Higher education's hidden craftsmen: A re-examination of the roles of support services middle management

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Higher education’s hidden craftsmen: A re-examination of the roles of support services middle management

Seal, Robert Kimball, Ed.D.
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HIGHER EDUCATION'S HIDDEN CRAFTSMEN:
A RE-EXAMINATION OF THE ROLES OF
SUPPORT SERVICES MIDDLE MANAGEMENT

A Dissertation
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In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Robert K. Seal
May, 1991
HIGHER EDUCATION'S HIDDEN CRAFTSMEN:
A RE-EXAMINATION OF THE ROLES OF
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by

Robert K. Seal

Approved May 1991 by

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Thomas J. Ward, Ph.D.

John R. Thelin, Ph.D.
This work is dedicated to the memory of my mother

Lucille Davis Seal

for untold support, dedication, and love
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HIGHER EDUCATION’S HIDDEN CRAFTSMEN:
A RE-EXAMINATION OF THE ROLES OF
SUPPORT SERVICES MIDDLE MANAGEMENT

ABSTRACT

The purpose of this research was to determine any differences that have occurred in the last fifteen years regarding the demographics, roles, responsibilities, and job satisfaction of support services middle management, using Robert A. Scott’s 1978 publication, Lords, Squires, and Yeomen: Collegiate Middle Managers and Their Organizations as a baseline for comparison.

A random sample of mid-level administrators in the state of Virginia was used for this survey. One hundred eight middle managers who were selected from Virginia’s 4-year public, 2-year public, and private institutions responded to a questionnaire regarding demographic data, which elicited the gender, age, race, educational level, job tenure, number of employees supervised, and type of institution in which they were employed. Those surveyed were also asked to respond to the Job Descriptive Index and Job in General Scale, two tests of job satisfaction.

The results showed that there have been no appreciable
differences in the types of positions or their inherent responsibilities since Scott's 1978 work. These positions were still dominated by white males, representing a two-to-one ratio over females, which represents a much lesser margin today than in 1978. The average age for those surveyed was 45 years. Minorities comprised only nine percent of the respondents.

Support services middle managers in Virginia are well-educated, as 76.9% hold a Master's degree and beyond, and their loyalty is evident in the number of years they have been employed at their institution (m = 9.96 years). The average staff size of these middle management positions is 17 employees. There seems to be no preferred educational path to obtaining these positions, as 34 different academic backgrounds were listed.

Responses to the Job Descriptive Index and the Job in General Scale were delineated by sex, years of education, and years of job tenure, and were subjected to six scales — work on present job, pay, opportunities for promotion, supervision, coworkers, and job in general. This survey showed no significant difference in the responses given by any of these delineations on the six scales.

The Job Descriptive Index allows for comparisons to be made against national norms, and several trends were noted: (1) males scored roughly the same as the national norms, and females scored slightly below national norms for work on
present job, pay, opportunities for promotion, and coworkers;

(2) educational level appears to influence work on present job, pay, and opportunities for promotion but does not appear to be a major factor in determining dissatisfaction toward supervisors and coworkers; (3) respondents with less than ten years of tenure score roughly the same as the national norms. Respondents with 10-15 years of tenure scored below national norms on work on present job, pay, and opportunities for promotion, whereas those with more than 16 years of tenure scored above national norms on the same three scales. Years of tenure was not an indicator of levels of dissatisfaction for supervision or coworkers.

These extrinsic variables do not appear to influence job satisfaction. Further studies are needed to examine intrinsic values, such as autonomy, pride in work, and recognition, to discover where problems lie within the institution.

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A RE-EXAMINATION OF THE ROLES OF
SUPPORT SERVICES MIDDLE MANAGEMENT
CHAPTER I

Introduction

Introduction

The structure of American colleges and universities has been evolving for over 300 years, since the chartering of Harvard College in 1636. Three centuries of educational visionaries have molded the collegiate ideal into a complex and distinctive system of higher education that currently enrolls over 13 million students. The research university, the university college, and the multiversity and its many satellite campuses are a far cry from the cloistered quadrangles of the colonial colleges. As the institutions have developed, so have the organizational structures that enable colleges and universities to survive in an increasingly competitive marketplace.

Veysey (1965) traces the growth of college academic administration in the United States from the late 1860s. He credits the growth in administration with the emergence of the American university. "Bureaucratic administration was the structural device which made possible the new epoch of institutional empire-building" (p. 311). Powerful and aggressive leadership by Presidents White at Cornell, Eliot at Harvard, and Angell at Michigan broadened the base of
their institution's support, thus usurping power from the hands of the conservative trustees. Veysey suggests that this 'new force' connotes "a certain state of mind: it meant those people in the university community who characteristically thought in terms of institutional management or of organizational planning." (p. 305)

The 1890s saw the inception of large bureaucratic staffs to support the needs of the flourishing universities. Veysey states that "by 1900 it could be said that administration had developed something like its full measure of force in American higher education." (p. 306) An alarm was sounded in many areas that managerial staffs were running away with the American university, although this lacked quantitative justification. This fear was in response to the strong-willed leadership of several college presidents, who were differentiating from previous campus leaders.

Rudolph (1962) states that the proliferation of administrators was "a response to enrollment increases and to demands for new services ... and the need to free research-minded scholars from the detailed but necessary work that went into the management of an organized institution." (p. 434) Veysey concurs that this expansion in personnel was the result of two countertendencies at work in higher education, fragmentation and centralization. As institutions compartmentalized its academic disciplines,
deans and department chairs became a new breed of administrators that added to the university’s growing bureaucracy. The ranks of administrators stayed relatively stable until the influx of veterans into higher education following World War II and the baby-boomers’ college years of the 1960s caused a drastic increase in the number of curricular offerings and other programs on campus.

Two distinct organizational hierarchies have emerged from within higher education, the academic and the administrative. Because it is vital to the success of the student body that both hierarchies work cooperatively to achieve the goals of the university, Baldridge has labeled these hierarchies as "parallel hierarchies" (Baldridge, 1977). By definition, parallel implies two or more comparable and analogous bodies that are interdependent in tendency or development (Webster, 1985). Parallel hierarchies, then, implies two bodies of management within one organization that work side by side, each with a specific function. The necessary coexistence of these hierarchical structures forms the organization that defines university governance of higher education in the United States.

The academic side of the hierarchy encompasses those administrators who manage the educational affairs of the campus. Examples of academic administrators include provosts, deans, department chairs, and librarians.
Typically, academic administrators come from faculty backgrounds and have assumed their positions from vertical movement within the institution.

The administrative side of the hierarchy refers to those administrators who hold positions that support the roles of the academic side of the university. Their positions lay beyond the educational mission of the institution, although their collective presence on campus often surpasses those on the academic side. A vice-president for budget and planning, director of career services, and director of sponsored grants and research are examples of non-academic administrators.

Some researchers state that academics and administration may not be equal partners in higher education. Clark Kerr (1982) states that

"The general rule is that the administration everywhere becomes, by force of circumstances if not by choice, a more prominent feature of the university. As the institution becomes larger, administration becomes more formalized and separated as a distinct function; as the institution becomes more complex, the role of administration becomes more central in integrating it; as it becomes more related to the once external world, the administration assumes the burdens of these relationships" (p.28).

Kerr’s argument gives justification for a larger
administrative hierarchy, which would seem to give greater authority and control to those whose responsibilities are not synonymous with teaching and research.

Kauffman (1984) argues that student and support services are not contrary to an institution's mission. If teaching, research, and service are the primary goals of the institution, then implementing quality auxiliary services through student extracurricular activities is a means of helping the students grow intellectually, socially, and responsibly.

Up until the last twenty-five years, white males dominated the ranks of both academics and administration. Today, however, women and minorities are assuming more upper level positions on campus, as the pool of qualified female and minority applicants increases due to the diversification of the student body. Recent demographics show a growing heterogeneity in today's college students, and colleges and universities are struggling to accommodate the demands of this untraditional student body. United States Department of Education statistics of college enrollments in 1988 report that, of the 13 million students enrolled in American higher education, 18.4 percent are members of racial and ethnic minorities, and almost 5.5 million students are aged 30 and over. Females outnumber males by over 1 million students (Digest of Education Statistics, 1989). Consequently, more women and minorities are needed in
administrative positions to serve as appropriate role models for the students and to reflect the heterogeneity of the student body.

Full-time instructional faculty appear to be well behind the diversification of the student body. White non-Hispanics still dominate the faculty, representing approximately 90% of the professorate, the remaining one-third comprised of Blacks (4%), Asian or Pacific Islanders (4%), Hispanic (2%), and American Indian and Alaskan Native (less than 1%). Females comprise only 28% of the instructional faculty in the United States (Digest of Education Statistics, 1989).

Despite the lack of appropriate minority role models, the growth and diversification of the student body has prompted higher education to offer an assortment of programs and services, some of which are minimally related to the mission of the university. In order to stay competitive, most institutions are offering services far removed from the traditional aspects of teaching and research. Harvard President Derek Bok (1986) writes that support services are an integral part of one's undergraduate experience:

"Like extracurricular activities, other university services had come to be seen as important influences on students' personal growth. The placement office is not just a source of information about jobs but a center for helping students to test their strengths and
weaknesses and to develop lasting interests. Psychiatric counseling is perceived not merely as treatment but as a stimulus to personal growth and maturity. In these ways, a rationale emerges to justify the provision of more and more services. The contemporary college or university does not concentrate only on formal education; it assumes the larger responsibility of promoting human development in all its forms" (p. 52).

Bok suggests that the rapid growth in extracurricular activities and student services is due in part to their operation outside of the formal educational process, thus not requiring approval by those in the teaching and research elements of the university.

Kauffman (1984) reports that good quality student services are critical for colleges in today's market, in order to attract and retain students. He allies student services with the roles of faculty, curriculum, and the academic environment in building a total program for the student body.

In *New Priorities for the University*, Lynton and Elman (1987) propose several means of adapting programs to meet the needs of a new breed of students who are attending college in unconventional attendance patterns, including credit for work experiences and flexible course schedules. New programs demand larger staffing needs, particularly
specialized personnel in nonacademic support fields. Due to the necessity of hiring more professionals at different levels of expertise, higher education becomes an intricate organizational bureaucracy.

As the college becomes increasingly complex, so does the administrative hierarchy that supports it. Woven into the fabric of academia is a burgeoning rank of support service personnel who are responsible for additional nonacademic programs, supplying important information and technological services to the administration, faculty, and students of the college. This group of specialists comprises the ranks of higher education's support services middle management.

