</td>
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</table>

(1) YOUR HIGHEST EARNED DEGREE IS AS FOLLOWS:

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Ph.D. or Ed.D</td>
<td>__________________</td>
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<td>(b) Ed.S.</td>
<td>__________________</td>
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<tr>
<td>(c) M.A.</td>
<td>__________________</td>
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<tr>
<td>(d) M.Ed.</td>
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<tr>
<td>(e) M.S.</td>
<td>__________________</td>
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<tr>
<td>(f) B.A.</td>
<td>__________________</td>
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<tr>
<td>(g) B.S.</td>
<td>__________________</td>
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<tr>
<td>(h) B.Ed.</td>
<td>__________________</td>
</tr>
<tr>
<td>(i) Other ———</td>
<td>(Specify)</td>
</tr>
</tbody>
</table>

(2) YOU FALL IN ONE OF THE AGE BRACKETS BELOW:

| (a) 25-38 |
| (b) 33-55 |
| (c) Above 55 |

#B: AS YOU CONSIDER EACH OF THE FOLLOWING NINE ROLES LISTED ACROSS THE TOP OF THE ADJACENT PAGE, HOW CRUCIAL ARE THE NINE VERTICAL VARIABLES TO DECISION-MAKING IN EACH OF THESE NINE ROLES?

INDICATE YOUR CHOICE IN THE FOLLOWING MANNER — If you think that Variable 1, Job Requirements, is Extremely Crucial to decision-making in performing Role 1, Curriculum Planning, place a (5) in the appropriate box to indicate the highest value possible.

USE THE KEY BELOW:

KEY: EXTREMELY CRUCIAL = 5; CRUCIAL = 4; AVERAGE = 3; FAIRLY CRUCIAL = 2; NOT CRUCIAL = 1.

WORK ACROSS THE PAGE FROM THE EXTREME TOP LEFT-HAND CORNER TO THE EXTREME RIGHT. CONTINUE IN THIS MANNER.

101
<table>
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</tbody>
</table>
### RESPONSE SHEET

**SELECTED VARIABLES AFFECTING DECISION-MAKING IN COMMUNITY COLLEGE ACADEMIC SECTIONS**

1. **Indicate your responses to each of the questions below as follows:**

   1. Indicate by a checkmark (✓) the appropriate response line and list, where applicable, what you consider to be at least one of your major and minor areas of academic preparation in the corresponding blank.

   **EXAMPLE:**
   
   ✓ Ph.D. or Ed.D. Ed. minor: 
   
   **Hobbies:**

2. **Your highest degree earned is as follows:**

   **Major:**
   
   (a) Ph.D. or Ed.D.
   (b) Ed.M.
   (c) M.A.
   (d) M.S.
   (e) B.A.
   (f) B.S.
   (g) O.G.
   (h) Other
   (i) Other (Specify)

3. **You fall in one of the age brackets below:**

   (a) 25-35
   (b) 35-45
   (c) Above 55

---

### PRE-VALIDATED QUESTIONNAIRE:

**REDUCTION**

<table>
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<tr>
<th>Vertical Variables</th>
<th>Role 1</th>
<th>Role 2</th>
<th>Role 3</th>
<th>Role 4</th>
<th>Role 5</th>
<th>Role 6</th>
<th>Role 7</th>
<th>Role 8</th>
</tr>
</thead>
</table>
| *Note:* You must check one of the following nine boxes listed across the top of each page. You should then fill in the appropriate boxes in each of these nine boxes. 

**Indicate your choice in the following manner:** If you think that variable 1, job performance is extremely critical in selecting a factor in performing duty, place a ✓ in the appropriate box to indicate an above average possible. 

**Key:** 

1. Extremely critical = 1  
2. Very critical = 2  
3. Average = 3  
4. Not critical = 4  
5. Not at all critical = 5  

**Note:** The data sheet and blanking your responses in the cells, mark across the page from the extreme top left-hand corner to the extreme right. Continue in this manner.
November 13, 1979

Dr. Curtis Jefferson  
Dean of Instruction  
Cuyahoga Community College  
Cleveland, Ohio 44115

Dear Dr. Jefferson:

I need your assistance. I am writing a dissertation on how selected variables affect decision-making in the roles of the chief academic officers in community colleges. All the Ohio community colleges have been included in the validation of an instrument to measure how this decision-making process operates.

Please lend me your assistance as follows:

1. Examine the stated aim of this study as attached to the questionnaire, and evaluate how well the questionnaire might provide the information necessary to fulfill this aim.

