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ORGANIZATIONAL STRUCTURE IN SELECTED TYPES OF HIGHER EDUCATION INSTITUTIONS AND LEADERSHIP FUNCTIONS OF CONTINUING EDUCATION ADMINISTRATORS IN OHIO

The Ohio State University

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ORGANIZATIONAL STRUCTURE IN SELECTED TYPES OF HIGHER
EDUCATION INSTITUTIONS AND LEADERSHIP FUNCTIONS OF
CONTINUING EDUCATION ADMINISTRATORS IN OHIO

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosphy in the Graduate
School of The Ohio State University

by

Phyllis Carder Baker, B.A., M.Ed.

The Ohio State University
1983

Reading Committee: Approved By
Dr. David L. Boggs
Dr. Edwin G. Novak
Dr. Dewey A. Adams

David L. Boggs
Adviser
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VITA


1956 . . . . . . . . . . R.T. (Radiologic Technologist), Marietta Memorial Hospital, Marietta, Ohio


1965 - 1980 . . . . . . Adult Services Coordinator, Public Services Coordinator, Assistant Director, Acting Director, Washington County Public Library, Marietta, Ohio

1976 . . . . . . . . . . B.A., Marietta College, Marietta, Ohio

1979 . . . . . . . . . . M.Ed., Ohio University, Athens, Ohio

1980 - 1983 . . . . . . Graduate Research Associate, The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio

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CHAPTER I
INTRODUCTION

Continuing education administrators in higher education
serve in diverse settings and face complex and challenging
tasks. Richman and Farmer (1974), note that administration
in education organizations "involves strategy, innovation,
initiating and bringing about change, creative problem
solving and decision making, actively seeking out
alternatives and opportunities, reforming goals and
priorities, redeploying resources, negotiating, resolving
conflicts, dynamic or active leadership, diplomacy,
statemanship, and a high degree of risk taking and
entrepreneurship" (p. 14). White and Belt (in Knox, 1980)
state that "administrative leadership is critical to the
future of adult education" (p. 216), and Knox (1982) suggests
leadership strategies for meeting new challenges in
continuing education.
The final report from The Task Force on Lifelong Education, Michigan State University, states that:

The vice president for lifelong education will have as one of his persistent and important tasks negotiating and monitoring relationships with urban, county, state, and federal government; eliciting and maintaining cooperation; sharing evaluation and planning with bonafide representatives of disparate participant groups; and maintaining an accurate flow of interpretation of the University's intentions and functions in lifelong education (p. 70).

According to the same report, the healthy development of lifelong education in the University depends on:

(1) Willing contribution and change in many academic and service units; and (2) The vision, diplomacy, autonomy, and leadership ability of its general administrative officer and his staff (p. 2).

The literature of continuing education emphasizes the need for active and dynamic leaders and numerous authors have written about the leadership function. Many of their comments are based on the psychological perspective of leader behavior adapted from organizational behavior. White and Belt (in Knox, 1980), for example, use a continuum of leadership developed by Tannebaum and Schmidt (1959, 1973), and Knox (1982) cites Fiedler's Contingency Theory of Leadership behavior to illustrate leadership styles.
Traditional views of administration (Taylor, Fayol) focus on the needs of the organization and not on the needs of the individual. In recent times however, the scientific management trend initiated by Taylor has been modified and added to by the human relations movement. Elton Mayo and his associates argued that in addition to finding technological methods to increase output, it was beneficial to managers to look into human affairs. Barnard's classic work, *The Function of the Executive* (1938) seems to reflect leadership concerns from both the scientific management and human relations schools of thought (Hersey and Blanchard, 1977, p. 90).

The trait theory of leadership is perhaps the oldest theory of leadership effectiveness. Its basic concept is the idea that leadership effectiveness is determined by personal traits or characteristics (Bobbitt, Breinholt, Doktor, and McNaul, 1978). In summarizing the literature of the trait approach, E.D. Jennings (1961) concluded that "Fifty years of study have failed to produce one personality trait or set of qualities that can be used to discriminate leaders and nonleaders" (in Bobbitt, Breinholt, Doktor, and McNaul, 1978, p. 17).
Current organizational behavior literature seems to support the situational or leader behavior approach to leadership effectiveness (Hersey & Blanchard, 1977). This approach suggests that leadership is a dynamic process, varying from situation to situation with changes in leaders, followers, and situations (p. 89). The focus in the situational approach to leadership is on observed behaviors of individuals. Proponents of the situational approach to leadership include Tannebaum and Schmidt (1958), Fred Fiedler (1967), and Hersey and Blanchard (1977).

Thus, the literature on leadership in organizations is large, but the findings are few (Meyer, 1978, p. 202). "No simple relationship of leadership style to the performance of workers has been found according to Campbell and others, 1970; Graen, Dansereau, and Minami, 1972" (in Meyer, 1978, p. 203). According to Meyer, the link between leadership style and performance of workers is either moderated by other variables or non-existent. Meyer also writes that "sociological theories of organization have all but ignored the question of leadership" (p. 203). In doing so, one might conclude that leadership is not a concern for large organizations. Meyer notes that to overlook leadership is to violate common sense, and more importantly, it overlooks the connection between leadership and variables describing
organizational structure that we do not normally associate with effectiveness or performance.

Sociologists view leadership from a perspective that is noticeably different from the situational approach. The sociological perspective of organizational analysis views leadership as a dependent variable (Perrow, 1970, p. 6) which depends upon or follows from something else. Moreover, sociologists note that the setting or task independently determines variation in leadership. Perrow states that "apparent leadership problems are often problems of organizational structure" (p. 10). He suggests that the leadership function may lie in the structure of the organization rather than in the characteristics of the people who head it.

Bobbitt and Behling (1981) state that the organizational behavior literature treats structure from both a global perspective and a dimensional perspective. The global perspective deals with differences between mechanistic and organic structures. Mechanistic structures (Burns & Stalker, 1961, p. 120) are characterized by precise definitions of roles; duties; responsibilities; and a hierarchy of authority. Organic structures refer to flexible and ill-defined roles, the absence of hierarchy of authority, and lateral rather than vertical communication.
The dimensional perspective of organizational structure deals most frequently with: (1) centralization; (2) formalization; (3) complexity; and (4) configuration (Miles, 1980, p. 23). Miles states that although these "general dimensions have been used primarily to distinguish between organizations, they may also be helpful in characterizing differences between major units within organizations" (p. 23). These dimensions are not discrete. Organizations are not simply mechanistic or organic (Bobbitt and Behling, 1981). Moreover, organizations are not simply formal or informal, centralized or decentralized. "Rather, they possess varying degrees of these structural characteristics and may be compared in terms of their profiles on these dimensions" (Miles, p. 23). Miles (p. 27) continues by noting that studies have shown that attempts to characterize organizations by their overall structure leaves much unsaid about their true nature. Thus, any attempt to diagnose organizational structure must focus on variance within the organization.

White and Belt (in Knox, 1980, p. 5) write that "an administrator of an adult education agency usually deals with the structure of two organizations, his own agency and the parent organization" (p. 217). Thus, the continuing education unit may be a dependent unit of a parent organization with
major purposes other than educating adults. The adult education agency may be a unit in an educational organization or it may be part of a labor organization, public library, or museum.

Continuing education in higher education is one example of unit structure within total organization structure. It operates within two structures; the structure of the parent organization, and the structure of the unit itself. There are administrators for both structures. Persons serving in these administrative positions have different goals and priorities. College and university presidents, for example, are generally concerned with overall functions of the organization. Continuing education administrators, on the other hand, are concerned with unit goals and priorities and how they contribute to the parent organization. The continuing education unit is dependent on the parent organization, yet not everyone may agree on the function and contribution of the continuing education unit.

Lauffer (1978, pp 128, 129) emphasizes the need for structural accommodations between the continuing education unit and the host organization. He suggests assessing the continuing education unit's functions and contributions in relation to the host organization's goals. However, as previously noted, structures vary within organizations
thereby indicating that structural accommodations may be
different in different types of institutions.

Baldridge, Curtis, Ecker, and Riley (1978) write that "there are major differences between academic institutions and other kinds of organizations" (p. 8). In a national study of American colleges and universities conducted at the Stanford Center for Research and Development in Teaching, the authors found that:

The organizational characteristics of academic institutions are so different from other institutions that traditional management theories do not apply to them. Their major goals are more ambiguous and diverse. They serve clients instead of processing materials. Their key employees are highly professionalized. They have unclear technologies based more on professional skills than on standard operating procedures. They have "fluid participation" with amateur decision makers who wander in and out of the decision process (p. 9).

According to the authors, "traditional management theories cannot be applied to educational institutions without carefully considering whether they will work well in that unique setting" (p. 10). Based on the Stanford Project, one might expect the leadership functions of continuing education administrators in higher education to be different from leadership functions in other organizations. One might also expect variance in leadership functions in different types of academic organizations. Baldridge et. al., for example,
found that as they progressed from "Community Colleges to Public Colleges to Elite Liberal Arts Colleges to Multiversities, (1) the more the faculty are influential, (2) the less the administrators dominate, (3) the less the environmental influences affect the institution's autonomy, and (4) the less likely it is that unions will be elected" (p. 11). Thus, leadership functions of continuing education administrators may vary depending on the type of academic institution. This idea is congruent with the sociological perspective of organizational analysis based on structural variance within the organization (Perrow, 1970; Meyer, 1975; and Miles, 1981).

In writing about educational organizations, March uses the word "ambiguity" to describe the environment for decision making. Cohen, March, and Olsen (1972) use a "garbage can" metaphor in describing educational organizations as "organized anarchies" (Sergiovanni and Carver, 1980). According to the authors, characteristics of organized anarchies are: (1) disagreement over and difficulty in articulating goals and preferences; (2) unclear technologies; and (3) fluid participation.

Weich (1976) writes that educational organizations are "loosely coupled systems." Ecker (1979) states that by "loose coupling" Weick intends to convey the image that
coupled events are responsive but that each event also preserves its own identity and some evidence of its physical or logical separateness" (p. 25).

Meyer and Rowan (in Meyer, 1978), provide an analysis of educational organizations as loosely coupled systems and organized anarchies. They write that "modern education today takes place in large scale, public bureaucracies" (p. 92). They continue by saying that instruction, the main activity of educational organizations, is largely removed from organizational structure.

Thus, the problem for continuing education administrators may be how to provide necessary leadership in diverse settings in higher educational organizations that are "loosely coupled," "organized anarchies" largely removed from organizational structure.

PROBLEM STATEMENT

Current literature of continuing education emphasizes the need for administrative leadership in continuing education in higher education. Richman and Farmer (1974); White and Belt (in Knox, 1980); Alan Knox (1982); and authors from the Task Force on Lifelong Learning, Michigan State Univeristy write about the need for active or dynamic leadership. Generally,
these authors approach leadership from a micro perspective by focusing on persons in leadership positions in continuing education. They write about ways continuing education administrators may become more effective in their jobs. Their suggestions are important and may be helpful to continuing education administrators. However, little consideration has been given to the relationships between organizational structure and leadership functions of continuing education administrators.

Perrow (1970) and Meyer (1978) write about leadership from a macro perspective. They state that apparent leadership problems may be due to organizational structure. The macro or sociological perspective of organizational analysis views leadership as a dependent variable which depends upon or follows from something else. Sociologists suggest that the setting or task independently determines variation in leadership. In keeping with the sociological perspective, Baldridge et. al. report that there are major differences in academic institutions and other organizations. According to the authors, these differences are so great that traditional management theories cannot be applied to academic organizations. Moreover, there are major differences in different types of educational organizations.

Based on a review of literature and discussions with continuing education administrators, this writer has
concluded that there is a need to study relationships between organizational structure and leadership functions of continuing education administrators. This study is concerned with leadership functions of continuing education administrators in different types of higher academic institutions. Specifically, the researcher will attempt to determine what relationships exist between organizational structure and leadership functions in various kinds of educational organizations.

PURPOSE OF THE STUDY

The purpose of this study is to investigate the possible relationships between the structure of the parent organization and leadership functions of continuing education administrators in selected types of higher education organizations.

Organizational structure can be conceptualized in many ways. Bobbitt and Behling (1981) define structure as "the systems of communication, of authority (or other roles), and of work flow. Structure provides for the division of work and its coordination toward a common goal" (np). Perrow (1970) writes about technology, rules and regulations, and environmental influences as facets of organizational structure. In describing the structure of continuing
education programs, Lauffer (1978) writes about configuration, e.g., tall or flat shaped organizations (p. 134). Lauffer also refers to the formal structure of the continuing education program and states that "by structure, we mean the logic or organization" (p. 127). For the purpose of this study, structure will be comprised of three dimensions. They are formalization, centralization, and complexity. These dimensions are defined by authors Bobbitt and Behling (1981) and Miles (1980).

Formalization is defined as the number of rules, regulations, and procedures within a system and the degree to which they are specified (written) and/or adhered to. Centralization refers to the locus of control for decision making authority. (Bobbitt and Behling, 1981, np)

Complexity refers to the number of management levels on the vertical dimension. (Miles, 1980, p. 23)

The leadership functions of continuing education administrators in higher education can also be conceptualized in many ways. For example, Robbins (1976, p. 18) writes that in the "leading function, we guide and supervise subordinates. This function carries out the objectives established in planning. Basically, leading consists of supervision, motivation, and communication." McGregor (1960, p. 33), states that leadership is basically a relationship between the person assigned to leadership responsibility or
who emerges as a leader and those with whom he must
collaborate in achieving prescribed and collaboratively
selected goals." In another view of leadership, Alan Knox
(1982) emphasizes the necessity for developing leadership
strategies to enhance decision making capabilities. Meyer
(1978, p. 12) argues that the function of leadership is to
mediate between environmental uncertainties and organizational
structure.

There appears to be no universally accepted concept of
leadership. In addition, the phrase continuing education has
no standard meaning (Kempfer, 1979, p. 23). For example,
continuing education is: Professional education; management
training; personal development; vocational education and
training; consumer education; arts and crafts; and studies in
liberal arts to name a few. Some of these programs have
credit status and some are non-credit. According to Kempfer
(1979), there are wide differences in definitions about
continuing education among continuing education
administrators carrying the same job title. This writer
assumes there would also be differences among programs
afforded credit or non-credit status in different types of
academic institutions. If this assumption is correct, then
there may be differences between leadership functions
performed for credit programs and non-credit programs.
For the purpose of this study, leadership functions will refer to three activities presumed to be the responsibility of the continuing education administrator. These activities are decision making, collaboration; and goal setting.

The problem to be studied is stated in the following question:

What are the relationships between organizational structure (formalization, centralization, and complexity) in selected types of higher education organizations and leadership functions described as decision-making, collaboration, and goal-setting activities of higher continuing education administrators?

The population for the study will be continuing education administrators in higher educational organizations in Ohio. Criteria for the selection of academic institutions will be based on the 1981-82 Handbook of Ohio Colleges and Universities and on the modification of a typology developed by Baldridge, Curtis, Ecker, and Riley (1978). Briefly stated, Baldridge et. al. determined that it was necessary to build an institutional typology because of the vast differences in academic institutions. They reviewed a typology established by the Carnegie Commission on Higher Education (1973) but found that it did not serve their research purposes. Accordingly, they reduced the Carnegie categories to a typology suitable for the Stanford Project.
The typology used for this study will be adapted from the revised Carnegie classification (1976) and the typology used by Baldridge et al. It will be explained in detail in Chapter III, Research Design.

The researcher will select representatives from higher educational organizations in Ohio. Persons serving as continuing education administrators will be selected from the following institutional categories.

Group A - Research and Doctorate Granting Universities
Group B - Comprehensive Colleges and Universities
Group C - Liberal Arts Colleges
Group D - Two Year Institutions

Definitions of institutional groups and details concerning classification of institutions will be presented in Chapter III.

