The purpose of this study was to ascertain the perceptions and satisfaction levels of individuals employed as full-time teaching faculty at Polk Community College (PCC) (Florida), with regard to the environmental elements of formal influence, communication, collaboration, organizational structure, work design, and student focus. These elements were investigated to determine: (1) the current level of faculty satisfaction; (2) the extent to which perceptions differed among academic division affiliations; (3) the extent to which perceptions differed between campuses; and (4) the extent to which perceptions differed when gender, ethnicity, years at PCC, or level of education were considered. Surveys were distributed to 112 permanent faculty members; 96 surveys were returned, for a response rate of 85%. The author used the Personal Assessment of College Environment (PACE) survey instrument. Findings include: (1) the organizational structure scale measured the extent to which the organization supported the faculty—4% of faculty reported the system was coercive, 31% found the system competitive, 45% identified it as consultative, and 20% found it to be collaborative; and (2) the largest number of open-ended comments was within the topic category of formal influence—94% of the comments in this category indicated unfavorable perceptions of the PCC working environment. Faculty seemed to feel excluded from administrative decision-making and that their creativity was stifled. (NB)
AN ENVIRONMENTAL ASSESSMENT OF COMMUNITY COLLEGE FACULTY SATISFACTION

by

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The committee, the college, and the University of Central Florida are not liable for any use of the materials presented in this study.
This work is dedicated to
Dean Jackson
for unfailing patience, love, and support
and to
Peggy and Billy Peters
for instilling in me a love of learning that will never end.
ABSTRACT

This study sought to determine the perceptions and satisfaction of individuals employed as full-time teaching faculty in a multi-campus two-year public postsecondary institution. The Personal Assessment of College Environment (PACE) survey instrument developed by Dr. George A. Baker III was used to collect responses to 55 items in regard to the environmental elements of formal influence, communication, collaboration, organizational structure, work design and student focus. The aforementioned elements were investigated to determine (a) the current level of faculty satisfaction; (b) the extent to which perceptions differed among division affiliations; (c) the extent to which perceptions differed between campuses; and (d) the extent to which perceptions differed when gender, ethnicity, years at Polk Community College or level of education were considered.

Findings showed that faculty were generally satisfied with the climate of the institution overall. Faculty in the Math, Science and Health division were less satisfied than others with the organizational structure element of the environment. Male faculty members were generally less satisfied than their female counterparts with the environment. Faculty who had been at the college less than one year rated the highest levels of satisfaction overall.
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CHAPTER 1
THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Institutional effectiveness, the systematic comparison of institutional performance to institutional purpose, has become a focus for many community college researchers as the uniquely American institution has come of age. Roueche and Baker (1987) adapted Likert's (1967) Profile of Organizational and Performance Characteristics in an attempt to correlate organizational climate with institutional effectiveness at Miami-Dade Community College. By understanding the dynamics, systemic processes, and patterns prevalent in an organization, leaders or members aspire to develop the ability to diagnose and describe the present state of affairs, to anticipate what might be forthcoming, and to act in ways that will facilitate the development and productivity of the organization.

Institutional effectiveness research has been used to identify the factors that influence the interaction patterns, motivation, development, decision making, cohesiveness, and productivity in the organization (Baker, 1992). Since 1986, over sixty community colleges have conducted climate studies using the instrument created by Roueche and Baker.

Baker (1992) stated that the interest in educational excellence in higher education brought to the attention of researchers and practitioners alike the unstructured nature of
university and college level institutional assessment. After Baker wrote the previous statement, the American Association of Community Colleges and the League for Innovation in the Community College provided indicators and definitions to estimate effectiveness in the two-year sector (Community College Roundtable, 1990; Doucette & Hughes, 1994). The provision of effectiveness indicators generated a trend toward the documentation of outcomes, successes, and effectiveness in the various programmatic efforts of community colleges (Cohen, 1993). With an increased awareness of accountability and outcome orientation, the pendulum of assessment has turned toward the structured extreme.

In 1999, the Florida legislature required community colleges to report quantifiable measures in an annual accountability report. Therefore, community college researchers have focused efforts on quantifiable measures of enrollment, retention and success as indicated by transfer performance, licensure passing rates, and placement rates of vocational students. At Polk Community College, a reporting of outcomes has taken the place of process review. The present organizational climate study was initiated in order to facilitate an understanding of the positive and negative impacts of organizational practices and assist in establishing priorities for change.

**Statement of the Problem**

This study sought to determine the perceptions and satisfaction levels of individuals employed as full-time teaching faculty in a multi-campus two-year public postsecondary institution regarding selected aspects of the institutional environment. Specifically, the environmental elements of formal influence, communication,
collaboration, organizational structure, work design and student focus were investigated. The purpose of this assessment was to determine (1) the current level of faculty satisfaction; (2) the extent to which perceptions differed among academic division affiliations; (3) the extent to which perceptions differed between campuses; and (4) the extent to which perceptions differed when gender, ethnicity, years at Polk Community College, or level of education were considered.

Clarification of the Problem Statement

Definition of Terms

For the purpose of this research, the following operational definitions were determined:

Accountability -- the extent to which an institution is held responsible for the achievement of established performance goals.

Collaboration -- the extent to which personnel have the opportunity to work in cooperation with others and participate in shared problem solving and decision-making.

Communication -- the extent to which personnel receive and share the necessary information to be effective in their work and furthering the mission of the college.

Community college -- an open-access postsecondary institution providing students with the education to earn the associate in arts degree for transfer, the associate in science degree or certificate for career entry, or enhance their jobs skills through continuing education.

Instructional personnel -- those employees whose primary responsibility is instruction of students, in this study, all full-time teaching faculty members at PCC.
Formal influence -- the extent to which faculty are provided professional development opportunities, career guidance, rewards, and are encouraged to provide input.

Institutional climate -- the atmosphere within which an organization functions (Roueche & Baker, 1987).

Institutional environment -- the prevailing condition that affects satisfaction and productivity.

Institutional culture -- the patterns of behavior demonstrated by an organization’s employees including thought, speech, actions and artifacts (Hanna & Wilson, 1988).

Organizational structure -- the primary network for sharing information, making decisions, and achieving organizational objectives (Baker, 1992).

Personal Assessment of College Environment (PACE) -- an assessment instrument created by Dr. George A. Baker which measures feelings, beliefs, perceptions, expectations, norms, values, policies, and procedures (Baker, 1992).

Student focus -- the extent to which personnel believe students are central to their work, and to which personnel perceive other organizational personnel are supportive of student needs.

Systems thinking -- a conceptual framework providing a body of knowledge and tools that views the organization as a complex system of interrelated parts (Magellan Group, 1998).

Work design -- the extent to which personnel feel responsible for accuracy, relevancy and quality in their work, and to which work is guided by a clearly defined process.
Purpose of the Study

The purpose of this study was to measure faculty attitudes and perceptions about and satisfaction with Polk Community College’s institutional environment. Data from this study has been used as a baseline measure for gauging the effectiveness of institutional improvement efforts via strategic planning, for identifying areas for targeted institutional improvement projects and for making recommendations for administrative and institutional policy changes. More specifically the study identified the perceptions of faculty about their workplace environment and its fulfillment of their needs. This study identified differences in perceptions of and satisfaction with the Polk Community College institutional environment among faculty subgroups regarding formal influence, communication, collaboration, organizational structure, work design and student focus within the institution. This research suggested priorities for changes in institutional policy and institutional goals regarding the issues investigated.

Delimitations

As part of a larger project undertaken at the college, the entire population of full-time, permanent administrative, career, professional-technical, and instructional personnel were surveyed. In addition to the full-time personnel, a random sample of adjunct faculty who taught credit courses were also included in the comprehensive assessment of organizational climate. All data for this survey was obtained through use of the PACE instrument developed by Dr. George A. Baker III. The instrument was used as presented by the author, with additional demographic questions created by the researcher and Polk Community College’s Coordinator of Institutional Effectiveness,
Dr. Ann Luciano. The survey data was supplied by participants based upon their responses to the survey instrument. For the purpose of this research, the study was limited to the perceptions and satisfaction levels of full-time, permanently employed instructional personnel at Polk Community College. The results of this study should not be generalized beyond the full-time instructional personnel population.

Assumptions

It was assumed that the PACE survey instrument was an appropriate instrument for measuring the perceptions of the survey respondents relative to their satisfaction with the institutional working environment, and that respondents provided honest information concerning their perceptions. In addition, it was assumed that surveying the entire full-time permanent faculty population was an appropriate approach to understanding the climate of Polk Community College. Scores provided by the instrument's author regarding validity and reliability were assumed to be correct.

Significance of the Study

As Polk Community College entered its thirty-fifth year of operation, with its third president, the college was paradoxically similar to, and yet different from, other community colleges in Florida and the United States. The college had evolved from Polk Junior College, which served eighteen year old, white males who were bound toward a four-year degree into a comprehensive community college whose students in 1999 were 63% female, 27% minority, had an average age of 24, and at least 35% required financial assistance to pursue their education.
As a typical mid-sized community college, Polk was required to meet the challenges facing all community colleges. McIntyre (1997) identified the following trends as the most important to community colleges: (a) changes in demography, including increases in the number of 18-24 year olds and in the diversity of students; (b) technological advances related to interactive communications and computer use; (c) longer and shallower economic cycles, increased outsourcing, and globalization; (d) social changes, including the advent of a multicultural society and increased living alone; (e) changes in public policy, including decreasing federal control and continued inadequate funding; and (f) pedagogical and policy trends that would affect planning, including the shift from teaching- to learning-centered institutions and increasing collaboration, as opposed to competition.

In 1997, in the face of an impending Southern Association of Colleges and Schools (SACS) self-study and at the encouragement of the Institutional Effectiveness Committee, the college started a new process of strategic planning which involved all full-time personnel in the college grouped by unit. Three issues were identified as threats or weaknesses by several units: morale, communication, and organizational structure. In April 1997 as the planning process evolved, the need for an employee survey and baseline measure of climate was brought forth to the District Board of Trustees (DBOT) by the Institutional Effectiveness Committee. The criteria for the survey instrument included national comparison data, community college experience, and created by an entity external to the institution (PCC, 1997).

The simultaneous factors of a new president, expanded Board of Trustees, evaluation of strategic plans, development of the SACS self-study proposal, and the
development of a grant application provided an environment in which the information garnered from a climate study could be used to indicate specific areas of concern.

**Conceptual Framework**

Systems theory was proposed in the 1940s by the biologist, Ludwig von Bertalanffy. He emphasized that real systems are open to and interact with their environments, and that they can acquire qualitatively new properties through emergence, resulting in continual evolution. Rather than reducing an entity to the sum of its parts or elements, systems theory focuses on the arrangement of and relations between the parts, which connect them into a whole (Heylighen & Joslyn, 1992).

Likert (1967) expanded upon the theory and identified four management systems ranging from “exploitive authoritative” to “participative group.” Over time, Baker (1992) has maintained the integrity of the descriptions of each of the four systems yet modified the names to reflect the colloquy of current management theory. Exploitive authoritative became “coercive.” “Benevolent authoritative” was modified to “competitive.” “Consultative” remained the same, and participative group became “collaborative.”

Likert’s research indicated that a Collaborative climate generally produced better results in terms of productivity, cost-reduction, absenteeism, and turnover. The research of Roueche and Baker from 1986 through 1987 and Baker from 1988 to the present determined that most colleges have a Consultative climate, although Collaborative remains the ideal.
In 1989, an employee survey was developed, distributed and analyzed at Polk Community College. The survey assessed employee opinion in the areas of support for teaching, college effectiveness, rules and policies, management of the college, facilities and services, and general questions to indicate personal satisfaction with the college environment. The results of the survey, from full-time teaching faculty, indicated the greatest satisfaction with facilities and least satisfaction with support for teaching. After the survey was analyzed, the administration at Polk Community College instituted a committee structure in which a representative from each area of the college had a voice in all major issues.

Strategic planning sessions among the individual units in conjunction with a comprehensive committee structure at Polk have provided the tools for organizational development. Yet the knowledge and skills to use those tools effectively has not permeated to the essential fabric of the institution. In order for the college to progress and measure its progress, baseline data needed to be gathered.

Researchers at Polk Community College used the results of the American Association of Community Colleges roundtable to frame the collection of data. The roundtable of community college representatives and constituents was commissioned in an attempt to identify a small group of core indicators that could be used by any college, regardless of its location, accreditation region, or institutional circumstance. The indicators were purported to be essential measures of effectiveness that reflect important functions at community colleges, external mandates, or pressing constituency needs. Among the characteristics important for a core indicator were generalizability across institutions, ease and efficient of use, relevance to the community college mission, and
significance to customers. The indicators were designed to assist community colleges in focusing on those activities within the educational enterprise that are most indicative of and important to student success. Mission areas identified by the American Association of Community Colleges (AACC) included student progress, career preparation, transfer preparation, developmental education, general education, customized education, and community development (AACC, 1994).

Research Questions

The following questions guided the present research:

1. What were the faculty's perceptions of and satisfaction levels with the overall college environment in the areas of formal influence, communication, collaboration, organizational structure, work design and student focus?

2. Were there significant differences in perception of and satisfaction levels with the institutional environment among faculty in the three academic divisions (i.e. Arts, Letters and Social Sciences; Career and Special Programs; and Math, Science and Health)?

3. Were there significant differences in perception of and satisfaction levels with the institutional environment among faculty between campuses (Winter Haven and Lakeland)?

4. Were there significant differences in perception of and satisfaction levels with the institutional environment when various demographic variables were considered (i.e. gender, ethnicity, years at Polk Community College, and level of education)?
Methodology

Population

The research design for this study involved the administration of a survey instrument to the entire population of full-time permanently employed faculty at PCC. The subjects of this study were the 112 full-time teaching faculty within the college's three divisions. Following the removal of non-instructional faculty members, a total of 96 surveys were returned for a response rate of 85.7%.

Instrumentation

The Personal Assessment of College Environment (PACE) developed in 1987 by George A. Baker. It was revised in 1994, and this newer version was the survey instrument used in this study. The instrument included 55 questions analyzed statistically and conceptually to provide six comprehensive scales as follows:

Scale 1: Formal Influence
Scale 2: Communication
Scale 3: Collaboration
Scale 4: Organizational Structure
Scale 5: Work Design
Scale 6: Student Focus.

Respondents were asked to rate their level of satisfaction with the climate factors using a five point Likert scale. Overall analysis resulted in mean scale scores that enabled comparisons of differences between environmental means with elements overall and by subgroups. An open-ended comment section was also included at the end of the
instrument to allow respondents the opportunity to provide additional comments concerning their overall assessment of the PCC environment.

Data Collection

A letter from the president of the college was distributed to all employees regarding participation in the survey. In addition, a series of announcements were posted around both campuses, in individual mailboxes, and via Polk Community College’s electronic bulletin board system. The instrument was administered in a group format on both campuses for two consecutive days early in November 1998. Respondents were asked to sign a log to indicate participation, then provided with a brief written explanation of the study, the survey instrument, a response envelop, and an answer sheet appropriate for computer scanning. The group administration method was selected because of historically high cooperation rates, the opportunity to explain the study and answer questions about the questionnaire, the low cost, and the small size of the population.

Data Analysis

The data from the PACE survey were analyzed in relation to the stated research questions. Frequencies and mean scores were calculated for each item and each environmental element to determine level of satisfaction for each category based on previously established criteria. Correlation coefficients among the PACE scale scores across the 96 respondents were calculated. These data were analyzed using analysis of variance (ANOVA) to determine if significant differences existed among the
respondents, based on division affiliation, campus assignment, gender, ethnicity, and years of service. In addition, a multiple regression analysis using the least squares solution for predicting each scale from the remaining five PACE scales was performed.