2. Please use the enclosed evaluation form and return it in the self-addressed, postpaid envelope.

Thank you very much.

Sincerely yours,

Sylvan Lashley

Bernard Lall, Ph.D.  
Dissertation Advisor

Enclosures
STATED AIM OF THE STUDY

This study rests on the theoretical base that community college academic deans and/or chief academic officers are influenced by forces or stimuli when they make decisions.

The aim of the study is to determine the degree to which these forces or stimuli influence decision-making in each of the dean's roles.

For example, LOCAL COMMUNITY EXPECTATIONS may be Extremely Crucial to decision-making in the role of Curriculum Planning.

Read through and examine the questionnaire to determine if it can fulfill the above aim. Section A solicits preliminary information only.

NOW TURN THIS ATTACHMENT OVER AND CONTINUE WITH THE QUESTIONNAIRE

THANK YOU VERY MUCH
VALIDITY EVALUATION FORM

Indicate by a check mark (✓) below how well you think the enclosed questionnaire solicit the necessary information as implicitly requested in the stated aim of the study.

1. Very Well  ____________________
2. Satisfactory  ____________________
3. Not at All  ____________________

COMMENTS OR SUGGESTIONS:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

Thank you very much.

Signature  ____________________ (Optional)

WHY PUT OFF MAILING WHEN YOU CAN MAIL NOW?
JUST FOLD, ENCLOSE, SEAL AND MAIL.

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APPENDIX C

POSTVALIDATED QUESTIONNAIRE MATERIALS

QUESTIONNAIRE
COVER LETTER
RESPONSE SHEET
SELECTED VARIABLES AFFECTING DECISION-MAKING IN COMMUNITY COLLEGE ACADEMIC DEANS

#A: INDICATE YOUR RESPONSES TO EACH OF THE QUESTIONS BELOW AS Follows:

(1) INDICATE BY A CHECK-MARK (✓) THE APPROPRIATE RESPONSE ITEM AND LIST, WHERE APPLICABLE, WHAT YOU CONSIDER TO BE AT LEAST ONE OF YOUR MAJOR AND MINOR AREAS OF ACADEMIC PREPARATION ON THE CORRESPONDING BLANK.

(2) EXAMPLE: MAJOR MINOR
✓ (a) PH.D. OR ED.D. ED. ADMIN. HISTORY

(1) YOUR HIGHEST EARNED DEGREE IS AS FOLLOWS:

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>MINOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) PH.D. OR ED.D.</td>
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<td>(b) ED.S.</td>
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<td>(h) B.ED.</td>
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<tr>
<td>(i) OTHER</td>
<td>(Specify)</td>
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</tbody>
</table>

(2) YOU FALL IN ONE OF THE AGE BRACKETS BELOW:

| (a) 25-38 |
| (b) 39-55 |
| (c) Above 55 |

#B: AS YOU CONSIDER EACH OF THE FOLLOWING NINE ROLES LISTED ACROSS THE TOP OF THE ADJACENT PAGE, HOW CRUCIAL ARE THE EIGHT VERTICAL VARIABLES TO DECISION-MAKING IN EACH OF THESE NINE ROLES?

INDICATE YOUR CHOICE IN THE FOLLOWING MANNER — IF YOU THINK THAT VARIABLE 1, JOB DESCRIPTION, IS EXTREMELY CRUCIAL TO DECISION-MAKING IN PERFORMING ROLE 1, CURRICULUM PLANNING, PLACE A (5) IN THE APPROPRIATE BOX TO INDICATE THE HIGHEST VALUE POSSIBLE.

KEY:
EXTREMELY CRUCIAL = 5; CRUCIAL = 4; AVERAGE = 3; HARDLY CRUCIAL = 2; NOT CRUCIAL = 1.

NOW GO TO THE ADJACENT PAGE AND RECORD YOUR RESPONSES IN THE CELLS. WORK ACROSS THE PAGE FROM THE EXTREME TOP LEFTHAND CORNER TO THE EXTREME RIGHT. CONTINUE IN THIS MANNER UNTIL YOU HAVE FILLED ALL THE CELLS WITH NUMBERS OF YOUR CHOICE.

c: sylvan lashey
andrews university
january 1980

108
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C: sylvan lashley
andrews university

January 1980

109
**RESPONSE SHEET**

**SELECTED VARIABLES AFFECTING DECISION MAKING IN COMMUNITY COLLEGE ACADEMIC DEGREES**

1A. Indicate your responses to each of the questions below as follows:

1B. Indicate by a check mark (✓) the appropriate response item and list, where applicable, what you consider to be at least one of your major and minor areas of academic preparation in the following blank.