For purposes of this study, support services middle management will be limited to the definition used by Robert A. Scott in his exhaustive work on this topic, Lords, Squires, and Yeomen: Middle Managers and Their Organizations (1978). Included as support services middle management are "deans and directors of services to whom their assistants and first-line supervisors report, and who themselves report to or are an officer at the vice-presidential level" (Scott, 1978). Academic deans, department chairs, and librarians are excluded because they typically come from the faculty and are not typically career administrators.

Studies by Scott (1978), Moore and Sagaria (1982), and Austin (1985) suggest that middle management in higher
education suffers from something akin to an inferiority complex -- feelings of being stuck between the power and authority of top-level executives above and ranks of support personnel below. Unlike their counterparts in the for-profit sector, middle managers in higher education are faced with yet another variable, the uneasy but necessary coexistence with faculty.

Middle management in higher education is vulnerable to idiosyncratic problems. Although Schmidt and Posner and Breen (1982, 1983) found similar findings on levels of job satisfaction reported by middle management in business and industry, the nature of higher education fosters feelings of inefficacy due to unclear levels of responsibility and tenuous relationships with campus constituents. Collegiate middle managers are offered significant responsibilities that affect the governance of the institution, but they report that their duties do not afford them an appropriate impact on crucial policy matters.

Middle managers not only have to deal with their superiors, but with faculty and students as well. They are bombarded from many sides, with each constituency making demands on their time and energy. Because of their managerial role, they also have the task of running an office of support personnel who need attention and consideration. Support services middle managers must serve as both specialists and generalists, to accommodate the divergent
requirements of their positions. Consequently, these jobs seem to have many intricacies that may foster feelings of job dissatisfaction.

An attitudinal analysis by Loher et al (1985) reports a moderately positive correlation between job characteristics and job satisfaction. This research suggests that when job characteristics such as skill variety, autonomy, and task significance are absent (or perceived as such), the employee's psychological state declines toward lessened feelings of meaningfulness and responsibility. This combination of factors results in lower intrinsic motivation and lower levels of satisfaction with the job, which seems to be particularly troublesome for middle management. Nevertheless, job satisfaction is only slightly related to job performance (Iaffaldino and Muchinsky, 1984), suggesting that dissatisfied personnel do not perform significantly lower than highly satisfied personnel.

It appears that higher education has failed to provide personal and career development for its middle management. Mobility within higher education is strictly limited due to the specific nature of their jobs. Industry has taken steps to aid middle managers with new opportunities and rewards, specifically lateral transfers, retraining programs, a liberal distribution of titles, more task force assignments, and departmental reorganizations (Zonana, cited in Scott, 1977). Higher education in general has not been progressive
in planning and encouraging mobility for middle managers.

Hence the problem. Lack of job satisfaction based on unfulfilled intrinsic motivators, coupled with the dilemma of "being in the middle", is making the role of support services middle management more difficult and less rewarding. Perhaps it is best summed up in the title of a 1983 article in the Journal of the College and University Personnel Association: "Middle Management in Higher Education: A Dog's Life?" (Krause, 1983).

Because of their growing presence on campus, being responsive to the needs of these university officers is becoming a critical factor for top administrators.

Significance of Study

Between 1965 and 1985, college enrollments in degree-granting institutions grew by 233%, from 5,570,000 to 13,000,000 students (American Council on Education, cited in Three Thousand Futures, 1980). Similarly, the number of administrators in higher education increased 150% (Sagaria, 1986). Especially heightened were the number of jobs created in student affairs and student personnel services, which realized a 300% increase over the last twenty-five years (Kirby and Woodard, 1984). Such a drastic expansion in personnel suggests that this group of administrators has the potential for being a major force on college campuses.

The growth of college administrators prompted the
American Association of State Colleges and Universities (1985) to issue this statement on institutional governance:

"Approximately 60% of university personnel are senior administrators, middle management, and classified employees. Their participation in decision-making is part of an effective governance process, and their views should be taken into account when they have expertise to contribute to the decision-making process or when a decision will affect their employment. Furthermore, when these employees are state civil service or members of a union, they should be consulted at the very least in order to ensure that decisions being made are not contrary to state policy or to a collective bargaining agreement" (p. 5).

This statement was accepted by the membership of AASCU in November, 1984.

College administrative ranks have expanded not only in response to the growth of the students, but to pressures from on and off campus. With the increase in state and federal monies and programs comes the concurrent increase in restrictions and guidelines attached to those funds. Administrators given the responsibility for monitoring the externally-funded programs are assuming prominent positions within the university, and their influence is being felt within the educational domain. For example, financial aid officers are playing an increasingly important role in the
admissions process, as school officials seek to recruit qualified minority and underprivileged students. These recruitment techniques are, in large part, a response to federal civil rights legislation.

Likewise, state-supported institutions must adhere to affirmative action and equal employment opportunity standards set by the federal government. Handicapped students are guaranteed equal access to classrooms, residence halls, and tutorials (as needed) as a result of Section 504 of the 1973 Vocational Rehabilitation Act. Each of these externally-mandated services falls under the auspices of some official within the administrative hierarchy. Austin (1984) and Kerr (1982) suggest that decision-making is becoming more centralized due to the increase in externally-funded programs, which, in turn, shifts greater power to the administrative side of the organizational hierarchy. This shift causes support services administration to expand because of external influences on campus.

Internal influences that contribute to the growth of the administrative bureaucracy take the form of student demands for auxiliary services, as in career placement and campus police. Career placement offices gained popularity over the last few decades, patronized by students in search of career opportunities upon graduation. Campus police forces are growing to satisfy wary parents' concerns about
their child's safety. Support personnel are added as the college offers a more comprehensive program of activities and services.

Studying support services middle management in institutions of higher education is particularly pertinent today considering the financial constraints facing many states. Although the enrollment decline that was forecast for the 1980s was offset by increased enrollment by nontraditional students, state budget shortfalls and federal budget deficits have prompted many states to seek reductions in manpower and programs at the institutional level. A discrepancy arises between the demands of the student body and the financial realities of staffing auxiliary programs.

Current research on support services personnel in higher education is limited. Middle management in higher education has not been adequately studied, despite the large number of position-holders. There is a significant amount of literature on management styles and techniques, such as management by objectives and quality circles, but these methods manuals tend to be geared toward the typical line/staff hierarchy. Similarly, research exists on matters pertaining to the academic side of the hierarchy, particularly concerns of the faculty. Because support services middle managers do not fit perfectly into either of these categories, current research does not suitably address their situation. Without documentation, it is likely that
middle management is misunderstood and misconceived within the college environment. And being misunderstood has long been a concern among these middle managers.

A primary misconception of middle management is a confusion in terminology -- middle "management" versus middle "staff". The title middle "management" often connotes a wide range of responsibilities and employment levels. Middle "staff" typically refers to upper level clerical and administrative assistant positions.

Confusion also exists due to the lack of universal nomenclature and rank for these positions. Titles and prestige tend to change from one college to another, ranging from civil service staff to faculty-rank teaching and research administrators.

Misunderstandings, job ambiguity, and an uncertain place within the college environment contribute to the problem of job dissatisfaction among middle management. Perhaps these factors are responsible in part for the high turnover rate among new professionals in higher education (Burns study, cited in Sagaria, 1986). Studying these middle managers is essential in understanding the administrative side of the university’s governance structure.
Research Questions

Based on the research reviewed on support services within higher education and the ranks of middle managers governing these services, several questions are in need of analysis and clarification.

(1) Has there been a shift in demographics over the past 15 years?

(2) Are there differences in middle management positions in public and private institutions? Do public institutions fall prey to greater external pressures on campus?

(3) Similarly, is there any difference between large research or comprehensive universities and smaller liberal arts colleges?

(4) How much has the role of support services middle management changed in the past 15 years, using Scott's work as a baseline for comparison?

(5) Are there common factors that influence job satisfaction or dissatisfaction in their work environment?

Definitions

For purposes of this study, several terms need to be specifically defined:

Higher Education refers to accredited post-secondary institutions, either two-year or four-year, that offer the associate, bachelors, Master's, or doctoral degrees. For
purposes of this study, proprietary schools, theological seminaries, medical schools, and law schools are excluded from this definition. Public and private institutions are further defined:

**Public Institutions** are those supported by state funding. Each institution has its own governance structure, but falls under the guidance of the state's coordinating board for higher education.

**Private (Independent) Institutions** are those supported primarily by private funding.

Support Services includes those offices/departments within higher education that operate beyond the educational mission of teaching and research. Their design is to support the needs and demands of the governing body, faculty, and students of the institution. These programs are also referred to as auxiliary services, programs, or enterprises.

**Middle Managers (Management)** adheres to the definition stated above, as interpreted by Robert Scott, which includes "deans and directors of services to whom their assistants and first-line supervisors report, and who themselves report to or are an officer at the vice-presidential level" (Scott, 1978). Academic deans, department chairs, and librarians are excluded. Confounding variables such as salary scale, length of tenure, chances of mobility, or specific title of position within each group are not controlled. The terms
"mid-level administrators" and "mid-managers" are used synonymously with "middle managers."

**Job Satisfaction** refers to a set of attitudes held by organization members. It is their affective responses to their jobs. There are many dimensions that contribute to job satisfaction, including working conditions, the work itself, rewards, one's persona within the organization, and other persons that one comes in contact with, both inside and outside the company (Locke's study, cited in McCormick and Ilgen, 1985).

**Limitations**

A problem that arises when evaluating middle management is the difficulty in defining their roles and responsibilities. There exists no precise framework on which to analyze the role of middle management. The positions are far-reaching, incorporating such diverse offices as Maintenance and Operations and Career Services; they are filled by well-educated professionals possessing narrow specializations. It is inappropriate to lump together these disparate positions, even though the position-holders have similar rank and report to the same top-administrator. Likewise, these positions are largely institution-specific, based on the administrative structure of the school (Sagaria, 1986).
The literature suggests that there are significant differences between genders and between races (see Funk, 1988; Mark, 1986; Scott, 1978; and Williams, 1989 in Chapter II). As women and minorities achieve positions that have previously been held by white males, there may be a significant change in the responses given to questions relating to job satisfaction and acceptance within the institution.
Chapter II

Review of Literature

Introduction

The literature which attempts to define university governance is extensive. Many works display models and diagrams explaining the intricate hierarchy of college administration. The foundation on which administration is understood and conceptualized is the work of Victor Baldridge and associates (1977).