**Organization of the Study**

Chapter 1 has set the context of the study by giving a general description of the purpose and research questions. Chapter 2 will review the conceptual framework needed to understand the impact of institutional climate upon productivity and effectiveness; the relevant literature regarding institutional climate, and the community college; and a historical perspective of issues pertaining to the evolution of Polk Community College. Chapter 3 will describe methods and processes used in the collection of data for the study. Chapter 4 will include the data analysis and describe results obtained from the study. Chapter 5 will present conclusions, discuss implications of the data, establish priorities for change in current practice, and indicate directions for future research related to climate of transition in the community college.
CHAPTER 2
REVIEW OF LITERATURE

Community colleges face an increasingly complex environment that demands reconciliation of increased social obligations, rapid technological change, and public accountability with the reality of limited resources. At the intersection of these often conflicting demands lies the work of community college faculty. The realization that performance and outcomes are dependent upon a set of individuals has increased awareness of motivational factors and behaviors affecting organizational processes. The literature reviewed was related to organizational environment and was focused on organizational climate, the use and study of climate within an educational context, and its relationship to faculty satisfaction and resultant behaviors. The major categories of the literature included organizational environment, performance and environment, the Personal Assessment of College Environment (PACE) survey and its subscales. Finally, a history of Polk Community College was also included.

Organizational Environment

As a concept separate from culture, climate permits an examination of the current perceptions, attitudes and expectations that define an institution and its members. While the culture researcher seeks to examine the organization from a holistic point of view, the
Baker (1994) described climate as the pattern of basic assumptions that a given group has developed in learning to cope with its problems. This definition has worked well enough to be considered valuable and, therefore, has been taught to new members of a group as the correct way to think and feel in relation to problems. Organizational climate, therefore, has been experienced directly by the organization's members and is believed to have influenced their motivation and performance.

According to Peterson and Spencer (1990), there are three major features of climate: 1) An investigation of climate examines common participants' attitudes, perceptions and/or observations that can be compared among groups or over time; 2) it focuses on current patterns of beliefs and behaviors; and 3) it is malleable in character. Climate is pervasive throughout an organization, and often includes a broad array of organizational phenomenon. Whereas culture is the organizational value as perceived by employees, climate is the atmosphere or style. Because climate focuses primarily on attitudes, perceptions, and opinions, it is more specific in its focus, is affected by news items outside the campus, and is more susceptible to affect the more deeply-embedded culture.

As succinctly stated by Blanchard and Peale (1988), climate describes how people, both employees and customers, perceive the way they have been treated by an organization and its management. The psychological environment of climate, according to Timm and Peterson (1982), has arisen from a composite impression people have been given from managers' treatment of workers, the corporate philosophy, the work atmosphere, and the types of organizational objectives. Employee treatment of customers
has mirrored employee treatment by the organization. Thus, the quality of relationships between members of an organization has been a strategic issue in determining the very fabric of an organization (Pinchot, 1993).

Organizational climate has often been used in an attempt to interpret and influence behavior within an organization. Baker (1992) suggested that by understanding the dynamics, systemic processes, and patterns inherent in an organization, leaders have developed the ability to diagnose and describe current events, to anticipate future events, and to act in ways that have facilitated the development and productivity of the organization. The skillful leader has become proficient in listening to and observing the organization in action and has been able to identify a number of variables that influence the interaction patterns, motivation, development, decision making, cohesiveness, and productivity in the organization.

Likert (1967) described the organization as systemic in character. He observed that organizational events flowed from causal conditions, through intervening processes, to end results. If groups in an organization were not interconnected, the sum of their separate properties would not create a cohesive whole. In fact, however, end results from some groups formed causal inputs of other groups. Thus, the flow of events was from group to group, as well as within any one group. Likert reported that the basic processes of any group were created by the causal factors of organizational climate and managerial behavior, in conjunction with intervening behaviors of peer subordinates toward one another.

Likert (1967) found that rewards attached to various behaviors conveyed to employees the priorities and values of both individual managers and the organization.
Likert found a significant correlation between pay and performance, when individuals understood that improved performance resulted in increased pay.

Hinrichs (1974) studied the effect of employee motivation on organizational performance. Hinrichs found that motivational factors did not correlate directly with work quantity, work quality and morale. The study identified a set of intervening processes by which motivational factors were translated into performance. Hinrichs determined that satisfaction was derived from the rewards given for effective performance, and served to form the basis of employee morale.

The level of morale was clearly reflected in the degree of employee commitment both to the job and to the organization. Further research substantiated that, most frequently, when an organization's reward system operated properly, high levels of effective performance were the cause of satisfaction for employees, rather than the converse. When effective performance was not rewarded or when the rewards did not relate to the goals of the employees, no statistically significant relationship was found between performance and satisfaction.

Drucker (1977) viewed personal satisfaction of the worker to the sacrifice of productive work as failure; as was productivity which destroyed the worker's sense of achievement. In effect, the exclusive prevalence of either was not tenable for very long. To be productive, individuals had to have sufficient mastery over the speed, rhythm, and attention spans with which they were working, because work was one of the ways in which individuals defined themselves and measured their worth and contribution to society.
As early as 1957, Argyris concluded that there were some basic incongruencies between the growth trends of a healthy individual personality in American culture and the requirements of formal organizations. The nature of the formal principles of organization were viewed to cause a subordinate, at any given level, to experience competition, rivalry, inter-subordinate hostility, and to develop a focus toward the parts, rather than to a cohesive whole. The results of such a disturbance were identified as frustration, failure, short-time perspective, and conflict. Levering (1988) suggested that personal stress, erosion of physical and mental health, and lower productivity were symptoms of a negative work environment.

Ryan and Oestreich (1991) found that declines in morale and dedication and loss of self-esteem in the workplace usually happened in small increments. In fact, fear has often been damaging precisely because of the hidden quality of incremental loss. Managers typically could not see the dramatic impact of fear, because it was concealed in the work process. As fear accumulated in an organization, the commitment, motivation, confidence, and imagination of individuals were consequently diminished. The negative impact on quality of work or productivity included a lack of initiative, making and concealing mistakes, failure to meet appropriate deadlines and budgets, loss of effective problem-solving activities, inappropriate ordering of priorities, poor work methods, and loss of creativity, motivation, and risk-taking.

Three key outcomes were of concern to Hinrichs (1974) in evaluating organizational behavior: quantity of work, quality of work, and the satisfaction derived from the job. All three outcomes were believed to play a vital role in the satisfaction of employees in business enterprises. Hinrichs suggested that high employee morale
enhanced an organization's ability to maintain its workforce. Moreover, a highly-committed workforce provided management with greater flexibility to change the structure, modify practices, and objectives of an organization with relative ease and with the confidence that employees would support these changes. An organization with highly committed employees was believed to have fewer conflicts in industrial relations. Therefore such an organization tended to save concomitant time lost on strike and the effort devoted to handling formal grievances and protracted negotiations. In addition to the practical business reasons cited, Hinrichs believed that high morale and job satisfaction were intrinsically desirable an organizational goal to be attained in conjunction with quantity and quality.

In order to determine the climate of an organization, a formal assessment must occur. Climate has been investigated through a systematic comparison of institutional performance in comparison to institutional purpose. The climate assessment process has differentiated one organization from another; is perceived and experienced either directly or indirectly by the institutions' members. Climate has been related to, yet remained distinct from other organizational aspects such as size, formal structure, or the design of specific jobs; influences each individual's motivation and performance on the job. Climate has been viewed to be modified through direct and indirect management and leadership (Baker, 1992).

The interest in replicating the corporate environment in education has derived largely from its presumed impact on organizational effectiveness. There has been considerable speculation, and yet limited research, suggesting that corporate culture can
improve an organization's ability to implement new business strategies as well as to achieve high levels of excellence.

As early as the Hawthorne studies of the 1920s, it was recognized that employee involvement increased both productivity and motivation. Lewin (1947), Argyris (1957), McGregor (1960), Likert (1967), Schein (1956) and others have all theorized that managers who treated subordinates as adults were more effective than those who did not. Those managers who were considered effective typically involved employees appropriately in the tasks for which they were accountable and created conditions that allowed employees to obtain useful feedback for self-monitoring of performance. McGregor (1985) found a statistically significant positive correlation between the managerial attitude of genuine concern for the welfare of subordinates and morale and productivity. Although studies linking corporate culture to organizational success have received rather widespread attention, Huse and Cummings (1985) suggested that the underlying evidence was weak from a scientific standpoint.

Lawler and Porter (1967) determined that a strong positive relationship between employee attitude and performance to the effective distribution of differential extrinsic rewards based on performance. Where no relationship existed between satisfaction and performance, Lawler and Porter suggested that rewards were not being effectively related to performance. Satisfaction was determined to be important because of its power to influence both absenteeism and employee turnover (Bassett, 1993; Glaser 1976; Lawler & Porter, 1967).

In actual work settings, the contribution of job satisfaction to productivity has been indirect and has often been reflected in reduced cost rather than increased
production. Specifically, indirect benefits were associated with reductions in turnover, absenteeism, alcohol and drug abuse, sabotage, and theft—all of which have been linked, to some degree, with job satisfaction (Glaser, 1976).

In an early 1990 study of two-year colleges, Smart, Kuh, and Tierney (1997) provided an alternate view. The researchers indicated that there was reason to believe that the external postindustrial environments of two-year colleges could have significant negative indirect, as well as direct, effects on organizational performance. The results of their study indicated that organizational effectiveness of two-year colleges was a function of the interaction among the external environment, institutional culture, and the preferred decision-making approach. Financial health, enrollment health, four culture types, and two decision approaches were all statistically significant when correlated to organizational effectiveness. In addition to providing more accurate estimates of the effects of various forces on organizational effectiveness, results suggested that negative influences of declining enrollments and financial health might be suppressed through attention to institutional environment and decision approach.

Baker (1992) also found that when enrollment ceases to grow and the flow of financial resources accompanying it diminishes, a self-confirming sense of failure inevitably sets in. This threatens to cause further decline by stultifying energy and promotional activity.

Smart, Kuh, and Tierney (1997) found organizational effectiveness of two-year colleges was negatively affected by deteriorating financial conditions and enrollment declines. However, both variables had statistically significant negative direct, indirect, and total effects on organizational effectiveness. Approximately one-third of the effect of
financial health and enrollment health was exerted indirectly. Institutional size had a significant positive direct influence on effectiveness. All four institutional culture factors had significant direct and indirect influences on effectiveness.

The consequences of ignoring the symptoms of an unhealthy climate in an educational setting were described by Johnson: the lack of understanding of the environment can lead to empty dormitories, to inability to predict consequences of actions, to a breakdown of the sense of belonging that diminishes respect for responsibility and order, to reduced support from those who see higher education as swaying from its purposes, and to other symptoms of campus unrest (1972).

O'Malley (1996) eloquently expressed the notion that not all college presidents are unaware of climate issues. "We talk about the importance of campus climate and the morale of people who work on campuses, and then we make severe cuts in budgets," complained Jacquelyn Belcher, president of Georgia's Dekalb College. "How do you do that and keep up morale, and keep working forward in a positive mode and not become depressed? (p. 13)"

Measures of Performance

From their inception, community colleges have been results oriented. We have, as a movement, measured our progress in terms of student success and community impact. Before it was fashionable or required, community colleges regularly reported placement data, licensure exam scores, retention rates, transfer success and economic impact. (Terry O'Banion in Hudgins, 1996, p. 3)

In the early 1970s, Rouche, Baker and Brownell (1972) initiated the scientific discussion of accountability in the community college. They stated that accountability implied two-year colleges were accountable externally to the community, and that
colleges were accountable internally to all students who passed through their open doors. The state of effectiveness would be achieved when students from the community entered the college, found a program compatible with their goals, persisted in college until the goals were reached, and then became productive members of the community.

According to Bowyer (1990), the Tennessee Higher Education Commission implemented a Performance Funding Program as early as 1979, which required the objective assessment of student outcomes. In the late 1980s, increasing demands for tax dollars forced legislators nationwide to push for greater accountability in the use of public funds. In 1988, the Secretary of the United States Department of Education mandated that objective outcome assessments had to be included in accreditation standards for all regions in order to retain eligibility for federal funding (Bowyer, 1990). According to Krech (1994), the United States faced a clear demand for more use of performance-based indicators. Those within the system and its institutions were required to collect and analyze data within the appropriate context and employ the resulting information as a basis for action to improve.

The increased trend of using such indicators encouraged those who understood the value of institutional measures that document outcomes, quantify successes, and assess effectiveness in the various programmatic efforts that community colleges have undertaken. The arguments in favor of assessment were mandated by the need to document institutional effects so that students, the public, and the professional community could understand how the institutions used their resources in fulfilling their missions. Indicators of effectiveness have provided information to members of the college community and the lay public in common language, for better community
understanding of the local effects of that institution. The most desirable indicators have been based upon availability of data required for measurement (Cohen, 1994).

As Joshua Smith, Chancellor of the California Community Colleges, has indicated;

Nothing is more critical to our future than to demonstrate clearly...that the community colleges make a qualitative difference in the lives of more than a million California citizens each year...The Governor and Legislature want to know what California is buying for the 1.8 billion dollars spent each year in the colleges. (Coffey, 1987, p. 3)

Since the 1988 decree of the United States Secretary of Education on the use of effectiveness indicators, community college leaders, accrediting bodies, and legislators have attempted to standardize a method of assessment via common performance indicators. The most frequent process used by Community colleges to identify indicators of effectiveness has been a review of the mission statement. Four core indicators recurred throughout institutional research of community colleges: retention rates, graduation rates, job placement rates, and two-year transfer rates (AACC, 1994; Bolt, 1997; Bowyer, 1990; Burke, 1996; Coffey, 1987; Grossman & Duncan, 1989; Hudgins, 1990 & 1996; Macomb Community College, 1989).

In a survey of community college leaders several items received the highest ratings as measures of institutional effectiveness. These items included employer satisfaction with graduates, employer satisfaction with job training/skills enhancement courses, the percentage of graduates who find employment in their major/field of study. Other items listed were the percentage of students who complete their intended program or degree at your institution, grade point average of graduates who transfer relative to
native students at four-year institutions, and number of students who graduate with an associate degree (Bowyer, 1990).

At Macomb Community College (1989) a debate on effectiveness centered around completion of students’ educational goals for human development as well as meeting the needs of society. These goals were described as the change that occurs in the individual as a result of having been involved in the learning process, and considering the underlying contributions that the institution is expected to provide to society.

In North Carolina, Hudgins (1996) attempted to answer the questions of mission and expected results by identifying three mission categories critical to the success of the college. Mission topics that Hudgins recommended for assessment included client satisfaction, institutional climate, and student learning. Some of the indicators identified included enrolled students’ satisfaction and retention, alumni satisfaction and success, energy given to providing quality client services, success of transfer students, placement of career program graduates, perceptions of employers of graduates, and quality of teaching and learning.

Conversely, when entire systems of community colleges considered the issues of accountability and effectiveness, both internal and external indicators were identified within the legal, fiscal, and academic positions. Grossman and Duncan (1989) of the Center on Education and Training for Employment at Ohio State University identified five key considerations in developing a standardized assessment: accountability, flexibility, cross-institution relevance, measurement standards, and goal differentiation. These researchers identified the following six mission areas that should be assessed: access and equity, employment preparation and placement, college/university transfer,
economic development, college/community partnerships, and cultural and cross-cultural development.

In order to provide a much-needed focus to questions of standardized performance measures, the American Association of Community Colleges convened a roundtable of community college representatives and constituents between December 1992 and August 1993. The roundtable was commissioned in an effort to identify a small group of core indicators that could be used by any college, regardless of its location, accreditation region, or institutional circumstances. The indicators were essential measures of effectiveness that reflected important functions at community colleges, external mandates, or pressing constituency needs. Among the characteristics deemed essential were generalizability across institutions, ease and efficiency of use, relevance to the community college mission, and significance to multiple customers. These indicators were designed to assist community colleges in focusing on those activities within the educational enterprise that were most indicative of, and important to, student success. Mission areas identified by the American Association of Community Colleges included student progress, career preparation, transfer preparation, developmental education, general education, customized education, and community development. The core indicators identified by the roundtable were student goal attainment, persistence, degree completion rates, placement rate in the work force, employer assessment of students, number and rate who transfer, performance after transfer, success in subsequent, related coursework, demonstration of critical literacy skills, demonstration of citizenship skills, client assessment of programs and services, responsiveness to community needs, and participation rate in service area (AACC, 1994).
According to Burke (1996), the indicators selected for performance funding should provide clues about the attitudes of state policy makers toward community colleges and baccalaureate campuses. Wisconsin identified an accountability matrix consisting of the following indicators: retention rates, completion and graduation rates, articulation and linkages with external organizations, employer satisfaction, course completion rates, student satisfaction, student goal achievement, student knowledge and skills at exit, pass rates/scores on licensure exams, placement rates in employment, articulation, identification of customer needs and expectations, public satisfaction, identification of student needs, identification of student functional skills at entry, student grades, achievement of institutional goals, organizational climate, student goal achievement, student knowledge and skills at exit, institutional goal achievement, and organizational climate (Bolt, 1997).