DEFINITION OF TERMS

Organizational structure: White and Belt (in Knox, 1980, p. 217) note that "an administrator of an adult education agency usually deals with the structure of two organizations, his own agency and the parent organization." For the purpose
of this study, structure is defined as formalization, centralization, and complexity. These dimensions of structure will be applied to the parent organization. (1) **Formalization** is defined as the number of rules, regulations, and procedures within a system and the degree to which they are specified (written) and/or adhered to (Bobbitt and Behling, 1981). Miles (1980) defines formalization as the extent to which expectations regarding work means and ends are explicit (p. 23). In this study formalization will refer to the organization's written specifications for the individual performance of the continuing education administrator and the unit's tasks. For example, it will be necessary to know the specificity of organizational expectations and the degree to which they are followed. (2) **Centralization** is defined as the locus of decision-making authority along the vertical dimension of organizational structure (Miles, 1980, p. 23). In this study centralization will refer to participation granted to continuing education administrators in work planning and organizational decision-making. (3) **Complexity** refers generally to the number of different components of the organization (Miles, 1980, p. 24). There may be vertical or horizontal complexity. In this study complexity will refer to the number of management levels on the vertical dimension (Miles, 1980, p. 24).
Leadership functions: Leadership functions are defined as the decision-making, collaboration, and goal-setting activities of the continuing education administrator. Leadership functions refers to activities characteristic of the person in charge rather than individual personality traits.

(1) Decision making refers to decisions made by the continuing education administrator concerning (a) staffing the CE unit; (b) finances and budgeting for the CE unit; (c) program offerings for the CE unit; and (d) marketing the programs offered by the CE unit (Knox, 1982, p. 24, 37, 67, 53). (2) Collaboration refers to the continuing education administrator's efforts to seek out and involve faculty members in the same academic institution who have potential for planning and conducting programs (Knox, 1975, p. 6).

(3) Goal setting refers to securing agreement about the main continuing education emphases. These agreements typically result from much interaction and negotiation among the continuing education administrator, central administration, academic affairs, and other internal planning committees (adapted from Knox, 1975, p. 5).

Continuing education unit: The continuing education unit is defined as the division or department in the higher educational organization having overall responsibility for continuing education programs.
Continuing education administrator: The continuing education administrator is the person who has responsibility for the continuing education unit in the higher educational organization.

Higher educational organization: Higher educational organization refers to (A) Research and Doctorate Granting Universities, (B) Comprehensive Colleges and Universities, (C) Liberal Arts Colleges, and (D) Two Year Institutions.

RESEARCH QUESTIONS

Based on current literature and the sociological perspective of organizational analysis, the following general research question was formulated.

To what extent does the organizational structure of selected types of higher education organizations covary with the leadership functions of continuing education administrators?

Specific research questions to be tested are:

1. To what extent does formalization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?
2. To what extent does centralization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?

3. To what extent does complexity in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?

4. To what extent does formalization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

5. To what extent does centralization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

6. To what extent does complexity in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

Leadership functions for this study are decision making, collaboration, and goal setting. They are defined below. Decision making refers to decisions made by the continuing education administrator concerning his unit. Respondents to a mailed questionnaire will be asked questions about their activities regarding the following:

1. Staffing the CE unit. Staffing includes advertising, recruitment, and hiring faculty and clerical support staff. Staffing also includes orientation and staff development.
2. Finances and budgeting for the CE unit. Financial aspects will include questions about whether the CE unit has its own budget, and if the administrator has responsibility for administering the budget.

3. Program offerings for the CE unit. Program offerings refers to decisions made about what programs are offered and when they are offered. In general, questions about program offerings will be designed to discover the extent to which the respondent conducts needs assessments and implements programs.

4. Marketing programs to advertising continuing education programs in the media. Questions about marketing will focus on administrator's decision-making activities and responsibilities concerned with marketing CE programs.

Collaboration refers to the continuing education administrator's efforts to seek out and involve faculty members in his institution who have potential for planning and conducting programs in continuing education. Respondents will be asked if they perform the following activities:

1. Seek out faculty members (in the same institution) to teach in CE?

2. Ask faculty members (in the same institution) for CE program suggestions?
3. Implement CE programs suggested by faculty?
4. Reward faculty for participation in CE activities?
5. Work with internal committees comprised of faculty and administrators within the institution concerning CE activities?

Goal setting refers to securing agreement about the main continuing education emphases. Respondents will be asked the following types of questions:

1. Do you serve on a council for academic affairs?
2. Does the council of academic affairs have responsibility for approval of CE program offerings?
3. What kinds of administrative actions occur in planning CE activities?
4. Where do you fit into goal setting activities for the CE unit?
5. Where do you fit into goal setting activities for the institution?

Goal setting refers to securing agreement about the main continuing education emphases. For example, at some higher education institutions continuing education programs are not subject to review by academic affairs, the faculty senate, or other internal committees. At these institutions the continuing education administrator has a great deal of autonomy in deciding the main continuing education emphases.
Conversely, some CE administrators must secure the approval of faculty organizations, college presidents, and boards of trustees before goal setting can occur for continuing education programs.

LIMITATIONS

This study will be limited to continuing education administrators from selected types of higher education institutions in Ohio. Although it would be useful to investigate a larger population, it is not administratively and economically feasible to do so.

The study will be limited to continuing education administrator's responses concerning leadership functions and organizational structure. No attempt will be made to measure faculty or other administrator's perceptions inside or outside the institution.

ASSUMPTIONS

In the course of preparing this study, the writer made the following assumptions.

The leadership function of the continuing education administrator is vital to the well-being of the continuing
education unit. According to Knox (1975), Kleis (nd), Harrington (1977), Knowles (1970), and other writers in continuing education, leadership is a major facet of administration.

Another assumption made by some writers, most notably Alan Knox (1975), is that continuing education is shifting from the margin to the core of the university. The term "marginality" was coined by Clark (1968, pp 56-57) to describe the insecure position of adult education on many college campuses. Knox cites societal and institutional trends that he claims indicate a "shift" of continuing education from peripheral to central status in higher education (p. 1). According to Knox, this shift indicates a need for dynamic leadership.

Due to the many definitions of leadership functions and continuing education, and the status of credit versus non-credit programs in different academic institutions, this writer assumes that leadership functions performed by continuing education administrators may vary depending on whether program offerings have credit or non-credit status.

Finally, one may assume that the leadership function of the continuing education administrator in higher education will be explained (at least in part) by the organizational structure of the higher education organization.
SIGNIFICANCE OF THE STUDY

A review of the literature from 1957 to 1982 relevant to administrative behaviors of continuing education administrators indicates that: (1) there are various conflicts and incompatibilities faced by the dean of the evening college (Dyer, 1956); (2) the academic leader needs to spend time releasing potentialities of persons with whom she/he works (Benezet, 1974); and (3) new leaders must be negotiators and integrators of diverse phenomena (American Association for Higher Education Perspective on Leadership, 1979). After surveying related literature, and after conversations with colleagues and continuing education administrators, this writer concluded that: (1) the leadership function was a problem of significance for continuing education administrators; and (2) leadership functions may vary depending on the type of academic organization. The second conclusion is based on the writer's generalizations drawn from the findings of the Stanford Project conducted by Baldridge, Curtis, Ecker, and Riley (1978). They found that governance and management vary systematically in different types of academic institutions (p. 11).
Although the literature generally suggests that administering continuing education programs in higher education is a complex job, little, if anything, has been written describing relationships between organizational structure and leadership functions of continuing education administrators in different types of academic organizations. An objective appraisal is essential for the following reasons: (1) to provide a current description of the situation; (2) to provide a dependable base of information; (3) to provide recommendations for approaching the problem and suggestions for further research. These needs will be met in this study by: (a) conducting an extensive literature search and review; (b) developing an instrument for measuring administrator's perceptions of the leadership function as it relates to their institution; (c) by providing, through examination and interpretation of data, a reliable base of information; (d) by providing suggestions and recommendations for approaching the problem; and (e) by providing suggestions for further research.

The information from this study might be used by (1) continuing education administrators to enhance performance of the leadership function in specific types of academic organizations; (2) may have implications for leadership
functions and structural concerns related to institutions with multiple campuses; (3) may enlighten continuing education administrators as to constraints and opportunities in the performance of leadership functions.

In summary, this study examines, from a sociological perspective, the possible relationships between organizational structure in selected types of higher education institutions and the leadership functions of continuing education administrators in Ohio.

Chapter II focuses upon the literature relevant to organizational thought and structure, educational leadership, the organization of continuing education, and leadership in continuing education.
CHAPTER II

REVIEW OF RELATED LITERATURE

This review of related literature will be divided into five sections. They are: (1) Overview of Organizational Thought and Organizational Structure; (2) Organizational Thought Related to Educational Organizations; (3) Educational Administration and Leadership in Higher Education; (4) Organization of Continuing Education in Higher Education; and (5) Leadership of Continuing Education in Higher Education.

Section I

Overview of Organizational Thought

Organizations today are seen as systems, that is, a collection of interdependent parts. Move one part and you somehow influence all the other parts. Look at one or two parts and you ignore the fact that they are being influenced in simple and complex ways by a host of other parts. Also, organizations are not static - they are dynamic systems, and we have to know what the processes are by which these dynamic properties occur and why they occur. Organizations hold together, work toward goals, behave in predictable ways, grow and decline. The processes that carry out these functions are complex and are the main field of our study.

Katz and Kahn (in Litterer, 1980, p. 10)
From this passage, one can appreciate that organizations are complex and difficult to study. This section is included to (1) provide the reader with a brief history of the evolution of organizational thought; and (2) to provide a contrast between traditional management theories and organizational theory related to educational organizations.

W. R. Scott (1981) writes that "in the course of this century, three more or less distinct perspectives have been employed in the study of organizational structure" (p. 55). These three perspectives are classified by Scott as: (1) rational; (2) natural; and (3) open systems. These same three approaches, or schools of thought are called: (1) classical; (2) neoclassical; and (3) modern organization theory by W. Scott (in Shafritz and Whitbeck, 1978, pp 275-276, 280). Regardless of how one refers to them, these three perspectives or approaches constitute the evolution of organizational thought. W. R. Scott (1981) notes that "the three perspectives are partially conflicting, partially overlapping, and partially complementary to one another" (p. 55).

The rational system perspective can be traced back to Frederick W. Taylor's (1911) interest in scientific management. Scientific management placed heavy emphasis on manipulation of the division of labor through detailed
planning as the means to increase productivity (Tausky in Litterer, 1980, p. 11). According to Tausky, this requires as a necessary first step, the separation of the functions of management and labor as distinct activities (p. 12). W. R. Scott (1981), also comments that with scientific management "the activities of both managers and workers were to be rationalized; both were equally subject to the regimen of science" (p. 63).

Contemporaneous with and yet independent of scientific management were theorists who attempted to formulate administrative principles. Henri Fayol (1919), for example, wrote that "the managerial function finds its only outlet through the members of the organization (body corporate)," (Fayol, translated by C. Storrs, 1949). Fayol compiled general principles of management which he considered to be applicable across organizations. However, the translator notes that the phrase "body corporate" represents the structure as distinct from the process of organization (Henri Fayol translated in Shafritz and Whitbeck, 1978). Thus, in every organization there is a management function to be performed. Fayol's management principles aim at the success of associations of individuals and at the satisfying of economic interests.

Another branch of the rational system deals with the structure of organizations, or how to organize. Max Weber, a
German sociologist, contributed to this area by focusing on the structure of the administrative component of organization. On the basis of empirical study, Weber developed an ideal type of the bureaucratic, component of modern large-scale organizations whether public or private (Tausky in Litterer, 1980, p. 14). The essential components of Weber's ideal bureaucratic organization will not be listed here.

Interested readers are referred to the book Max Weber's Essays in Sociology by H. Gerth and C. Wright Mills, 1946, for complete information. Generally, bureaucratic organizations are characterized by:

- A fixed division of labor among participants
- A hierarchy of offices
- A set of general rules which govern performance
- A separation of personal from official property and rights
- Selection of personnel on the basis of technical qualifications
- Employment viewed as a career by participants


The rational system deals with basic questions of organization structure, but falls short of specifying with precision how to organize (Tausky in Litterer, 1980, p. 21). The rational approach also deals with basic questions of organization structure related to a mechanistic (Burns and Stalker, 1961) or a static system. This approach offers prescriptions for the design of effective organization. The
natural perspective followed the rational approach. It is also referred to as neoclassical theory by W. G. Scott (in Shafritz and Whitbeck, 1978, p. 276), or the humans relations school of organization thought according to Tausky (in Litterer, 1980, p. 21).

W. R. Scott (1981, p. 85) writes "as with the rational system perspective, the natural system perspective is an umbrella under which a number of rather diverse approaches can be gathered." For example, he mentions Elton Mayo's famous series of studies and experiments at the Hawthorne plant of the Western Electric Company (p. 86), and Selznick's institutional approach (p. 90).

The Hawthorne effect has been described explicitly by Roethlisberger and Dickson (1939), and Elton Mayo (1945). Mayo has been identified with the human relations school of organization thought which perceives leadership primarily as a mechanism for influencing the behavior of individual participants (W. R. Scott, 1981, p. 87).

Selznick's institutional approach deals with original or professed organizational goals, and actual operative goals. He contends that organizational activities often distort original goals thereby changing the goals into ends pursued by operative goals. For example, the work of Burton Clark (W. R. Scott, 1981, p. 93) was influenced by Selznick's
in institutional approach. Clark (1965) studied an adult education program in Los Angeles and reported on the program's marginal organizational and institutional status. Because of the marginal status, the program only retained those programs with the highest enrollment regardless of student demand. In speaking about Clark's study, W. R. Scott (1981) notes "lacking full legitimacy, only those parts of the program that could attract large numbers of students were retained, with other academically valuable but less popular offerings losing out to the enrollment economy" (p. 93).

Thus, the natural perspective of organization theory encompasses neoclassical theory related to the human relations movement and other approaches. It gives evidence of accepting rational, classical thought (goals, structure), but superimposes on it modifications resulting from individual behavior (the Hawthorne effect). Open systems (W. R. Scott, 1981) or modern organization theory (W. G. Scott, 1961, in Litterer) moves beyond rational and natural perspectives to integrate the interactions, processes, and goals of the organization viewed as a system.

This section began with a passage from the work of Katz and Kahn (1966), proponents of the open systems concept of organization thought. According to Kahn and Katz (1976), "the open system approach . . . begins by identifying and mapping the repeated cycles of input, transformation, output,
and renewed input which comprise the organizational pattern" (in Litterer, 1980, p. 91.) To view organizations as open systems requires study of external environmental influences as well as internal relationships, structure, and interdependence in the system.

In speaking of organizations as open systems, W. R. Scott (1981) writes that not all environments place the same demands on organizations. According to Scott, recognition of this important point has given rise to another perspective known as contingency theory (p. 113). Contingency theory is a branch of systems design (W. R. Scott, 1981, p. 114) and can be described by the proposition which states that "different environments place differing requirements on organizations" (Lawrence & Lorsch, 1967). According to Lawrence and Lorsch--

"environments characterized by uncertainty and rapid rates of change in market conditions and technologies present different demands - both constraints and opportunities - on organizations than do placid and stable environments" (in Scott, 1981, p. 114).

Thus, the open systems approach builds upon the rational and natural perspectives and goes beyond to encompass environmental influences.

According to the author, "the ingredients in systems analysis are the parts, the interactions, the processes, and the goals of systems" (p. 281). He also states that the important parts of the system are "the individual, the formal structure, and informal structure status and role patterns, and the physical environment of work" (p. 282).

As previously stated, the purpose of this section is to provide background information on the evolution of organization thought. It is an overview and many important theories and theorists have not been mentioned. However, the information presented will allow the reader to consider contrasts between organizational thought and organizational thought related to educational organizations.

In summary, the rational systems approach implies clear divisions of authority, decision making, and goal setting. The human element enters into the natural systems approach with employees and working conditions being taken into consideration. The open systems approach encompasses rational and natural systems and integrates environmental influences. Scott (1981, p. 55) noted that the three perspectives are partially conflicting, partially overlapping, and partially complementary to one another.

The next part of Section I will present an overview of organizational structure. The reader will note that organizational structure is generic to all organizations and
does not fit specifically into one or another of the three schools of organizational thought mentioned in the first part of Section I. Rather, organizational structure is an inherent part of each of the perspectives discussed.

Overview of Organizational Structure

Organizational structure is broadly defined by Miles (1980) as "those features of the organization that serve to control or distinguish its parts" (p. 18). According to Miles (1980) structure is generally expressed by two factors; differentiation and integration.

Differentiation refers to the division and specialization of labor in an organization. Differentiation is concerned with how the organization divides the work and assigns resources among work units (Miles, 1980, pp. 18, 19).