Administrators are divided into three categories: general administrators, responsible for the overall leadership of the institution; academic administrators, responsible for the educational aspects of faculty, students, and curriculum; and support services administrators who supervise the offices of necessary ancillary activities. Whereas the general administrators define institutional problems and analyze relevant solutions, support services administrators are specialists, often licensed in a particular field of expertise. The roles of the support services supervisors are determined by the general administrators, based on the needs of the college (Corbally and Holmberg-Wright, 1980).

Those who study higher education are familiar with the
customary roles of top administrators, faculty, and students, as their jobs are obviously congruent with the educational mission of the university. There is, however, a growing legion of mid-level administrative personnel who are gaining a greater presence on campus. These middle managers are running offices and providing services that play an integral role in the overall picture of the university; yet they are operating outside of the academic realm of the institution.

Middle managers have grown in number and professionalism over the years. Organizations such as the College and University Personnel Association (CUPA) and the National Association of College and University Business Officers (NACUBO) have aided in improving campus services through national networking, as well as offering support and camaraderie for its membership. For example, those who work in student services are encouraged to move away from the title "student personnel services" and toward "student development", implying a greater and more conscious impact on students' lives (Kauffman, 1984).

For purposes of this study, middle management will be limited to Scott's (1978) definition, which includes "deans and directors of support services to whom their assistants and first-line supervisors report, and who themselves report to or are an officer at the vice-presidential level."

Academic deans, department chairs, and librarians are
excluded because they typically come from the faculty and are not career administrators.

To provide a better understanding of mid-level support services administrators, this review of research will examine (1) the definition of middle management, and the roles and responsibilities of the job based on literature in education and industry; (2) university governance and intrarole conflict; (3) demographics on the make-up of mid-administrative positions; (4) job satisfaction among middle managers; (5) organizational climate that fosters and hinders work performance and satisfaction; (6) organizational leadership responsibilities that directly influence the organizational climate in which a middle manager works; and (7) Robert Scott's work on collegiate middle management, which serves as a definitive view of the positions and the position-holders. These factors together make up the milieu in which college administrators function.

**Definition, Roles and Responsibilities**

Middle managements refers to "group leaders responsible for carrying out and implementing top management decisions. They interpret policies and long-range goals and convert them into instruction, then construct a framework that line supervisors can follow. There is executive responsibility for planning, organizing, budgeting, and
authorizing the materials, equipment, personnel, and other facilities needed" (Place and Armstrong, cited in Forbes, 1984).

This definition of middle management in higher education covers a whole spectrum of responsibilities. Some researchers, however, find inconsistencies with such a sweeping definition. Mary Ann Sagaria (1986), in evaluating the research on collegiate middle managers, reports that there is some difficulty in codifying the role of middle management. One researcher may refer to these position-holders as senior level administrators, while another may label them as service employees. Likewise, positions with extremely different characteristics are often lumped together under one category, without a true evaluation of the roles and responsibilities of the position. The duties of a budget officer may in no way be related to the duties of a personnel director or career services director even though they are labeled similarly. These positions are largely institution-specific, based on the administrative structure of the school.

Miner and Estler (1985) suggest that the nature of higher education leads to certain peculiarities for its mid-managers. The authors identify ambiguous goals and technology, unusual vulnerability to external environments, and a relatively flat administrative hierarchy as three idiosyncrasies of higher education that inhibit job
Another special feature of middle management in higher education is the narrow specialization of its members. These officers have a wealth of specific knowledge, gained from both educational training and the daily intricacies of their job. Because they hold managerial positions, however, they must also have general knowledge of the institutional organization and possess appropriate management skills (Kirby and Woodard, 1984). Middle managers must support the needs of their subordinates in the same theoretical fashion as they wish to be supported by their superiors. Forbes (1984) states that

"The critical task of the middle manager is to determine the developmental level of each employee, consider the constraints placed upon the department by the senior-level student affairs officer, and reach a workable style of management that reflects consideration for both parties" (p. 41).

To accommodate both narrow specialization and managerial responsibilities, the definition of middle management must expand in complexity.

Despite the many diverse responsibilities, ambiguities, and lack of explicit framework on which to evaluate them, middle managers fulfill three basic administrative functions: (a) they serve as liaison with external suppliers of financial or human resources; (b) they
implement internal procedures for the allocation of those resources, and the control of activities of campus coordination and compliance with external regulations; and (c) they work with student activities and curricular responsibilities in helping students become oriented to college rules and requirements (Scott, 1977).

Sagaria (1986) states that middle managers develop and implement policy, coordinate resources and activities, support academic functions, and serve as liaisons to a variety of constituents. Austin (1985) calls middle managers the "linking pins" of the organization, linking policy makers to those who implement policy. Similarly, Procaccini (1986) defines middle managers as the bridge between the policy maker and those who must execute policy.

Balderston (1974) interchanges middle management with administrative services, which are generally classified under student services, institutional support, maintenance/operation, auxiliary enterprises, and general business/administration. The administrators oversee a large staff, control large budgets, and coordinate the activities of large populations of intractable students and faculty.

Another definition of the mid-manager's role is provided by Funk (1988), who evaluated the work patterns of mid-managers in business and education and found that the primary objectives of these positions is to promote teamwork and commitment through motivation techniques, to distinguish
goals and directions for their particular offices/departments, to delegate responsibility among staff members, and to actively engage in participative decision-making.

Clearly, a middle manager's role is hard to specify. Kirby and Woodard (1984) complicate the definition even further by suggesting that middle managers must couple their professional expertise with skills beyond their narrow specializations. They must exhibit good communication skills, motivational skills, analytical skills, and organizational and goal-setting skills in order to conceptualize and articulate broad educational issues. The higher in the administrative hierarchy the position, the more emphasis on being a generalist rather than a specialist.

An example of support services middle management was examined in the Chronicle of Higher Education in an article titled "Purchasing Officers, Often Unappreciated, Point to Importance of their Campus Role" (Heller, 1985). This article highlighted these points:

1. the purchasing office is considered a "logistical" support service
2. the purchasing office is changing from a clerical function to a profession because (a) the job is becoming more complicated due to technological advances and the quickening rate of technological obsolescence, and (b) the purchasers must
interpret and reinforce institutional, state, and federal regulations on fair purchasing

3. the purchasing office is a prime means of saving money for the college, despite being on the first-hit list of budget crunches

4. the purchasing office often experiences the "prima donna effect" or resistance from faculty and others, who see the purchasing office as a roadblock rather than a helping agent (pp. 27-29).

This example illustrates both the internal and external pressures exerted on a support services department. It shows that middle management not only has to deal with the administrative and faculty hierarchy within the institution, but also with external agencies and other regulatory bodies.

Baldridge (1971) offers assistance in defining middle managers' roles by devising the sandwich theory. He suggests that behaviors of individuals are related to the levels between which they are sandwiched.

Being in support services middle management in higher education means not being allowed to share in the value system of promotions and rewards associated with teaching and research. Mid-level administrators are often exposed to academic snobbery and a contempt for bureaucracy from faculty and students (Balderston, 1974).

Relations between administration and faculty have long been strained, due to questions of control and authority.
Appleton, Briggs, and Rhatigan suggest that newcomers to the administrative ranks must realize that

"To insure cooperative relationships with faculty, it is important to be committed to the belief that the basis of the mission of the institution involves teaching, learning, and research; that the faculty represent key resources; and that the classroom, laboratory, and library are the core of this effort. Communicating this value is easy if it is genuinely believed. Without this essential ingredient, faculty will have little in common with student affairs personnel" (Cited in Forbes, 1984).

A flaw in the interpretation of research on middle managers is the lack of precision in defining roles and responsibilities. Perhaps this is the problem in itself—a feeling of confusion and misplacement on behalf of mid-managers. Because of the institution-specific nature of these positions, codifying job descriptions into a manageable concept may be unrealistic. To make an adequate evaluation of middle management is to understand the character of the position within the administration.

**University governance and intrarole conflict**

University governance and the structure of higher education are unique unto themselves. Whereas the lines of bureaucracy are rather clearcut in business and industry, the chain of command in college administration may be
somewhat nebulous. The pyramid of authority in higher education is relatively flat, and it is getting broader at the base as support services are added. Add to this factor the very distinct domains of "academic support," "administrative support," and "support services," and the pyramid is further convoluted. This conglomeration of personnel has led Cohen and March (1974) to term college administration an "organized anarchy." Based on this interpretation, it is understandable why middle managers are unsure of their position in the organization.

An intrarole conflict exists as well due to the intermediary nature of the position -- being caught between faculty and administration, faculty and students, and administration and students. This is particularly true for those who have daily contact with various campus groups. Personnel directors and financial aid officers have the added responsibility of accountability to state and federal mandates, particularly in state-supported institutions. Pressures are felt from many directions, as each constituent demands more timely and better quality services (Soloman and Tierney, 1977).

According to a study by Medrano (1979, cited in Murphy, Owen, and Gable, 1988), a significant relationship was found between role conflict and job-related tension and satisfaction. Role ambiguity, or an unclear definition as to job responsibilities and obligations, was not found to be
significantly related to job anxiety, tension, conflict, or stress.

The impact levied by students on institutional policy has escalated in the past, and the Carnegie Council on Policy Studies in Higher Education does not foresee a change in the future. In their report of 1980,

"We expect the students will be more nearly the center of attention on campus during the next 20 years than in the past 10. They will be recruited more actively, admitted more readily, retained more assiduously, counselled more attentively, graded more considerately, financed more adequately, taught more conscientiously, placed in jobs more insistently, and the curriculum will be more tailored to their tastes" (p. 53).

With this idea in mind, students will be exercising greater power on student support services and on the programs offered in college.

From a slightly different perspective, middle management in business and industry displays many of the same characteristics as higher education, with the exception of more clearly delineated levels of administrative authority. The responsibilities of the for-profit middle manager include planning, supervising and motivating subordinates, and maintaining the internal systems of the organization. Principle characteristics include getting feedback, monitoring performance of subordinates, disseminating information,
and transmitting and interpreting ideas between higher and lower management. The position holders must be results-oriented rather than activity-oriented, in order to withstand the many demands on their time (Couch, 1979).

To help alleviate problems that result from the organizational hierarchy of higher education, Kanter (cited in Mark, 1986) suggests that the administration needs to design flatter, more responsive systems as opposed to steep hierarchies (present), that allow decisions at relatively low levels. She suggests that

"top-down processes are too unwieldy, subject to too many information distortions, and remove a role from the people best able to make decisions [emphasis added] because they are in greater contact with the relevant sections of the environment." (p. 12)

It is obvious that the duties of the middle manager are certainly diverse and difficult to describe. The research cited above details a wide range of duties for mid-level executives and paints a very intricate and complex picture of the nature of the positions. Understanding these job-related intricacies is particularly important with the increase in support services in the recent past. Unfortunately no one has yet proposed a framework which encompasses this diversity.