In 1999, Florida was the only state that used separate indicators for two- and four-year institutions. Lacking a strong coordinating agency as well as differing missions, the Division of Community Colleges and the State University System in consultation with staff in the Governor's office and the Legislative committees developed separate performance-funding indicators. Community college indicators consisted of retention and graduation rates, faculty teaching load, job placement, licensure test scores, satisfaction surveys, time-to-degree, and number of two-year college transfers (Burke, 1996).
Personal Assessment of the College Environment and Likert

The Personal Assessment of the College Environment survey instrument was constructed on the premise of Likert's organizational theory (Baker, 1992; Likert, 1967). Likert described organizations as systemic in nature. For any group, two basic types of causal characteristics were given preeminent status in Likert's consideration. These were managerial behavior and organizational climate. Climate was described in terms of the extent to which a structure of groups had overlapping membership, the extent to which information flowed easily and accurately in all directions, the degree to which coordination occurred among separate operations and units, the degree to which there was participative decision-making structure, and the extent to which motivational forces generated within a system were positive and mutually reinforcing as opposed to negative and conflicting. He concluded that the various behavioral, attitudinal, and structural parts of the organizational whole have a fundamental interdependence, and must be mutually consistent.

The six subscales of organizational climate measured by the Personal Assessment of the College Environment survey are formal influence, communication, collaboration, work design, organizational structure, and student focus. Taken together, all six subscales have been combined to describe organizational health and the organizational climate (Roueche & Baker, 1984).

Baker described the general properties of management systems in terms of a continuum of organizational systems ranging from autocratic to participative. Although a continuum by definition does not have interval, Likert identified four distinct areas in which organizational management systems typically fell: System 1, exploitive
authoritative; System 2, benevolent authoritative; System 3, consultative; and System 4, participative group.

System 1 was labeled exploitive authoritative and was symptomatic of the most autocratic environment. The management within this first system would tend to hoard control and direction at the very top of the organization. Decisions were made at the very top, then orders were issued. Although downward communication existed, very little upward communication was present, and little or no lateral communication was evident. As a result, the decisions made at the top of the organization were based upon partial information, which was often inaccurate.

Contrary to a formal organization's needs, an informal organization would develop, thus stimulating covert resistance to orders, which may have been verbally agreed to and accepted. Mistrust, hostility, and dissatisfaction were typically present in the System 1 organization as described by Likert. The organization would rely upon fear, upon the need for money, and upon a desire for status or power, ignoring other motives intrinsic to individuals or inherent in groups.

In Likert's System 2, labeled as benevolent authoritative, policy was formulated at the top, but specific implementation decisions may have been delegated to somewhat lower levels. Orders were still issued, but some opportunity was usually provided for subordinate input. There was a great deal of downward communication, viewed ordinarily with mixed feelings by subordinates. There was very little upward communication, much of it distorted and filtered, and practically no lateral communication.
Attitudes were sometimes hostile, sometimes favorable in System 2, but there was ordinarily a substantial degree of dissatisfaction present in the organization. The System 2 management system would rely heavily upon the need for money, desire for status, and other allied ego motives of the individual. Likert found that System 2, with all of its inherent difficulties, was the management system most prevalent in American industry in the late 1960s.

Broad policy determination at the top and specific decision-making at lower levels characterized Likert's System 3 and was considered to be consultative. Some use was made of group decision-making processes. The information upon which decisions were based is reasonably accurate and adequate. Attitudes were usually favorable, there was very little hostility, most members of the organization felt a responsibility for its welfare, and resistance to the organization's directives was at a low level. Practically no reliance was placed upon fear or coercion, and most major motive sources inherent in the individual were used—the need for money, ego motives, and the desire for new experience. According to Baker's (1992) research of community colleges in the past decade, most can be described as consultative.

The fourth system in Likert's continuum was labeled as participative group. In System 4, decisions were made throughout the organization and linked together by the existence of overlapping groups that participated in decision-making. Information flowed freely upward, downward, and laterally, and few forces existed to distort or filter that information. The interpersonal climate was characterized as one of trust. System 4 tapped all of the major positive motives, including those motivational forces that arose from group processes. The general pattern of Likert's research findings has been that, the
more closely an organization's management system approximates a System 4, the more effective that organization is in terms of lower costs, higher productivity, and lower absence rate.

Formal Influence

Formal influence, according to Baker (1992), has been described as the extent to which faculty have been provided professional development opportunities, career guidance, rewards and were encouraged to provide input to the decision-making process. In a study of 150 Tennessee State University faculty members, Stewart and Spence (1996) determined that inadequate opportunities to attend professional meetings generally translated into low morale.

Feldman and Paulson (1999) suggested that intrinsic motivations for faculty included a preference for open-ended problem-solving, wanting to be helpful, having a sense of making a difference, feeling satisfaction from interacting with students, feeling a sense of competence, having opportunities for learning and to use skills and knowledge, and having autonomy-independence. Farmer (1999) observed that although many faculty have been motivated to participate in implementing new ideas or projects, most initiatives could not be sustained by the simple goodwill of the faculty. He suggested that colleges need to ensure that the reward system reinforced the behaviors needed both to implement and to sustain change. Otherwise, contradictory reward systems would deplete the psychic energy of the faculty.

Feldman and Paulson (1999) noted that external rewards included a granting of tenure, promotion, merit pay, travel provisions, payment of incidental department and
professional expenses, clerical assistance, and certain privileges. Powell (1981) gave an explanation of the relationship between salary, rewards, and recognition and job satisfaction for faculty. These three things have been tangible representations of the value given to instruction by administration and the general public. In Powell's study, most faculty members derived considerable satisfaction from teaching; yet many indicated that they felt that this was undervalued by the institution. This undervaluing has impacted morale, commitment and productivity of faculty. Major areas of dissatisfaction for the 521 faculty at the University of Texas-Houston Health Science faculty respondents included promotion and tenure policies, recognition of teaching, and salary issues (UTH, 1996). In addition, Stewart and Spence (1996) found that low recognition of accomplishments was correlated with low faculty morale.

An example of a perceived contradictory reward system was the Teacher Incentive Plan implemented at the University of West Florida. Messerschmidt and Droegemueller (1998) surveyed 20 faculty regarding the award. The majority of faculty members (19) felt that the award was not equitable for all faculty members and believed the selection process was based entirely on productivity. As such it was not perceived as an objective measure of teaching abilities. Two-thirds of the faculty surveyed felt that the program did not motivate them to become better or more productive teachers. Half felt the program promoted competition, which had a negative effect on faculty motivation.

Neinhuis (1994), Schwandt (1996), and Tack and Patitu (1992) identified recognition and affirmation as major factors in job satisfaction and faculty retention. In a study of 935 full-time faculty, organized by seniority, Hagedorn (1994) determined that
satisfaction with salary played a prominent role in job satisfaction for all cohorts. In essence, constrained resources, generational splits, salary differentials, and the disparity in rewards between teaching and research had left many faculty dissatisfied and isolated (Zemsky, 1996).

Communication

Communication, as defined in this study, is the extent to which faculty receive and share the information necessary to be effective in their work and further the mission of the college. No formal organization can exist efficiently without cooperative relationships, shared values, common purpose, and the interpersonal and systemic communication to achieve those common elements (Baker, 1992). Di Petta (1998) suggested that when faculty felt part of a professional community, they could relate on the basis of something more than the need for order or achievement. Faculty could feel an intimacy with other scholars because of shared purposes and values connecting scholarship and discipline.

Feldman and Paulsen (1999) viewed the supportive teaching culture as a context necessary to promote the availability of informative feedback in various forms about an individual's teaching effectiveness. This, in turn would stimulate faculty motivation for instructional excellence. The researchers further suggested that widespread involvement of faculty in every aspect of planning and implementation of instructional excellence and improvement activities was necessary to increase the development of shared values between administrators and faculty.
Gratz and Salem (1981) suggested that academic institutions were self-contained social systems whose primary function was information processing, and as such, they have been prone to communication problems common to other social systems. While institutions have often devoted great energy to communication with the external public, their focus on internal communication problems has usually been assigned a lower priority. Much of the information processing in higher education has been improvised rather than carefully planned. As a result, members who have genuinely needed information often did not receive it. Furthermore, specific roles and responsibilities remained unclear, and information frequently arrived in a distorted form and/or in an untimely manner. The unmanaged flow of information has resulted in organizational members becoming overloaded with data, while others simultaneously suffer from inadequate information. The net effect of this haphazard information dissemination system has been the increased cost of distribution in providing a large amount of material that has been discarded and frequently overlooked.

Specific examinations of the faculty committee system have suggested several communication problems including the limited resemblance between the nominal organizational hierarchy and the actual functioning of university committees, the use of committees in inappropriate situations, and the tendency of many committee members to employ a win-lose orientation.

Bode and Menges (1997) surveyed 121 faculty respondents at various postsecondary institutions and determined that faculty at two-year institutions sought feedback more frequently, reported more credence, amount and satisfaction with feedback from chairs and colleagues, and reported more job satisfaction and less
academic stress than those at 4-year institutions. They determined that faculty who
frequently consulted written documents for information reported more job satisfaction
than did those who did not seek information from written sources. Faculty who reported
more job satisfaction gave more credence to feedback from chairs and colleagues and
were more satisfied with feedback from students.

Collaboration

Collaboration is defined as the extent to which faculty members have the
opportunity to work in cooperation with others and to participate in shared problem
solving and decision making, according to Baker (1992). It is a multidimensional
concept that involves working together, in pairs or teams, cooperatively to achieve a
desired outcome. In the process of collaboration, individuals and teams have typically
benefited by the extent that they have been able to promote cooperation, build trusting
relationships, develop shared goals, and effectively solve problems (DeMarte, 1996).
Some of the most influential job satisfaction factors identified for faculty members have
involved collegial interaction (Nienhuis, 1994; Powell, 1981; and Zemsky, 1996).

Faculty collaboration through team teaching created a professional environment
for professors by developing or maintaining their teaching abilities, intellectually
stimulating them, engaging them as self-directed learners, and more closely connecting
them to the university or college as a community according to Feldman and Paulsen
(1999). Institutional and departmental cultures that support teaching were characterized
by opportunities for frequent interaction among faculty on teaching-related issues. They
found that one of the most important characteristics of a positive teaching culture was the
opportunity for collegial interaction and collaboration about teaching. In a study of female faculty, Dickens and Sagaria (1997) determined that collaborative scholarship was an ongoing process. Joining with other researchers to generate articles—to increase one's efficiency and productivity—was more frequently seen in the social sciences than in other fields represented in their study. In all fields, participants consistently described their desire to function as democratic, equal partners rather than as hierarchical team leaders, and found that women preferred to collaborate with other women as equals, rather than as superior and subordinate.

Powell (1981) reported that many respondents in his study of 24 Arts and Sciences faculty gave the impression that they were not satisfied with the social aspects of their contact with colleagues. They also indicated that comparisons with experiences at other institutions often led to unfavorable judgments about their own university. Nienhuis (1994) added that among the 2,051 faculty members surveyed, the most influential job satisfaction factors were related to collegiality and recognition. An important element in collegiality seemed to be reducing the barriers to interdisciplinary efforts and encouraging faculty members to reach across traditional departmental boundaries to bring together a team of persons with different kinds of expertise in a joint effort to address issues and topics of mutual concern. Once engaged in a collaborative effort, faculty members often found themselves with a heightened sense of enthusiasm for the job and a growing sense of responsibility to the team.

Zemsky (1996) related collaboration to the effectiveness of academic departments. He found departments that functioned effectively included a supportive culture and frequent faculty interaction. The membership of such departments
demonstrated an ability to work collegially; both in formal matters, such as promotion and tenure decisions, and determining course offerings and teaching assignments -- and informally, by such means as the sharing of research findings.

The results of a study by Hagedorn (1994) suggested that, regardless of career stage, a reduction in stress had a positive influence on satisfaction for academicians. This research suggested that perceived support of colleagues was beneficial to the relief of negative stress. Therefore, she recommended that policies should be designed to encourage collegiality, and to provide welcome and comfort in the academic setting.

Organizational Structure

Organizational structure, in the context of this study, was used to describe the primary network for sharing information, making decisions, and achieving organizational effectiveness. More specifically it has been concerned with the continued activities directed toward the achievement of stated objectives (Falletta, 1996). A wealth of qualitative and quantitative studies have been conducted in relation to the management of the higher education organization, particularly in respect to decision making. Results of studies by Powell (1981) reflected faculty dissatisfaction with the administrative style of the institution, and demonstrated a preference for decentralized budgeting (Browne-Wright, 1993) and participative decision-making (Clark, 1996; Levin, 1997; Powell, 1981; and Spencer, 1989). The National Initiative for Leadership and Institutional Effectiveness (NILIE) national database mean scores of over 60 community/technical colleges across the United States, indicated that college personnel
overall have generally been dissatisfied with the level of decision-making available to them within the organizational structure (DeMarte, 1996).

In Powell's (1981) study, faculty comments reflected dissatisfaction with the administrators' styles. Comments typically incorporated references to the differences between administration and faculty, and revealed a sense of not being informed about institutional priorities, and not being involved in decision-making. The collective impression was of a socially-fragmented, highly-bureaucratized organization in which a small group of people made most of the decisions without communicating or consulting with anyone else. Many of the comments were indicative of feelings of alienation, powerlessness and hostility, rather than a sense of the traditional academic community working collaboratively to achieve shared purposes. A faculty respondent cited in the Thaxter and Graham (1999) study wrote, "There are pretenses of openness but they are perceived as meaningless gestures designed to convey an appearance of inclusiveness" (p.666). On the whole, Thaxter and Graham discovered that community college faculty felt that there was ample opportunity to serve on committees, but the committees were not given authority to make decisions, and results of their deliberations were seldom seen. As a group, the faculty could hold formal meetings to discuss issues and even make recommendations, but decisions were clearly perceived to be made at another level.

Faculty members who indicated enjoyment in coming to work were found in environments of decentralized decision-making and responsibility (Brown-Wright, 1993). Hagedorn (1994) determined that satisfaction with administration was an important contributor to job satisfaction for novices, mid-career, and senior faculty members alike.
In addition, Stewart and Spence (1996) determined that poor faculty-administration relations were correlated to low faculty morale.

Spencer (1989) determined that governance style was a significant indicator in predicting environmental characteristics. The predictive relationship, therefore, reflected the overall impact of governance style on institutional climate, and ultimately individual satisfaction and personal motivation and commitment to undergraduate teaching and learning. Of the 118 community colleges surveyed by Underwood and Hammons (1999), two-thirds had reviewed and revised their organizational structure within the past 18 months. Personnel reported as being involved in recommending organizational structure changes, arranged in rank order, were as follows: administration, 99%; faculty, 55%; governing board, 45%; classified staff, 31%; faculty senate, 25%; students 20%; external advisory groups, 9%; state office, 9%; faculty union, 9%; and other groups, 3%. The traditional organizational model with a president and three to four vice presidents or deans was the most common structure used prior to the study; was the most common structure in use during the study; and was identified as the structure most preferred for the future. In addition, five years prior to the study, the instructional units were organized by subject matter. In contrast to the past, during the study there emerged a trend toward interdisciplinary units and cluster units as the organizational forms.

In Levin's (1997) study of five Arizona community colleges, presidential succession was a significant contributor in the areas of organizational processes, organizational culture, and organizational change. Levin suggested that established communication networks often change when new administrative personnel are brought into the institution, and existing power structures change when new presidents effect
changes to governance processes and organizational structure. At one college under study, the arrival of a new president ushered in a developmental period of the college and what faculty referred to as the new democracy. Organizational change was manifest in increased faculty participation in governance and planning processes and in improved faculty and administration relationships. The consequences of these changes affected employee behaviors more than measurable outcomes such as institutional productivity, student enrollments or even student learning. Outcomes included the formation of new groups, increased formalization of institutional roles and processes, increased sense of democracy, and improved morale. The outcomes suggested that institutional changes influenced by presidents affect internal constituents' behaviors and attitudes as well as organization processes.