Integration refers to the coordination and control of various organizational units to achieve general and specific organizational goals (Miles, 1980, pp. 18, 19).

Bobbitt and Behling (1981) write that structure is defined as the systems of communication, of authority (or other roles), and of work flow. Structure provides for the division of work and its coordination toward a common goal.
Litterer (1980) notes that "probably the single most important aspect of organization is that it provides for a division of work" (p. 107). Thus differentiation is an important concept to organization, but the problem remains concerning how to divide the work. The typical mode for making division of work decisions is for higher management to specify what is wanted and collaborate with lower management levels to set up basic structures to achieve organizational goals (Litterer, 1980, p. 108).

After organization decisions are made about differentiation, further decisions are necessary in order to integrate working parts or units. Integration consists of coordination and control of the articulation among organization units.

Walker and Lorsch (1968) note that while the achievement of differentiation and integration is possible it can occur only when well-developed means of communication among specialists exist in the organization (p. 132).

Decisions made about differentiation and integration help determine the formal structure of organization.
The Formal Structure of Organizations

Blau and Scott (1962) describe formal organizations as organizations that have been deliberately established for a certain purpose (in Shafritz and Whitbeck, p. 213). According to the authors, "the distinctive characteristic of formal organizations is that they have been established for the explicit purpose of achieving certain goals" (p. 213). Thus, formal establishment for a specific purpose helps determine organizational structure.

Litterer (1980) notes that "the formal organization is that part of the organization consciously planned" (p. 107). The formal organization specifies tasks to be performed, rules and procedures to be carried out, and general behavioral requirements of organization members.

W. R. Scott (1981) writes that "a structure is formalized to the extent that the rules governing behavior are precisely and explicitly formulated and to the extent that roles and role relations are prescribed independently of the personal attributes of individuals occupying positions in the structure" (p. 59, 60). Scott also notes that formalized structures are relatively independent of the participation of
individuals. For example, "the influence of leaders can be determined in part by the definition of their offices and not made a function of their personal qualities . . ." (p. 61).

In speaking of formal organizations, Litterer (1980) mentions the complex topic of organizational decision-making. Decision making authority in organizations is generally referred to as being centralized or decentralized. Briefly stated, organizational decision making is said to be centralized if positions at lower levels are primarily concerned with executing decisions made toward the top of the organization. Decentralized decision making implies that positions at the lower level of the organization have a broad array of decision-making authorities (p. 108).

The concept of complexity in formal organizations generally refers to the number of different components of the organization (Miles, 1980, p. 24). The number of different management levels in an organization is an indicator of the degree of vertical complexity or differentiation. Vertical complexity of different types of academic institutions will be investigated in this study. Horizontal complexity generally refers to the number of different occupational roles or specialized sub-units in an organization (Miles, p. 24). Horizontal complexity will not be investigated in this study.
Although this section of literature deals with some of the formal structures of organizations, it is important to mention that in every formal organization there arise informal organizations. The term "informal organization" refers to emergent patterns of social life that evolve within the framework of a formally established organization (Blau and Scott, 1962). The distinction, however, between the formal and informal aspects of an organization is an analytical one and will not be discussed in this study.

It is also important to note that environmental factors have an impact on the structure of organizations. For example, legislative mandates concerning Affirmative Action have prompted many organizations to hire specialists to direct and oversee hiring policies and procedures. These specialists represent an area of specialization that is new to many organizations. The inclusion of new specializations represents another level of differentiation and integration in the organization.

As was noted earlier, it is not the purpose of this study to investigate informal organizations, nor will the study examine environmental factors that may impact on the organization. These concepts are mentioned as examples of two of many factors that may affect organizational structure.
In summary, the literature reviewed in this part of Section I is an overview of organizational structure. Three dimensions of organizational structure, namely formalization, centralization, and complexity are discussed. These dimensions comprise three independent variables for this study. Further elaboration of these dimensions are contained in the next part of Section I.

Three Dimensions of Organizational Structure

The term organizational structure as used in this study is comprised of three dimensions. They are: formalization, centralization, and complexity. As was previously mentioned in Chapter I, these dimensions are defined accordingly.

Formalization refers to the number of rules, regulations, and procedures within a system and the degree to which they are specified (written) and/or adhered to. Centralization refers to the locus of control for decision making (Bobbitt and Behling, 1981, np).

The definition of complexity is listed below.

Complexity refers generally to the number of management levels on the vertical dimension (Miles, 1980, p. 23).

These three general dimensions represent one way of describing the structure of an organization. They are
concerned with plans to organize the efforts of people, and will be investigated in this study as covariants of leadership functions of higher continuing education administrators.

The literature reviewed in the last part of Section I constitutes an overview of organizational structure and formal organizations. Three dimensions of organizational structure (formalization, centralization, and complexity) are discussed. These dimensions were chosen for this study because they represent one way to obtain a structural profile of an organization. Although researchers have used a number of measures to study organizational structure, four major dimensions of structure dominate the literature: complexity, formalization, centralization, and administrative intensity (Bobbitt and Behling, 1981, np). Miles (1980) also writes that four general dimensions represent one way of describing and comparing the structures of organizations. He cites them as: centralization, formalization, complexity, and configuration.

This writer chose the dimensions of formalization, centralization, and complexity because it is believed, based on the literature and the sociological perspective of organizational analysis (Perrow, Miles, Meyer, and Scott),
that these dimensions of structure will be likely to covary
with leadership functions of higher continuing education
administrators in selected types of academic institutions.

Section II deals with literature pertinent to
organizational thought related to educational organizations.

Section II

Organizational Thought Related to Educational Organizations

The literature reviewed in Section I indicated that
organizational thought has evolved from the rational
perspective (Frederick Taylor, 1911) to the open systems
perspective (Katz and Kahn, 1976).

The systems approach to organizational thought focuses on
the processes, the parts, the interactions, and the goals of
the system (W. Scott, in Shafritz & Whitbeck, 1981).

Ecker (1979) notes that:

Organizations viewed as systems are
tightly coupled when goals and technologies
are clear, and participant involvement in
decision making is predictable and
substantial (p. 25).

In contrasting organizations viewed as systems Ecker (1979),
Weick (1976), and Meyer and Rowan (1975), write that
educational organizations are loosely coupled systems. An
example of a loosely coupled feature in an educational organization might be the relationship between the continuing education division and the college of medicine or law. Each division or college has its own identity and is physically separated from the others. Despite being separated, each division may be responsive to one or more other divisions in the organization. The image of educational organizations as loosely coupled systems implies that decision making may be less than rational.

Cohen, March, and Olsen (1972) use a "garbage can" metaphor to contrast accidental and rational decision making in educational organizations. The authors suggest that educational program decisions are often made on the basis of faculty and administrative strengths rather than community or student needs. Decision making is characterized as a "garbage can" into which problems, solutions, and people are mixed (p. 1). As a result of this mixture, decisions are made from the various interactions rather than from rational planning.

Sergiovanni and Carver (1980), attempt to soften the garbage can metaphor by stating that a better position is to accept the rational limitation of planning suggested by March and his colleagues but to view them as a "limitation to an otherwise purposive and rational-striving process (p. 289)."
Lindblom (1959), proposes an alternative to rational decision making which is based on successive limited comparisons. Briefly, Lindblom suggests that public administration may be a synthesis of rational-comprehensive and successive limited approaches (in Stillman, 1976, p. 153). The rational approach implies a comprehensive analysis has been conducted before decisions are made. Successive limited comparisons, on the other hand, imply limited analysis of the problem occurs before decisions are made. Based on the literature reviewed, the rational approach may not be entirely satisfactory in educational organizations. In this writer's opinion, educational decision-making is not dependent upon one strategy over another. Rather, several strategies may be used and/or combined to make decisions.

Hedberg, Nystrom, and Starbuck (1976), suggest that organizations "camp on seesaws" to maintain organizational balance. According to the authors, organizations that "camp on seesaws" emphasize flexibility, creativity, and initiative (p. 45). The authors contrast flexibility or openness to environmental change with traditional ideas of authority, clarity, and decisiveness in the organization (p. 45). Ecker
(1979), writes that organizations ought to be tied to their environments (p. 28).

The environments of colleges and universities have changed radically in recent years. The roles played by federal and state governments have expanded greatly. The numbers of students seeking higher education are no longer expanding for every type of institution. Government, the public, and students are demanding accountability.

Colleges and universities have been slow to respond to these environmental changes. Administrators are slow to respond to opportunities in the changed environment, seeing only constraints. Faculty members continue with outmoded patterns of behavior inappropriate to their new students and the changed time (p. 28).

Lauffer (1978), also emphasizes the importance of environmental influences. He speaks directly to continuing education directors about what he calls the acceptance environment and the task environment.

By acceptance environment we refer to the extent to which the CEP and its activities may receive support or opposition from the CEP's various publics. Those publics that directly impinge on the CE Program's ability to accomplish its objectives are referred to as the task environment (p. 67).

No continuing education unit in higher education operates in isolation from other units in the organization. There are various subunits that may compete with and/or complement the continuing education unit. Miles (1980), and Scott (1981),
cite a study by Salancik and Pfeffer (1974), which provides some insight into power acquisition and maintenance tactics of subunits in educational organizations.

Subunit power accrues to those departments that are most instrumental in bringing or providing resources which are highly valued by the total organization. In turn, this power enables these subunits to obtain more of those scarce and critical resources allocated within the organization. Stated succinctly, power derived from acquiring resources is used to obtain more resources, which in turn can be employed to produce more power - the rich get richer (Salancik and Pfeffer, 1974, p. 470).

Implications about leadership functions of higher continuing education administrators can be drawn from the Salancik and Pfeffer study mentioned above. Students, for example, are key resources needed by universities and colleges. Traditional student enrollment is waning while nontraditional student enrollment is growing (W. Smith, 1982 Lifelong Learning Research Conference). Dr. Smith writes that:

Last year Harvard University enrolled 16,000 candidates in their regular degree programs and over 45,000 in continuing education (p. 16).

In keeping with the Salancik and Pfeffer study, the continuing education unit would be instrumental in bringing or providing resources which are highly valued by the total organization. Therefore, growth exemplified by the influx of students into the continuing education unit would give that unit power
within the system. Power gained by the continuing education unit could then be used to obtain more resources such as space, materials, additional faculty, and additional funding. Growth of the continuing education unit implies the need for active, dynamic leaders who are capable of implementing the leadership functions of collaboration, decision making, and goal setting.

Earlier it was noted that there are major differences between academic institutions and other kinds of organizations (Baldridge et. al., 1978). In their book titled *Policy Making and Effective Leadership* (1978), Baldridge, Curtis, Ecker, and Riley present a comparative analysis of college and university governance and the organizational features that affect decision-making and professional practice. Information was gathered from hundreds of campuses and thousands of campus administrators and faculty, and institutional case studies. A summary of major conclusions indicates that there are major differences between different types of academic organizations concerning participation in and attitudes toward academic governance. As was previously mentioned in Chapter I, Baldridge et. al. found, for example, that as they progressed from "Community Colleges to Public Colleges to Elite Liberal Arts Colleges, to Multiversities, (1) the more the faculty are influential, (2) the less the administrators dominate,
the less the environmental influences affect the institution's autonomy, and (4) the less likely it is that unions will be elected" (p. 11). According to the authors, "in order to tell the story of academic leadership and management, we often had to tell a different story for each type of institution studied" (p. 11).

In summary, the literature reviewed in this section indicates that educational organizations: (1) are loosely coupled systems (Weick); (2) make decisions in a garbage can fashion (Cohen, March, and Olsen); (3) should camp on seesaws to achieve organizational balance (Hedberg et al.); (4) are different from other organizations and other types of academic institutions (Baldridge et al.); and (5) cannot be separated from their internal and external environments (Lauffer).

According to these authors, the structure of educational organizations may offer a type beyond the three perspectives (rational, natural, and open) of organization though mentioned in Section I.

The literature about organizational structure reviewed in Section I of Chapter II, and also in Chapter I indicates that there are varying degrees of structural differences between and within organizations. The literature reviewed in Section II of Chapter II, and also in Chapter I indicates that there
are major differences between academic organizations and other types of organizations as well as differences between types of academic organizations. In view of these differences, it would seem that one might expect variance in leadership functions of higher continuing education administrators in different types of academic organizations.

Section III

Educational Administration and Leadership in Higher Education

The history of higher education in the United States encompasses conflicting attitudes about those in educational leadership roles (Eaton, 1978, p. 1). Eaton posits that educational leaders should be well-trained academicians who somehow know how to manage, or they should be well-trained managers who somehow know how to be academic (p. 2). She further states that community college educational administrators are neither one nor the other, but persons trained a bit in both areas. Eaton suggests that the behavioral context in which people function as leaders determines the success or failure of that leadership. She describes the dimensions of the behavioral context as: (1)
leader's self-knowledge; (2) awareness of others; (3) willingness to take risks; and (4) the capacity for self-confrontation (p. 9). According to Eaton, the critical characteristic necessary for providing academic leadership is not academic but psychological (p. 4).

From another perspective, Millett (1974), states that leadership in the academic community arises from the necessities of the structure of governance within a college or university (p. 2). Millett writes that it is obvious that structure of governance comes first, and the leadership role follows from it. According to the author, governance is both a structure and a process.

Governance is a structure legitimizing power groups and power relationships. It is a process for making basic decisions about purpose, procedure and performance (p. 2).

He also states that leadership is both a structure and a process.

Leadership is a structure which establishes roles of influence upon the behavior of other persons in a social unit. It is a process of encouraging, persuading, and even directing others to make decisions and to perform in accordance with decisions (p. 2).

Millett bases his thesis on two models for governance in leadership in higher education. They are the Institutional Governance Model (p. 3), and the Community Governance Model (p. 5). The author states that interest in the Community
Governance Model is waning and he predicts changes will occur in the Institutional Governance Model. The Institutional Governance Model will evolve into Institutional Leadership; a model that will require more information sharing, more consultation and more sharing of authority than in the past among leaders in academe.

Terry Barraclough (1973), espouses another view of successful educational administration. According to the author, management style is a major factor in the successful accomplishment of the many tasks required of an educational administrator (p. 1). Barraclough states that an administrator's style develops in proportion to his adaptation to organizational structure, his personality and value system, his concept of personal success, experiences both in and out of his managerial capacity, and the role expectations as perceived by others.

In a study of leadership styles, Hadley and Andrews (1978) surveyed administrators at Los Angeles Southwest College to determine their political, social, and psychological background. Survey responses indicated that: (1) administrator's goals were restatements of their educational philosophy concerning community colleges (p. 24); (2) they felt they should be involved in college operations as much as possible; (3) they favored in-service staff development; (4) they were unequivocally opposed to faculty participation in
major decisions; and (5) they showed little agreement as to order of priorities for the college. According to the report the data also demonstrated that administrator's surveyed had cognitive processes based upon personal ideology (p. 26), had an internal locus of control (p. 28), and had an authoritarian personality with a strong need for power (p. 27).

Benezet (1974) turns away from leadership styles or types and offers a three-part prescription for academic leaders. The first is that the leader needs to guide himself in terms of the best he can be as a person of reflection and originality (p. 3). Second, the educational leaders should "outread his faculty and fellow administrators in what is going on concerning movements in higher education" (p. 4). Third, the administrative leaders, if he would lead, needs to spend most of his time studying and releasing the potentialities of the human beings with whom he is working (p. 4).

Finally, Duhamel and Johnson (1978), set up a framework borrowed from systems theory to identify societal forces and changes that will affect educational leaders of the future. According to the authors, these societal forces and changes are: (1) the economic system with fewer dollars and declining enrollments (p. 7); (2) the trend toward conservatism and traditionalism in programming (p. 8); (3) the deluge of information from which administrators must make
decisions (pp. 9, 11); and (4) the cultural plurality that society itself has recognized (p. 13). The authors write that major leader behaviors that will result from these changes are mainly changes in emphasis. They foresee a greater accountability for programs and performance; and a greater need to deal with different values based on cultural diversity in society (p. 14).