1C. Your highest earned degree is as follows:

1D. Indicate whether the following questions are true or false:

1E. You fall in one of the following brackets below:

1F. As you consider each of the following rows, place the appropriate check mark in the column for the highest variable in decision-making in your opinion. Indicate your choice in the following manner. If you think that variable 1 is the determination, place a 1 in the appropriate box to indicate the highest value possible.

### EXPLANATION


How to use the adjacent page and record your responses in the cells. Work across the page from the extreme top to the extreme right. Continue in this manner until you have filled all the cells with numbers of your choice.

T. L. L. Sch mystery

January 1964
Dear

I am writing a dissertation on the chief academic officer of the community college, sometimes referred to as the academic dean, the vice-president of instruction or academic affairs. A recent review of the relevant literature suggests that there are several variables which influence decision-making when community college academic deans and/or chief academic officers perform various roles.

I have selected the states of California, Illinois and Michigan in which to conduct this study. The questionnaire has already been validated and pre-tested in the states of Ohio and Kentucky. The questionnaire is drawn up in the form of a matrix: roles are listed in horizontal fashion and selected variables in vertical fashion. A number value will be used to indicate the strength of each response.

I would be extremely grateful if you could assist me in completing this study by taking a few moments of your busy schedule to complete the enclosed one-page questionnaire.

Please include the name of your community college on the questionnaire if you desire a brief abstract of the results of this study.

Sincerely,

Sylvan Lashley
Doctoral Student

Bernard M. Lall, Ph.D.
Dissertation Advisor

P.S. JUST FOLD, ENCLOSE, SEAL & MAIL IN THE STAMPED, SELF-ADDRESS ENVELOPE.
GOOD-MORNING SIR/MADAM

JUST A BRIEF REMINDER:

IF YOU HAVE ALREADY RESPONDED TO THE ENCLOSED QUESTIONNAIRE MAILED YOU SOME WEEKS AGO

PLEASE IGNORE THIS ONE

IF NOT, SIMPLY COMPLETE, ENCLOSE & MAIL TODAY

Your assistance is crucial in the progress of the study

Remember to enclose your name and College address if you desire to have the results of this study mailed to you.

Sincerely,

Sylvan Lashley
Andrews University
Beechwood D-41
Berrien Springs, MI 49103

Sylvan Lashley
April 8, 1980

DEAR PARTICIPANT:

WHAT WAS YOUR FIRST REACTION WHEN YOU SAW THAT PERSONAL STAMPED ACROSS THE FRONT OF YOUR ENVELOPE?

(1) CURIOSITY?
(2) DISGUSTING GRADUATE STUDENT?
(3) PERSISTENT MAN?
(4) "OH NO, NOT HIM AGAIN".
(5) CAN'T THESE UNIVERSITIES BRIDLE THEIR STUDENTS AND STOP THEM FROM PESTERING BUSY PEOPLE?

. . . JUST WANTED TO SAY THANKS FOR YOUR TIME AND EFFORT IN HELPING ME COLLECT THIS DATA. BY NOW, YOUR COMPLETED QUESTIONNAIRE MUST BE WELL ON THE WAY. IF NOT, IT'S NOT TOO LATE TO CATCH THE FLIGHT BACK EAST, TO MICHIGAN.

NO NEED TO THUMB THROUGH YOUR DESK FILES. JUST FILL OUT AND MAIL THIS ONE.

Most Sincerely,

Sylvan Lashley
Doctoral Candidate for the Ed.D.
APPENDIX E

COLLEGES REQUESTING ABSTRACT BY STATE
COLLEGES REQUESTING ABSTRACT BY STATE

State of Kentucky
1. Paducah Community College
2. Lexington Technical Institute
3. Elizabethtown Community College
4. Jefferson Community College

State of Michigan
1. Macomb County Community College
2. Kellogg Community College
3. Lake Michigan College
4. Highland Park Community College
5. Northwestern Michigan Technical College

State of Illinois
1. Joliet Junior College
2. Danville Community College
3. State Community College
4. Prairie State College
5. Illinois Central
6. Morton Community College
7. Lewis Clark Community College
8. Kishwaubee Community College
9. McHenry County Community College