**Demographics**

In 1860, the median number of administrators in American
colleges was 4; in 1933, the number had increased to 30.5 (Rudolph, 1962). From 1929 to the mid-1960s, expenditures for college administration increased 21 times (Scott, 1977). Between 1968 and 1975, the number of administrators in higher education increased 150% in response to the growth of the student body, and administrative expenditures increased by 30%. Job opportunities in student affairs have tripled in the last twenty-five years (Kirby and Woodard, 1984).

Moore and Sagaria (1982) and Austin (1885) report that in 1978, 83% of all mid-level administrators were males in their late forties. More recent statistics show an increase in female administrators, particularly in student affairs and student personnel services (Austin, 1985). In a 1989 report, 40.2% of all college administrators were females holding major administrative posts (Scollay, Tickamyer, Bokemeier, and Wood, 1989).

As more women enter administrative positions, the character of the organization may change. Austin (1985) shows that women respond differently than men when asked to rate job satisfaction as middle managers. A large percentage of women managers are younger than their male counterparts, with shorter tenure and lower salaries.

Females and males hold different values as well. Brenner, Blazini, and Greenhaus (1988) found that males rate long-range career objectives, high income, risk-taking, and supervising others high on their value systems, whereas
females consider intrinsic job characteristics such as intellectual stimulation and skill utilization and self-actualization as most important to their job situation. Females also favor convenience aspects of the job, comfortable working conditions, and interpersonal relationships.

Mark (1986) found that men hold more line positions, and women more staff positions. Males in this study tend to be slightly older and had married more frequently than females. Of the women who achieved an administrative position from outside of the institution, the majority held doctorates in their specific fields. Despite holding terminal degrees, two times the number of women had no academic rank when compared to men in similar managerial positions. Salaries were found to be inequivalent for the genders, favoring males over females.

Sagaria (1985) reports that administrative positions require similar managerial skills for both males and females. She found that male and female administrators have similar skill levels, except that males seem to be better prepared for financial planning and management requirements. Females tend to rate institutional committee work, graduate training, and participation in advanced seminars significantly more important than their male counterparts. Sagaria suggests that males have greater opportunities for developing skills and insights through organizational
networks and mentoring.

Besides different rewards for males and females, there appears to be considerable intrinsic gender differences among mid-level administrators. Mark reports that females are socialized differently from birth, and thus respond differently when put in managerial roles. In this study, males were found to experience fewer internal conflicts and external barriers to work than their female counterparts. Perhaps this finding reflects attitudes reminiscent of a "good ole boy" network. Because of the increasingly diverse managerial workforce on campus, there is the heightened need to understand individual differences in managers' work values (Brenner, Blazini, and Greenhaus, 1988).

As for minorities, Affirmative Action legislation has produced only a modest increase in minority administrators in traditionally white institutions. In 1985, Blacks comprised only 6.8% of the administrators in all colleges and universities, and 2.2% in traditionally white institutions (Wilson and Melendez, 1985). A report published in 1989 states that nonwhite persons in major administrative positions constituted 8.3% of the total number of administrators (Scollay, Tickamyer, Bokemeier, and Wood, 1989).

Scott (1978) reports that half of the minority administrators in higher education work in predominantly black institutions. Two positions -- Affirmative
Action/equal employment opportunity officer and student financial assistance director -- account for one quarter of all minority employment in white public institutions.

According to Affirmative Action guidelines, if an institution has 50 or more employees and federal contracts of $50,000 or more, then the institution must develop Affirmative Action plans with numerical guidelines and timetables outlined by the United States Department of Labor. These plans must include: (1) a design for the implementation of equal employment opportunity policies, (2) the assignment of an internal Affirmative Action officer who is responsible for the successful implementation of AA/EEO policies; (3) the design and use of an internal review, report, and monitoring and audit system for identifying problem areas; (4) the design of internal action programs to eliminate problem areas; and (5) the design of external action plans to eliminate future problem areas. These plans are only reviewed by the federal government if the institution is required to undergo an Affirmative Action compliance review (Yocom, 1988).

Such low minority representation in administrative ranks leads one to question the effectiveness of Affirmative Action regulations on campus, as was tested by Scollay and associates. The researchers found that 61% of the Affirmative Action/Equal Employment Opportunity officers believed that AA/EEO programs in place on college campuses
had impacted the gender composition of administrators, but not so for racial equality. Forty-one percent of the AA/EEO officers have formal involvement in major administrative promotion decisions, and 62% have sign-off responsibilities for major administrative appointments. They report greater impact on faculty decisions than on administrative decisions (Scollay, Tickamyer, Bokemeier, and Wood, 1989).

There appears to be race-related differences in management styles and opportunities as well as gender-related differences. In a study of the CUNY system by Williams (1989), black women were found to cluster in jobs as head librarian, registrar, and director of financial aid. Williams reports that, in addition to receiving lesser pay in lower level jobs, 42% of the respondents felt that they were somewhat excluded from the internal information and support network. The majority of the respondents felt that their decisions were accepted by their superiors, but there were mixed responses as to whether they received recognition for their ideas and contributions. This report concludes that lack of recognition reflects the ideals of the institution and leads to job insecurity. Less than 25% of the respondents expressed a desire to continue their career in higher education.

Brenner, Blazini, and Greenhaus (1988) found that blacks placed more importance on independence in the workplace than their white counterparts. This study of middle managers
also found that blacks emphasized the extrinsic outcomes of security, high income, and working conditions as highly significant factors to job satisfaction than whites.

Salaries for middle managers have increased considerably in the decade of the 1980s. According to statistics listed in the Chronicle of Higher Education in 1984, median yearly salaries for middle administrators ranged from $20,000 and $35,000 (cited in Austin, 1984). More recent statistics from the Chronicle of Higher Education lists average salaries between $23,000 and $49,000 in 1987 ("Median Salaries", 1987). Based on the CUPA Administrative Compensation Survey, bookstore managers were on the low end of the scale at $23,990, with the Chief Business Officer at the high end, receiving a salary of $53,500 (1989-90 Fact Book on Higher Education, 1989).

Higher salaries are garnered by those holding legislative and governmental relations positions, estate planners and annual gifts officers, and budget directors; payroll managers, custodial and building and grounds directors are at the low end of the scale. Across the board, one can expect a higher salary at a university than at a liberal arts college. Similarly, public institutions pay higher salaries than private institutions (1989-90 Fact Book on Higher Education, 1989). It must be qualified, however, that these figures are not reflective of the discrepancy in title and rank between institutions.
The rise in professionalism among middle managers carries with it the possibility of higher salaries. For those who are specialists within a particular field, future salaries may be compared either to the faculty or to the job market for their specialty. Salaries for non-specialists, however, will likely remain on the same level as similar jobs in other colleges, which is lower than generalist middle managers in business (Scott, 1977).

Despite the drastic increase in positions and a relatively stable salary base, there seems to be considerable limitations on opportunities available for movement into academic support. There is much within-institution job movement, which hinders an outsider’s chance of securing a mid-level administrative post. There is a prevalence of "evolved" jobs, whereby new administrative positions are established outside of the normal administrative structures operating in the university. Job responsibilities are expanded far beyond those listed in the initial job description, as the incumbent’s expertise grows. Miner and Estler (1985) have labeled this the accrual mobility model.

Similarly, Ost and Twale (1988) found that some new administrative positions are created by redefining the duties of the position, not by the university, but by the incumbent. This type of "evolved" position is based on the availability of resources and the degree of internal
flexibility within the organization. Both the accrual mobility model and the redefinition of duties by the individual are means of increasing one's job mobility from within the institution, but make entry into the administrative ranks more difficult for those outside the institution.

Turnover appears to be a problem as well. In a study by Burns (cited in Sagaria, 1986), one-third of the new professionals in mid-level positions left higher education six years after starting the job. Bogenschutz and Sagaria (1988) report similar findings on the career aspirations of mid-level administrators, stating that 65% of the middle managers in their survey planned to stay at the institution for the next 1-5 years, yet more than half planned to leave eventually. Only 20% planned to stay longer than five years. Regarding lifetime commitment to higher education, 30% stated that they plan to stay in higher education, 33% plan to leave higher education, and 22% are considering both options.

This demographic data suggest several trends. It appears that there is a large number of positions available in higher education, but many are filled by older career middle managers, or are filled by within-institution transfers. If higher education is losing many of its new professionals, job dissatisfaction may be a critical factor in understanding the "state of mind" of collegiate middle
management.

**Job Satisfaction**

Many factors contribute to job satisfaction. As stated in Chapter I, job satisfaction refers to a set of attitudes held by organization members. It is their affective responses to their jobs. There are many dimensions that contribute to job satisfaction, including working conditions, the work itself, rewards, one's persona within the organization, and other persons that one comes in contact with, both inside and outside the company (Locke's study, cited in McCormick and Ilgen, 1985). Satisfaction depends on the match between an employee's value system and the rewards provided by his/her job situation (Brenner, Blazini, and Greenhaus, 1988).

Salary and benefits are extrinsic factors that generally top the list for desiring vertical job movement. Many middle managers experience stress resulting from lack of time, limited resources, excessive bureaucratic minutia and paperwork, and problems with staff and students, according to Bucci's study (cited in Austin, 1984). Several studies suggest, however, that intrinsic factors are even more important to middle managers' satisfaction with their jobs, which in turn increases their level of commitment.

Commitment to work is defined by Porter and Steers (cited in Austin, 1984) as
"the relative strength of an individual’s identification in a particular organization. Conceptually, it can be characterized by at least three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization." (p. 27)

According to this definition, commitment to and involvement on behalf of the organization are the critical factors. Other literature, however, reports slightly different findings.

Soloman and Tierney (1977) suggest that job satisfaction is a combination of several factors: satisfaction with power, influence, and autonomy; congenial work relationships and competency of colleagues; and a challenging job that includes significant responsibility. The researchers also state that status anxiety is related to specific institutions, in that as the quality of the institution increases, so does general job satisfaction.

Middle managers are motivated by intrinsic factors such as autonomy, pride, recognition and prestige, and the opportunities to work with exciting people. However, diminishing external factors such as salary and level of position are weakening continuous job satisfaction despite other more prominent internal motivations (Austin, 1984).

Ann Austin (1985) based her research on two historical
works to determine job satisfaction. She used the findings by Bess and Lodahl (1969) who concluded that subsistence and growth needs for middle managers are being frustrated; also Soloman and Tierney (1977) found high satisfaction related to the administrator's value of subordinates, perceptions of attributes by which the institution rewards administrators, and a congruency between these perceptions and the behaviors valued by individual administrators. Using these studies, Austin conducted research on 424 middle managers in large public research universities.