The literature reviewed in this section indicates that most of the writers approach educational leadership and administration from the behavioral psychology perspective. Eaton, Barraclough, Hadley and Andrews, and Benezet suggest appropriate leader behaviors and management styles for administrators in higher education. Millett and Duhamel and Johnson write about leader behaviors, but also incorporate environmental influences and structural dimensions representative of the sociological perspective. Thus, literature reviewed in Section III of Chapter II indicates a strong emphasis on the psychological perspective of leader behavior.
An examination of literature pertaining to the organization of continuing education in higher education is presented in Section IV.

Section IV

Organization of Continuing Education in Higher Education

The function of continuing education in higher education may be organized in several different ways. Kleis (n.d., n.p.) for example, suggests the following four alternative patterns of continuing education organization:

1. It may vest authority and responsibility in each of its several colleges and departments.

2. It may authorize one of its already established units to administer the Continuing Education Work.

3. It may establish a new unit charged with total responsibility for the Continuing Education function.

4. It may establish a central highly placed unit for administrative, coordinative and service functions but with program responsibility shared throughout the university.

Kleis continues by writing that the first two choices are generally not successful and have demonstrated disadvantages. However, universities which have chosen alternatives three and
four have generally maintained significant programs of continuing education. According to Kleis, "the establishment of a strong central unit characterizes both the third and fourth of the stated alternatives." The author further declares his "bias in favor of the strongest possible central administrative unit and the broadest possible decentralization of program participation."

P. Frandson (1977) agrees with Kleis' suggestions concerning a central administrative unit. He further states that the centralized structure should contain operational aspects of continuing education headed by a specialist. The specific role of the continuing education specialist would be to generate academic learning experiences oriented to the phenomena of society (p. 9).

These encompass personal and career needs including the creation of new careers; human interrelationships and the place of humanity in the universe; governmental functions at all levels; local, state, national, international affairs, and the multi-disciplinary, often multi-professional approaches required for public and private value judgement and decision making in the great life issues of the day (p. 9).

Frandson argues that centralization emphasizes the efficiency from the managerial perspective (p. 11), and that centralization will serve the education perspective as well as the managerial perspective in continuing education (p. 11).
Frandson also states that faculty should serve as advisors to the continuing education specialist and share in decision-making and philosophical viewpoints. The author's views concerning faculty involvement suggest to this writer that he may agree with Kleis in favoring shared program responsibility throughout the college or university.

An advocate for centralization of adult education programs, Benjamin Massey (1979), contends that we are now witnessing the entry of the older student (mostly parttime) in postsecondary education. He describes a model at the University of Maryland which incorporates parttime student needs into the continuing education component of the institution.

The University College (Maryland) is a discrete component of the University charged with serving parttime students. The physical plant is housed in the residential conference center and located on the periphery of the campus. Internal organization structures and practices have been converted to serve the needs of new clientele in the following ways.

Curricula: Articulation between University College with community colleges is fostered through a University College Community College Advisory Council. The council meets semi-annually to discuss program offerings in an effort not to overlap or duplicate courses. They also strive to maintain balance between standard disciplines, and emerging areas of cultural or occupational emphasis (p. 6).
Admission: Parttime students are admitted as special students (non-degree). If students wish to enter degree programs, they may elect to do so after completing 15 credit hours with a "C" average (p. 7).

Access: The University College has several delivery units which include; two overseas divisions, and statewide programs that offer seminars, short courses, and symposia (p. 8).

Registration: Students may register by mail or during scheduled hours on weekends and evenings (p. 9).

Faculty: Faculty are recruited from government, industry, the private sector, other postsecondary institutions, and other University of Maryland campuses. The emphasis is on teaching excellence and in some cases faculty receive orientation or re-training to teach parttime students (p. 10).

Thus, the University College (Maryland) is a discrete part of the University which may indicate a strong central administrative unit. However, the faculty comes to University College from various organizations which leads this writer to assume some shared program responsibility.

Rosalind Loring (1978) assumes centralization of continuing education administration within the institution and places emphasis on faculty composition. According to Loring, the ideal faculty for continuing adult education programs should be comprised of: (1) the best adjunct faculty available from professions (p. 6); (2) persons recruited from business, industry and government; and (3) a fulltime continuing education faculty (p. 6). Loring states that successful programs for adults are rarely "reruns" of traditional courses and successful on-campus teachers will not necessarily work well with adults (p. 5).
Rollin Watson (1979) also reflects on the faculty's role in continuing education and recommends integrating fulltime faculty into continuing education and community services. Watson suggests that three things must happen if we are to shape the history of continuing education.

1. Channels of communication between continuing education and faculty must be open. There should be a faculty continuing education advisory committee composed of divisional representatives. The division should be involved in initiation and development of courses, and appropriate administrative mechanisms to ensure this can be set up (p. 7).

2. In order to guarantee faculty involvement in planning and evaluation, the administrative procedures would include the designation of a faculty member to monitor each course (p. 8).

3. Course and program integrity follow if the above steps are taken. In addition, administrators could become involved in teaching and department activities in their disciplines (p. 8).

C. Brice Ratchford (1977) suggests that higher education organization structure should be composed of faculty who have joint appointments between their teaching departments and continuing education. He further states that a department head should be assigned to see that the continuing education plan of the University is carried out. In addition, a Dean should be appointed at the collegiate level to oversee the extension program as well as administer budgets and personnel (p. 6). Ratchford notes that it is essential to have a top
level administrator for continuing education. This officer can take the lead internally in coordinating continuing education activities into a cohesive unit.


A recent study of continuing education administrators in Ohio conducted by Richard Teaff (1978) concluded that "the small number of continuing education administrators with the title of Dean indicates marginality of the area, at least in its placement in the administrative hierarchy" (p. 71). In general, administrative structures which provide for a centralized continuing education administration was preferred by respondents in Teaff's study (p. 72).

In summarizing the literature reviewed, there appears to be agreement about the need to have the administrative leadership of continuing education located centrally in the college or university. Faculty composition and involvement in continuing education activities are also emphasized by many writers. Finally, and of particular interest to this study, the literature also indicates that an able person
should be appointed to provide active and dynamic leadership for the continuing education division. The next section will deal with literature about leadership in continuing education in higher education.

Section V

Leadership of Continuing Education in Higher Education

Leadership is generally defined as the process of influencing the activities of others toward the accomplishment of organizational goals. For centuries people have sought the valid prescription for effective leadership, and many studies of leader effectiveness have been conducted. Most of these studies were conducted by management scientists and are reported in the literature of organizational behavior. Recently educators have begun to apply these theories to educational settings.

D. Willing (1979) suggests the theory and work of Frederick Herzberg (1959) for administrators who want to provide positive support for staff (p. 51). Herzberg's two factor theory is comprised of hygiene factors and motivators. According to Willing, "the administrator of able teachers of adults will improve his or her effectiveness in providing
positive administrative support if a theory that provides a framework for administration is accepted and followed" (p. 58). Willing states that Herzberg's motivation-hygiene theory provides such a framework (p. 58). According to Willing, "a theory of administrative leadership can help avoid job dissatisfaction and increase motivation on the part of others" (p. 51).

Fiedler's Contingency Theory of Effective Leadership (1967) is sometimes adapted by educators to illustrate the leader's perceptions of his/her co-workers. Alan Knox (1982), for example, uses Fiedler's theory in a discussion of situational influences that face continuing higher education administrators in different professional fields. Knox writes that "each specific situation has its own contingencies and involves people with personal values, and effective administrators take these into account" (p. 66).

White and Belt (in Knox, 1980) write that "leadership in adult education is leadership of equals" (p. 231) and illustrate their statement with a continuum of leader behavior proposed by Tannebaum and Schmidt (1973). According to the authors, the Tannebaum and Schmidt model illustrates a participative style of leadership behavior appropriate for administrators of adult education (p. 231).
In writing about administrative style for continuing education programs, Lauffer (1978), suggests a model of management styles developed by Rensis Likert (1967). Briefly stated, the Likert model lists four systems of management styles:

- System 1. Authoritative, Exploitive
- System 2. Authoritative, Benevolent
- System 3. Consultative
- System 4. Participative


Lauffer (1978, p. 161) writes that "we've found that the consultative and participative styles are most appropriate to CE Programs" (p. 161). He also states that "the best style of course varies with the size of the program, the tallness or flatness of its structure, and the management styles employed in the host organization" (p. 161).

In summarizing the literature reviewed so far, it is evident that the authors are suggesting modes of leader behavior for continuing education administrators based on organizational theory. Herzberg's Two-Factor Theory, Fiedler's Contingency Theory, Tannebaum and Schmidt's Continuum of Leader Behavior, and Likert's Management Style Systems were all proposed to determine how a leader's personality attributes affect group performance. While a number of programs have demonstrated the influence of leader attributes on group effectiveness, the results may not be
generalizable from one group situation to another. For example, these models may be useful in a business or industrial setting, but not useful in educational organization. As far as this writer can determine, very little empirical research on administration of higher continuing education has been reported using models of leader behavior.

Spikes (1979) directs his comments to continuing education administrators in his analysis of behavioral dimensions of leadership. According to Spikes:

The role of the continuing education administrator is a complex one. Eclecticism of function abounds – program management, personnel management, and fiscal management skills combined with knowledge of public relations techniques, and old fashioned salesmanship are typically associated with this type of administrative responsibility (p. 8).

He also notes that the process of administration in a continuing education setting is interactive with internal and external environmental influences as well as a diversity of organizational structures (p. 8).

By way of choosing a personal leadership style, Spikes suggests attention to leader behavior studies conducted at the Ohio State University in the late 1940's and early 1950's. The Ohio State group defined leadership as the behavior of an individual when directing the activities of a group toward a goal attainment (Hersey & Blanchard, 1977, p. 94).
Eventually, they narrowed the description of leader behavior to two dimensions: Initiating Structure and Consideration.

Briefly stated:

Initiating structure refers to "the leader's behavior in delineating the relationship between himself and members of the work group and in endeavoring on the one hand to establish well-defined patterns of organization, channels of communication, and methods of procedure (Halpin, 1959, p. 4).

This writer interprets Halpin's definition of initiating structure as analogous to the traditional or scientific management view of administration, and to Burns and Stalker's (1961) definition of mechanistic organizations.

Consideration as defined by Halpin refers to:

Behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leaders and the members of his staff (p. 4).

Halpin's definition of consideration incorporates characteristics of the human relations approach to organization thought.

Spikes argues that it is possible to use these dimensions of leadership as they were expanded from the Ohio State studies in the Leader Behavior Description Questionnaire (LBDQ) (p. 9), to choose a personal leadership style. He also states that the supporting data used were "drawn from the private sector, i.e., the business and industry community" (p. 9). According to the author, the leadership dimensions
of initiating structure and consideration are generalizable to include the role, scope, and function of the continuing education administrator (p. 9).

As previously stated, there is little, if any, empirical evidence to support the use of these leader behavior models in continuing education settings.

Scammahorn, Wendel, and Henry (1981), address major challenges of leadership in continuing education. They interviewed continuing education administrators and academic program administrators to obtain their perceptions about the future of continuing education (p. 12). A content analysis was conducted on variables believed to be fundamental concerns for continuing education administrators. The variables are:

- Organizational models, administrative structures, management skills, human resources, program administration, budgeting, line-staff and faculty relationships, and administrative qualifications (p. 13).

The authors then developed a matrix of these managerial variables which they perceived to be fundamental to administrative leadership for future planning in continuing education units (p. 17). They conclude by stating:

Continuing education administrators can muster the forces necessary to meet the challenges of the future, but, to do so will require well-trained, highly skilled, visionary leaders in the field (p. 11).
In a paper titled, *New Realities in the Administration of Continuing Higher Education*, Alan Knox (1975), suggests strategies for leadership. He notes that successful leadership strategies will be collaborative (p. 4), and will be both internal and external to the institution. Broadly stated, the author suggests leadership strategies for continuing education administrators in the following areas internal to the institution:

1. Coordination of academic units
2. Priorities for continuing education emphases
3. Performance of faculty members
4. Program development (pp. 4, 5, 6).

Knox states that collaborative efforts are also external to the institution, and suggests leadership strategies for the following areas:

1. Institutional outreach
2. Working with sponsors
3. Collaboration among administrators from various continuing education programs
4. Institutional support (pp. 6, 7, 8).

Interested readers are referred to Knox (1975 and 1982) for more information on leadership strategies for continuing higher education administrators.

In summary, the literature reviewed in this section indicates some general viewpoints about leadership in continuing education in higher education. Authors Willing, Knox, White, and Belt, Lauffer, and Spikes suggest
organizational models of leader behavior to illustrate modes of behavior appropriate for continuing education administrators. Scammahorn et. al. developed a matrix of managerial variables which they state are fundamental to the administration of continuing education programs. While Lauffer mentions organizational auspices and the "tallness and flatness of program structure", and Knox speaks of situational influences, none of the writers deal with relationships between organizational structure and leadership functions of continuing education administrators in different types of academic institutions.

As was noted in the introduction to Chapter I, continuing education administrators in higher education serve in diverse settings and face complex and challenging tasks. These tasks demand dynamic and active leadership. The purpose of this study is to examine the possible relationships between organizational structure and leadership functions of continuing education administrators in selected types of higher education organizations.
CHAPTER III
RESEARCH DESIGN

This chapter discusses: classification of institutions; definitions of institutional types; selection of the sample; questionnaire design and development, data collection procedures; and data analysis.

Classification of Institutions

Academic institutions for this study were chosen according to the following criteria. All of the institutions (1) are located in Ohio, (2) offer continuing education programs, and (3) are accredited by The Ohio Board of Regents.

Information needed to determine and confirm the criteria was obtained from the 1981-82 Handbook of Ohio Colleges and Universities published by The Ohio Board of Regents. Institutions that met the above criteria were then classified into the following categories:

Group A - Research and Doctorate Granting Universities

Group B - Comprehensive Colleges and Universities
Group C - Liberal Arts Colleges

Group D - Two Year Institutions

Categories for institutional classification were based on and modified from the 1976 revised edition of *A Classification of Institutions of Higher Education* published by the Carnegie Council on Policy Studies in Higher Education. The Carnegie typology is complex and contains many variables not relevant to this study. Baldridge, Curtis, Ecker, and Riley (1978) write that the Carnegie typology "is a relatively complex structure, consisting of twelve categories with minor sub-divisions and further distinctions between public and private— a total of thirty-two distinct categories" (p. 59). For example, size, financial support, aspects of the student body, and prestige of research are included in the Carnegie classification. These variables are not pertinent to this study. Moreover, many of these variables were investigated by Baldridge et. al. in the Stanford Project which was described in Chapter II of this study. Researchers in the Stanford project modified the Carnegie typology by reducing the twelve categories to eight categories that maintained the overall outline of the Carnegie classification yet was better suited to their research purposes.
The Carnegie and Baldridge et. al. classifications have been further reduced for this study. This writer wanted a category system that would provide a broad basis for classifying different types of academic institutions in Ohio. The four broad categories chosen for this study are meant to (1) be easily recognized institutional types to those involved in higher education, and (2) make sense and fit the theoretical perspective being explored.

Definitions for institutional categories used in this study are adapted from definitions in the Carnegie typology and definitions used by Baldridge, Curtis, Ecker, and Riley (1978, pp. 59, 60, 61).

Definitions of Institutional Types

Group A - Research and Doctorate Granting Universities

This category is comprised of the largest universities in Ohio. They have diverse degree offerings, award doctoral degrees and have large research facilities. Examples are the University of Cincinnati, The Ohio State University, The University of Akron, and Kent State University.
Group B - Comprehensive Universities and Colleges

The comprehensives are strong academic institutions that are found throughout Ohio. They offer bachelor's programs and in some cases master's or professional programs. In addition, they may offer occupational programs such as nursing or teaching. Examples are Central State University, Wright State University, Ashland College, and Youngstown State University.

Group C - Liberal Arts Colleges

This category includes four year colleges with strong liberal arts traditions. Although some of these institutions award B.S. degrees and offer occupational programs, their major focus is toward bachelor of arts degrees. Examples are Defiance College, Marietta College, Muskingum College, and Ohio Dominican College.

Group D - Two Year Institutions

There are more two year institutions than any other type of higher academic institution in Ohio. Two year institutions include technical colleges, regional branch campuses affiliated with major universities, and community colleges. In general, these institutions offer associate in arts degrees and/or transfer options. Examples are
Hocking Technical College, Washington Technical College, Stark County Regional Campus (Kent State University), Lancaster Branch Campus (Ohio University), and Sinclair Community College.