State of California
1. Ventura Community College
2. El Camino Community College
3. Gavilan Community College
4. Citrus Community College
5. Orange Coast Community College
6. Glendale Community College
7. Imperial Valley Community College
8. Los Angeles Harbor College
9. Long Beach City College
10. Cuyamaca Community College
11. City College of San Francisco
12. La Mission Community College
13. College of the Siskiyous
14. Cerro Coso Community College
15. College of San Mateo
16. Rio Hondo Community College
17. Butte Community College
18. Fullerton Community College
19. Santa Barbara City College
20. Feather River College
21. Sacramento City College
22. Shasta Community College
23. West Hills Community College
24. Hartnell Community College
25. San Joaquin Delta Community College
26. Modesto Junior College
APPENDIX F

STATISTICAL CALCULATIONS AND COMPUTER PRINTOUTS

FORMULAE AND PROCEDURAL CALCULATIONS:
MANN-WHITNEY U TEST

COMPUTER PRINTOUT: CATEGORICAL SCALING AND
SCALE VALUES

FORMULAE AND PROCEDURAL CALCULATIONS:
KENDALL'S COEFFICIENT OF CONCORDANCE: W

POWER ANALYSIS BY PROPORTIONS
FORMULAE AND PROCEDURAL CALCULATIONS: 
MANN-WHITNEY U TEST

The purpose of the Mann-Whitney U test was to compare the relative rank of the internal and external variables for each of the nine roles. The equation used for determining the U statistic (Siegel, 1956) was as follows:

\[ U = N_1 N_2 + \frac{N_1(N_1 + 1)}{2} - R_1 \]

where \( N_1 \) = the number of scale values in group 1 and \( R_1 \) = the number of ranks for group 1, and \( N_2 \) = the number of scale values in group 2; \( R_2 \) = the number of ranks for group 2. A transformation formula of \( U = N_1 N_2 - U' \) (Siegel, 1956) was applied in each case to test for the smallest value of U.
TRANSFORMATION: RAW DATA
TO SCALE VALUES—
CATEGORICAL SCALING

A tally program was run to total the number and percentage of
times a response (that is, a 1 or 2 or 3 or 4 or 5) was attributed to
each role for each of the internal-external or dependent variables.
Total samples follow for each of roles 1 through 9. A value of 0 in-
dicated that there was no response in some of the cells (see actual
questionnaire, sections A and B, for fuller explanation of response
method).

From the transformation, categorical scale values were deter-
mined for each role. A constant of +.18 was added to each value to
negate the presence of -.18 so as to make for facility in calculations.
For example, in role 1, Curriculum Planning, variable 1, Require-
ments of the Job Description, received a scale value of -.1795E 00.
This value was computed at -.18, but +.18 added to it so as to make
for constancy in further calculations. Thus -.1795 or -.18 became
0.00 and for role 1, variable 2 became 1.05. These values appear
below.
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## CATEGORICAL SCALE VALUES

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VALUES OF BOUNDARIES BETWEEN CATEGORIES
(ROLES 1-9)

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DEGREE OF AGREEMENT = -0.2323

ROLE 1

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DEGREE OF AGREEMENT = -0.2423

ROLE 3

128
VALUES OF BOUNDARIES BETWEEN CATEGORIES
(ROLES 1-9—Continued)

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ROLE 4

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ROLE 5

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ROLE 6

DEGREE OF AGREEMENT = 0.015441
### VALUES OF BOUNDARIES BETWEEN CATEGORIES

(ROLES 1-9—Continued)

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**ROLE 7**

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**ROLE 8**

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**ROLE 9**

**DEGREE OF AGREEMENT = .022919**

*STOP* 0
The purpose of this statistical test is to determine the degree of consistency among several items when these are ranked by N judges. According to Siegel (1956, p. 23), the equation for the statistic W is expressed thus:

\[ W = \frac{s}{\frac{1}{12} k^2 (N^3-N)} \]

where \( s = \frac{(R_i - \bar{R})^2}{N} \) or the sum of squares of the observed deviation from the mean of \( R_i \). From table 19, it can be calculated that the mean of \( R_i = 40.5 \), so that \( \bar{R} = 40.5 \). Using the formula above, first to calculate \( s \), each column total is subtracted from \( \bar{R} \), squared, and then summed. For these calculations, \( s = 1221.5 \), which is also expressed as:

\[
(40.5-33.5)^2 + (60-40.5)^2 + (40.5-25.5)^2 + (41-40.5)^2 + (47-40.5)^2 \\
+ (40.5-26)^2 + (40.5-34)^2 = 49 + 380.25 + 225 + 25 + 272.25 + 42.25 + 210.25 + 42.25 = 1221.5.
\]

Using the equation for \( W \), now that \( s \) has been calculated, the following calculations are obtained:

\[
W = \frac{1221.5}{\frac{1}{12} (64)(93-9)} = \frac{1221.5}{5.33(720)} = \frac{1221.5}{3837.60} = 0.32
\]

The formula for testing the significance of \( W \) is as follows:

\[ X^2 = k(N-1)W = 8(9-1) \cdot 0.32 \text{ which is equal to an observed value of 20.48. With N-1 degrees of freedom (df), in order to determine the probability associated with the occurrence under the null hypothesis.} \]
of any values as large as the observed values for $W(20.48)$, it is discovered that $X^2$ equals 20.48 with 8 degrees of freedom (df) has a probability of occurrence under the null hypothesis of $p \leq .01$. 