Her findings suggest rather high job satisfaction among mid-level administrators (5.49 on a 1-7 scale, sd = 1.12). Key factors in these findings show that older administrators and female administrators were more satisfied with their positions than were their younger and male counterparts. Interacting with others and the perception of task significance was an important factor as well. Contrary to the researcher's expectations, length of tenure at a university was not a factor.

Austin (1984) also found that middle managers fall into three categories: university-oriented, career-oriented, and position-oriented. Among these three orientations there is a difference in the primary commitment to and in the importance given these various factors by middle managers. Based on this author's work, over 50% of those who responded ranked an interest in the position as the most important
aspect of their job, followed by a career-orientation and lastly a university-orientation. Austin concluded that more mid-level administrators are interested in what they are doing and the status of that position rather than in their career objectives or in the university as an organization.

Austin reported that job satisfaction is dependent on three job-specific factors and three environmental characteristics: autonomy, skill variety, and feedback from the job, coupled with the perception of the workplace as being a caring environment, a cooperative environment, and an environment that fosters involvement in decision-making.

The powerful extrinsic motivator, salary, was significantly related to job satisfaction in this study. It accounted, however, for only a small amount of variance as compared to environmental characteristics, thus relegating it to a position of lesser importance.

Murphy, Owen, and Gable (1988) report that males tend to be slightly more disassociated with the university than females. The authors also report that a small increase in commitment is found among older administrators. Their findings did not, however, directly address the combined effect of age and years of tenure together.

Breen (1983) surveyed over 1500 American Management Association middle managers and reports that a high degree of decision-making responsibility and fulfillment of lifetime goals were the top two "indicators of success."
Also listed as important were jobs that afford the use of the mid-manager's best skills and the organization's use of ethical standards. This survey also assigns salary to a lesser position, as over 70% of the respondents felt they were receiving a fair wage.

In another American Managerial Association Survey Report by Warren H. Schmidt and Barry Z. Posner (1982), it appears that most managers value intangible qualities such as integrity, initiative, and competence as means of improving the quality of their lives. Effective working relationships are predicated on two personality traits, responsibility and honesty; further, the respondents admired integrity and competence most among their co-workers. Miscommunication seems to be a major problem in understanding the problems of a managerial hierarchy.

Mobility is a key issue in determining job satisfaction, and an issue that is particularly troublesome for collegiate managers. Vertical movement in higher education is often restricted to lateral or diagonal movement because of the technical nature of the positions. Couple this factor with a predominance of inter-institutional movement, and the result is a heightened probability of career dead ends (Atwell and Green, 1987).

Search processes tend to work against middle managers as well, for search committees typically look for specific academic credentialing and administrative experience. This
aids in inhibiting one’s entrance into different areas of administration (Green, 1988). In general, colleges and universities have not invested in programs of career development for their middle managers, which would foster mobility both inside and outside the institution (Scott, 1977). And despite the major reorganization and formalization of nonfaculty employment procedures since 1970, there exist no mechanisms for mobility for support positions (Miner and Estler, 1985).

There seems to be a disparity between the relative satisfaction reported as an overall indicator of middle management positions and the various aspects listed as reasons for dissatisfaction. It appears that the unsatisfactory elements of middle management are not strong impetus for change. Perhaps it is necessary to examine the group dynamics factor that comprise the mid-managers’ environment to gain a better understanding of the situation.

**Organizational Behavior/Climate**

Organizational climate is defined by Kelly (1988) as the set of prevailing conditions within the workplace that are directly associated with productivity and job satisfaction. The organizational climate in which people work has been found to play a significant role in their job satisfaction and competence. Organizational behavior theorists have formulated models that they believe foster the greatest
degree of effectiveness in the workplace.

Rensis Likert's landmark study (1961) on organizational climate proposes a systems approach, whereby the spirit of the organization is characterized according to research-based variables inherent to all organizations. These systems are centered on the development of highly effective work groups which are committed to the goals of the institution and which work toward these goals as a means to professional growth and development and personal self-fulfillment. These systems permit workers to function as relatively small and cohesive primary groups and as dynamic contributors to and influencers on the total institution.

A highly effective environment, according to Likert, is described as one that (1) members perceive as supportive, building and maintaining their sense of personal worth, (2) has high performance goals that are consistent with those of the school and/or the profession, (3) uses group decision making, and (4) is linked to other institutions through multiple and overlapping group structures. He identifies this environment as a System 4 approach, also known as participative management.

Participative management is described by eight major characteristics: (1) the organizational leadership has complete confidence and trust in its subordinates in all matters; (2) the organization makes full use of economic, ego, and other major motives and motivational forces of its
employees; (3) management knows and understands the problems of its subordinates; (4) there is extensive friendly interaction with a high degree of confidence and trust among all members; (5) all are fully involved in those decisions that relate to their work; (6) high goals are sought by all levels; (7) a concern for performance of control functions is likely to be felt throughout the organization; and (8) a desire to achieve all set goals is felt (Likert, 1961).

Organizations that operate under participative management report greater productivity, high-performing groups, lower costs, favorable attitudes, and improved management relationships.

Similar findings are reported by Blake and Mouton (cited in Sergiovanni and Starratt, 1983), who have devised a normative managerial grid which matches an orientation for production with an orientation for people. The authors suggest that a high task/high people orientation is optimal for organizations, resulting in goal achievement by committed individuals operating in an atmosphere of trust and respect. According to this model, problem-solving is centered on the interdependence among constituencies who have common objectives for the institution.

Human resource management assumes that employees are highly motivated with the intrinsic desire to do a good job and to be an integral part of the organization. Subordinates should be viewed as capable and willing to
contribute to the good health and prosperity of the institution due to the need to belong. Employees also desire to be involved in decision-making practices. The supervisor’s responsibility is to create an environment that will maximize staff potential (McGregor, and Argyris, cited in Sergiovanni and Starratt, 1983).

Similar research by Argyris (1960) states that the human personality is not given sufficient opportunity to mature in most formal organizations. Self-initiative and self-determination are attributes exhibited by those who have grown in their position and in their organization.

Fry, Rubin, and Plovnick (cited in Kolb, Rubin, and McIntyre, 1981) report that there are specific issues faced exclusively by middle groups. Because organizational leadership greatly influences the roles, procedures, and relationships in middle groups, there is the inherent danger of the middle group mirroring the top executives’ managerial style. This may be dysfunctional in implementing policies and procedures with other members of the organization. And as policy implementation is a key responsibility of the middle manager, this may cause unnecessary conflict between supervisors and subordinates.

Fry, Rubin, and Plovnick state that middle groups tend to experience great difficulty in establishing an identity or philosophy. Goal ambiguity results from unclear or inconsistent expectations communicated by top management.
There is also uncertainty regarding functional responsibilities within the organization (i.e., executing policy oneself or managing the execution of policy by others), which leads to role conflict and stress. All of these factors are derived from one common denominator: being situated in the middle of an organization.

Research on organizational psychology and development is extensive: many texts have been published that incorporate the various theories of management and leadership. Management by Objectives, Quality Circles, and Theory X, Y, and Z organizations are management theories that have been defined, explicated, and debated in many forums. A general theme that ties these works together is a movement away from an autocratic bureaucracy and toward a management style that promotes individual participation and growth within the company. Improving communication, participative decision-making, and heightened job satisfaction are key phrases in organizational psychology, much of which have developed since the late 1960s (Kerr, 1976; McClelland, 1965; McGregor, 1960; Ouchi, 1981; Vroom and Jago, 1973).

The implications of research in this area are somewhat evident. As cited earlier, the peculiar aspects of mid-level positions in higher education can foster feelings of inefficacy and underutilization. Establishing a climate that promotes individual growth and mutual trust and respect can increase one's satisfaction with his/her position.
Creating this climate in higher education is complicated by the many factors at work in the organization and among the various constituents to which the middle manager must answer. These positions may be particularly susceptible to one interest group moreso than another; here again, this is largely job- and institution-specific. And who bears the responsibility for creating such an environment? The research looks to university leadership to answer this question.

**Leadership Responsibilities**

A wealth of literature has been generated about college and university presidents on management and leadership techniques. Many researchers have defined effective leadership and offered guidelines on the ways to achieve it. First-hand accounts of the role of the campus president have been offered by Clark Kerr, Derek Bok, and Donald Walker. In *The Effective Administrator* (1979), Walker describes the political realities at work in higher education, and the rigors of managing an active-reactive environment. Walker also gives considerable emphasis to building an administrative frame that fosters teamwork among its managers.

Lahti (1975) concludes that effective management is based on a single theory: it is incumbent to top-level administrators to integrate individual needs and organizational needs. The author suggests that being an
effective leader requires knowledge of human behavior, to encourage constituents to perform at the highest possible level of their potential. An emphasis should be placed on the quality and technical excellence of subordinates, long-term career opportunities, and personal growth potential. Prospects for internal upward mobility should be stressed.

White (1986) urges top administrators to give subordinates power, by letting them know without a doubt that they share in all decisions. Ownership of new proposals and policies is valuable to campus management, as middle management will bear the responsibility for implementing policy decisions. Here it is proposed that the more an individual contributes to the decision-making process, the more he/she will support the outcome.

Green (1988) responds to cooperative decision-making by questioning its feasibility, based on campus structure. Middle managers, earlier defined as specialists, are highly knowledgeable in their own areas, but tend to be uneducated as to campus-wide operations and to their place within the system. Compartmentalization and the resulting tunnel vision promotes little integration with campus objectives, making participative management especially difficult in higher education.

A clear understanding of the goals of the university and a commitment to building a supportive environment for subordinates are the responsibility of the campus leader.
Due to the specialization of campus offices, a strong emphasis should be placed on achieving institutional goals rather than departmental goals (Green, 1988). Top administrators must articulate the mission of their university to give middle management a focal point on which to base pride in their work. It is important to express appreciation and recognition for the essential work of middle managers, and to provide structures that support work autonomy and that provide opportunities for professional growth (Austin, 1984).

Kelly (1988) agrees with Austin that top management should concentrate on their middle managers to effect improvement rather than attempting to make sweeping changes themselves. This is accomplished through using and supporting innovative ideas, providing support for personal growth, inspiring staff with a sense of purpose, and facilitating cooperation across and within departments. White (1986) adds, "Make expectations, offer support, but don't demand" (p. 31).