There is some overlapping in these categories. For example, some liberal arts colleges also offer master's degrees as well as nursing, teaching, and occupational programs. Placement of an institution in a specific category was based primarily on the Carnegie classification and modified according to the writer's judgement. Despite modifications and adaptations the typology was not arbitrarily chosen, and it does provide a broad basis for classifying higher education organizations in Ohio.

Selection of the Sample

After academic institutions were classified into Groups A, B, C, D, a stratified random sample was drawn from the total population of eighty-nine institutions. A proportional allocation was calculated on four strata, i.e., Group A (N=9), Group B (N=9), Group C (N=20), and Group D (N=51). Results of the calculations indicated that for an alpha level of \( \alpha = .05 \), a bound on the sampling error of .05, and an estimated variance of \( pq = .25 \), it
was necessary to have N=50, with Group A = 5, Group B = 5, Group C = 11, and Group D = 29 (Scheaffer, Mendenhall, and Ott, 1979, p. 74). A table of random numbers was used to draw a simple random sample of institutions from each stratum (Babbie, 1973, pp 373-376). Institutions selected constitute the sample of the study. The institutions are represented by their continuing education administrators. The admissions' office of each institution was contacted for the name of the person designated as having responsibility for continuing education activities. A cover letter and mailed questionnaire was sent to each continuing education administrator named.

Questionnaire Design and Development

A review of the literature and conversations with continuing education administrators indicated that decision-making, collaboration, and goal setting are components of leadership functions performed by continuing education administrators. These components comprise the dependent variable which is leadership functions. The literature also indicated that leadership functions may vary depending on organizational structure, type of academic institution, and the credit, non-credit status of programs. Thus, organizational structure, type of academic institution, and
credit, non-credit status of programs serve as the independent variables. For this study, organizational structure is comprised of three components. They are formalization, centralization, and complexity. For this study, type of academic institution is comprised of four levels. They are (1) research-doctorate granting institutions, (2) comprehensive colleges and universities, (3) liberal arts colleges, and (4) two year institutions.

Components of the leadership functions performed by continuing education administrators were used to formulate the major parts of a questionnaire.

Using the research questions as a guide, a questionnaire for the purposes of collecting descriptive data on leadership functions actually performed by continuing education administrators in higher education institutions was designed.

Through an extensive review of the adult and continuing education literature, leadership functions of continuing education administrators were identified. These formed the basis for the questionnaire. A review of the literature on organizational structure and educational administration enabled the researcher to identify the components, that were selected to provide the basis for drawing inferences about organizational structure. These components are
formalization, centralization, and complexity in the respondent's institution as reported by the respondent.

The questionnaire consisted of four parts. They are

Section A: Decision-Making Activities

1. Staffing the CE unit
2. Finances and budgeting for the CE unit
3. Program offerings for the CE unit
4. Marketing programs offered by the CE unit

Section B: Collaboration

1. Collaborating with faculty and administrators in the same institution concerning CE activities
2. CE administrator's participation in decisions concerning collaborative activities among faculty, administrators, and the CE unit
3. Number of management levels through which the CE administrator must go to secure permission to collaborate with faculty and administrators

Section C: Goal-Setting Activities

1. Written goal statements related to continuing education activities
2. CE administrator's participation in goal-setting activities for CE
3. Number of management levels through which the CE administration must go to secure permission to set goals for CE

For each of the categories listed under Sections A, B, and C, respondents were asked: 1) if there are written policies for that activity; 2) if the CE administrator participates in decisions concerning that activity; 3) how many layers of management authority the CE administrator goes through to secure permission for that activity. Each of the questions in Sections A, B, and C have a credit and a non-credit stem.
Section D: Leadership Functions (the dependent variable)

A twenty item checklist of leadership functions was derived from the literature and was used to measure the dependent variable, leadership functions. Previous researchers, Forman (1968), and Maag (1975), have employed checklists to measure the dependent variable.

Using components of the leadership functions performed by continuing education administrators as a guide, continuing education administrators were asked a series of questions pertaining to each component. The questions were designed to enable the researcher to make inferences about formalization, centralization, and complexity in the respondent's institution. Questions in Sections A, B, and C are mixed scale-type items. For example, some questions required the respondent to check "rarely," "sometimes," or "frequently." Other questions were answered by checking "yes" or "no." Some questions required respondents to circle an appropriate level.

Following the initial design, the questionnaire was tested on a small number of individuals representative of those to whom it was directed. Four individuals participated in the pilot test. None of these persons were included in the target population. One person was a...
former administrator of continuing education programs in a liberal arts college. She is currently teaching and conducting research in her field of specialization which is learning psychology of adult learners. Another individual is employed by The Ohio Board of Regents, has an advanced degree in adult education, and has conducted research on the administrative behaviors of adult education administrators. Two persons are currently administering continuing education programs in higher education institutions.

After the pilot-tests the questionnaire was revised and edited according to the reviewer's suggestions and comments. A final form was typeset, printed, and sent with a cover letter and stamped, self-addressed return envelope to respondents. (See Appendix A).

Scoring

The responses to questionnaire items answered by checking rarely, sometimes, or frequently will be scored from two (2) (rarely) to zero (0) (frequently). The subject's score is the sum of the weights of the responses endorsed by him/her. High scores will indicate high levels of formalization, centralization, and complexity in
the institution. Low scores will indicate low levels of formalization, centralization, and complexity in the institution.

A score of one (1) was assigned to questions answered by checking yes, and questions checked no received a score of zero (0). Hierarchal questions concerning management levels of authority (five levels) was scored one (1) for each level circled.

Data Collection Procedures

The questionnaire, cover letter, and a return self-addressed, stamped envelope was mailed to respondents. Questionnaire covers were color coded according to type of institution (research-doctorate granting universities - blue; comprehensive colleges and universities - green; liberal arts colleges - yellow; two year institutions - tan). An identification number was written on each return envelope as a means of identifying non-respondents.

A second questionnaire, cover letter, and return self-addressed, stamped envelope was sent to non-respondents approximately two weeks after sending the original
questionnaire (Dillman, 1978, p. 163). Over eighty percent (80%) of the questionnaires were returned, so no further attempts were made to contact non-respondents. In writing about response rates of mailed surveys, Babbie (1973, p. 165) notes that "a response rate of at least 50 percent is adequate for analysis and reporting." He further states that a response rate of at least 60 percent is good, and 70 percent or more is very good. However, Babbie cautions readers that these are rough guides and have no statistical basis (p. 165.)

Statistical Analysis

The following statistics were used in analyzing the data:

(1) For research questions one through six (see pp. 19-20) multiple regression analysis was used. According to Kerlinger (1973):

Multiple regression analysis is an efficient and powerful hypothesis-testing and inference-making technique, since it helps the scientist study, with relative precision, complex interrelations between independent variables and a dependent variable, and thus helps him to "explain" the presumed phenomenon represented by the dependent variable (p. 631).
Summary

An ex post facto, survey research design has been presented in Chapter III. After determining the population and the sample, a data collection design was presented. Leadership functions of continuing education administrators in higher education institutions were synthesized from an extensive literature review. Components of organizational structure were identified, and organizational theory relative to education organizations was integrated with leadership functions and organizational structure to develop a questionnaire. Questionnaires, along with cover letters and stamped, self-addressed envelopes were mailed to continuing education administrators in selected types of higher education institutions in Ohio.

The purpose of the questionnaire was to discover to what extent leadership functions (dependent variable) covary with organizational structure in selected types of higher education institutions (independent variables). The dependent variable (leadership functions) was measured via continuing education administrator's responses to a 20-item checklist; the independent variables (formalization, centralization, complexity, type of institution, and credit or non-credit
programs) were measured via the 38-item questionnaire to continuing education administrators. The data were analyzed using multiple regression analysis.

Chapters IV and V report the results of the data collection and of the analyses of the data; discussion of the data relative to the research questions are presented; the research study is summarized; and implications of the study along with suggestions for future research are stated.
CHAPTER IV
DATA ANALYSIS AND DISCUSSION

Introduction

The results of the research effort are presented in this chapter. Data are presented sequentially and several tables are used to show the analysis of the data by multiple regression analysis. Specifically, data were analyzed under Release 79.5, Statistical Analysis System (SAS), using stepwise regression, maximum R square improvement, and analysis of variance.

Multiple regression analysis was employed to test six research questions (Chapter 1) relating the dependent variable (leadership functions) and the independent variables (formalization, centralization, complexity, institutional type, and credit, non-credit programs). In each of the research questions, the question was to what extent organizational structure in selected types of higher education institutions covaried with the leadership functions of the continuing education administrators.
Questionnaires were mailed to fifty continuing education administrators in four different types of higher education institutions. Data were compiled from forty-two (84%) of the returned questionnaires.

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Size of Sample</th>
<th>No. of Returns</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (research &amp; doctorate granting)</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>B (comprehensive colleges and universities)</td>
<td>5</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>C (liberal arts colleges)</td>
<td>11</td>
<td>8</td>
<td>73%</td>
</tr>
<tr>
<td>D (two year institutions)</td>
<td>29</td>
<td>25</td>
<td>86%</td>
</tr>
</tbody>
</table>

Forty-three questionnaires (86%) were returned to the researcher, but one was not completed. The respondent attached a written explanation stating that his/her institution "did not differentiate between traditional and continuing education activities." Some of the administrators responding had only CE credit or CE non-credit
programs in their institutions. Therefore, they did not answer questions about programs they did not have. Thirteen observations were deleted due to the absence of information on either credit or non-credit programs. Thus, the data were calculated on 29 observations.

Multiple Regression Analysis

The variables (leadership functions, formalization, centralization, complexity, institutional types, and credit/non-credit programs) were entered into multiple regression analysis in the following order:

\[
\text{Input Leadersh, Formalcr, Formalnc, } \text{Center, Centnc, Compcr, Compnc, Institutions}
\]

Leadership functions (DV) were labeled Leadersh; formalization (IV) in credit programs was labeled Formalcr; formalization in non-credit programs was labeled Formalnc; centralization (IV) in credit programs was labeled Center; centralization in non-credit programs was labeled Centnc; complexity (IV) in credit programs was labeled Compcr; and complexity in non-credit programs was labeled Compnc. Thus each one of the organizational variables was tested for both credit and non-credit programs. Type of institution was designated by A (research, doctorage granting); B (comprehensive colleges and universities); C (liberal arts colleges); and D (two year institutions).
According to Kerlinger (1973, p. 627) there is no correct method for determining order of variables. Moreover, in the stepwise and maximum R square improvement models of SAS, the independent variable that correlates the highest with the dependent variable will be selected first in the equation (Guilford and Fruchter, 1978, p. 385).

The first independent variable to enter the stepwise regression procedure for dependent variable leadership functions (Leadersh) was centralization in non-credit programs (Centnc).

Research questions concerning centralization are repeated (Chapter I) below.

Research question #2: To what extent does centralization in selected types of higher education organizations covary with leadership functions of the continuing education administrators of CE credit programs?

Research question #5: To what extent does centralization in selected types of higher education organizations covary with leadership functions of the continuing education administrators of CE non-credit programs?

Thus, each questionnaire item designed to draw inferences about centralization in credit and non-credit programs was derived from research questions 2 and 5. In order to measure centralization in non-credit programs respondents were asked if they participated in decision-making, collaborative, and goal-setting activities related to CE non-credit programs.
See items 15, 16, 19, 22, and 25 in Section A of the questionnaire; item 5 in Section B; and item 5 in Section C (Appendix A). Respondents checked "rarely" (scored 2); "sometimes" (scored 1), or "frequently" (scored 0) to answer these questions. The sum of scores represented the respondent's total score on questions about centralization in non-credit programs.

Data compiled from all of the selected types of institutions were calculated and the independent variable, centralization in CE non-credit programs, was the only variable that met the .05 significance level for entry into the stepwise regression for dependent variable leadership.

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>R^2</th>
<th>df</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Centnc</td>
<td>.2508</td>
<td>1/27</td>
<td>9.04</td>
<td>.0057</td>
</tr>
</tbody>
</table>

The data show that centralization in CE non-credit programs explains twenty-five percent (25%) of the variance in dependent variable leadership as reflected by R^2 = .2508. R^2 is an estimate of the proportion of the
dependent variable accounted for by the independent variables. The F test calculated to determine the significance of $R^2$ shows $F = 9.04$. At 1 and 27 degrees of freedom, $R^2$ is statistically significant at the .05 level.

TABLE 3

Summary of Stepwise Regression Procedure for Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>56.14</td>
<td>56.14</td>
<td>9.04*</td>
<td>.2508</td>
</tr>
<tr>
<td>Error</td>
<td>27</td>
<td>167.65</td>
<td>6.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (1, 27) = 4.21, p = .05

No other variables met the .05 significance level for entry into the stepwise model. Tables 2 and 3 depict the best one variable model found.

Findings obtained as a result of the stepwise procedure indicate that leadership functions of continuing education administrators may be explained in part by centralization in CE non-credit programs. This finding is in agreement with the theoretical assumptions of the sociological theory of leadership discussed earlier.

The maximum $R^2$ improvement model for dependent variable leadership followed the stepwise regression procedure in the multiple regression analysis. The data are shown in Tables 4 and 5 on the next page.
The reader will note that the information in Tables 4 and 5 repeats the data displayed in Tables 2 and 3 thereby supporting the stepwise regression. $R^2 = .2508$ is statistically significant at the .05 level as indicated by the $F$ test. According to the data obtained from the first steps of the stepwise procedure and the maximum $R$ square improvement models, centralization in CE non-credit programs explains 25 percent of the variance in dependent variable leadership. The best one variable model found in the maximum $R$ square improvement program is illustrated in Tables 4 and 5.
The next independent variable that combines with the first variable in the equation is centralization in CE credit programs. In order to measure centralization in credit programs, respondents were asked if they participated in decision-making, collaborative, and goal-setting activities for CE credit programs. See items 2, 3, 6, 9, and 12 in Section A of the questionnaire, item 2 in Section B; and item 2 in Section C (Appendix A). The questions related to centralization in CE credit programs were worded and scored the same as those for centralization in CE non-credit programs.

**TABLE 6**

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Centcr</td>
<td>.2818</td>
<td>2/26</td>
<td>5.10</td>
<td>.0135</td>
</tr>
</tbody>
</table>

R² equals .2818 and explains 28 percent of the variance in the dependent variable leadership after the effects of centralization in CE non-credit programs are partialled out. More specifically, centralization in non-credit programs plus centralization in CE credit programs explains 28 percent of
the variance in leadership. An F test calculated at each step of the equation shows the overall $F = 5.10$. At 2 and 26 degrees of freedom, $R^2$ is statistically significant at the .05 level.

**TABLE 7**

Summary of Maximum R Square Improvement For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>$F$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2</td>
<td>63.07</td>
<td>31.53</td>
<td>5.10*</td>
<td>.2818</td>
</tr>
<tr>
<td>Error</td>
<td>26</td>
<td>160.71</td>
<td>6.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $F(1,26) = 3.37, p = .05$

The best two variable model can be seen in Tables 6 and 7. The findings so far indicate that centralization in non-credit programs and centralization in credit programs explain 28 percent of the variance in dependent variable leadership functions. It is interesting to note the relatively high contribution of centralization in CE non-credit programs (25%) compared to centralization in CE credit programs (3%) for a total of 28 percent of the explained variance in leadership functions of continuing education administrators. One might speculate that CE non-credit programs in higher education institutions are diverse and handled differently in different types of higher education institutions. Conversely, one
might consider that CE credit programs are part of the traditional curricula and may therefore be subject to traditional institutional policies and procedures. Although it is not the purpose of this study to investigate relationships between CE credit and non-credit programs in higher education, the differences noted here raise questions that might be pursued in future research.

The next independent variable to combine with centralization in non-credit programs and centralization in credit programs in the multiple regression analysis was formalization in credit programs. Formalization in credit programs was measured by asking respondents if there were written policies and procedures for decision-making, collaborative, and goal-setting activities for CE credit programs in their institutions. Research questions related to formalization are repeated (Chapter 1) below.

**Research question #1:** To what extent does formalization in selected types of higher education organizations covary with leadership functions of the continuing education administrators of CE credit programs?