Clarke (1996) found a correlation between depriving faculty of decision-making and faculty perceptions of organizational effectiveness. The faculty's highest level of deprivation was registered concerning decisions related to budgeting departmental funds and allocation of departmental resources (i.e., support staff, students workers, equipment use, etc). Results demonstrated that faculty and administrators (academic unit heads) viewed the role of decision-making quite differently, in terms of its impact on the effectiveness of the academic unit. The unidimensional measure of decision-making deprivation correlated negatively with both the faculty measure of organizational effectiveness, and the academic unit head's measure of organizational effectiveness.

Thaxter and Graham (1999) asked 70 community college faculty in six Midwestern states to rate the level of faculty involvement in institutional decision-making related to the educational environment. The most significant finding of the study
was that faculty members did not feel they were meaningfully involved in important
decision-making activities in their community colleges. In general, faculty appeared to
feel some control in classroom-related issues, but had little sense of involvement in the
institution outside of the classroom, such as institutional goal-setting, recruiting or
evaluating personnel, or contributing to the budgeting process.

Faculty interviewed by Powell (1981) indicated feeling that institutional
arrangements largely failed to recognize their need to participate more fully in decision-
making and policy formulation. Findings suggested a widening gap between academic
ideals and the realities of daily experience, which could lead to frustration and
dissatisfaction, which in turn could weaken morale.

Work Design

Work design can be described as the extent to which faculty members feel
responsible for accuracy, relevancy, and quality in their work, and to which work is
guided by a clearly-defined process. Researchers, writers, and organizations have
contributed assessments of faculty roles and responsibilities (Amey, 1999; Baldwin,

Faculty role and workload have traditionally been shaped by academic culture
represented by discipline-related and institutionally-driven values and incentives. With
academic culture as the driving force behind faculty role and workload, research,
teaching, and service have been the common tripartite assignments for faculty
(Amey, 1999). The language used to describe faculty work during the 90s emphasized
quantity as opposed to quality, extrinsic as opposed to intrinsic characteristics of work, a
lack of trust of other faculty members, and an emphasis on the procurement of resources, according to Bean (1998). He proposed that faculty are those people whose primary role is to engage in academic endeavors of creating, distributing, and applying knowledge. Even the United Nations' Educational Scientific, and Cultural Organization (UNESCO) adopted a set of wide-ranging recommendations defining academic freedom and other faculty rights and responsibilities in November 1997. The recommendation focused on the civil rights and academic freedom of academics as well as on tenure and the right to participate in collegial governance. These rights were balanced by a section on the responsibilities and accountability of higher-education faculty. The right to teach freely according to accepted principles of professional responsibility and intellectual rigor and the right to disseminate research results were guaranteed (Savage & Finn, 1999).

Baldwin (1998) discussed the traditional model of instruction as professor-centered, with students in a secondary, often passive role. The traditional professor has been viewed as a course designer, a lecturer, discussion moderator, and a learning evaluator. He suggested that new technologies have challenged the traditional roles, because some aspects of instruction can be performed more effectively or more efficiently using technology. The information-dissemination function of lecturing can be captured and delivered technologically, thus eliminating the repetitive aspects of course instruction and freeing professors for more creative aspects of college teaching. According to this new conception of the instructor's role, the professor would have more time for direct student contact and individual feedback and would essentially play a supportive role as students learn to take more responsibility for their learning and collaborate with peers. In this new environment, the professors' function would be to
create conditions conducive to learning, to engage student actively in the learning process, and to monitor behaviors and adjust strategies as required to facilitate subject mastery and personal growth. As such, one of the most attractive features of recent advances in technology according to Baldwin has been the potential to enlarge academic life by diversifying the work of faculty and expanding professional growth opportunities.

In Harder's (1981) study of productivity measures, 52% of faculty surveyed responded that the most accurate definition for them was "faculty productivity represents the sum of all activities that were related either directly or indirectly to professional duties, responsibilities, and interests". Another 38% responded that they defined faculty productivity as "the sum of only those activities that were related directly to professional duties, responsibility, and interests" (p. 3).

The National Center for Education Statistics (1997) reported productivity for community college faculty in terms of time spent teaching and in contact with students. Full-time postsecondary faculty members at two-year institutions had more student contact hours per week in 1992 than did faculty at four-year colleges and universities. In fact, community college faculty spent 69% of their time teaching, compared to the 54% average of all postsecondary faculty. In addition, community college faculty spent an average of 16.2 hours in the classroom compared to the 11 mean classroom hours at other postsecondary institutions.

Trice and Dey (1996) found that few changes in faculty's undergraduate teaching goals have occurred over the twenty-four year period between 1972 and 1992. Trice and Dey reviewed data on trends in teaching goals obtained from national surveys of faculty conducted in 1972 by the American Council on Education (42,000 respondents), in 1984
and 1989 by the Carnegie Foundation for the Advancement of Teaching (5,000 respondents each), and in 1989 and 1992 by the Higher Education Research Institute (approximately 30,000 respondents each). The focus of faculty teaching goals appeared to remain on the individual learner and the development of his or her higher-order thinking skills. The faculty, as a whole, viewed intellectual development as more important than outright students goals or ambitions. Providing for students' emotional development and preparing students for family living decreased across all types of institutions in the twenty years. The goals of developing cognitive ability, preparation for employment and advanced education, and developing the individual's emotional maturity and self-awareness were all fairly stable over the 24 years covered by the surveys.

Powell (1981) found that the nature of academic life has been such that a high level of morale has been viewed as essential to the quality of teaching and research. Unless staff members had a strong commitment to the pursuit of knowledge and a deep engagement in the task of teaching, those activities were at the peril of being neglected. Stewart and Spence (1996) determined that dissatisfaction with workload was significantly correlated with low morale for 150 faculty members at Tennessee State University.

Nienhuis (1994) determined that university faculty members were generally satisfied with instruction, career outlook and compensation, while they reported greater dissatisfaction for institutional quality, workload, and institutional support. Faculty members rated aspects of the work environment that influenced satisfaction with the job. Those aspects which received the highest job satisfaction ratings included the authority to make decisions about content and methods in courses taught, job security, benefits,
authority to decide which courses to teach, and quality of graduate students taught. Those aspects which received the lowest job satisfaction rating included the time available to work on scholarship and research, relationship between administration and faculty, availability of support services (including clerical), quality of chief administrative officers, and research assistance received.

In addition, Spencer (1989) determined that what they identified as "Professionalism in the Academic Setting" had a significant positive effect on faculty satisfaction. Professionalism in the Academic Setting included faculty autonomy, trust between faculty and administrators, and freedom for new ideas. According to Spencer, female faculty and faculty at institutions perceived to have collegial, autonomous, and rational governance systems, were more motivated and committed because they were more likely to perceive professionalism in the academic setting.

Johnsrud and Heck (1998) reported that in general faculty satisfaction has been with the profession; their frustration has been with the institutions. They identified three broad concerns eroding the morale of faculty: the attack on their professional priorities, their lack of confidence in their institutions' ability to support and protect their personal and professional interests, and the erosion of their quality of life. One of the enduring sources of satisfaction for the academic profession is their autonomy. Nonetheless, the public has questioned how faculty spend their time, the relevance of their research, and how much they care about undergraduate education and the needs of society. The Thaxter and Graham (1999), respondents felt most involved in decision-making related to the categories of instruction and students. In no area did respondents reach the threshold point which was designated to indicate a real sense of participation in campus decisions.
Only one item met the benchmark point indicating real faculty involvement: decisions related to course content and curricular materials in the broad category of instruction.

Perry et al. (1997) surveyed 259 new hires at five United States institutions with the following Carnegie classifications: two Liberal Arts Colleges, one multi-campus Community College, one Comprehensive I University, and one Research I University regarding the relationship between perceived control and teaching satisfaction. Perceived control had a significant main effect on new hires' teaching-related job satisfaction. New hires in the Community College were more satisfied with their teaching, reported less stress, expressed less negative emotions about their teaching, and felt they had more control than did faculty in the Liberal Arts and Comprehensive I institutions. New hires in the Community Colleges, therefore, appeared to have a much more positive working environment with regard to their teaching responsibilities.

Student Focus

Student focus, as defined in the present study and by Baker (1992), is the extent to which faculty members believe students are central to their work and to which they perceive other organizational personnel to be supportive of student needs. In a survey of senior faculty at King's College in Great Britain, Farmer (1999) identified a campus culture emphasizing student-centeredness as a major factor contributing to faculty motivation.

Faculty, reported to be effective by both students and colleagues, demonstrated a greater commitment to undergraduate teaching than those who were not considered effective. In significantly greater numbers, they registered preferences for teaching rather
than engaging in research and for the teaching of undergraduate to the teaching of graduate students. Within their classrooms, effective teachers were more likely to strive to make their course presentations more interesting than their less effective colleagues. Specifically they more often reported using stories and analogies to make a point and often shared examples from their own experience or research. The single biggest difference between faculty perceived to be effective and faculty perceived to be less effective was the extent to which they interacted with students outside the classroom (Wilson & Gaff, 1975).

In a later study conducted by Powell (1981), most faculty members derived considerable satisfaction from teaching, yet many indicated that they felt that teaching was undervalued by the institution. Many respondents attached a special significance to social relationships and a sense of community but felt that their daily experiences were less than optimal. Teaching, and its attendant contact with students, was considered a central responsibility of the academic and anyone who found it unrewarding or an irritating distraction from other activities would be automatically engaged in a career which incorporated a large element of frustration. Some faculty members found the satisfaction gained from teaching resulted from the pleasure of seeing students gain in understanding and of working with very capable students who were able to stimulate the teacher's own thinking. Factors that influenced faculty satisfaction were student growth, personal growth, and autonomy in the classroom (Stewart & Spence, 1997). Bode and Menges (1997) found that the faculty in their study gave more credence to feedback from students than to that given by colleagues and chairs.
In a study of 1,123 community college, private college, and university faculty members, Spencer (1989) determined that "Institutional Support" had a significant positive correlation with faculty satisfaction. The Institutional Support factor assessed the faculty perception of the amount of support for improving undergraduate education by board members, administrators, and faculty. The more support for undergraduate education from these sources, the better faculty members felt about their undergraduate teaching experiences.

Brewer (1999) used a national survey of 1,725 individuals in 92 institutions to document the attitudes of community college faculty toward institutional mission in 1995-1996. He determined that community colleges were truly diverse in the sense that, on average, faculty could not agree on one single mission. The research suggested that faculty were relatively evenly split between occupational preparation and transfer of students to a four-year institution as the two most important current missions of the community college. Most faculty ranked workplace preparation marginally over transfer. In the modal ranking, most faculty clearly believed basic skills were the third most important mission, followed by community service as a distant fourth.

Attitudes toward teaching and the satisfactions to be gained from it were, to some extent, intertwined with the academic accomplishments of students. Faculty in their mid- and late-careers attributed a certain amount of their personal satisfaction to a positive perception of student scholarship. However, appreciation of student interaction was of greater importance to the novices (Hagedorn, 1994). Competing and growing demands on their time were seen to be making it increasingly difficult to give adequate attention to the various elements in their professional role.
Polk Community College History

Polk Community College and Polk County, Florida have been described by the phrase "the more things change, the more they remain the same." Polk Junior College opened its doors at Bartow Air Base in 1964 under the authority of the Polk County School Board. Thirty-four full-time faculty members served an initial enrollment of 1,114 full and part-time students destined for an Associate in Arts degree and eventual transfer to a university. In 2000, some 36 years later, the college had established its own local governing Board of Trustees, acquired 231 acres and two campuses, and 91 full-time faculty and 162 adjuncts. One-third of the 5,489 enrolled students were pursuing the Associate in Science degree and many could expect immediate job placement upon degree completion.

By 2000, over half of Florida's residents had arrived in the state since 1970. Demographers at the University of Florida estimated that the population of Polk County had increased 9% from 440,000 in 1990 to 479,609 persons in 2000 (FDLES, 2000). Polk County's population growth has been accelerated as a bedroom community to the cities of Orlando and Tampa, following completion of the Polk County Parkway and improvements on the Interstate that ran through Polk County between Orlando and Tampa.

The high number of retirees and low-paying industries in Polk County have contributed to a low per capita income of $20,625 in 1998 (FDLES, 1998). This was 18% below the average per capita income for the state of Florida and 19% below the...
national average. Although unemployment dropped to an unprecedented low of 3.9%, nearly 18% of Polk's population lived in poverty in 1999 (FDLES, 2000).

Another factor contributing to Polk's economy has been the low education level of its citizens. In 1990, only 12% of the 440,000 responding to the Census had earned a four-year college degree. At the time of the present study, Florida ranked first in the nation in number of high school dropouts, fourth in the nation in the rate of teenagers who were not in school and unemployed, with Polk County near the top of that list (FDOE, 1999). Many of the students who have pursued a postsecondary education through Polk Community College's open-door policy have not been prepared for college-level work. At least 70% of admitted students were found to require remedial courses upon entry in 1999 (PCC, 1999).

In 1983, Dr. Maryly VanLeer Peck was named the second president of Polk Community College and was the first woman president among the 28 community colleges in Florida. Under her leadership, the college focused on accountability and outcomes. A second campus was established in the center of the population growth in 1986. A division of continuing education was also created in 1983 to serve local industry. Six new Associate in Science degree programs in health care were established between 1983 and 1998 to assist in the economic development of Polk County. Finally, a technical infrastructure for tracking and reporting accountability measures and supporting students consisting of linked computerized databases was implemented in 1988.

In the late 1980s, unprecedented unemployment rates, shifts industry, and the advent of welfare-to-work, school-to-work, and targeted workforce development contributed to the doubling of the college's enrollment and its focus on performance
outcomes. In 1988, amid this phenomenal expansion, came a shortage in state funding which forced the college to outsource several campus operations, to reorganize the administrative structure (eliminating eight administrators), and to limit non-essential travel funds. In the mid 1990s, Florida Senate Bill 1688, designed to spur workforce development and the availability of vocational education, opened the vocational education arena to outside competition and put the college in a defensive position. In 1998, after 15 years of focus on outcomes without the corollary focus on processes, the fabric of the institution began to erode.

At the time of the present study, Polk County faced the same challenges that had existed since 1964. With the rapidly dwindling resources of the phosphate mines, the recurring catastrophic weather, and the Mediterranean and Oriental fruit fly damage to the citrus crop, the economy of Polk County teetered on the edge of collapse. The Central Florida Development Council has worked diligently to diversify industry in the county, and has taken advantage of the most obvious resource, inexpensive land which spanned the principle transportation route between the cities of Orlando and Tampa.

Employment in warehouses and distribution centers, as well as trucking, rose by 68% in six years in response to a new industrial push (FDLES, 2000). The jobs, however high the demand for labor, were not high-wage occupations, nor did they offer long-term solutions to the economic crises facing Polk’s citizens. With Florida and the nation pushing workforce development initiatives which required high wages and high skills, Polk County’s industry has fallen far short of the ideal.

Since 1998, Polk Community College has worked with the CFDC and the Florida Jobs and Education Partnership on a new initiative. The goal has been to create a
"Corridor of Technology" within the Interstate-4 corridor extending from Daytona Beach in the east to Tampa in the west and to link seven counties, two state universities, and six community colleges in the venture. The intent of the initiative has been to attract higher skill, higher wage occupations associated with the information technology industry by leveraging on the foundation created by Orlando and Tampa forging into silicon chip manufacturing and information technology. At the time of this study, the partners faced a challenging situation. With Florida's focus on accountability and outcomes, funding to develop the educational programs has been contingent upon industry demand. However, Polk County has been unable to attract industry to the area without the required skilled workforce.

Dr. Larry Durrence, named Polk Community College's third president in 1998, with a background in both education and public administration, appeared to be uniquely qualified to assist Polk Community College in serving the community. The president's inaugural speech emphasized the need to strengthen the institution from within by examining educational and support processes and through staff and faculty development. This self-examination coincided with the Southern Association for Colleges and Schools (SACS) accreditation self-study process, which began in January 1999.