Kouzes and Posner (1987), in The Leadership Challenge, suggest that organizational leaders are responsible for inspiring their subordinates to move toward a common goal for the institution. The authors promote the ideals of fostering collaboration on projects, seeking integrative solutions to institutional problems, and building trusting relationships as critical to effective leadership. By
building interpersonal relationships in the workplace, a leader is capable of empowering others to more constructive workmanship, which in turn strengthens the organization as a whole.

The literature does not consider whether or not these expectations of top-level administrators are feasible, particularly at a time when presidents are expected to serve in many different capacities beyond the campus walls. In a presidential time allocation survey (Glenn and March, cited in Cohen and March, 1974), college presidents were spending more time out-of-town and with persons outside of the college environment in 1979 than they were in 1974. They spend more time with university trustees (18%) than with students (6%) and faculty (8%) (1979 data). Similarly, presidents are spending less time with their academic and nonacademic administrators, each commanding 10% of the president's workday. These findings have led Glenn and March to conclude that

"the presidential role has shifted somewhat in the direction of becoming a bit more entrepreneurial and a bit less involved in the internal affairs of the college or university ... there appears to be an increase in the attention given to trustees, outsiders, and persons in the president's own office. These increases have been at the expense of attention given to others within the university, specifically academic and nonacademic
administrators, students, and faculty" (p. 264).

The research does not explore the relationship of these expectations to the organizational structure operating at the university. Of the three models of university governance described by Baldridge (1971), the expectations cited here are most congruent with the collegial model, or the consensus metaphor proposed by Cohen and March (1974). Unfortunately, the political and bureaucratic models are probably more prevalent.

Several researchers have made recommendations for use by top-level college administrators in affecting a positive change in the work situation for middle managers. Kanter (cited in Mark, 1986) advises that college administration needs to expand the powerbase to overcome [middle managers’] feelings of powerlessness. Kanter encourages using problem solving task forces and decision-making teams, involving more people in discretionary problem-solving activities that gain them more visibility and recognition (even if nothing changes in their work situation), and using "Requests for Proposals" (RFPs) as a means of brainstorming on pressing college problems.

Levine (1987) supports the creation and promotion of peer support organizations for women as a means of hastening and smoothing the transition of women into managerial positions. Female administrators often report feelings of isolation and lack companionship and support from other
female professionals. Small, informal networks have been created, but networks for women in higher education have not received widespread acceptance and patronage as yet.

Williams (1989), citing a lack of mentors and appropriate role models for black females in higher education, recommends that the recognition and promotion of women of color be the first priority of administrative search committees. According to Williams and Piper (cited in Ost and Twale, 1988), members of screening committees tend to search for candidates who are similar to themselves. If this is true, minority entry into administrative ranks is further hindered by discrimination within the search committee.

Williams (1989) calls for vocational nurturing and training for those already in higher education, and that all administrators be consulted in policy decisions. For all aspects of education, the author encourages institutions to make jobs more financially attractive and rewarding to encourage a sustained interest in education as a career.

Training and development programs are suggested as a means of improving the job situation and the middle managers' perception of their work environment. Programs such as these would enhance one's managerial skills in much the same way as attending regional and national associational meetings -- a means of staying abreast of the changes and advances in one's field of specialization.
Executive Development Programs and Leadership Short Courses have increased in number over the last two decades, but are attended by a special population of staff developers. Two such programs exist at the University of Tennessee and the University of Georgia.

The Institute for Leadership Effectiveness is an extensive eight-day workshop which conveys a mixture of theoretical information on management styles with the hard truths of reality. An in-house program, the university spends over $600 on each participant. Through self-assessment, case studies, lectures, and discussions, participants are exposed to communication and leadership styles and the dynamics of interpersonal interactions and networking. The participants are made aware of the internal and external forces at work in the university, including information on current political and budgetary concerns. Fostering constructive inter-office relationships is stressed, as are the concerns of conflict, power, and authority (Fly and High, 1984).

A series of three-day workshops is held at the Institute of Higher Education at the University of Georgia at Athens. To aid both the top administrator and those in middle management, this program stresses staff relationships and ways of improving alliances within the working environment. Of particular focus is staff involvement in decision-making, policy implications, and the delegation of responsibility
and authority. Also discussed is the relationship between administration, faculty, and academic policies that have ramifications for support services. The administrative team is emphasized, whereby better decision-making is cultivated through increased input and communication (Feltner, 1975).

Evidence has shown a positive relationship between formal administrative training and improved relationships on campus. It appears that administrators are more receptive to developing skills than faculty; many of those attending workshops have been actively implementing what they have learned. Unfortunately, the numbers of attendees are relatively small compared to the burgeoning number of administrative positions (Goldenbaum, 1978).

According to Robert Scott

One work serves to tie together the many aspects of middle management -- a report produced by Robert Scott for the American Association of Higher Education in 1978. Lords, Squires, and Yeomen: Collegiate Middle Managers and Their Organizations is a landmark study in the understanding of collegiate middle managers.

Examining the burgeoning ranks of support services personnel in college administration, Scott traces the growth of a three-person administrative team (president, librarian, and bursar) in the early years to a network of specialists whose responsibilities lie far beyond teaching and research.
This diversity in orientation has caused a rift between the professoriate and the increasing numbers who support the needs of the faculty and student body.

Collegiate middle managers are defined by Scott as those in positions equivalent to directorships and vice-presidents, who supervise a large number of technical and clerical employees. Their positions are outside the academic realm of higher education and principally in administrative support and student personnel services.

Scott states that middle managers fulfill three functions:

"they serve as liaison with external suppliers of resources, be they financial or human; they implement procedures for internal allocation of resources and control of activities, especially in matters of campus coordination and compliance with external regulations and orders; and they work with student activities and curricular responsibilities in helping students become oriented to college requirements, standards, and opportunities" (Scott, p. 5).

The mid-managers in these positions provide the information on which important university-wide decisions are based, and then they are responsible for implementing the decisions. Despite their technical knowledge, however, they are seldom asked to advise top administrators on crucial decisions, or, if consulted, their advice often goes
unheeded.

Scott reports that middle managers are well educated, most of whom hold degrees beyond the baccalaureate level. A large portion of middle managers start and continue their careers at the institutions they attended as students. Most of their occupational training, nonetheless, is gained from hands-on experience on the job.

Scott observed that middle managers are caught in a quandary regarding future employability and vertical career movement. Because their jobs are highly technical and specific in nature, the chances for moving up the career ladder are usually restricted to lateral moves between institutions. Financial aid directors have few opportunities in the private sector to utilize their skills; any outside move they could make involves retraining and possibly further formal education.

Scott found that salaries for middle administrators tend to be considerably less than their educational and experiential counterparts in the private sector. Those at state universities are restricted by the state's salary scale, and often these positions do not carry faculty rank. Movement in the upper levels is rather slow, and the possibility of vertical (or diagonal) movement is hindered by "lifetime" positions.

Current issues facing middle management addressed by Scott include the entry of women and minorities into college
administration. Once getting past male-dominated search committees, women and minorities cluster in jobs of lower status and responsibility, and report being outside the communication channels on campus.

In response to these complaints, colleges and universities are establishing administrative counsels, comprised of middle managers from throughout the institution, to be involved in policy decisions. Institutions are also increasing the presence of Affirmative Action officials and enforcing Affirmative Action policies in employment decisions.

Despite the many drawbacks associated with middle management, Scott reports a relative satisfaction among its members. The problems listed above do not appear to be strong impetus for change. Association with professional organizations and with occupational colleagues plays a vital role in job satisfaction and stability, although few institutions do more than provide little funding for travel and membership fees.

Training and development opportunities for collegiate middle managers are scarce, but growing. While military, business, and governmental employees regularly send their managers to training programs, colleges do not. Budgetary and time constraints preclude attendance at educational training workshops for college employees.

In responding to Scott's questionnaire, middle managers
suggest that incentives such as job security, personal advancement, keeping up with the complexities of the job, personal growth and satisfaction, salary increases, peer recognition, and personal pride would top their list of needed improvements. Several of these incentives would top everyone's list; the key seems to lie in the respect and recognition afforded these positions by their administrators and by the collegiate community.

Scott states that middle managers are "uncertain loyalists" because of the intermediary nature of their positions. They report a lack of consideration accorded them by senior administrators and faculty -- a "step sister" status. Troubled relations with faculty can be traced to the lack of interaction and consequent lack of understanding between them. Another cause seems to be differing values and frames of reference for the two groups. Because the faculty is the defining element of the school, they determine the conditions for membership in the academic community. And so far, middle managers have not been granted full membership.

Scott summarizes the predicament of collegiate middle managers in this way:

"Collegiate middle-managers are oriented to serve faculty and students, committed to a career in the institution, and satisfied that they are competent and achieve desired results in challenging work. But they
are extremely frustrated by not being taken seriously, by the lack of recognition of their accomplishments, by low pay, by the lack of authority that accompanies their responsibility, and by the lack of direction given to them" (p. 9).

The author lists several recommendations for college presidents and provosts in establishing a better work environment for middle management:

1. Make use of what is known about job satisfaction and organizational commitment, and put these incentives to work in higher education.
2. Provide mechanisms for feedback to middle-managers about their successes and shortcomings.
3. Be concerned about the environment for innovation.
4. Recognize the value to the individuals and to the organization of broad participation in goal-setting activities.
5. Encourage career alternatives and mobility within your organization. (pp. 58-59)

Scott makes several suggestions on how middle managers can help themselves:

1. Participate in the educational life of the college. Be visible, active in committee work, and make your work and ideas known to others. Distribute reports widely, and keep faculty informed about developments in curricula,
placement testing, enrollment trends, and other pertinent facts.

2. Develop and demonstrate skills in forecasting, planning, and budgeting. Stay abreast of current trends in your field of expertise.

3. Analyze your institution’s structure and propose paths for professional and intellectual development. Identify career patterns in the organization and suggest them to senior administrators.

4. Demonstrate professionalism; ideas and accomplishments bring respect.

The question raised regarding Scott’s work is the possibility of the research being outdated. Support positions have increased over the last twenty years—perhaps the middle manager’s role in higher education has evolved into a more satisfactory position.

Considering the inattention given Affirmative Action programs during the Reagan presidency (Williams, 1989), it is questionable whether institutions still strongly enforce equal employment opportunity and Affirmative Action guidelines. As the pool of qualified minority and female applicants has increased in the last ten years, adherence to federal hiring guidelines has a considerable effect on employment strategies.

As part of his conclusions and implications, he implies
that it is the responsibility of the college president to bear the burden of improving the work environment of the institution. Perhaps external influences should be considered here as well, as the president is bound by the same restrictions placed on colleges by funding agencies as is middle management.