**Research question #4:** To what extent does formalization in selected types of higher education organization covary with leadership functions of continuing education administrators of CE non-credit programs?
As with all questionnaire items derived from the research questions, there was a credit, non-credit stem. For questions about formalization in credit programs, see items 1, 5, 8, and 11 in Section A of the questionnaire; item 1 in Section B; and item 1 in section C (Appendix A). Questions about formalization were answered by "yes" (scored 1) or "no" (scored 0). The sum of the items checked represented the respondent's score on formalization in CE credit programs.

TABLE 8

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>R^2</th>
<th>df</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a</td>
<td>Formalcr</td>
<td>.3064</td>
<td>3/25</td>
<td>3.68</td>
<td>.0253</td>
</tr>
</tbody>
</table>

The data show that formalization in credit programs explains .3064 or 31 percent of the variance in leadership as depicted by $R^2 = .3064$. Specifically, formalization in CE credit programs explains approximately 3 percent of the variance after the effects of centralization in CE non-credit programs and centralization in CE credit programs are partialed out. At 3 and 25 degrees of freedom, the overall $F = 3.68$ and indicates that $R^2$ is statistically significant at the .05 level.
TABLE 9

Summary of Maximum R Square Improvement For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>68.57</td>
<td>22.85</td>
<td>3.68*</td>
<td>.3064</td>
</tr>
<tr>
<td>Error</td>
<td>25</td>
<td>155.21</td>
<td>6.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (3, 25) = 2.99, p = .05

Centralization in credit programs, the second independent variable to enter the equation, was replaced at this point in the analysis by formalization in non-credit programs. Formalization in non-credit programs was measured by totaling respondent's scores on questions concerning written policies and procedures for CE non-credit programs. See items 14, 18, 21, and 24 in Section A of the questionnaire; item 4 in Section B; and item 4 in Section C (Appendix A). As with questions about formalization in credit programs, "yes" answers were scored one (1), and "no" answers were scored zero (0). The sum of scores represented the total score for formalization in CE non-credit programs.
TABLE 10

Maximum R Square Improvement For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b</td>
<td>Centcr replaced by Formalnc</td>
<td>.3509</td>
<td>3/25</td>
<td>4.51</td>
<td>.0117</td>
</tr>
</tbody>
</table>

The data show that formalization in CE non-credit programs explains 35 percent \((R^2 = .3509)\) of the variance in leadership functions after the effects of centralization in non-credit programs, centralization in credit programs, and formalization in credit programs are partialed out. At 3 and 25 degrees of freedom, the overall \(F = 4.51\) which means that \(R^2\) is statistically significant at the .05 level.

TABLE 11

Summary of Maximum R Square Improvement For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>78.54</td>
<td>26.18</td>
<td>4.51*</td>
<td>.3509</td>
</tr>
<tr>
<td>Error</td>
<td>25</td>
<td>145.24</td>
<td>5.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(*F (3,25) = 2.99, p = .05\)

The best three (3) variable model found is shown in Tables 8, 9, 10, and 11. A summary of the data shown in the best
three variable model indicates that independent variables centralization in non-credit programs, centralization in credit programs, formalization in credit programs and formalization in non-credit programs viewed collectively explain approximately 35 percent of the variance in the dependent variable leadership functions.

In Step 4 of the multiple regression analysis, centralization in CE credit programs re-entered the equation. The reader will recall that centralization in credit programs first entered the equation at Step 2. The re-entry of this variable at Step 4 indicates some redundancy and overlapping of variables.

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>$R^2$</th>
<th>df</th>
<th>$F$</th>
<th>Prob&gt; $F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Centcr</td>
<td>.4217</td>
<td>4/24</td>
<td>4.38</td>
<td>.0085</td>
</tr>
</tbody>
</table>

The data show that centralization in CE credit programs explains 42 percent ($R^2 = .4217$) of the variance in leadership functions after the effects of centralization in CE non-credit, centralization in credit, formalization in credit, and formalization in non-credit programs are partialed out. $R^2$ equals .4217 and is statistically significant at the .05 level as shown by the overall $F = 4.38$. 

TABLE 12
Maximum R Square Improvement For Dependent Variable Leadersh
TABLE 13
Summary of Maximum R Square Improvement For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4</td>
<td>94.38</td>
<td>23.59</td>
<td>4.38*</td>
<td>.4217</td>
</tr>
<tr>
<td>Error</td>
<td>24</td>
<td>129.40</td>
<td>5.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (4,24) = 2.78, p = .05

Data illustrating the best three variable model found in the maximum R square improvement model are summarized in Table 14 on the next page.
### TABLE 14

Summary of Best Three Variable Model
For Dependent Variable Leadersh

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Variable Entered</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F</th>
<th>R²</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression Error</td>
<td>Centnc</td>
<td>1</td>
<td>56.14</td>
<td>56.14</td>
<td>9.04</td>
<td>.2508</td>
<td>.0057</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>167.65</td>
<td>6.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression Error</td>
<td>Centcr</td>
<td>2</td>
<td>63.07</td>
<td>31.53</td>
<td>5.10</td>
<td>.2818</td>
<td>.0135</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>160.71</td>
<td>6.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression Error</td>
<td>Formalcr</td>
<td>3</td>
<td>68.57</td>
<td>22.85</td>
<td>3.68</td>
<td>.3064</td>
<td>.0253</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>155.21</td>
<td>6.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression Error</td>
<td>Formalnc</td>
<td>3</td>
<td>78.54</td>
<td>26.18</td>
<td>4.51</td>
<td>.3509</td>
<td>.0117</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>145.24</td>
<td>5.80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data show that collectively two of the three organizational variables used for this study explain 35 percent of the variance in the dependent variable. These findings are statistically significant as indicated by the overall F tests calculated at each step in the analysis. The findings indicate that organizational structure does covary with leadership functions of continuing education administrators and they lend support to the sociological perspective of leadership as a dependent variable.

Centralization in CE non-credit programs explains the largest percent of variance in leadership functions of continuing education administrators in four selected types of higher education institutions. This finding may not be surprising in view of the diversity of CE non-credit program offerings. For example, many institutions offer CE non-credit programs through individual departments in the institution. Thus, the department (allied health, management science, agriculture, etc.) assumes responsibility for the activity and the continuing education department is not involved.

Viewed from another perspective, and previously mentioned, is the possibility that CE credit programs may be part of the regular curricula and thereby subject to institutional policies and procedures related to traditional programs.
Findings related to CE non-credit programs will be discussed later in this chapter and again in Chapter 5. However, it would seem that the findings from the multiple regression analysis suggest future research possibilities for those interested in the structural aspects of CE credit and non-credit programs in higher education.

Although the findings shown in Table 14 are statistically significant, care must be exercised in drawing broad generalizations from the model. For example, to the researcher's knowledge, no previous studies of this particular type exist. Therefore, it is impossible to compare the findings with previous work of a similar nature. In addition to the lack of previous studies, the independent variables used for this study may be interrelated as evidenced in Step 4 of the multiple regression analysis. According to Kerlinger and Pedhazur (1973, p. 296) in ex post facto or nonexperimental research the independent variables are generally correlated. As such, there may be explanations of complex events. A major danger in ex post facto research is the improper and erroneous interpretation of the research. One way to gain better control of the independent variables in ex post facto research is to employ factor analysis as a method for extracting common factor analysis from sets of measures (Kerlinger, 1973, p. 659). The researcher suggests
that future research using abstract organizational variables such as the ones used in this study also employ factor analysis as one way of determining the number and nature of the underlying variables among larger numbers of measures. For example, a number of factors have been found to underlie intelligence, aptitude, attitude, and personality factors (Kerlinger, 1973, p. 660). There are no doubt many factors that underlie leadership and various facets of organizational structure.

Despite the limitations mentioned the findings shown in Table 14 are statistically significant at the .05 level and bear further examination. Tests were run on each one of the steps in the best three variable model found. The following formula was calculated manually to test for increments in proportion of variance between models, with the objectives of determining where significant differences exist and of selecting the best one variable model.

\[ F = \frac{(R^2_{y.12..k_1} - R^2_{y.12..k_2})/(k_1-k_2)}{(1-R^2_{y.12..k_1})/(N-k_1-1)} \]

\[ R^2_{y.12..k_1} = \text{squared multiple correlation coefficient for the regression of } Y \text{ on } K_1 \text{ variables; and } R^2_{y.12..k_2} \]
\[ = \text{squared multiple correlation coefficient for the regression of } Y \text{ on } K_2 \text{ variables, where } K_2 \text{ is any set of variables selected from the set of variables } K_1. \]

The degrees of freedom for the F ratio denominator respectively (Kerlinger and Pedhazur, 1973, p. 178).
Step 1.

\[
\frac{(.2818 - .2508)/(2-1)}{(1 - .2818)/(28-2-1)}
\]

The F ratio for Step 1 equals 1.080. At 1 and 25 degrees of freedom, F is not significant at the .05 level.

Step 2.

\[
\frac{(.3064 - .2818)/(3-2)}{(1 - .3064)/(28-3-1)}
\]

\[
\frac{.024}{.028} = .851
\]

For Step 2, the F ratio equals .851. At 1 and 24 degrees of freedom, F is not statistically significant at the .05 level.

Step 3.

\[
\frac{(.3509 - .3064)/(3-2)}{(2 - .3509)/(28-3-3)}
\]

\[
\frac{.044}{.029} = 1.508
\]

The F ratio for Step 3 equals 1.508. At 1 and 22 degrees of freedom, F is not statistically significant at the .05 level.
Data were obtained from tests calculated to determine the proportion of variance accounted for by each variable in the three variable model. They showed that none of the independent variables (centralization in CE credit programs, formalization in CE credit programs, and formalization in CE non-credit programs) contributed a statistically significant proportion of variance to the best one variable model, centralization in CE non-credit programs. Therefore, it seems logical to conclude that the independent variables are correlated to some extent. Further, it is apparent that the one best variable model is centralization in CE non-credit programs as illustrated by the stepwise and maximum R square improvement models.

Upon completion of tests to determine the increments in the proportion of variance between models, an analysis of variance was employed to analyze differences between types of higher education institutions.

Analysis of Variance

An analysis of variance was used to analyze the variance estimates obtained from four types of higher education institutions. Although this analysis is not directly related to the research questions, it was assumed by the researcher that there would be differences in governance and management
in different types of higher education institutions (Chapter 1, p. 26). This general assumption was based on a national research study conducted by Baldridge, Curtis, Ecker, and Riley (1978). As previously mentioned in Chapters 1, 2, and 3, Baldridge et. al. concluded that there are major organizational differences and much diversity among colleges and universities (p. 10). They specifically mention differences in formal control structures, diversity of institutional goals, and the institution's degree of centralization (p. 10).

Therefore, the next objective in the data analysis was to determine if there were differences in types of institutions (A, B, C, D) and the variables formalization in credit and non-credit programs, centralization in credit and non-credit programs, complexity in credit and non-credit programs, and leadership functions. An analysis of variance was employed to analyze the variance estimates obtained from the four samples.

For the variable formalization in CE credit programs, there was no significant differences in variance between the means of the institutions as shown in Table 15 on the next page.
TABLE 15

ANOVA For Variable Formalcr in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>29</td>
<td>696.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td>3</td>
<td>33.04</td>
<td>11.01</td>
<td>0.43*</td>
<td>.7320</td>
</tr>
<tr>
<td>Error</td>
<td>26</td>
<td>663.26</td>
<td>25.509</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (3,26) = 2.98, p = .05

At 3 and 26 degrees of freedom the F ratio is 0.43 which is not significant at the .05 level.

There was no significant difference in variance between the means of the institutions in formalization in CE non-credit programs as illustrated in Table 16 below.

TABLE 16

ANOVA For Variable Formalnc in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>40</td>
<td>645.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td>3</td>
<td>41.68</td>
<td>13.89</td>
<td>0.85*</td>
<td>.4748</td>
</tr>
<tr>
<td>Error</td>
<td>37</td>
<td>603.83</td>
<td>16.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (3,37) = 2.63, p = .05
The F ratio is 0.85 for 3 and 37 degrees of freedom which is not significant at the .05 level.

For the variable centralization in CE credit programs there was no significant difference in variance between institutional means as shown in Table 17.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>29</td>
<td>339.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td>3</td>
<td>71.40</td>
<td>23.80</td>
<td>2.31*</td>
<td>.0999</td>
</tr>
<tr>
<td>Error</td>
<td>26</td>
<td>268.06</td>
<td>10.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (3,26) = 2.98, p = .05

The F ratio is 2.31 for 3 and 26 degrees of freedom and is not significant at the .05 level.

It can be seen in Table 18 on the next page that there is a significant difference between the means of institutions A, B, C, and D on the variable centralization in CE non-credit programs.
### TABLE 18
ANOVA For Variable Centnc in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
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<td>Total</td>
<td>40</td>
<td>133.12</td>
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<tr>
<td>Institution</td>
<td>3</td>
<td>59.46</td>
<td>19.82</td>
<td>9.96*</td>
<td>.0001</td>
</tr>
<tr>
<td>Error</td>
<td>37</td>
<td>73.65</td>
<td>1.9907</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F (3,37) = 2.86, p = .05
*F (3,37) = 4.38, p = .01

The F ratio is 9.96, and at 3 and 37 degrees of freedom is statistically significant at the .05 and at the .01 level.

There was also a statistically significant difference between means of institutions on the variable complexity in CE credit programs. Data in Table 19 show that the F ratio is 4.22 which is statistically significant at the .05 level.

### TABLE 19
ANOVA For Variable Compcr in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
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<tr>
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<tr>
<td>Institution</td>
<td>3</td>
<td>364.27</td>
<td>121.42</td>
<td>4.22*</td>
<td>.0148</td>
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<tr>
<td>Error</td>
<td>26</td>
<td>748.53</td>
<td>28.789</td>
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<td></td>
</tr>
</tbody>
</table>

*F (3,26) = 2.98, p = .05
Variables complexity in CE non-credit programs, and leadership showed no significant variance between means of selected institutions. In the following Tables (20 and 21) it is shown that the F ratio for complexity in CE non-credit programs equals 1.21 which is not statistically significant at the .05 level with 3 and 37 degrees of freedom. In the case of leadership functions, the F ratio is 2.05 which is not significant at the .05 level with 3 and 37 degrees of freedom.

TABLE 20
ANOVA For Variable Compnc in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
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<td>Institution</td>
<td>3</td>
<td>64.66</td>
<td>21.55</td>
<td>1.21*</td>
<td>.3201</td>
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<tr>
<td>Error</td>
<td>37</td>
<td>569.82</td>
<td>17.83</td>
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<td></td>
</tr>
</tbody>
</table>

*F (3,37) = 2.98, p = .05

TABLE 21
ANOVA For Variable Compnc in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob &gt; F</th>
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<tr>
<td>Total</td>
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<td>464.28</td>
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<tr>
<td>Institution</td>
<td>3</td>
<td>64.63</td>
<td>21.54</td>
<td>2.05*</td>
<td>.1233</td>
</tr>
<tr>
<td>Error</td>
<td>38</td>
<td>399.65</td>
<td>10.51</td>
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<td></td>
</tr>
</tbody>
</table>

*F (3,38) = 2.62, p = .05
Results of the analysis of variance show that there is a significant difference between means of centralization scores in non-credit programs and complexity scores in CE credit programs of the four institutions. These findings are in agreement with the overall results of the Baldridge et. al. study. However, it is not possible to draw accurate comparisons between the research of Baldridge et. al. and this study because of the different variables being measured. It is possible though to support the general overall assumptions made concerning management and governance differences in different types of higher education institutions.

In summary, data obtained from the analysis of variance show that there are statistically significant differences in means among four types of higher education institutions in two areas. Those areas are centralization in CE non-credit programs and complexity in CE credit programs. However, the institutions did not differ significantly in five other areas namely: formalization in CE credit programs; formalization in CE non-credit programs; centralization in CE credit programs; complexity in CE non-credit programs, and leadership.
The means for formalization in credit and non-credit programs, centralization in credit and non-credit programs, complexity in credit and non-credit programs, and leadership in institutions A, B, C, and D are shown in Appendix B.

No further data analyses were performed
Summary of Findings

This chapter presented findings related to the relationships between organizational structure (formalization, centralization, and complexity), credit and non-credit programs, types of higher education institutions, and leadership functions of continuing education administrators in higher education. Findings related to the research questions are summarized below.