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ANALYSIS OF POWER BY PROPORTIONS

The purpose of this section is to discuss the power of this study and present some calculations of power.

If we were to infer from a sample of 165 which is our working N, to a population of \( N = 189 \) or our total number of community academic deans in the four states, it is obvious that the power of our test would be normally high because of our large gamma or effect size (our response rate was 87.30 percent). In fact, we may have almost no need to use inferential statistics, especially if we are inferring to our population of 189 community college academic deans.

However, this may limit the conclusions of our study. Using the population total of the number of community colleges in the United States in 1974 as 1,141, and assuming from the statements reviewed that indeed 230 to 280 new community colleges were expected to be in operation by 1980, conservatively our estimate of community colleges at present would be in the region of 1,400. Using our sample of 165, it can still be shown that such an N would be sufficient to give us respectable power if we were to infer to 1,400 community colleges.

However, we cannot technically (statistically) infer to all community college academic deans in the United States since our deans were not randomly selected from all community college academic deans in the United States, and since our community colleges were not randomly selected from all the community colleges in the country. Furthermore, our methodology indicates that some states had different
community college systems, for example, Indiana and Wisconsin.

To resolve this seeming impasse, we can do two things:

1. Assume that the community colleges used in our study represent a national norm of comprehensive-type community colleges

2. Prove that even if the number of comprehensive community colleges stood at say 1,500, our present N of 165, had it been statistically randomly selected, could still have been adequate enough to give us acceptable power (.80).

Having proven this, it may be possible for us to make general conclusions concerning all community colleges having comprehensive-type programs. Cohen (1977) and Welkowitz, Ewen, and Cohen (1971) suggest a formula for determining the test of the proportion of a single population. The null hypothesis is equal to some specific value or that \( H_0: \pi = \pi_c \). Usually, \( H_0 \) is set at .50—there is no statistically significant difference between \( H_1 \) and \( H_0 \) (\( H_1 = .87 \))

"For the test of a proportion from a single population, the effect size \( Y \), and \( \delta \) are defined as follows" (Welkowitz, Ewen, & Cohen, 1971);

\[
Y = \frac{\pi - \pi_0}{\pi_0(1-\pi_0)}
\]

\[
\delta = Y \sqrt{N}
\]

From our response rate of 87.30, or 87.00 to use round figures, \( H_1 = .87 \) and \( H_0 = .50 \), we obtain the following calculations:

\[
Y = \sqrt{\frac{.87-.50}{.50(1-.50)}} = .37 \quad .74 \text{ or } Y = .74
\]

Then, since \( Y = .74 \), and we have our population size (189 academic deans in all of the four states), we can calculate \( \delta \) (delta). After consulting our power tables, with an alpha of .05, a gamma of .74, and a delta of 10.17 (\( \delta = .74 \sqrt{189} = 10.17 \)), the power = < .99.


Barzun, Jacques M. "Deans Within Deans." Atlantic Monthly 175 (February 1945): 76.


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Mayhew, Lewis B. "Shared Responsibility of the President and the Dean." The North Central Association Quarterly (October 1957): 188.


Meyers, Richard S. "The College Dean or It's Difficult to Save Your Sanity When You're the Peanut Butter in a Peanut Butter Sandwich." *Community College Social Science Quarterly* 5 (Summer-Fall, 1975): 70-72.

Milner, Clyde A. *The Dean of the Small College*. N.p., Christopher Publishing House, 1936.


VITA

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Employment:

- History/Geography teacher, West Indies College High School, 1974-1975
- High School Principal, West Indies College High School, 1975-1977
- Instructor, History and Education Departments, West Indies College, 1974-1977
- Chairman, Division of Humanities, West Indies College, Mandeville, Jamaica, 1980-

Publications:


Professional Memberships:

- Phi Delta Kappan
- Association of Adventist Historians
- American Educational Research Association
- Association of Supervision and Curriculum Development
- Council of Educational Facility Planning
- Commonwealth Council for Educational Administrators