Faculty Characteristics

The composition of the faculty of Polk Community College has changed in response to the shift from a junior college to a community college. The original 34 full-time faculty hired in 1964 had grown to 112 full-time and 162 adjunct faculty employed, with a potential adjunct pool of over 1,000 by the spring of 2000. The average faculty
member had been at Polk Community College for 16 years, taught 15 contact hours a term, under a thirty-week contract. There were no continuing professional development requirements beyond those required by the Southern Association of Colleges and Schools--the Master's Degree with eighteen credits in topical field.

Polk Community College aspired to a diverse faculty reflective of the demographics of both the local population and the student body. At the time of the present study, full-time faculty were 88% Caucasian, 7% African-American, 3% Hispanic, and 2% American Indian, falling far short of the goal of equitable ethnic representation in employment (PCC, 2000).

Since the beginning of corporations, management theory has recognized the value of the human resource to the organization. The National Study of Postsecondary Faculty noted that "faculty are the pivotal resource around which the process and outcomes of postsecondary education revolves" (NCES, 1997). In fact, 70% ($12,594,985) of Polk Community College's 1999 budget was allocated directly toward this single resource. Ironically, in education this vital resource has often been neglected, resulting in low pay and few opportunities for professional development. With accountability being stringently enforced in Florida, the college allocated funds to programs and services that directly impact outcomes. By narrowing the focus in such a manner, there has been little reinvestment back into this educational corporation.

Salary has been a critical issue with Polk Community College faculty since 1985. In the early 1980s Polk Community College instructors were at the top of the state's pay scale, yet have fallen to the lower two-thirds of the pay scale in 1999. Many instructors have taken several overloads (some have taught as many as nine classes a term), and also
taught at neighboring community colleges to compensate for the lack of income. This workload became a critical issue at Polk Community College because of the effect on quality of teaching due to lack of down time, lack of time for collegial discussions, as well as the negative effect on professional development efforts and pursuit of higher degrees.

In the 1970s, the doctorate was attractive to faculty because it provided a method of increasing the chances of finding a full-time position, as well as increasing the base salary for faculty already employed in the community college. In the 1980s and 1990s the gap between salaries for faculty members with the Master's and Doctoral degrees became smaller, and sharply diminished the salary benefit of pursuing advanced degrees.

The faculty characteristics at Polk Community College are similar to those in Canada and the United Kingdom, according to the following researchers. Rosenblum and Rosenblum (1997) studied cohorts of newly-hired instructors at Canadian universities (excluding Quebec) annually over a 15-year period (1977-1991). The trend identified by the researchers indicated a consistent and major decrease in young academics' ability to obtain full-time appointments. In 1977, 1545 (61%) of the new hires in Canadian universities were under the age of 35, whereas in 1991, the figure had fallen to 1365 (41%). This substantial aging among those entering academe is indicative of the considerable delay and frustration being experienced by the potential academics.

In a study of 554 academics employed in the United Kingdom, Oshagbemi (1998) determined that the interaction of age and gender were significant with respect to teaching satisfaction. In addition, rank and the interaction of rank and gender were statistically correlated with predicting overall job satisfaction. This means that age
accounted for satisfaction with teaching and research and that the interaction of age with rank and with rank and gender also explained satisfaction in these core aspects of a university.

At Polk Community College, there was a cohort of faculty members pursued an Ed.S. or Ph.D. in Educational Leadership via Florida State University in the late 1970s. By the year 2004, the remainder of this cohort, as well as the others with Ph.D.s, were expected to retire, leaving a significant gap in Polk Community College's full-time faculty pool. Almost half (46%) of the full-time faculty in 1999 had been at Polk Community College over 16 years, with 26% having a tenure of 26-35 years. Simple projections have been used to identify the fiscal challenges in paying out retirement benefits, hiring new faculty, and developing less experienced faculty members in the early years of the 21st century.

Low salaries and lack of rewards for performance have been mediating factors in the organizational climate study of Polk Community College. An additional point of dissatisfaction has been the staff and faculty development program—or lack thereof. Less than half (38%) of the instructional personnel at Polk Community College participated in professional development efforts in 1997-98 and only $25,959 was dedicated by the institution to this effort. The low rate of participation in professional development was expected to impact the quality of instruction and student satisfaction with Polk Community College.
Summary

This chapter has presented an overview of the literature related to institutional working environment with a focus on instructional faculty perceptions of environment and its effect on institutional performance. As community colleges have faced increasing external pressures, the quality of faculty working environments has declined. The literature supports the concept that an institution's ability to provide a positive, supportive environment has a significant impact on faculty morale and productivity and on the institution's ability to effectively fulfill its mission and vision. Consequently, consideration of the college working environment could be an important aid to institutional leaders in determining appropriate improvement efforts.

Within the context of this review, Polk Community College was shown to be an institution that responds quickly to political demands without enculturating the underlying philosophies of those demands. The need to increase the understanding of the working environment for faculty at Polk Community College was supported by the literature reviewed by this researcher. The methodology used in this study combined factors discussed in this chapter with procedures specifically designed for this research. These factors are described in Chapter 3.
CHAPTER 3

METHODOLOGY

Introduction

The present study was initiated in the Spring of 1997 at Polk Community College. The final analysis of data, conclusions and recommendations were presented in the Summer of 2000. This chapter reviews the problem statement and describes the population, instrumentation, dependent and independent variables, data collection, and data analysis procedures of the study.

Problem Statement

This study sought to determine the perceptions and satisfaction levels of individuals employed as full-time teaching faculty in a multi-campus two-year public postsecondary institution in regard to the environmental elements of formal influence, communication, collaboration, organizational structure, work design and student focus. The aforementioned elements were investigated to determine (1) the current level of faculty satisfaction; (2) the extent to which perceptions differed among academic division affiliations; (3) the extent to which perceptions differed between campuses; and (4) the extent to which perceptions differed when gender, ethnicity, years at Polk Community College, or level of education were considered.
Population

The research methodology for this study involved the administration of a survey instrument to the entire population of 112 permanently employed faculty at Polk Community College (PCC). These employees were identified using the Consortium Human Resources System (CHRS) database at PCC. After eliminating adjunct and non-teaching faculty members, the population of this study included 96 full-time teaching faculty within the college's three academic divisions. Teaching faculty were identified from within the larger listing of full-time PCC employees by the researcher based upon responses given to the survey question regarding position. Although 96 faculty members responded to survey questions 1 through 55, several chose not to respond to the demographic questions. Demographic information for the full-time teaching faculty survey population is presented in Table 1. Response percentages for demographic variables were calculated using the actual number of responses for each item. Thus, missing responses were excluded from the calculation.

Instrumentation

The Personal Assessment of College Environment (PACE) was the survey instrument used in this study. This instrument was developed by Baker (1987) and later revised (1994). At the time of the present study, the instrument was obtained by PCC through the National Institute for Leadership and Institutional Effectiveness (NILIE) at North Carolina State University.
**TABLE 1**

DEMOGRAPHIC DESCRIPTION OF SURVEY RESPONDENTS

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLE</th>
<th>RESPONSE FREQUENCY</th>
<th>RESPONSE PERCENT&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>51.2</td>
</tr>
<tr>
<td>Male</td>
<td>40</td>
<td>48.8</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>American Indian or</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Native Alaskan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Islander</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>87</td>
<td>94.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td><strong>PCC Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>25</td>
<td>5.4</td>
</tr>
<tr>
<td>1-4 years</td>
<td>15</td>
<td>16.1</td>
</tr>
<tr>
<td>5-9 years</td>
<td>17</td>
<td>18.3</td>
</tr>
<tr>
<td>10-14 years</td>
<td>22</td>
<td>23.7</td>
</tr>
<tr>
<td>15+ years</td>
<td>34</td>
<td>36.5</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td><strong>PCC Division</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts Letters &amp; Social</td>
<td>31</td>
<td>44.3</td>
</tr>
<tr>
<td>Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career &amp; Special</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td>Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Science &amp; Health</td>
<td>30</td>
<td>42.8</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
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<td></td>
</tr>
<tr>
<td>Associate</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>Masters</td>
<td>58</td>
<td>63.0</td>
</tr>
<tr>
<td>Doctorate</td>
<td>25</td>
<td>27.2</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Response percent for demographic variables were calculated using the actual number of responses for each item. N=96. Missing responses were excluded from the calculation.
The PACE instrument was designed specifically for measuring institutional satisfaction levels of employees at two-year postsecondary education institutions. The instrument included 55 questions that framed the environmental assessment based upon the factors of Formal Influence, Communication, Collaboration, Organizational Structure, Work Design and Student Focus. Respondents were asked to rate their level of satisfaction with each item among the aforementioned factors. Respondents could rate each item on a reverse one to five response scale where 5=very satisfied, 4=satisfied, 3=neither satisfied nor dissatisfied, 2=dissatisfied, and 1=very dissatisfied. The final score for the respondents on each scale was the sum of the individual ratings for all of the items within each scale.

The instrument also included demographic items designed by the researcher in consultation with PCC’s Coordinator of Institutional Effectiveness, with Dr. Ann Luciano and in accord with NILIE. Respondents were asked to indicate their level of satisfaction using the same type of scale used for items 1 through 55. Nine additional PCC-specific questions were developed for institutional use but were excluded from the data analysis in the present study. An open-ended comment section was also included at the end of the instrument to allow respondents the opportunity to provide additional comments concerning their overall assessment of the PCC environment.

As of January 1999, the PACE instrument had been used in the measurement of institutional environment at more than 60 community colleges and universities. NILIE provided a reliability analysis of the PACE derived from those applications of the instrument using Cronbach’s Alpha coefficient as the scale reliability measure.
Cronbach’s Alpha is a statistical measure used to estimate reliability based on the amount of correlation among individual test items. "For commercially distributed tests it is expected that the reliability coefficient will be at least as high as 0.80, and preferably 0.90 or higher" (Nunnelly, 1972, p.106). An analysis of the internal scale reliability was conducted using SPSS (SPSS, 1998) for the scale results from the PCC administration of the instrument. Both the NILIE and the PCC Cronbach’s Alpha reliability results are listed in Table 2.

### TABLE 2

**PACE SCALE RELIABILITY ANALYSIS**

<table>
<thead>
<tr>
<th>SCALE</th>
<th>ITEMS</th>
<th>CRONBACH’S ALPHA COEFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NILIE&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Formal Influence</td>
<td>10</td>
<td>.93</td>
</tr>
<tr>
<td>Communication</td>
<td>9</td>
<td>.91</td>
</tr>
<tr>
<td>Collaboration</td>
<td>8</td>
<td>.91</td>
</tr>
<tr>
<td>Organizational</td>
<td>8</td>
<td>.86</td>
</tr>
<tr>
<td>Structure</td>
<td>9</td>
<td>.86</td>
</tr>
<tr>
<td>Work Design</td>
<td>11</td>
<td>.93</td>
</tr>
<tr>
<td>Student Focus</td>
<td>11</td>
<td>.93</td>
</tr>
<tr>
<td>PACE Overall</td>
<td>55</td>
<td>.98</td>
</tr>
</tbody>
</table>

<sup>a</sup> Alpha coefficients by climate category for PACE completed from 1st quarter of 1997 up to the 1st quarter of 1998 (N=1268) (NILIE, 1999).

The PCC administration of the PACE survey demonstrated a slightly lower scale reliability (a=0.97) than that of the aggregate internal reliability for other institutions (a=0.98). For the PCC survey results, the Formal Influence scale showed the highest coefficient for reliability (a=0.93), Organizational Structure demonstrated the lowest reliability coefficient (a=0.84), and the reliability for the remaining scales ranged between...
a=0.85 and a=0.92. A notable difference occurred in the reliability coefficients for the Student Focus scale between the aggregate NILIE results (a=0.93) and those of the PCC survey (a=0.88).

Data Collection

A letter from the president of Polk Community College was distributed to all employees regarding participation in the survey. In addition, a series of announcements were posted around both campuses, placed in individual mailboxes, and sent via Polk Community College’s electronic mail system. The instrument was administered in a group format on both campuses for two consecutive days early in November 1998, between the hours of 7 am and 7 pm. Respondents were asked to sign a log to indicate their participation. They were provided with a brief written explanation of the study, the survey instrument, a response envelope and an answer sheet appropriate for computer scanning. Respondents then entered the designated room and completed the answer sheet at their own pace, without interruption from the researchers.

Once completed, the respondents placed the answer sheets into a response envelope and sealed the envelope before returning it. The group administration method was selected because of historically high cooperation rates, the opportunity to explain the study and answer questions about the questionnaire, the low cost, and the small size of the population. After administration, completed surveys were collected and mailed to NILIE in sealed envelopes to ensure anonymity of participants and to prevent data manipulation prior to analysis.
Variables

Dependent variables for the data analysis were the six scales of measurement within the PACE survey instrument. The scales, comprised of a total of 55 environmental measurement items, were formal influence, communication, collaboration, organizational structure, work design, and student focus. In addition, the overall perception of satisfaction by faculty as reported by the PACE survey instrument served as a dependent variable. The independent variables were the demographic characteristics of the responding faculty members. These variables included academic division of employment, gender, ethnicity, years of employment at PCC, and level of education.

Data Analysis

The completed survey answer sheets were processed at the request of the District Board of Trustees, by NILIE at North Carolina State University on November 16, 1998. The answer sheets were read by an optical scanner at NILIE, and the data were returned in electronic format to the researcher who then completed the statistical analysis for the present study using the statistical software package SAS, Version 6.0.

Input and analyses of the collected data, specifically concerning faculty perceptions of institutional environment, were completed for the present research on the PCC campus using the statistical software package SPSS, version 8.0 (SPSS Inc., 1998). Respondent answers were translated into numerical scores for each item according to the following scale: very satisfied=5, satisfied=4, neither satisfied nor dissatisfied=3,
dissatisfied=2, and very dissatisfied=1. Frequency distributions, comparative means, and standard deviations of responses were calculated for each of the survey items and each of the six scales using SPSS.

Mean scores for items and scales were then used to identify which Likert environmental type was perceived by respondents as evidenced by ratings given. A mean score of 1.99 or lower was considered to reflect a perception of a Coercive (System 1) institutional environment. Mean scores between 2.00 and 2.99 were considered to reflect a perception of a Competitive (System 2) environment. Mean scores between 3.00 and 3.99 were classified as perceptions of a Consultative (System 3) environment, and means between 4.00 and 5.00 were considered to represent a perception of a Collaborative (System 4) institutional environment.

Correlation coefficients among the PACE scale scores across the 96 respondents were also calculated using SPSS. A multiple regression analysis using the least squares solution for predicting each scale from the remaining five PACE scales was performed. The added comments were first reviewed for relevance and frequency by scale and then were analyzed to identify recurrent themes and issues. The results of these procedures are reported in Chapter 4.

Data Analysis for Research Question 1

The measurement of the faculty’s overall perception of the PCC working environment within the Likert environmental quadrants of Coercive, Competitive, Consultative, and Collaborative Systems was conducted by analyzing responses to the 55-
item instrument through the use of mean item scores, mean scale scores, and standard
deviations. Mean scale scores were also used to determine component areas of highest
and lowest faculty satisfaction within the environment. Specific PACE items within the
component scales that received responses showing the highest and lowest areas of faculty
satisfaction within the environment were identified using mean scores for individual
items.

Responses to the open-comment item at the end of the PACE instrument were
evaluated by the researcher and categorized by topic and type of comment. Topics were
framed by the six PACE scale definitions, by division-specific comment content, and by
type--favorable or unfavorable--to reflect faculty evaluation of the PCC environment.
The frequency and percent of topic comments were calculated and reported as was the
number of each type of comment within the topic categories.
Data Analysis for Research Questions 2 - 4

In order to determine the perceptions of the environment by faculty within each of the three separate PCC academic divisions, comparative means within each PACE scale were calculated using SPSS. One-way analyses of variance (ANOVA) were performed to test the null hypothesis that perceptions of the differing groups were not significantly different within the six PACE scales. Scheffé post hoc comparisons were then applied to determine the nature of the effects of the significant differences revealed at the p < .05 level. The same process used to determine significant differences between academic divisions was applied to the data to determine how perceptions differ when years of service at PCC, and campus assignment were used as independent variables. Post hoc comparisons were not performed on the ethnicity nor the gender data, due to the small number of African-American, American Indian, or Hispanic faculty members within the ethnicity category, and the limited number of variables within the gender category.