1. Thirty five percent of the variance in leadership functions of continuing education administrators was explained by centralization in CE non-credit programs; centralization in CE credit programs; formalization in CE credit programs; and formalization in CE non-credit programs.

Thus, based on the results of the multiple regression analysis, two of the three organizational variables measured for CE credit and non-credit programs explained 35 percent of the variance in the dependent variable.

The results obtained from tests calculated to determine the proportion of variance accounted for by each variable model showed that none of the independent variables (centralization in CE credit programs, formalization in CE credit programs, and formalization in CE non-credit programs) made a statistically significant contribution to the one best variable model (centralization in non-credit programs).
Findings related to the analysis of variance to test differences between institutions are summarized below.

1. There are statistically significant differences among four selected types of higher education institutions in centralization in CE non-credit programs and complexity in CE credit programs.

2. There are no statistically significant differences among four selected types of higher education institutions regarding formalization in CE credit programs; formalization in CE non-credit programs; centralization in CE credit programs; complexity in CE non-credit programs or leadership functions of CE administrators.

In interpreting study findings, focus was given to the use of the stepwise regression procedure, the maximum $R^2$ improvement model, and analysis of variance in obtaining study results.

Chapter V contains a summary, conclusions, implications, and suggestions for future research.
CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS
AND
SUGGESTIONS FOR FUTURE RESEARCH

The primary purpose of this research was to investigate the relationships between organizational structure in selected types of higher education institutions and the leadership functions of continuing education administrators. Formalization, centralization, complexity, type of institution, credit and non-credit status of CE programs, and leadership functions defined the variables examined.

Data were gathered by questionnaires mailed to continuing education administrators in fifty higher education institutions in Ohio. The institutions were selected according to criteria determined for four types of higher education institutions in Ohio. The institutions were then divided into four strata from which random samples were drawn. The questionnaire was designed to elicit information about organizational structure related to CE credit and non-credit
programs and leadership functions of CE administrators. The data consisted of self-reports and represented the CE administrators' perceptions of structural conditions and leadership functions in his/her institution.

A review of the adult and continuing education literature showed that numerous articles have been written about the leadership styles of continuing education administrators. However, no studies were found which examined leadership of continuing education administrators in relationship to task, setting, or organizational structure. Therefore, this study was designed according to the sociological perspective of organizational analysis which views leadership as a dependent variable (Perrow, 1970, p. 6), dependent upon or following from something else. In this study the "something else" was organizational structure (formalization, centralization, complexity), the credit or non-credit status of programs, and type of institution.

The following general research question and six specific research questions were formulated to guide the study.

To what extent does the organizational structure of selected types of higher education organizations covary with the leadership functions of continuing education administrators?

1. To what extent does formalization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?
2. To what extent does centralization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?

3. To what extent does complexity in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE credit programs?

4. To what extent does formalization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

5. To what extent does centralization in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

6. To what extent does complexity in selected types of higher education organizations covary with leadership functions of continuing education administrators of CE non-credit programs?

Questionnaire items designed to draw inferences about the research questions were based on a comprehensive review of literature. The questionnaire was pilot-tested on a small group of individuals representative of those to whom the questionnaire was directed. Following the pilot-test, the questionnaire was revised according to suggestions, typeset, and mailed with a cover letter and stamped, self-addressed envelope to fifty CE administrators. A follow-up letter, another questionnaire, and a self-addressed, stamped envelope
was sent to nonrespondents approximately two weeks after the original mailing. Forty three (86%) of the questionnaires were returned and forty two (84%) were used for data analysis.

Data analysis consisted of multiple regression analysis (stepwise regression, maximum R square improvement, and one way analysis of variance) and was performed under Release 79.5, Statistical Analysis System (SAS). Additional tests were calculated manually to determine the proportion of variance accounted for by each variable. Results of the multiple regression analysis indicated that a statistically significant amount of variance in leadership functions of CE administrators is explained by centralization in CE non-credit and credit programs and formalization in CE credit and non-credit programs. Tests conducted to determine the proportion of variance contributed by each variable showed that none of the variables contributed a significant proportion of variance to the one best variable model. A one-way analysis of variance (ANOVA) was employed to test the differences between the means of all the variables in four types of institutions. The results showed that there are significant differences in centralization in CE non-credit programs and complexity in CE credit programs in different types of institutions. Although study findings provide support for
the conclusions drawn later in the report, more definitive results require future research studies which overcome methodological limitations previously discussed.

Despite the limitations mentioned, there is much that can be derived from the results of this study. The findings indicate that variance in leadership functions of CE administrators is explained in part by organizational structure. The conclusions that follow are synthesized from the analysis of data reported in Chapter IV. Implications for future research are given following the conclusions.

Conclusions

Conclusion 1. Leadership functions of continuing education administrators in four types of higher education institutions are explained in part by centralization in CE non-credit programs.

This conclusion is based on the proportion of variance in leadership functions explained by centralization in CE non-credit programs. This conclusion may be attributable to many factors. For example, CE non-credit programs may be more or less numerous and diverse in different types of higher education institutions. Definitions of CE non-credit programs are likely to vary broadly in different types of higher education institutions. Additional factors that may
contribute to this conclusion are: (1) size of the institution; (2) whether the institution is public or private; (3) the age of the continuing education program; (4) continuity of leadership and length of time the CE administrator has been on the job; (5) external environmental forces. These factors could be examined in various ways in future research. For example, one might use an open systems model as proposed by Katz and Kahn (1976) to examine external environmental conditions and their relationships to CE credit and non-credit programs.

It may be conjectured that centralization of decision-making, collaborative, and goal-setting activities at the institutional level inhibits the CE administrators' leadership functions in CE non-credit programs.

Conclusion 2. Leadership functions of continuing education administrators in four types of higher education institutions are explained in part by centralization in CE credit programs.

This conclusion is based on the amount of variance in leadership functions explained by centralization in CE credit programs after the effects of centralization in CE non-credit programs were partialed out. As with centralization in CE non-credit programs, many factors could contribute to this finding. More specifically, the factors listed under conclusion number one (1) could contribute to all the findings.
in this study. Thus, based on the results of this study, if can be assumed that centralization in CE credit programs (or lack of participation in decision-making, collaborative, and goal-setting activities) interferes with the leadership functions of CE administrators. For example, CE administrators who do not participate in planning CE credit programs may find it difficult to provide leadership for same.

Conclusion 3. Leadership functions of continuing education administrators in four types of higher education institutions are explained in part by formalization in CE credit programs.

This conclusion is based on the amount of variance in leadership functions explained by formalization in CE credit programs after the effects of centralization in CE non-credit programs and centralization in CE credit programs were partialed out. The reader is reminded that questionnaire items concerning formalization in CE credit programs were related to written institutional policies and procedures for CE credit programs. Respondents answered these questions by checking "yes" or "no." One person chose to elaborate on the answers by checking "no" and then writing in the margin that written policies and procedures for CE credit programs were currently being drawn up for use in the near future. Messages written in the margin next to questionnaire items suggested at least two things to the researcher: (1) that respondents
were interested in giving more complete information than the question called for; and (2) that there are inherent difficulties in dealing with dynamic processes through mail surveys. In spite of the limitations implied by these observations, it may be assumed that formalization in CE credit programs hinders the leadership functions of CE administrators. Written institutional policies and procedures for CE credit programs for example, may impede decision-making, collaborative, and goal-setting activities relevant to CE credit programs.

Conclusion 4. Leadership functions of continuing education administrators in four types of higher education institutions are explained in part by formalization in CE non-credit programs.

This conclusion is based on the amount of variance in leadership functions explained by formalization in CE non-credit programs after the effects of centralization in CE non-credit programs, centralization in CE credit programs, and formalization in CE credit programs were partialled out.

Respondents seemed to have no difficulty in interpreting the questions and some chose to write in additional comments. Some written comments on questions related to written policies and procedures for CE non-credit programs included the following: (1) "not that I am aware of;" (2) "this is a regional campus and I'm not sure about the main
campus;" (3) "policies and procedures are handed down by the office of special programs." These comments lend support to the finding of centralization in CE non-credit programs. Specifically, comments two (2) and three (3) seem to imply that decisions about policies and procedures for CE non-credit programs may be centralized in main campus offices or offices of special programs. If this is the case, CE administrators working in branch or regional campuses may be geographically excluded from participating in decision-making, collaborative, and goal-setting activities for CE programs. In addition, comment three (3) lends support to the possibility of differences in definitions previously mentioned. For example, some colleges and universities may view CE non-credit programs as "special programs." Other institutions may define CE non-credit programs as part of the total continuing education effort.

Therefore, it may be inferred that leadership functions of CE administrators are somewhat restrained by formalization in CE non-credit programs.

Conclusion 5. Organizational structure in four selected types of higher education institutions covaries with the leadership functions of continuing education administrators.

This conclusion is based on the total amount of variance in the dependent variable (leadership functions) explained by
the independent variables formalization, centralization, and
the credit, non-credit status of programs. This conclusion
also lends support to the theoretical assumptions of the
sociological perspective of leadership.

Conclusion 6. None of the variables, centralization in CE
credit programs; formalization in CE credit
programs; and formalization in CE non-credit
programs contributed a significant proportion
of variance to the one best variable model,
centralization in CE non-credit programs.

This conclusion is based on the results of tests
calculated to determine the proportion of variance accounted
for by each variable. Although the variables centralization
in CE credit programs and formalization in CE credit and non-
credit programs show overall statistical significance when
combined with centralization in CE non-credit programs, none
of these variables contributed a statistically significant
proportion of variance to the one best variable model. It
may be assumed that there is some correlation of these
variables causing overlapping and redundancy in the
independent variables. As was previously mentioned in
Chapter IV, this problem could be alleviated somewhat by using
additional methodological techniques. Namely, it was and is
suggested that factor analysis be used prior to the multiple
regression analysis in future research of this type. When
complex variables are being examined in an ex post facto
study, factor analysis is one way to cluster the variables thereby helping to eliminate overlapping and redundancy.

Conclusion 7. There are major differences in centralization in CE non-credit programs and complexity in CE credit programs in four types of higher education institutions.

This conclusion is based on the results of an analysis of variance used to test the differences between the means of institutions on all the variables. Although these test results are not specifically related to the research questions, they do support a general assumption made by the researcher. Namely that there are differences in management and governance in different types of higher education institutions. While no accurate comparisons can be made due to different variables being measured, this conclusion is supported by the Baldridge, Curtis, Ecker, and Riley (1976) research cited throughout this report.

It is interesting to note the statistically significant differences between means of institutions in complexity in CE credit programs. Complexity for this study was defined as vertical complexity, or stated another way, the hierarchy of management levels. Respondents were asked to circle the number of management levels through which decisions about CE programs must go for approval in their institutions. Differences among definitions of management levels were
readily apparent in one or two answers to questions about complexity. Some respondents changed the wording of management levels to read "Controller," "Vice President for Finance," and "Vice President of Academic Affairs." None of these titles were listed as such on the questionnaire. The means for institutions A, B, C, and D are shown in Table 21 in Appendix B. According to the results of the analysis of variance, liberal arts institutions are relatively complex thereby indicating that CE administrators must seek approval at several management levels before decisions can be made. This finding may be due in part to the fact that the liberal arts institutions in this study were private institutions. By contrast, most of the other institutions in the study were public institutions. There are no doubt vast differences in the philosophies, missions, type of students, program offerings, tuition costs, and funding between private and public institutions. In addition, complexity may be related to the size of the institution. Baldridge et. al. found for example that larger schools provide the most autonomous work environment for the professional (1978, p. 130). All of the factors mentioned could affect continuing education programs. These issues were not examined in this study, however they raise some provocative questions about continuing education in private versus public institutions and the size of the institution.
Results of the analysis of variance also showed statistically significant differences between means of institutions in centralization in CE non-credit programs. These differences are shown in mean responses listed in Table 21 in Appendix B. According to the results of the analysis of variance, comprehensive colleges and universities are centralized in CE non-credit programs. This finding indicates that CE administrators in comprehensive colleges and universities (B) participate less in decision-making, collaborative, and goal-setting activities in CE non-credit programs than administrators in institutions A, C, and D.

The results of the research are suggestive rather than conclusive due to methodological limitations and the ex post facto nature of the study. In addition to previously discussed weaknesses inherent in ex post facto studies, the questionnaire consisted of fixed-alternative items. These closed items may force respondents to check answers that do not fully describe their programs or situations. In a pragmatic sense though, it should be observed that two of the three organizational structure variables measured explained a significant proportion of the variance in leadership functions of CE administrators. Therefore, it seems logical to draw from the research certain implications for continuing education administrators.
Implications of the Research

1. Continuing education administrators in higher education institutions should be just as aware of organizational structure in their institutions as they are of personal leadership styles in performing leadership functions for CE credit and non-credit programs.

2. Continuing education administrators in higher education should use their knowledge and awareness of organizational structure in their institutions to take advantage of opportunities and overcome restraints related to leadership functions.

3. Continuing education administrators in higher education institutions should be aware of the possibility that differences in management and governance exist in different types of higher education institutions. An awareness of and sensitivity to these differences may enable CE administrators to devise strategies to overcome barriers to their leadership functions. Conversely, knowing about differences in management and governance may help CE administrators recognize opportunities that exist for performing leadership functions.

On a theoretical level, the research has shown that leadership functions of continuing education administrators
probably have many correlates. One of these correlates is organizational structure. Therefore, on the basis of the results of the research one can imply that the use of a macro (organizational) perspective is as necessary as a micro (personal style) perspective when studying leadership functions of continuing education administrators. This study makes a theoretical contribution to the understanding of relationships between certain aspects of organizational structure and the leadership functions of continuing education administrators in higher education.

Several suggestions for future research were mentioned in Chapter IV. These suggestions are amplified and additional suggestions are listed in the final section on suggestions for future research.

Suggestions for Future Research

1. Any replication of this research should use factor analysis to determine the number and nature of underlying variables. After variable clusters have been determined, data could be analyzed using multiple regression analysis similar to that used in this study. Factor analysis could also be used to obtain construct validity of the independent variables.
2. The Delphi technique, in addition to the literature review, might be used in future research to identify the leadership functions of continuing education administrators.

3. For more in-depth information in similar studies, questionnaires should be constructed with both alternative-item and open-end type items. If possible, questionnaires should then be coupled with structured interviews to obtain more complete information.

4. Longitudinal studies should be conducted to take advantage of the dynamic processes involved in organizational structure and leadership functions of continuing education administrators in higher education.
APPENDIX A

COVER LETTER, FOLLOW-UP LETTER, QUESTIONNAIRE
Dear Administrator:

Your cooperation is requested in taking approximately 30 minutes to complete the enclosed questionnaire. Continuing education administrators are active, vigorous persons who perform multiple leadership functions for continuing education credit and non-credit programs. The primary purpose of this STATEWIDE survey is to determine how some of these leadership functions vary in different types of higher education institutions. The survey will provide a means by which higher continuing education administrators can contribute their thoughts relative to leadership functions in their individual institutions.

Due to the nature of the sampling procedure, even a few non-respondents will diminish the results of the study. Therefore, your response is critical to the study. I know you are busy. Consequently, the questionnaire has been constructed so you can respond to it as simply, directly, and quickly as possible.

You can be assured of complete confidentiality. In no instance will responses or institutional affiliations be identified in the report. The return envelope is numbered for statistical control of returns, but the questionnaire is anonymous and will be separated from the envelope.

Please complete the survey questionnaire and return it within five working days if possible. A self-addressed, stamped, return envelope is enclosed for your convenience.

If you have any questions about the study, please contact me at (614) 486-3655, Ext. 77, or (614) 267-1073. Thank you for participating.

Sincerely,

Phyllis Carder Baker, Research Associate
The National Center for Research in Vocational Education
1960 Kenny Rd.
The Ohio State University
Columbus, Ohio 43210
Dear Administrator:

Several weeks ago I sent you a letter asking for your participation in a Statewide study of continuing education administrators in Ohio. You were asked to complete a questionnaire and return it to me. Since I have not received the completed questionnaire, I assume that it may have been lost in the mail.

I know that you are very busy. Perhaps you have not had sufficient time to complete the survey instrument. However, your response is vital to this project and therefore I urge you to take time to answer the items and return the form to me. All information provided by you will be kept confidential. A copy of the questionnaire and a self-addressed, stamped envelope are enclosed.