**State of the Research**

There are many avenues which can be taken in attempting to understand middle management in higher education. Much of the literature on the topic expresses similar findings on the causes of job dissatisfaction. The research concludes that middle managers are beleaguered professionals who feel unappreciated.

There are, however, inconsistencies among the studies cited. Because of the institution-specific nature of these positions, there may be serious flaws in the interpretation of survey and questionnaire responses. There seems to be little control for age or experience within middle management, which precludes the research on maturational and ego development across the lifespan. It is inappropriate to blindly categorize all persons of different age, gender, and ethnicity under one heading, without qualifying the results (Loevinger, 1976).

Perhaps an examination of Levinson's theory of adult development would help in understanding the differences in
opinion, outlook, and motivation that occur during one's life (Levinson, 1978). According to this theory, the relative importance of work in most men's lives tends to decrease as a function of age and relative career success. And as higher education has been dominated by white males over its entire history, experience and expectations may play a major factor in attitudes about job satisfaction.

As with all studies reflecting descriptive data, there appears to be a heavy reliance on second-hand reports and impressions from officemates and subordinates as to abilities and attitudes of middle management. This means of data collection, while certainly important to the overall understanding of the work environment, may not reflect the range of factors that impact on collegiate middle managers.

Another question is the reported lack of mobility. Demographics show a drastic increase in support positions (particularly in student affairs), but researchers report that job seekers have difficulty in securing these positions, supposedly because they are filled from within the institution. Who then is filling these positions? Secondly, if the mobility of a mid-manager is constrained because of his specialization, how then can he assume a different position in the same institution? If his specialization does not constrain his mobility, how does he acquire the competence to gain a position within his institution, and why does that competence not enhance his
ability to secure a position at another institution? How can middle management positions be abundant and available to the institution's own but impervious to outsiders?

Another inconsistency regards overall job satisfaction compared to many lesser dissatisfactions. Since all jobs include certain aspects that are less liked than others, what sets middle management apart? Is middle management different in this respect from other levels within the organization? If so, is the difference peculiar to the position?

Perhaps the literature on organizational development and behavior provides needed insights into the dispositions of middle managers, in explaining the situation from a behavioral approach. Management scientists have found different cognitive styles for managers, categorizing their thought processes as systematic, intuitive, receptive, or perceptive. Decision making and the means of dealing with others will be affected by one's cognitive style (McKenney and Keen, cited in Leavitt, Pondy, and Boje, 1980).

Putting more responsibility on the campus leader to set up an environment of cooperation and personal self-fulfillment is yet another responsibility for the already overtaxed CEO. It may be beyond the president's control to challenge and inspire managers in ways that will increase their job satisfaction. Research by Kohn and Schooler (cited in Schaie and Willis, 1986) reports that once an
individual has mastered a job, he/she may want to look elsewhere for challenges, despite the good intentions of the organization. This would be particularly appropriate for collegiate middle managers, as they tend to be well educated individuals who aspire to higher positions.

Scott's work *Lords, Squires, and Yeomen* seems to be one of the few studies that ties together the many factors at play regarding collegiate middle managers. The sheer numbers of middle managers on campus is sufficient justification for a broad examination of their positions and the position-holders. Bringing Scott's data through the 1980s and into the 1990s is critical to college top-level administrators in effecting constructive leadership styles and environments within higher education.

**Conclusion**

Support services middle management in higher education is a diverse and complex subject for study, as diverse as the roles and responsibilities given them. Considered the linking pins of the organization, middle managers have significant responsibility for gathering information and implementing policy decisions that affect the governance of the institution. They tend to be narrow specialists with a wealth of knowledge in one particular field of higher education who must couple their expertise with managerial skills. Their positions are directly effected by internal
and external pressures on campus, as they are often given the task of executing state and federal guidelines.

Collegiate middle managers are caught between top administrators, faculty, students, and legions of office staff. Because their positions do not fall within the theoretical framework of teaching and research, they are often treated as outsiders who are not given access to the collegiate community.

The number of administrative support and student services personnel has increased significantly over the last 30 years. The numbers within the administrative hierarchy of higher education have come to rival the number of faculty, and their collective presence on campus has increased as well. Once dominated by white males, the ranks of administrators are beginning to show signs of ethnic and gender diversity as the pool of qualified applicants grows. This contrast has significant implications for the way in which colleges and universities are managed, as research shows that men and women respond differently to career goals, aspirations, and opinions about their jobs.

A rise in professionalism has aided in maintaining and improving salaries, although collegiate middle managers receive lesser stipends than their experiential counterparts in the business sector. And despite the burgeoning number of positions and stable salary base, there is limited job mobility because of "evolved" positions and inter-university
job movement.

This research is particularly important to higher education, as it attempts to relate the different factors in organizational governance that directly affect the middle manager. Understanding what factors may enhance or detract from the contributions of middle managers, with their increasingly significant numbers and roles, is essential for top level university administration.
CHAPTER III

Research Methodology

The method of data collection used for this study was descriptive in nature, as collegiate middle managers were asked to respond to a questionnaire of job characteristics. The results were scrutinized to determine any trends or common tendencies among the respondents on individual characteristics.

The target population was support services middle managers in higher education. The assessable population for this study was randomly selected middle managers in institutions of higher education in the state of Virginia. Subjects were chosen according to the following:

15 four-year public institutions
24 two-year public institutions (including community colleges)
26 four-year private (independent) institutions
65 institutions in Virginia (SCHEV Fact Book, 1989)

Each institution offered an undergraduate program, and enrolled at least 285 students in full- or part-time study.

Size of the subject pool for this study was calculated on the assumption that all Virginia institutions of higher education have at least three support services middle
managers. One hundred fifty middle managers were sampled, representing 50 managers from each category of institution (public 4-year, public 2-year, and private).

Collegiate middle managers were identified in accordance with those so labeled by Scott (1978). They are listed in Appendix I.A. A list of all qualifying middle managers was composed using the Higher Education Publication Directory of college and university administrators, and specific position-holders were randomly selected from that master list.

Subjects were sent via first-class mail a copy of The Job Descriptive Index, including the Job in General Scale (Appendix I.B), a brief questionnaire regarding demographic information (Appendix I.C), cover letter (Appendix I.D), and self-addressed stamped envelope, and were given fourteen days to respond. As the goal of this study was to achieve a percentage return rate of at least 70 - 85%, a postcard reminder was mailed to those who did not return the questionnaire.

Questionnaire

The questionnaire used for this study was The Job Descriptive Index (JDI), and the Job in General Scale (JIG), developed by Patricia Cain Smith, Lorne M. Kendall, and Charles L. Hulin (1975), and revised by William K. Balzer and Patricia Cain Smith, et al (1990). This index,
comprised of five scores (work, pay, supervision, promotions, and people or co-workers), is used in over half of the industrial-organizational psychology satisfaction measures (Mental Measurements Yearbook (I), 1982). Both the JDI and JIG are designed to show general levels of satisfaction across the respondents as a whole and to allow comparisons between various subgroups.

National norms are included for each scale, based on data collected from 2600 male and female employees from 21 industries, representing 19 companies and 15 different Standard Metropolitan Statistical Areas (Balzer and Smith, 1990).

It was noted that those middle managers from Virginia who were surveyed were not a parallel comparison group to those scores depicted by the national norms. Characteristics of the state of Virginia, such as salary levels, ethnic population, and representativeness of institutional type, relative to other states, was not controlled in this study.

Each scale has a list of adjectives and short phrases: there are 9 - 18 items per scale, totaling 72 items. The JDI and JIG require approximately 10 minutes to complete.

The items included on the scales were designed to provide information on each factor without splintering the scale into subgroups or subthemes. The items were based on these assumptions:
Satisfaction with work. Satisfying work appears to be work that can be accomplished and is intrinsically challenging.

Satisfaction with pay. Expected pay is based both on the value of perceived inputs and outputs of the job and the pay of other employees holding similar jobs or possessing similar qualifications.

Satisfaction with promotions. Satisfaction is thought to be a function of the frequency of promotions, the importance of promotions, and the desirability of promotions.

Satisfaction with supervision. The more considerate and employee-centered supervisors are, the greater the levels of employee satisfaction. The greater the supervisor's perceived competence on the job, the greater the levels of satisfaction with supervision.

Satisfaction with people on present job. The degree of satisfaction is thought to be determined by the work-related interaction among co-workers and the mutual liking or admiration of fellow employees (Balzer and Smith, 1990).

It is expected that workers possess different feelings corresponding to different aspects of their job, and that each of these satisfactions is an outcome of different aspects of the work situation. Likewise, these satisfactions have different relationships with other
workplace variables, such as turnover (Balzer and Smith, 1990).

The Job in General Scale (JIG) accompanied the JDI, followed the same format, and was scored similarly. It was designed to give the respondent an opportunity to evaluate his/her work environment considering those factors that have not been addressed by the JDI. Items chosen for inclusion on the JIG were evaluative and global rather than descriptive and specific and had a long-term frame of reference (Balzer and Smith, 1990). National norms for the JIG scale are not available.

Evaluation of the Job Descriptive Index

A review of the JDI by John O. Crites praised the use of this instrument, suggesting that the items were descriptive as well as evaluative (two-thirds were evaluative, one-third were descriptive). A total score cannot be computed, as the subscales do not intercorrelate despite high reliability ratings. The subscale intercorrelation ranges from .08 to .76, the modal tendency being in the .30s and low .40s. He stated that perhaps these correlations were derived because those with moderate overall job satisfaction were more satisfied with certain features of their work than with others. He also concluded that the JDI showed job-to-job and situation-to-situation differences in the worker’s frame of reference (Mental
Barbara A. Kerr (Mental Measurements Yearbook, pp. 754-756) stated that the JDI was an "exemplary instrument" with good content, construct, and concurrent validity. Content validity was high despite subscales that occasionally split into several factors when factor analyzed. Construct validity was highly correlated with independent variables such as life satisfaction, leader consideration, and positive leader reward behaviors. This test was highly scrutinized and widely used for good predictive validity.

Kerr (Mental Measurements Yearbook, pp. 754-756) reported extraordinarily high internal consistency coefficients; Smith (Mental Measurements Yearbook, p. 757) stated an average corrected reliability coefficient for the five scales was .79 for split-half estimates of internal consistency; higher internal consistency reliabilities exist for each scale (work = .84, pay = .80, promotion = .86, supervision = .87, co-workers = .88). Test-retest reliability was fairly high (for 2 - 6 week periods), based on the results of an unpublished manuscript by Schriesheim and Tsui (1981); low to moderate reliability was reported for long term retesting.