A one-way analysis of variance (ANOVA) was chosen as the method of data analysis because it evaluated the significance of the differences among several means, all at the same time. The F test used in this method provides an answer to the following question: Was the variance of the means too great to conclude that the means were drawn randomly from the same population? If the null hypothesis was rejected, this meant that the independent variable in the experiment was a causal factor in creating a difference between populations (Kimble, 1978).

Summaries of data, statistical tests and appropriate narratives are presented in Chapter 4. These analyses were then used to form conclusions and make
recommendations for possible changes in institutional policy and practice.

The conclusions also provided a basis for suggestions for further research. Conclusions drawn from the data analysis and resulting recommendations are presented in Chapter 5.
CHAPTER 4
DATA ANALYSIS

Introduction

The results of Polk Community College's organizational climate study are presented in this chapter. The chapter includes descriptive statistics for responses and analysis of data for each research question. Each section includes a description of the population, a discussion of the frequency distribution by scales, relationships among the PACE scales, and an analysis of each research question using mean response, mean scale scores, frequencies, ANOVA results, and post hoc results when performed. This study sought to determine the perceptions and satisfaction among teaching faculty employed in a two-year public postsecondary education institution in regard to the environmental elements of formal influence, communication, collaboration, organizational structure, work design and student focus.

Description of Population

Participation in the PACE survey was voluntary and responses should be considered to reflect respondents' perceptions of PCC's institutional environment as of
November 1998 when the data was collected. A response rate of 85.7% was achieved by the return of 96 surveys originally distributed to 112 permanent faculty at PCC.

**Frequency Distribution of Scales**

Chapter 3 described the process by which scores were collected. Attainable mean scores for all scales ranged from 1 to 5 with 1 representing the lowest level of faculty satisfaction and 5 representing the highest. Based upon the Likert quadrant system of environmental styles explained in Chapter 2 (Likert, 1967), scores were classified in one of four quadrants. A perception of a Coercive (System 1) institutional environment was considered to be represented by a mean score of 1.99 or lower. A Competitive (System 2) environment was reflected by mean scores ranging between 2.00 and 2.99. A Consultative (System 3) environment was reflected by mean scores between 3.00 and 3.99. Means between 4.00 and 5.00 were considered to represent a perception of a Collaborative (System 4) institutional environment.

**Scale 1: Formal Influence**

The extent to which faculty were provided with professional development opportunities, career guidance, rewards and encouraged to provide input into their working environment by their administrator was assessed by the ten questions comprising the Formal Influence scale. The scale mean, scale standard deviation, frequency and percent of respondents reporting Systems 1, 2, 3, and 4 perceptions of institutional environment for the Formal Influence scale are presented in Table 3.
TABLE 3

DESCRIPTIVE RESPONSES TO SCALE 1 -- FORMAL INFLUENCE (N=96)

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(1.00 - 1.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 2 -- Competitive</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>(2.00 - 2.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 3 -- Consultative</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>(3.00 - 3.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 4 -- Collaborative</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>(4.00 - 5.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale mean = 3.46
Standard deviation = 0.92

The mean for the Formal Influence scale for all PCC faculty respondents was 3.46, reflecting faculty perception of a Consultative (System 3) environment for Formal Influence issues. A Coercive (System 1) environment was reported by 4% of the faculty; a Competitive (System 2) environment was reported by 27% of the respondents; 36% of the faculty reported Consultative (System 3), and 33% reported a Collaborative (System 4) institutional environment. For this scale, the standard deviation of 0.92 signified the most highly dispersed distribution of scores around the mean for any of the scales.

Scale 2: Communication

The Communication scale determined the extent to which faculty received and shared the information necessary to be effective in their work and other organizational activities. Nine questions were used to assess this component. The scale mean, scale
standard deviation, and frequency and percent of respondents reporting Systems 1, 2, 3, and 4 environments for the Communication scale are presented in Table 4.

TABLE 4

DESCRIPTIVE RESPONSES TO SCALE 2 -- COMMUNICATION (N=96)

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive (1.00 - 1.99)</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>System 2 -- Competitive (2.00 - 2.99)</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>System 3 -- Consultative (3.00 - 3.99)</td>
<td>47</td>
<td>49</td>
</tr>
<tr>
<td>System 4 -- Collaborative (4.00 - 5.00)</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

Scale mean = 3.29
Standard deviation = 0.84

The mean for the Communication scale for all PCC faculty respondents was 3.29 reflecting faculty perception of a Consultative (System 3) environment for Communication issues. Only 7% of the faculty reported a Coercive (System 1) environment; 24% of the respondents perceived a Competitive (System 2) environment; the majority of faculty (49%) reported a Consultative (System 3) environment; and 20% reported a Collaborative (System 4) institutional environment.

Scale 3: Collaboration

The Collaboration scale concerned the extent to which faculty had the opportunity to work in cooperation with others and participate in shared problem solving and decision making. Eight questions were used to determine faculty perception of collaboration at
Polk Community College. The scale mean, scale standard deviation, and frequency and percent of respondents reporting Systems 1, 2, 3, and 4 environments for the Collaboration scale are presented in Table 5.

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive (1.00 - 1.99)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>System 2 -- Competitive (2.00 - 2.99)</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>System 3 -- Consultative (3.00 - 3.99)</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>System 4 -- Collaborative (4.00 - 5.00)</td>
<td>28</td>
<td>29</td>
</tr>
</tbody>
</table>

The mean rating for the Collaboration scale for all PCC faculty respondents was 3.35, reflecting faculty perception of a Consultative (System 3) environment for Collaboration. A Coercive (System 1) environment was reported by 6% of the faculty; a Competitive (System 2) environment was reported by 22% of the respondents; 43% of the faculty reported a Consultative (System 3) environment; and 29% reported a Collaborative (System 4) institutional environment.
Scale 4: Organizational Structure

The Organizational Structure scale included eight questions which measured the extent to which the organization supported faculty through quality feedback, appropriate workload, and policy decisions. Questions in this section also dealt with the amount of work faculty were asked to perform, faculty's ability to organize their own work and the extent to which faculty commitment to the institution was encouraged. The scale mean, scale standard deviation, and frequency and percent of respondents reporting Systems 1, 2, 3, and 4 environments for the Organizational Structure scale are presented below.

TABLE 6
DESCRIPTIVE RESPONSES TO SCALE 4 -- ORGANIZATIONAL STRUCTURE
(N=96)

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(1.00 - 1.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 2 -- Competitive</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>(2.00 - 2.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 3 -- Consultative</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>(3.00 - 3.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 4 -- Collaborative</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>(4.00 - 5.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean for the Organizational Structure scale for all PCC faculty respondents was 3.29, reflecting faculty perception of a Consultative (System 3) environment for Organizational Structure issues. A Coercive (System 1) environment was reported by 4% of the faculty; a Competitive (System 2) environment was reported by 31% of the
respondents; 45% of the faculty reported a Consultative (System 3) environment; and 20% reported a Collaborative (System 4) institutional environment.

Scale 5: Work Design/Technology

The Work Design/Technology scale measured the extent to which faculty felt responsible for accuracy, relevancy and quality in their work, and the extent to which faculty work was guided by clearly defined processes. Nine questions were used to assess faculty perceptions regarding Work Design/Technology at Polk Community College. The scale mean, scale standard deviation, and frequency and percent of respondents reporting Systems 1, 2, 3, and 4 environments for the Work Design/Technology scale are presented in Table 7.

TABLE 7
DESRIPTIVE RESPONSES TO SCALE 5 -- WORK DESIGN/TECHNOLOGY
(N=96)

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive (1.00 - 1.99)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>System 2 -- Competitive (2.00 - 2.99)</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>System 3 -- Consultative (3.00 - 3.99)</td>
<td>42</td>
<td>44 Scale mean = 3.80</td>
</tr>
<tr>
<td>System 4 -- Collaborative (4.00 - 5.00)</td>
<td>45</td>
<td>47 Standard deviation = 0.70</td>
</tr>
</tbody>
</table>

The mean for the Work Design/Technology scale for all PCC faculty respondents was 3.80 reflecting faculty perception of a Consultative (System 3) environment for Work
Design/Technology issues. A Coercive (System 1) environment was reported by 1% of the faculty; a Competitive (System 2) environment was reported by 8% of the respondents; 42% of the faculty reported a Consultative (System 3) environment; and 45% reported a Collaborative (System 4) institutional environment. For this scale, the standard deviation of .70 signified the narrowest distribution of scores around the mean.

Scale 6: Student Focus

The Student Focus scale included 11 questions which measured the extent to which faculty believed students were central to their work and that other organizational personnel were supportive of students needs. The scale mean, scale standard deviation, and frequency and percent of respondents reporting Systems 1, 2, 3, and 4 environments for the Student Focus scale are presented in Table 8.

TABLE 8
DESCRIPTIVE RESPONSES TO SCALE 6 -- STUDENT FOCUS (N=96)

<table>
<thead>
<tr>
<th>QUADRANT</th>
<th>FREQUENCY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>System 1 -- Coercive</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>(1.00 - 1.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 2 -- Competitive</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>(2.00 - 2.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 3 -- Consultative</td>
<td>53</td>
<td>55</td>
</tr>
<tr>
<td>(3.00 - 3.99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System 4 -- Collaborative</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>(4.00 - 5.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean for the Student Focus scale for all PCC faculty respondents was 3.56. This reflected faculty perception of a Consultative (System 3) environment for Student Focus issues. A Coercive (System 1) environment was reported by 3% of the faculty; a
Competitive (System 2) environment was reported by 14% of the respondents; 55% of the faculty reported a Consultative (System 3) environment; and 28% reported a Collaborative (System 4) institutional environment.

Relationships among the PACE scales

Intercorrelations among the PACE scale scores across the 96 respondents were examined through the derivation of a 6 x 6 correlation coefficient matrix. Interscale correlations for the six PACE scale means are listed in Table 9.

TABLE 9
CORRELATIONS AMONG THE SCALES

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Formal influence</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Communication</td>
<td>0.78</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Collaboration</td>
<td>0.67</td>
<td>0.71</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Organizational Structure</td>
<td>0.69</td>
<td>0.76</td>
<td>0.67</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Work Design</td>
<td>0.68</td>
<td>0.66</td>
<td>0.65</td>
<td>0.55</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Student Focus</td>
<td>0.54</td>
<td>0.60</td>
<td>0.59</td>
<td>0.58</td>
<td>0.72</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The analysis of the correlation coefficient matrix indicated that the observed relationships ranged from moderate (0.54) to moderately strong (0.78). The strongest relationship was between Formal Influence and Communication (0.78), indicating that
those respondents who were satisfied with Communication issues tended to be satisfied with the issues addressed within the Formal Influence scale. The correlation for Formal Influence and Collaboration was 0.67, for Formal Influence and Organizational Structure was 0.69, and for Formal Influence and Work Design was 0.68. The weakest relationship was between Formal Influence and Student Focus (0.54).

The relationship of Communication with other scales described by the matrix ranged from a high correlation of 0.78 with Formal Influence to a low correlation of 0.60 with Student Focus. The relationship of Collaboration with the other scales ranged from a high of 0.71 with Communication to a low of 0.59 with Student Focus.

Organizational Structure correlated highly with the Communication scale (0.76) and a related low correlation of 0.55 with Work Design. The strongest correlation was demonstrated by the Work Design scale with Student Focus at 0.72. Its weakest correlation was with Organizational Structure at 0.55. Finally, Student Focus had the lowest overall correlation with other scales, ranging from a high of 0.72 with Work Design to a low of 0.54 with Formal influence.

Multiple regression analysis was used to determine the predictive ability of each scale from the remaining six scales. The proportion of variance ($R^2$) is presented in Table 10. The multiple regression analysis corroborated the observations regarding relationships between variables demonstrated in the correlation coefficient matrix. All scales could be moderately well predicted from the remaining scales. The largest variance was accounted for by predicting Communication from the other five scales ($R^2=0.73$). The analyses for Formal Influence, Collaboration, Organizational Structure,
and Work Design resulted in $R^2$ values ranging from 0.60 to 0.68.

TABLE 10

PROPORTION OF VARIANCE

<table>
<thead>
<tr>
<th>SCALE</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Influence</td>
<td>0.68</td>
</tr>
<tr>
<td>Communication</td>
<td>0.73</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.60</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>0.64</td>
</tr>
<tr>
<td>Work Design</td>
<td>0.65</td>
</tr>
<tr>
<td>Student Focus</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Research Question 1

What were the faculty's perception of and satisfaction levels with the overall college environment in the areas of formal influence, communication, collaboration, organizational structure, work design, and student focus?

The four systems of management styles and institutional environments framed by Likert (1967) and adapted by Baker to create the PACE survey were Coercive (System 1), Competitive (System 2), Consultative (System 3), and Collaborative (System 4).

The scaling assigned to faculty perceptions of the environment ranged between one and five. According to the rating for each system described in Chapter 3, PCC’s teaching
faculty mean score of 3.47 indicated a perception of a Consultative (System 3) environment within the institution.

Table 11 reports the number of responses for each scale, the number of responses missing, and the standard deviations for the scale scores which ranged from 0.70 for Work Design to 0.92 for Formal Influence. These relatively small standard deviations demonstrate that most faculty responses to items within the scales fell within a fairly narrow range of scores. As indicated in Table 11 and in Figure 1, the Work Design scale received the highest mean score (3.80) of all the scales. The Communication and Organizational Structure scales received the lowest mean scores (3.29).

<table>
<thead>
<tr>
<th>SCALE</th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Influence</td>
<td>96</td>
<td>3.46</td>
<td>0.92</td>
</tr>
<tr>
<td>Communication</td>
<td>96</td>
<td>3.29</td>
<td>0.84</td>
</tr>
<tr>
<td>Coercive</td>
<td>96</td>
<td>3.35</td>
<td>0.87</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>96</td>
<td>3.29</td>
<td>0.84</td>
</tr>
<tr>
<td>Work Design/Technology</td>
<td>96</td>
<td>3.80</td>
<td>0.70</td>
</tr>
<tr>
<td>Student Focus</td>
<td>96</td>
<td>3.56</td>
<td>0.76</td>
</tr>
<tr>
<td>PACE Overall</td>
<td>96</td>
<td>3.47</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Figure 1 provides a graphic description of the mean scale scores’ placement within the environmental style quadrants. All of PCC’s PACE mean scale scores, as well as the PACE Overall mean scale scores fell within the Consultative (System 3) quadrant.

Four of the six scale scores, Formal Influence (3.46), Communication (3.29),
Collaboration (3.35), and Organizational Structure (3.29) were in the lower half of the quadrant; with the remaining two scales, Work Design (3.80) and Student Focus (3.56), in the upper half of the quadrant.

Figure 1. PACE Mean Scale Scores For PCC Faculty.

The Description of a strong Consultative (System 3) environment described by Likert (1967) is one in which management demonstrates substantial, but not complete, confidence and trust in employees. Leaders often seek input from employees regarding decisions, and the informal organization deals primarily with morale issues and tends to cooperate in the accomplishment of organizational goals. In this type of working environment, influence of employees is exercised through a reward process and through intermittent collaborative efforts, although some negative consequences are attached to negative performance by employees.

PCC's faculty perceived their working environment in all six measurement scales to be firmly in the middle of the Consultative (System 3) quadrant. Only one scale, Work Design (3.80) placed well above the median. The scores indicated that PCC's environment at the time of this study is adequately described as firmly entrenched in the Consultative (System 3) environment, as described in Chapter 2.

Table 12 reports the mean response of faculty for each of the 55 items within the six scales of the PACE survey instrument. The means and standard deviations presented in this table reflect respondents' satisfaction with and perceptions of specific characteristics of the PCC environment during the Winter term of 1998.