Thank you for your cooperation. I sincerely believe that the results of the study will be of practical value to continuing education administrators.

Sincerely,

Phyllis Carder Baker
NCRVE
1960 Kenny Rd.
The Ohio State University
Columbus, Ohio 43210
Statewide Survey
Of
Continuing Education Administrators
In
Higher Education In Ohio
Dear Administrator:

As was noted in the cover letter, this statewide survey of continuing education administrators in higher education in Ohio is to determine some of the leadership functions performed by higher continuing education administrators.

I know you are busy and have many demands on your time. Consequently, I have tried to make the questionnaire as straightforward as possible to enable you to respond to it quickly. Due to the nature of the sampling procedure, EVEN A FEW NON-RESPONDENTS WILL THROW OFF THE RESULTS OF THE STUDY. Therefore, your response is central to the study.

Thank you very much for your cooperation.

GENERAL INSTRUCTIONS

Please answer all questions with the response that most nearly fits your situation.
DECISION-MAKING ACTIVITIES

SECTION A

Continuing education (CE) administrators in higher education make decisions about continuing education activities. Some of these decisions are related to staffing, finances and budgeting, program development and implementation, and marketing CE CREDIT and NON-CREDIT programs. Credit programs are academic courses, seminars, or workshops which result in the awarding of academic credit upon completion. Non-credit programs are generally a form of community service designed to provide enrichment for groups and individuals outside the scope of regular credit courses.

For each of the following statements please answer the extent to which it best characterizes decision-making activities about CE CREDIT programs in your institution. If you do not administer CE CREDIT programs, go directly to question 14 on page 3.

1. My institution has clearly stated, written policies and procedures concerning the following staffing activities for CE CREDIT programs. (Check one for each activity)
   Yes No
   a) Advertising in the media for faculty and support staff
   b) Recruiting faculty and support staff
   c) Hiring faculty and support staff
   d) Providing orientation programs for faculty and support staff
   e) Providing staff development programs for faculty and support staff

2. How often do you participate in decisions to hire faculty for CE CREDIT programs? (Check one)
   rarely
   sometimes
   frequently

3. How often do you participate in decisions to hire support staff for CE CREDIT programs? (Check one)
   rarely
   sometimes
   frequently

4. Some higher education institutions have a number of management levels through which decisions about staffing for CE CREDIT programs must be cleared.

   Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

   Level V President
   Level IV Council of Academic Affairs
   Level III Dean of the College
   Level II Department Chairperson
   Level I CE Administrator

5. Some CE administrators prepare a budget for CE CREDIT programs in their institutions.

   Check one statement below that best characterizes the procedure you would follow for budget preparation in your institution.

   a) Organizational procedures for budget preparation for CE CREDIT programs are clearly stated, written procedures.
   b) Organizational procedures for budget preparation for CE CREDIT programs are written guidelines that allow flexibility
   c) My organization has no written procedures for budget preparation for CE CREDIT programs

   (Check one)

   ______
   ______
   ______
   ______
   ______
   ______
6. How often do you participate in decisions concerning financing and budgeting for CE CREDIT programs? (Check one)
   rarely ........................................... 
   sometimes ........................................
   frequently ........................................

7. During the last two years I prepared a budget request for CE CREDIT programs to be acted upon by higher authorities in my institution.
   Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.
   Level V President
   Level IV Council of Academic Affairs
   Level III Dean of College
   Level II Department Chairperson
   Level I CE Administrator

8. Some higher education institutions have clearly stated, written policies and procedures concerning program development and implementation of CE CREDIT programs.
   This is a fairly good description of my situation: (Check one)
   Yes _________ No _________

9. How often do you participate in decisions concerning program development and implementation of CE CREDIT programs? (Check one)
   rarely ........................................... 
   sometimes ........................................
   frequently ........................................

10. Some higher education institutions have a number of management levels through which decisions about program development and implementation of CE CREDIT programs must be cleared.
    Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.
    Level V President
    Level IV Council of Academic Affairs
    Level III Dean of the College
    Level II Department Chairperson
    Level I CE Administrator

11. Some higher education institutions have organizational policies and procedures for marketing CE CREDIT programs.
    Check one statement below that best characterizes your institution’s procedures for marketing CE CREDIT programs.
    a) Organizational procedures for marketing CE CREDIT programs are clearly stated, written procedures 
    b) Organizational procedures for marketing CE CREDIT programs are written guidelines that allow for flexibility 
    c) My organization has no written procedures for marketing CE CREDIT programs

12. How often do you participate in decisions concerning marketing CE CREDIT programs? (Check one)
   rarely ........................................... 
   sometimes ........................................
   frequently ........................................
13. Some higher education institutions have a number of management levels through which decisions about marketing CE CREDIT programs must be cleared.

Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of the College
Level II  Department Chairperson
Level I  CE Administrator

For each of the following statements please answer the extent to which it best characterizes decision-making activities about CE NON-CREDIT programs in your institution. If you do not administer CE NON-CREDIT programs, go directly to question 1 on page 6.

14. My institution has clearly stated, written policies and procedures concerning the following staffing activities for CE NON-CREDIT programs. (Check one for each activity)

   a) Advertising in the media for faculty and support staff
   b) Recruiting faculty and support staff
   c) Hiring faculty and support staff
   d) Providing orientation programs for faculty and support staff
   e) Providing staff development programs for faculty and support staff

   Yes   No

15. How often do you participate in decisions to hire faculty for CE NON-CREDIT programs? (Check one)

   rarely
   sometimes
   frequently

16. How often do you participate in decisions to hire support staff for CE NON-CREDIT programs? (Check one)

   rarely
   sometimes
   frequently

17. Some higher education institutions have a number of management levels through which decisions about staffing for CE NON-CREDIT programs must be cleared.

Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of the College
Level II  Department Chairperson
Level I  CE Administrator

18. Some CE Administrators prepare a budget for CE NON-CREDIT programs in their institutions.

Check one statement below that best characterizes the procedure you would follow for budget preparation in your institution.

   a) Organizational procedures for budget preparation for CE NON-CREDIT programs are clearly stated, written procedures
   b) Organizational procedures for budget preparation for CE NON-CREDIT programs are written guidelines that allow for flexibility.
   c) My organization has no written procedures for budget preparation for CE NON-CREDIT programs
19. How often do you participate in decisions concerning financing and budgeting for CE NON-CREDIT programs (Check one)
   rarely ............................................
   sometimes ........................................
   frequently ........................................

20. During the last two years I prepared a budget request for CE NON-CREDIT programs to be acted upon by higher authorities in my institution.
   Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.
   Level V President
   Level IV Council of Academic Affairs
   Level III Dean of the College
   Level II Department Chairperson
   Level I CE Administrator

21. Some higher education institutions have clearly stated, written policies and procedures concerning program development and implementation of CE NON-CREDIT programs.
   This is a fairly good description of my situation: (Check one)
   Yes ________ No ________

22. How often do you participate in decisions concerning program development and implementation of CE NON-CREDIT programs? (Check one)
   rarely ............................................
   sometimes ........................................
   frequently ........................................

23. Some higher education institutions have a number of management levels through which decisions about program development and implementation of CE NON-CREDIT programs must be cleared.
   Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.
   Level V President
   Level IV Council of Academic Affairs
   Level III Dean of the College
   Level II Department Chairperson
   Level I CE Administrator

24. Some higher education institutions have organizational policies and procedures for marketing CE NON-CREDIT programs.
   Check one statement below that best characterizes your institution's policies for marketing CE NON-CREDIT programs.
   a) Organizational procedures for marketing CE NON-CREDIT programs are clearly stated, written procedures
   ....................................................
   b) Organizational procedures for marketing CE NON-CREDIT programs are written guidelines that allow for flexibility
   ....................................................
   c) My organization has no written procedures for marketing CE NON-CREDIT programs
   ....................................................

25. How often do you participate in decisions concerning marketing CE NON-CREDIT programs? (Check one)
   rarely ............................................
   sometimes ........................................
   frequently ........................................
26. Some higher education institutions have a number of management levels through which decisions about marketing CE NON-CREDIT programs must be cleared. Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of the College
Level II  Department Chairperson
Level I  CE Administrator

COLLABORATION

SECTION B

Continuing education (CE) administrators in higher education work jointly with faculty members and administrators in their institutions in planning and conducting CE programs. For this study we are interested in these collaborative activities in your institution.

For each of the statements that follow please answer the extent to which it best characterizes collaborative activities related to CE CREDIT programs in your institution. If you do not administer CREDIT programs, go directly to question 4.

1. Some higher education institutions have clearly stated written policies and procedures for collaborating with faculty and administrators on CE CREDIT activities listed below: (Check one for each activity)

   a) Asking faculty members in the institution for CE program suggestions ________
      ______
   b) Recruiting faculty members in the institution to teach in CE ________
      ______
   c) Rewarding (monetary) faculty in the institution for teaching in CE ________
      ______
   d) Faculty service on CE committees ________
      ______

2. How often do you participate in decisions to collaborate with faculty and administrators on planning CE CREDIT activities (Check one)

   rarely ........................................
   sometimes .................................
   frequently ....................................

3. Some higher education institutions have a number of management levels through which decisions about collaborative relationships for planning CE CREDIT programs must be cleared. Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of the College
Level II  Department Chairperson
Level I  CE Administrator

For each of the statements that follow please answer the extent to which it best characterizes collaborative activities related to CE NON-CREDIT programs in your institution. If you do not administer CE NON-CREDIT programs, go directly to question 1 on page 6.

4. Some higher education institutions have clearly stated written policies and procedures for collaborating with faculty and administrators on CE NON-CREDIT activities listed below: (Check one for each activity)

   a) Asking faculty members in the institution for CE program suggestions ________
      ______
   b) Recruiting faculty members in the institution for teaching in CE ________
      ______
   c) Rewarding (monetary) faculty in the institution for teaching in CE ________
      ______
   d) Faculty service on CE committees ________
      ______
5. How often do you participate in decisions to collaborate with faculty and administrators on planning CE NON-CREDIT activities? (Check one)

rarely 

sometimes 

frequently 

6. Some higher education institutions have a number of management levels through which decisions about collaborative relationships for planning CE NON-CREDIT programs must be cleared. Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of the College
Level II  Department Chairperson
Level I  CE Administrator

GOAL-SETTING ACTIVITIES

SECTION C

Different types of faculty organizations exist on different campuses. These organizations are variously referred to as the Council of Academic Affairs, Faculty Senate, Academic Council, or Faculty Association. For this study we are interested in the influence of such bodies on goal-setting activities for continuing education (CE) in your institution. Please answer the extent to which each of the following statements best characterizes goal-setting activities for CE CREDIT programs in your institution. If you do not administer CE CREDIT programs, go directly to question 4 on page 7.

1. My institution has clearly stated, written policies and procedures for the following activities related to setting goals for CE CREDIT programs: (Check one for each activity).

a) Written goal statements for CE CREDIT programs are compiled by central administration

b) Written goal statements for CE CREDIT programs are compiled by a faculty governance body (Academic Affairs, Faculty Senate, etc.)

c) Written goal statements for CE CREDIT programs are compiled by a council of faculty and administrators

d) Written goal statements for CE CREDIT programs are compiled by individual academic departments

e) Written goal statements for CE CREDIT programs are compiled by the CE administrator and staff with input from the groups listed above

2. How often do you participate in decisions related to goal-setting activities for CE CREDIT programs? (Check one)

rarely 

sometimes 

frequently 

...
3. Some higher education organizations have a number of management levels through which decisions about setting goals for CE CREDIT programs must be cleared.

Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of College
Level II  Department Chairperson
Level I  CE Administrator

Please answer the extent to which each of the following statements best characterizes goal-setting activities for CE NON-CREDIT programs in your institution. If you do not administer CE NON-CREDIT programs, please turn to page 8.

4. My institution has clearly stated, written policies and procedures for the following activities related to setting goals for CE NON-CREDIT programs: (Check one for each activity)

   a) Written goal statements for CE NON-CREDIT programs are compiled by central administration
   b) Written goal statements for CE NON-CREDIT programs are compiled by a faculty governance body (Academic Affairs, Faculty Senate, etc.)
   c) Written goal statements for CE NON-CREDIT programs are compiled by a council of faculty and administrators
   d) Written goal statements for CE NON-CREDIT programs are compiled by individual academic departments
   e) Written goal statements for CE NON-CREDIT programs are compiled by the CE administrator and staff with input from the groups listed above

5. How often do you participate in decisions related to goal-setting activities for CE NON-CREDIT programs? (Check one)
   rarely  . . .
   sometimes  . . .
   frequently  . . .

6. Some higher education organizations have a number of management levels through which decisions about setting goals for CE NON-CREDIT programs must be cleared.

Circle all the appropriate levels in the hierarchy through which such decisions go for approval in your institution.

Level V  President
Level IV  Council of Academic Affairs
Level III  Dean of College
Level II  Department Chairperson
Level I  CE Administrator
LEADERSHIP FUNCTIONS

SECTION D

Please place a check mark (✓) within the brackets to the left of those leadership functions which you perform for continuing education (credit and/or non-credit programs) in your institution.

( ) 1. Advertise in the media for faculty for the CE unit.
( ) 2. Advertise in the media for support staff for CE.
( ) 3. Recruit faculty for the CE unit.
( ) 4. Recruit support staff for the CE unit.
( ) 5. Hire faculty for the CE unit.
( ) 6. Hire support staff for the CE unit.
( ) 7. Provide orientation programs for CE faculty.
( ) 8. Provide orientation programs for CE support staff.
( ) 9. Provide staff development programs for CE support staff.
( ) 10. Provide staff development programs for CE faculty.
( ) 11. Prepare a budget for the CE unit.
( ) 12. Administer the budget of the CE unit.
( ) 13. Conduct needs assessments for programs to be offered by the CE unit.
( ) 14. Conduct marketing strategies for CE programs.
( ) 15. Ask faculty members in my institution for CE program suggestions.
( ) 16. Ask faculty members in my institution to teach in CE.
( ) 17. Implement CE programs suggested by faculty.
( ) 18. Reward faculty and administrators within my institution concerning CE activities.
( ) 19. Work with faculty and administrators within my institution concerning CE activities.
( ) 20. Serve on academic committees to get goals for CE activities.

************************************************************

Return completed questionnaire to:

Phyllis C. Baker
The National Center for Research in Vocational Education
1960 Kenny Road
The Ohio State University
Columbus, Ohio 43210

(Return envelope enclosed)
APPENDIX B

SUMMARY OF MEAN RESPONSES OBTAINED IN THE ANALYSIS OF VARIANCE FOR INSTITUTIONS A, B, C, AND D
### TABLE 22
Means Obtained From ANOVA For Formalcr, Centcr, and Compcr in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Inst.</th>
<th>N</th>
<th>Formalcr</th>
<th>Centcr</th>
<th>Compcr</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>8.00</td>
<td>8.00</td>
<td>13.00</td>
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<tr>
<td>B</td>
<td>3</td>
<td>5.66</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>8.71</td>
<td>0.71</td>
<td>20.00</td>
</tr>
<tr>
<td>D</td>
<td>19</td>
<td>9.21</td>
<td>2.42</td>
<td>12.15</td>
</tr>
</tbody>
</table>

### TABLE 23
Means Obtained From ANOVA For Formalnc, Centnc, and Compcnc in Institutions A, B, C, D

<table>
<thead>
<tr>
<th>Inst.</th>
<th>N</th>
<th>Formalnc</th>
<th>Centnc</th>
<th>Compcnc</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>7.60</td>
<td>0.40</td>
<td>9.60</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>7.25</td>
<td>4.50</td>
<td>8.25</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>4.62</td>
<td>0.25</td>
<td>12.62</td>
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<tr>
<td>D</td>
<td>24</td>
<td>7.00</td>
<td>0.54</td>
<td>10.00</td>
</tr>
</tbody>
</table>

### TABLE 24
Means Obtained From ANOVA For Leadersh in Institutions A, B, C, D

<table>
<thead>
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<th>Inst.</th>
<th>N</th>
<th>Leadersh</th>
</tr>
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<tbody>
<tr>
<td>A</td>
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<td>14.11</td>
</tr>
<tr>
<td>D</td>
<td>24</td>
<td>15.20</td>
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