80
Of the 55 items means, 38 items fell within the Consultative (System 3) environment style (those with means between 3.00 and 3.99), eleven means fell within a Competitive (System 2) environment (those means falling between 2.00 and 2.99), six means fell within a Collaborative (System 4) environment (those with means between 4.00 and 5.00). No item resulted in scores within the Coercive (System 1) environment.

To provide more information about specific environmental strengths and weaknesses, those items with means that fell into the highest and lowest environmental quadrants were individually identified.

Six items had mean scores that fell within the Collaborative (System 4) type of environment. These items are listed on the pages following Table 12.

| TABLE 12 |

| MEAN RESPONSES TO 55 ITEMS IN PACE SURVEY (N=96) |

<table>
<thead>
<tr>
<th>SCALE</th>
<th>ITEM</th>
<th>n</th>
<th>MISSING</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Influence</td>
<td>1</td>
<td>94</td>
<td>2</td>
<td>3.34</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
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<td>3</td>
<td>95</td>
<td>1</td>
<td>3.57</td>
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</tr>
<tr>
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<td>4.02</td>
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</tr>
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<td>92</td>
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<td>9</td>
<td>93</td>
<td>3</td>
<td>2.63</td>
<td>1.13</td>
</tr>
<tr>
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<td>10</td>
<td>93</td>
<td>3</td>
<td>2.99</td>
<td>1.25</td>
</tr>
<tr>
<td>Communication</td>
<td>11</td>
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<td>3.58</td>
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<td></td>
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<td>3.41</td>
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</tr>
<tr>
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<td>92</td>
<td>4</td>
<td>3.36</td>
<td>1.09</td>
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</tr>
<tr>
<td>16</td>
<td>94</td>
<td>2</td>
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<td>92</td>
<td>4</td>
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<td>18</td>
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<td>1.11</td>
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<td>19</td>
<td>92</td>
<td>4</td>
<td>2.9</td>
<td>1.20</td>
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</tr>
</tbody>
</table>

Collaboration

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tr>
<td>21</td>
<td>93</td>
<td>3</td>
<td>3.69</td>
<td>1.12</td>
</tr>
<tr>
<td>22</td>
<td>90</td>
<td>6</td>
<td>3.64</td>
<td>1.02</td>
</tr>
<tr>
<td>23</td>
<td>84</td>
<td>12</td>
<td>2.81</td>
<td>1.12</td>
</tr>
<tr>
<td>24</td>
<td>94</td>
<td>2</td>
<td>2.68</td>
<td>1.14</td>
</tr>
<tr>
<td>25</td>
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<td>3.39</td>
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<td>26</td>
<td>92</td>
<td>4</td>
<td>3.57</td>
<td>1.18</td>
</tr>
<tr>
<td>27</td>
<td>89</td>
<td>7</td>
<td>3.45</td>
<td>1.08</td>
</tr>
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<td>MEAN</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------</td>
<td>----</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>28</td>
<td>91</td>
<td>5</td>
<td>3.32</td>
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<td>94</td>
<td>2</td>
<td>3.37</td>
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Item 4  The extent to which I am given the opportunity to be creative in my work. (Mean = 4.02)

Item 36 The extent to which accuracy is expected of my in my job. (Mean = 4.12)
Item 37  The extent to which my skills are appropriate for my job. 
(Mean = 4.59)

Item 38  The extent to which I feel my job is relevant to this institution's mission. (Mean = 4.49)

Item 39  The extent to which I am responsible for meaningful work. 
(Mean = 4.54)

Item 50  The extent to which this institution prepares students for a career. 
(Mean = 4.03)

Eleven items had mean scores that fell within the Competitive (System 2) type of environment. These items are listed below.

Item 9  The extent to which I am able to appropriately influence the direction of this institution. (Mean = 2.63)

Item 10  The extent to which this institution has been successful in positively motivating my performance. (Mean = 2.99)

Item 17  The extent to which open and ethical communication is practiced at this institution. (Mean = 2.72)

Item 19  The extent to which information is shared within this institution. (Mean = 2.90)

Item 23  The extent to which institutional teams use problem-solving techniques. (Mean = 2.81)

Item 24  The extent to which a spirit of cooperation exists at this institution. (Mean = 2.68)

Item 34  The extent to which this institution is properly organized. (Mean = 2.67)
Item 35  The extent to which decisions are made at the appropriate level at this institution. (Mean = 2.61)

Item 40  The extent to which I have the opportunity for advancement at this institution. (Mean = 2.98)

Item 48  The extent to which support services personnel meet the needs of the students. (Mean = 2.58)

Item 49  The extent to which administrative personnel meet the needs of the students (mean = 2.89)

Of the ten items with the lowest mean scores, one (Item 9) was within the Formal Influence scale, two (Items 17 and 19) were in the Communication scale, two (Items 23 and 24) were within the Collaboration scale, two (Items 34 and 35) were within the Organizational Structure scale, one (Item 40) was within the Work Design, and two (Items 48 and 49) within the Student Focus scale.

An open-ended comment section was also provided at the end of the PACE instrument. Respondents were invited to provide any comments which they felt were important to the overall assessment of the PCC environment. Of the 96 faculty respondents, 40 offered a total of 127 separate comments for a mean of 3.2 comments per respondent. The comments were separated by the researcher into topic scale categories and then subjected to further analysis (favorable versus unfavorable) within each topic category. The topic and frequency distribution and type of written comments are reported in Table 13.
The largest number of comments (46) was within the topic category of Formal Influence. These comments represented 36.3% of the total comments. Three comments were favorable within the Formal Influence scale and 43 were unfavorable perceptions of the PCC working environment.

Comments dealing with Organizational Structure issues were the second largest group with 32 comments or 25.2% of the total. Of those comments, four were favorable and 28 were unfavorable. The third largest group of comments dealt with Student Focus issues. This category had 18 comments or 14.2% of the total. Two comments were favorable and 16 were unfavorable. Of the total 127 comments offered by faculty respondents, 13.4% were favorable, and 87.6% were unfavorable. The distribution of favorable and unfavorable comments is further illustrated in Figure 2.
One of the favorable comments within Formal Influence related to meeting the community college mission is:

I believe that the majority of employees at PCC believe in the noble mission of our institution. Furthermore, I believe that for the most part, we have been successful in trying to meet the needs of our students.

The majority of the unfavorable comments related to faculty opinions regarding administrators and their actions such as the following:

There is a closed administrative net that excludes most faculty and is designed expressly to hunker down and avoid new ideas or controversy. Memos are rarely responded to and new ideas are ignored.

Faculty are tired of working hard on committees discussing College-wide plans and activities when decisions seem to be made capriciously by administrators regardless of faculty and staff recommendations.
The administrators at this institution seem to have lost sight of the mission of the college (e.g. serving students). It appears that there are a lot of politics that go on within the administration, and the faculty gets frustrated with this. It would be great if somehow this institution could move forward in a positive direction to meet the challenges that it faces. I am not sure that this can be done with the current administrative team. Too much past history and past problems interfere with the move forward.

Additional unfavorable comments addressed the topics of pay scale and salary, examples include the following:

The point accounting system does not fit what faculty have to do. Everything is set up to short change faculty. Why should full time faculty be expected to teach more than their contract load for adjunct pay? Why should extra-term contracts be taught for $300 -- when an experienced professor should be able to expect 1/6th of his salary? Why are people expected to teach overloads for no pay because the credit hours of the classes don’t fit within the framework?

Working as a faculty member at PCC is both rewarding and frustrating because of our relatively low faculty pay scale. I must teach several overload in order to make a decent salary. Consequently, I am often overwhelmed by prep time and grading, and may not be giving my students all the attention they need. In other words, faculty pay scale needs to be raised.

I believe that one area that does need attention is the pay that we receive. At one time, we were in the middle to high range in faculty salary. Now we are near the bottom in every category when compared to the state’s other community colleges. The effect of the low faculty pay has been that we are unable to attract and hire qualified new faculty. Having served on hiring committees for faculty positions has been very difficult as we receive few good applicants and lose the best to other institutions.

In terms of Organizational Structure, the following favorable comment referred to the process of enculturating new faculty to the institution.

I’ve only been at PCC since January of 1998 so I’m pretty unfamiliar with the college’s mission, administrative policies, the extent to which dissent is tolerated, etc. It seems to me that PCC is a well-run, efficient, attractive facility with dedicated, talented faculty who take their jobs seriously and do them well. I enjoy the students here and the other faculty, many of
whom have been extremely helpful to me in giving me feedback and course information and standards for my classes. I don't really have a "work team" but I do have a mentor and a department head who have been most encouraging, supportive and attentive about making me feel comfortable and appreciated.

The unfavorable comments regarding Organizational Structure addressed a wide array of topics including criticism of individuals, student services, decision-making, and hiring practices.

We strain at a gnat with strategic planning, but allow division directors and the curriculum committee to make subject-matter decisions without the benefit of training or experience in the discipline affected.

In visiting other two-year institutions or reading about them, it is remarkable that PCC has nearly no administrators with a doctorate degree. Why is that? Why are other community colleges loaded with Ph.D.'s or Ed.D.'s as administrators has almost none? Why does a doctorate disqualify a person from being an administrator?

Favorable comments within Student Focus were examples of the faculty members' enjoyment of teaching. "The best part of being an instructor is my interaction with the students -- they are a wonderful group of young people who for the most part really want to expand their minds." "PCC is an excellent academic institution. I would recommend it to any student."

Unfavorable comments were focused on student services and financial aid. "Counseling, probably the weakest area in the college, was weakened significantly when its function was reduced to program planning." "Most of the students' complaints that I hear refer to a lack of nurturing from Student Services."

I am not satisfied with the assistance students receive from Student Services, particularly, financial aid. In the past two semesters (3 classes), I am aware of three students who had difficulty receiving aid that was
rightfully theirs -- two were scholarships. Records were lost and phone calls were not returned.

Research Question 2

Were there significant differences in perception of and satisfaction levels with the institutional environment among faculty in the three academic divisions (i.e. Arts, Letters and Social Sciences (ALSS), Career and Special Programs (CASP), Math, Science and Allied Health (MASH))?

The comparative scale means of responses for each of the three academic divisions are listed in Table 14. The highest and lowest mean scores within each scale are indicated by the letter a or b. Twenty-six respondents did not identify a division affiliation.

The Arts, Letters and Social Sciences (ALSS) faculty reported the highest overall PACE mean score for satisfaction with the PCC institutional environment (Mean = 3.65). All division groupings scored in the Consultative (System 3) environment. Figure 3 illustrates placement of divisional scale means within the environmental style quadrants.

The highest level of satisfaction within a division reflected by the mean scores within scales was in the Math, Science and Allied Health (MASH) division for the Work Design scale (Mean = 3.96). MASH faculty reported the highest mean scores for the Collaborative (Mean = 3.48) and Student Focus (Mean = 3.67) scales. Career & Special Programs faculty reported the highest mean score for the Formal Influence scale (Mean = 3.69). Arts, Letters and Social Sciences faculty reported the highest mean scale scores for Communication (Mean = 3.54), and Organizational Structure (Mean = 3.72).

TABLE 14

SCALE AND OVERALL PACE MEAN SCORES;
INDEPENDENT VARIABLE: ACADEMIC DIVISION (N=70)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>ALSS MEAN (n= 31)</th>
<th>CASP MEAN (n= 9)</th>
<th>MASH MEAN (n= 30)</th>
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<td>3.54&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>3.58&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.67&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>3.49&lt;sup&gt;b&lt;/sup&gt;</td>
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Note. ALSS = Arts, Letters & Social Sciences; CASP = Career & Special Programs; MASH = Math, Science & Allied Health. <sup>a</sup> Highest Scale Score. <sup>b</sup> Lowest Scale Score

Figure 3. PACE mean score for faculty using the independent variable of Academic Division.

The lowest mean scale score was for Organizational Structure (Mean = 3.00)

reported by the MASH division, who also reported the lowest mean score for Formal
Influence (Mean = 3.54). CASP faculty reported the lowest mean scores for Communication (Mean = 3.22), Collaboration (Mean = 3.21), Work Design (Mean = 3.77), and Student Focus (Mean = 3.58).

One-way Analyses of Variance (ANOVAs) were performed using the six PACE environmental scales as dependent variables and Academic Division as the independent variable. The purpose of using an ANOVA procedure was to determine if the independent variable of Academic Division influenced responses within each of the scales. The results indicated that there is less than a 1% chance that the differences between Academic Division faculty responses within the scale of Organizational Structure was due to chance alone. The analysis of the remaining scales resulted in probabilities ranging between 0.33 and 0.94. Therefore, the statistical differences between the remaining dependent variables were not great enough to suggest that Academic Division affected faculty perceptions differently. Table 15 reports the results of the ANOVA tests using Academic Division as the independent variable.

The results of separate Scheffé post hoc procedures of the ANOVAs for the scales Formal influence, Communication, Collaboration, Organizational Structure, Work Design, and Student Focus indicated that the only scale with significant differences between PCC Divisions at the \( p < .05 \) level was Organizational Structure. The mean score for Organizational Structure within the MASH division (3.00) was shown to be significantly different at the \( p < .05 \) level than the means for Organizational Structure...
CHAPTER 5
SUMMARY, CONCLUSIONS, IMPLICATIONS
AND RECOMMENDATIONS

This chapter reviews the problem statement and describes the population, instrumentation, and data analysis procedures. Also included are a summary and discussion of findings by research question, conclusions, implications for practice. The chapter concludes with recommendations for future research.

Problem Statement

The present study sought to determine the perceptions and satisfaction levels of individuals employed as full-time teaching faculty in a multi-campus two-year public postsecondary institution in regard to the environmental elements of formal influence, communication, collaboration, organizational structure, work design and student focus. The aforementioned elements were investigated in an attempt to determine (1) the current level of faculty satisfaction; (2) the extent to which perceptions differed among division affiliations; (3) the extent to which perceptions differed between campuses; and (4) the extent to which perceptions differed when gender, ethnicity, years at Polk Community College or level of education were considered.
Population

The research methodology for this study involved the administration of a survey instrument to the entire population of 290 full-time or part-time permanently employed faculty and staff at PCC. The population of this study was the 112 full-time teaching faculty within the college's three divisions. Following the removal of non-instructional faculty members, a total of 96 surveys were returned for a response rate of 85.7%.

Instrumentation

The Personal Assessment of College Environment (PACE) was the survey instrument used in the study. The instrument was developed by Baker (1987) and later revised (1994). At the time of the present study, the instrument was obtained by PCC through the National Institute for Leadership and Institutional Effectiveness (NILIE) at North Carolina State University.

The PACE instrument was designed specifically for measuring institutional satisfaction levels of employees at two-year postsecondary education institutions. The instrument included 55 questions that framed the environmental assessment based upon the scales of Formal Influence, Communication, Collaboration, Organizational Structure, Work Design and Student Focus. Respondents were asked to rate their level of satisfaction with each item among the aforementioned factors. They could rate each item on a reverse one to five response scale where 5=very satisfied, 4=satisfied, 3=neither satisfied nor dissatisfied, 2=dissatisfied, and 1=very dissatisfied. The final score for the respondents on each scale was the sum of their ratings for all of the items.
The instrument also included demographic items designed by the researcher in consultation with PCC's Coordinator of Institutional Effectiveness, Dr. Ann Luciano and NILIE. An open-ended comment section was also included at the end of the instrument to allow respondents the opportunity to provide additional comments concerning their overall assessment of the PCC environment.

Data Collection

A letter from the president of Polk Community College was distributed to all employees encouraging participation in the survey. In addition, a series of announcements were posted around both campuses, placed in individual mailboxes, and sent via Polk Community College's electronic bulletin board system. The instrument was administered in a group format on both campuses for two consecutive days early in November 1998. Respondents were asked to sign a log to indicate participation. Respondents were provided with a brief written explanation of the study, the survey instrument, a response envelope, and an answer sheet appropriate for computer scanning.

Respondents then entered the designated room and completed the answer sheet at their own pace, without interruption from the researchers. Once completed, the respondents placed the answer sheets into a response envelope and sealed the envelope before returning it to the researchers. The group administration method was selected because of historically high cooperation rates, the opportunity to explain the study and answer questions about the questionnaire, the low cost, and the small size of the population. After administration, completed surveys were collected and mailed to NILIE.
in sealed envelopes to ensure anonymity of participants and to prevent data manipulation prior to analysis.

Data Analysis

The completed survey answer sheets were processed at the request of the District Board of Trustees, by NILIE at North Carolina State University on November 16, 1998. The answer sheets were read by an optical scanner at NILIE, and the data were sent for processing to the mainframe computer at North Carolina State University. Responses were then analyzed using the statistical software package SAS, version 6.0, by researchers at NILIE, and the results for ALL employee groups at PCC were returned to PCC in late January, 1999.

Input and analyses of the collected data, specifically concerning faculty perceptions of institutional environment, were completed for the present research on the PCC campus using the statistical software package SPSS, version 8.0. Respondent answers were translated into numerical scores for each item according to the following scale: very satisfied=5, satisfied=4, neither satisfied nor dissatisfied=3, dissatisfied=2, and very dissatisfied=1. Frequency distributions, comparative means, and standard deviations of responses were calculated for each of the survey items and each of the six scales using SPSS.

Mean scores for items and scales were then used to identify which Likert environmental type was perceived by respondents as identified by ratings. A mean score of 1.99 or lower was considered to reflect a perception of a Coercive (System 1)
institutional environment. Mean scores between 2.00 and 2.99 were considered to reflect a perception of a Competitive (System 2) environment. Mean scores between 3.00 and 3.99 were classified as perceptions of a Consultative (System 3) environment, and means between 4.00 and 5.00 were considered to represent a perception of a Collaborative (System 4) institutional environment.

Correlations among the PACE scale scores across the 96 respondents were also calculated using SPSS. A multiple regression analysis using the least squares solution for predicting each scale from the remaining five PACE scales was performed. The results of these procedures were reported in Chapter 4.

**Summary and Discussion of Findings**

Likert's research, based in the human relations literature, assumed that the Collaborative climate generally produces better results in terms of productivity, cost-reduction, absenteeism, and turnover. Thus, the Collaborative environment remains a climate to be sought through planning, collaboration, and organizational development (Baker, Caison & Miller, 1999). The research of Roueche and Baker from 1986 through 1987 and Baker from 1988 to the present determined that most colleges have a Consultative climate. Of the more than 60 studies completed by NILIE using the PACE instrument, no organization was found to have achieved a Collaborative (System 4) environment, except in some aspects of some categories.

In System 4 of Likert's continuum, decisions were made throughout the organization and linked together by the existence of overlapping groups that participated
in decision-making. Information flowed freely upward, downward, and laterally, and there existed few forces to distort or filter that information. The interpersonal climate was one of trust. System 4 tapped all of the major positive motives, including those motivational forces that arose from group processes. The general pattern of Likert's research findings was that the closer an organization's management system was to System 4, the more effective that organization was in terms of lower costs, higher productivity, and lower absence rate. Nienhuis (1994) determined that faculty members were generally satisfied with instruction, career outlook and compensation, while they reported greater dissatisfaction for institutional quality, workload, and institutional support. The sections that follow provide a summary of the findings for each of the four research questions.

Research Question 1

What were the faculty's perceptions of and satisfaction levels with the overall college environment in the areas of formal influence, communication, collaboration, organizational structure, work design and student focus?

The description of a strong Consultative (System 3) environment provided by Likert (1967) was one in which management demonstrated substantial, but not complete, confidence and trust in employees. Leaders would often seek input from employees regarding decisions, and the informal organization dealt primarily with morale issues and often cooperated in the accomplishment of organizational goals. In this type of working environment, influence of employees would be exercised through a reward process and through intermittent collaborative efforts, although some negative consequences have
been attached to negative performance by employees.

In the present study, 38 of the 55 item means fell within the Consultative (System 3) environment style (those with means between 3.00 and 3.99), eleven fell within a Competitive (System 2) environment (those means falling between 2.00 and 2.99), and six fell within a Collaborative (System 4) environment (those with means between 4.00 and 5.00). No item scored within the Coercive (System 1) environment. There were relatively small standard deviations, which demonstrated that most faculty responses to items within the scales were fairly homogeneous.

At the end of the PACE instrument, respondents were invited to provide any comments which they felt were important to the overall assessment of the PCC environment. Of the 96 faculty respondents, 40 offered a total of 127 separate comments for a mean of 3.2 comments per respondent. Of the total 127 comments offered by faculty respondents, 13.3% were favorable, and 87.7% were unfavorable. According to Baker, Caison and Miller (1999), NILIE’s experience indicated that only 10% of respondents would include comments, and of those comments 7 of 10 would be unfavorable.

The largest number of comments, 46, was within the topic category of Formal Influence. These comments represented 36.3% of the total comments. Three comments were favorable within the Formal Influence scale and 43 were unfavorable perceptions of the PCC work environment. In Powell’s (1981) study most faculty members derived considerable satisfaction from teaching, yet many indicated that they felt that teaching was undervalued by the institution. Many comments focused on pay and reward issues,
supporting the findings of Farmer (1999) who noted that contradictory reward systems would deplete the psychic energy of the faculty.

Comments that referred to Organizational Structure issues were the second largest group with 32 comments, or 25.2% of the total. Of those comments, four were favorable and 23 were unfavorable perceptions of the PCC working environment. One faculty member wrote, “Only a select group makes decisions and if you are not part of this group, there is no hope of promotion or any consideration. If you are in ‘the group’, then anything goes and every word out of your mouth is believed with no other evidence considered.” This comment has been supported by the findings of Powell (1981) and Thaxter and Graham (1999). Faculty interviewed in the two previous studies indicated that they were not meaningfully involved in important decision-making activities of the college.

The third largest group of comments addressed Student Focus issues. This category had 18 comments for 14.2% of the total. Two comments were favorable and 16 were unfavorable. An unfavorable comment was given by a PCC faculty member, “I’ve actually been told, ‘Don’t get involved with the students or care about them.’ How does this support the institution?” The incredulous tone of the previous comment supports the findings of Farmer (1999) who identified a campus culture of student-centeredness as a major factor contributing to faculty motivation.
Research Question 2

Were there significant differences in perception of and satisfaction with the institutional environment among faculty in the three academic divisions (i.e. Arts, Letters and Social Sciences; Career and Special Programs; and Math, Science and Health)?

Significant differences were found among faculty when division of employment was the independent variable. Faculty in the division of Arts, Letters and Social Sciences reported the highest level of satisfaction with the environment overall. All faculty groups indicated an overall Consultative (System 3) environment. The faculty of Math, Science and Health (MASH) reported significantly lower scores on the scales of Organizational Structure than the faculty of Career and Special Programs (CASP) and Arts, Letters, and Social Sciences (ALSS).

These findings were consistent with the research of Toma (1997), who found that scholars working within different paradigms, disciplines, and institutions perceived their access to influence decision makers differently. Alternatively, Lawrence (1989) and Riger, Stokes, Raja, and Sullivan (1997) determined that faculty in the social sciences have significantly less positive views of organizational climate than their humanities and natural sciences colleagues.

Research Question 3

Were there significant differences in perceptions of and satisfaction with the institutional environment among faculty between campuses (Winter Haven and Lakeland)?

Among campus assignments, the faculty who indicated campus assignment reported a Consultative (System 3) environment, with those assigned to the Lakeland
campus indicating the greatest satisfaction and those assigned to both campuses the least. There were no statistical differences in satisfaction and perception of organizational climate among the three groups. These findings were consistent with Di Petta (1998) who suggested that when faculty felt part of a professional community, they could feel an intimacy with other scholars because of shared purposes and values connecting scholarship and discipline.

Research Question 4

Were there significant differences in perception of and satisfaction levels with the institutional environment when various demographic variables were considered (i.e. gender, ethnicity, years at Polk Community College, level of education)?

Among the demographic characteristics studied, females, Hispanic, those employed less than one year, and those with the baccalaureate degree reported the highest levels of satisfaction with PCC's institutional environment. When the independent variable of gender was used, all faculty reported a Consultative environment, with no scale scores falling outside of System 3. However, males reported statistically lower perceptions within the Communication scale than did females. These findings were inconsistent with the findings of Riger, Stokes, Raja and Sullivan (1997) and Bronstein and Farnsworth (1998). The literature reported that women perceived the overall climate as chillier than men, and reported feeling free to express themselves within their departments, in scholarly work, and in the classroom significantly less often than their male counterparts.

When the faculty ratings were assessed using the independent demographic
variable of ethnicity, the faculty member of Hispanic heritage reported a Collaborative (System 4) environment, the two faculty members of African-American heritage reported a Competitive (System 2) environment, and the remaining faculty reported a Consultative (System 3) environment. Within scales, the faculty member of Hispanic heritage reported a perception of System 4 for all except Communication, which rated as Consultative (System 3). Conversely, those faculty of African-American heritage reported a Competitive (System 2) environment for the Formal Influence, Communication, Collaboration, and Organizational Structure scales. The American Indian faculty reported a Competitive (System 2) environment for Communication, Collaboration, and Organizational Structure, with the remainder earning Consultative (System 3) ratings.

In terms of Years at PCC, faculty who had been employed at the college less than one year were the most satisfied overall and within the individual scales, with a perception of a Collaborative (System 4) environment. Scores for the remaining faculty groupings indicated perception of a Consultative (System 3) environment overall and within the individual scales. Faculty members who have served the college between 5 and 9 years and over 15 years reported the lowest overall satisfaction with the college environment.

Those faculty members employed less than one year demonstrated a significantly higher satisfaction within the scales of Formal Influence, Communication, and Work Design than those faculty who had been employed at the college between 5 and 9 years; within the scale of Organizational Structure for those faculty who had been employed at the college between 10 and 14 years; and within the scales of Formal Influence,
Communication, Collaboration, Organizational Structure, and Work Design those faculty who had been employed at the college over 15 years.

These findings were consistent with Hagedorn (1994) and Oshagbemi (1998), who determined that as faculty careers progressed, priorities and contributors to satisfaction changed. The closer a faculty member was to retirement, the more significant salary, collegiality, and relationship with administration became to them. Conversely, Riger, Stokes, Raja and Sullivan (1997) reported that faculty employed in a department over 10 years perceived a more supportive climate than those working in the department less than 10 years.

When the independent variable of Education Level was used to differentiate the faculty, those whose highest degree was the Baccalaureate indicated the highest degree of satisfaction with the college environment. Those holding the Associate's Degree reported the lowest overall satisfaction with the college environment. Those faculty holding the Associate's Degree reported a Competitive (System 2) environment for the scale of Formal Influence, Communication, and Collaboration. The remaining faculty reported a Consultative (System 3) environment within each scale and overall. There were no statistically significant differences among faculty perceptions based upon their level of education. However, the gap between those faculty holding the Associate degree and others was notable. These findings were consistent with Lawrence (1989) who determined that faculty with the Ph.D. had a less positive overall view of the organizational climate than those with lower levels of education.

Conclusions
Based upon the results of this study, several conclusions regarding the overall working environment of Polk Community College were drawn.

1. The overall perceptions of faculty employed by Polk Community College concerning the college environment indicated a Consultative (System 3) environment. This conclusion was based upon the following faculty perceptions:
   a. Items pertaining to faculty competence and satisfaction with work design earned the highest rating among PCC faculty.
   b. Although faculty were generally satisfied with their own performance in teaching and student support, all other college personnel failed to achieve faculty expectations for student service.
   c. Faculty were dissatisfied with the specific items pertaining to information, the quality of information and the manner in which information was communicated.
   d. Another area of faculty dissatisfaction involved organization, decision-making, problem-solving, and their ability to influence the direction of the institution.

2. The results of the study indicated that faculty among the three divisions and the two campuses perceived differences in the institutional environment. This conclusion was based upon the following information:
   a. Faculty within the division of Math, Science and Health reported a significantly lower perception of Organizational Structure than faculty in the other divisions. The specific items that created this perception of environment related
to the amount of work expected of them, the organization of the division, and the
level at which decisions were made within the institution. The issues identified
were related to lack of differential for teaching laboratory courses, lack of
intermediary between faculty and the Dean, and lack of faculty involvement in
high-level decision-making, respectively.

b. Faculty expressed a general satisfaction with the collaborative efforts
within their teams, and a general dissatisfaction with the collaborative efforts of
the institution as a whole.

c. Faculty in each of the divisions were generally satisfied with their ability
to do their jobs, and do them well, but believed that there was no room for
advancement within the institution.

d. Faculty assigned to the Lakeland campus were generally, but not
significantly, more satisfied with the institutional environment.

e. Faculty assigned to the Winter Haven campus were generally more
satisfied with items pertaining to information receiving and dissemination,
feedback in general, ease of working in teams, satisfaction with skills expected of
them, and awareness of student needs.

3. It was concluded that Gender was related to differences in perceptions of and
satisfaction with the institutional environment among Polk Community College faculty.

a. Male faculty were generally less satisfied than the female faculty with
the institutional environment. In addition, on the scale of Communication, the
male faculty reported significantly lower scores than the females.
b. Male faculty were generally less satisfied with items pertaining to institutional motivation, the lack of a spirit of cooperation for the institution overall, and limited timely and appropriate feedback.

c. Points of greater satisfaction for males included the amount of creativity allowed in their job, support of personal development, request for ideas from their supervisor, appropriate workload, and the importance of diversity at the college.

4. It was concluded that Years of Service was related to differences in perceptions of and satisfaction with the institutional environment among Polk Community College faculty.

   a. Generally, faculty who have been at PCC less than one year indicated the greatest level of satisfaction with the institutional environment, and those with 5-9 years and more than 15 years, the lowest.

   b. One source of dissatisfaction for the faculty who have been at PCC less than one year was the lack of up-to-date technology available to them.

5. Though the differences between faculty who held the Associate's degree and others was notable, it was concluded that Educational Level was not related to differences in perceptions of and satisfaction with the institutional environment among Polk Community College faculty.
Implications and Recommendations for Practice

In this study, faculty identified an overall Consultative environment. They indicated that they were fairly well satisfied with the community college environment as it related to their teaching and students. This provides a solid base on which to improve specific aspects of the environment and to address faculty concerns.

Overall, concerns have been identified which relate to the extent to which faculty feel the organizational structure provides not only support for their work with students but for open communication, i.e., faculty participation in decision making, problem solving, and influencing the direction of the college. If the institution wishes to further strengthen its Consultative environment and move closer to a Collaborative environment, the care with which recommendations of faculty groups are received and acted upon should be tracked to ensure full and appropriate attention.

The college could use some of the areas of concern identified in this study as possible topics for further study. The topics could be examined further by appropriate groups of administrators or by task forces formed to address various environmental elements (i.e. gender, diversity, and tenure). Task forces to study relevant concerns could be useful in both resolving real challenges in the campus environment as well as engaging faculty in positive ways. Likewise, initiating an institution-wide quality improvement effort such as Total Quality Management, Continuous Quality Improvement, or Systems Thinking could engage administrators, faculty and students as they work toward common goals.

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Recommendations for Future Research

The following recommendations appear to be appropriate based upon the research, communication, conclusions and limitations of this study. Recommendations include:

1. This study provided an overview of the faculty satisfaction with the organizational climate at one multi-campus community college in Florida. Additional comparative research could be conducted assessing the relative satisfaction of faculty members among all community colleges in Florida. In this context, emphasis could be placed on the structure of the organization.

2. The results of this study revealed significant differences among the faculty based upon division affiliation. Further research and investigation into this dimension is needed to identify underlying issues, particularly in regard to the organizational structure component.

3. Significant differences among faculty with differing campus assignments were indicated in this study. Insight into the issues related to campus assignment could be provided by further investigation.

4. Gender was revealed as a variable in differing satisfaction with the environment. Further research could be undertaken to explore the specific elements of satisfaction among the faculty based upon gender.

5. The study was conducted within the first year of a new president's arrival. Since the administration of the survey, there have been changes in the administrative structure that may influence faculty satisfaction with the environment. A replication of this study would indicate whether faculty satisfaction with the environment has changed.
6. Further analysis of the PACE instrument could be conducted to reaffirm independence of the constructs in operationalizing satisfaction.
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**An Environmental Assessment Of Community College Faculty Satisfaction**

**Sonja Peters Jackson**

**University of Central Florida**

**2000**

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