Kerr concurred with Crites that scores cannot be summed, despite the high reliabilities listed above. The author asserted that there is no means for controlling for social desirability (reporting oneself in a positive light)
or leniency (perceptions of others as overly positive), and further, that in the presence of major confounding variables, another measure needed to be used to correct bias.

Ethical Considerations

Because this questionnaire was nonthreatening, ethical considerations did not have a major impact on this study. Subjects were told in the cover letter that their anonymity was guaranteed, and confidentiality was assured. Likewise, a profile of the results is available from the researcher upon completion of the study if desired (Appendix I.E).
CHAPTER IV
Results and Discussion

Fifty middle managers at each institutional type received questionnaires, and of the 150 questionnaires mailed, 108 (71%) were returned, representing 33 responses from middle managers in four-year public institutions, 40 responses from two-year public institutions, and 35 responses from private institutions. Each return consisted of both the demographic questionnaire, the Job Descriptive Index, and the Job in General Scale. Responses to the demographic questionnaire, the five scales of the Job Descriptive Index, and the Job in General Scale were compiled and analyzed. A listing of the respondents' position titles and the frequency of occurrence are presented in Appendix II.A. Enrollment for the institutions is listed in Appendix II.B, revealing that over half (65.4%) of the middle managers surveyed work in colleges and universities enrolling under 5,000 students.

Summaries and Conclusions to Research Questions

Has there been a shift in demographics over the last 15 years?

The responses to this survey suggest that females are
gaining access to a wide range of administrative positions in the state of Virginia. This finding seems to be a new trend in the composition of support services middle management.

**Gender.** Of the 108 questionnaires returned on this survey, 101 respondents identified themselves by gender. Approximately two-thirds of the respondents were males (n=68, 67.3%) and one-third were females (n=33, 32.7%).

Approximately one-third of the respondents to this survey were females. Of the 37 different position titles held by all respondents, females occupy 18 different positions, or about half of the position titles. Public information officer/college relations director outranked all other position titles for females, but by only a small margin. This suggests that females are gaining access to positions previously dominated by males. White males outnumbered females by a two-to-one margin, although the percentage of female administrators in this survey (33%) was not as high as the national percentage (40%), as reported in 1989 (Scollay et al, 1989).

**Age.** Ninety-four respondents listed their age, and this data is presented in Appendix II.C. Mean age for all respondents was 45.13 (s.d. = 8.55, ages ranging from 28-68), with the average age for males being approximately four years greater than the average age for females (46.54 and 42.13, respectively).
**Race.** Seven respondents were not identified by race. As shown in Appendices II.D and II.E, of those 101 responses, 92 persons were white (91%) and 9 were black (9%). None of the respondents identified themselves as Hispanic, Asian and Asian American, or American Indian.

The numbers reported in this study suggest a rather low representation of minorities. Of the nine respondents who identified themselves as black managers, six of the nine were employed at traditionally black institutions, two were employed at community colleges, and only one at a major research university. Of the nine, nonetheless, no two respondents held the same position title. Unfortunately, because of the low number of minority respondents, gaining a clear picture of minority employment from this survey is difficult.

Scott (1978) reports that, in the mid-1970s, women and minorities were well underrepresented in American higher education. A 1975 survey by the College and University Personnel Association and the American Council on Education states that one-half of white women administrators in [traditionally] white coeducational institutions were employed in seven of 52 job types (Van Alstyne, cited in Scott, 1978). Scollay et al (1989) report a major improvement in female representation, stating that females now comprise 40.2% of all major administrative positions.
Educational background. Of those surveyed, 103 responses were returned, and these are displayed in Appendix II.F. Master’s, post-Master’s, or Doctoral degrees were held by 76.9% (n=80) of the respondents, the largest single grouping of respondents (32%) have completed Master’s degrees. Less than 6% have no education beyond the secondary level.

For males, 83.8% of those surveyed hold a Master’s degree or beyond, compared to 63.6% for females. Twenty-three respondents have completed hours beyond their last degree and/or are pursuing another degree, predominantly at the post-Master’s level.

Academic background, delineated by area of concentration and specialization, is depicted in Appendix II.G, and shows a variety of career paths. Of the 34 different backgrounds listed, the most frequent concentrations were: terminal degree in higher education and educational administration (12), Master’s degree in Business Administration (10), and Bachelor’s degree in Business Administration (8). Incumbents in positions requiring technical and professional training, such as finance, accounting, computer services, and counseling, tended to hold degrees more closely related to their present job, but this was not exclusively the case.

Employment history. Of those surveyed, 87% (n=94) listed their employment history, and this data is found in
Appendix II.H. Respondents were asked to classify their years of employment according to years in current position, years at current institution, and years in higher education.

Middle managers that were surveyed have held their current position for almost seven years ($m=6.75$ years, $s.d.=5.84$). They have contributed an average of $9.96$ years ($s.d.=7.93$) to the institution, and $14.54$ years to higher education. This includes 29 individuals who have been employed in higher education for twenty years or more. In each of the three classifications, males have a slightly longer tenure than females.

On the average, respondents have been employed at their present institution three years longer than they have held their current position ($9.96$ years and $6.75$ years, respectively). This suggests that respondents have held positions at their institutions other than their current position, perhaps attributable to job movement or "evolved" responsibilities.

**Number of Employees Supervised.** Based on 98 responses, the average number of employees supervised is $17.02$. The average number of employees supervised stratified by gender indicates that males supervise over $2 \frac{1}{2}$ times more employees than females ($18.61$ and $7.41$, respectively). See Appendix II.I for these results.
Are there differences in middle management positions in public and private institutions? Do public institutions fall prey to greater external pressures on campus?

No significant differences were detected in public and private institutions in this survey based on age, employment history, or number of employees supervised. These results are depicted in Appendix II.J.

Little research differentiates between public and private institutions regarding middle management. One study suggests that private institutions often include a clause in job advertisements requiring a "commitment to the goals and objectives of a small private liberal arts college", implying that the private college is looking to hire from the ranks of those already employed at a private college (Ost and Twale, 1988).

According to the Higher Education Directory (HEP, 1990), there is little or no difference between public and private institutions in the state of Virginia regarding the number and title of middle management positions. All institutions list the same slate of officers serving in support fields. Affirmative Action/Equal Employment Opportunity officer is the only job title that appears in public institutions and not in private ones.

The 1989-90 Fact Book on Higher Education reports that there is a difference in median salaries of middle managers in public and private institutions, favoring the state-
sponsored institutions.

Ost and Twale (1988) report that women have a better chance of getting a middle management appointment in private institutions by using alternate career paths, such as the accrual mobility model mentioned in Chapter II. Academic credentials and specific administrative background tend to work against females and minorities, as they typically do not have equivalent backgrounds to their white male counterparts.

If there is any significant difference in job responsibilities between public and private colleges, the disparity apparently lies in the guidelines that control those offices. For example, state schools are usually restricted to giving first consideration to purchasing items available on state contract. Financial Aid officers must adhere to state guidelines regarding the apportionment and availability of state funds. State-supported institutions must adhere to civil service employment guidelines for those middle managers not considered professional or contract salaried administrators or who hold teaching and research administrative positions.

Is there any difference in middle management positions between large research or comprehensive universities and smaller liberal arts colleges?

Based on age, employment history, and number of
employees supervised, there were no significant differences in type of institution with respect to middle management, as is depicted in Appendix II.K. Any differences may be detected through interviews with incumbents in the various positions in the various schools, which was beyond the scope of this survey.

The results reported from this survey tend to reflect middle management in relatively small colleges, as over 65% of those surveyed work at colleges enrolling fewer than 5,000 students. This is attributed to the fact that there are few research and comprehensive universities in the state of Virginia compared to the number of small liberal arts colleges and community colleges. In Virginia, only three institutions (out of 65 institutions) enroll over 20,000 students (Fact Book, 1989).

A 1987 "Fact File" published in the Chronicle of Higher Education reflects higher salaries at universities than at smaller liberal arts schools. This report lists those holding positions in legislative/governmental relations, estate planning and annual gifts, telecommunications, and budgeting receive the highest salaries. In reviewing the Higher Education Directory (HEP, 1990), it seems that each of these categories appears in Virginia schools, receiving the highest salaries, but not on a consistent basis.
How much has the role of support services middle management changed in the past 15 years, using Scott’s work as a baseline for comparison?

Making a judgment that can be quantified regarding the amount of change in support services middle management over the last 15 years is beyond the scope of the instruments used in this study. However, based on the relative similarity between the demographics reported in this survey and those analyzed by Scott (1978), there appears to be little change in middle management positions.

Studies by Kirby and Woodard (1984) and Scott (1977) state that the ranks of support services middle management have grown significantly over the last 25 years. When comparing lists compiled by HEP of college administrators in 1990 and that compiled by Scott in 1978, there are relatively few additions to Scott’s earlier list. The only title appearing more frequently in Virginia’s colleges is vice-president/director of university advancement. At larger institutions, there appears to be a delineation in the field of computer technologies between “administrative computing,” “academic computing,” and “computer services.”

Difficulty and confusion regarding the methods by which middle management positions are codified is described by Sagaria (1986). Different institutions call their administrators by different titles, and each may have slightly different responsibilities, based on the
administrative structure of the institution. Attempting to amass any conclusive data about middle managers would require an intensive and systematic interview with those so labeled "middle management," which was beyond the scope of this survey.

Many of the duties and responsibilities outlined by Scott are still pertinent to today's middle management. Research completed in the 1980s (Forbes, 1984; Austin, 1985; Heller, 1985; Kirby and Woodard, 1985; Sagaria, 1986; and Funk, 1988) concludes that middle management in higher education fills a variety of informational and policy implementation positions that are essential to the support of the mission of the institution. Perhaps a shift toward greater technological knowledge and expertise is a product of the 1980s.

Are there common factors that influence job satisfaction or dissatisfaction in their work environment?

Using the JDI and JIG was useful in determining the strength of several extrinsic variables in determining job satisfaction. As the results of this survey show, the five extrinsic variables examined -- work on present job, pay, opportunities for promotion, supervision, and coworkers -- was not found to significantly impact job satisfaction among middle managers.
Scott (1978) reports middle managers are relatively satisfied with their jobs, despite several aspects within the work situation that are unsatisfactory. Austin (1985) concurs, reporting a comparable finding of positive job satisfaction among middle managers. Austin found that females respond differently to questions regarding job satisfaction than males, and Brenner, Blazini, and Greenhaus (1988) found that black middle managers placed more importance on extrinsic outcomes of their positions as critical to job satisfaction.

The Job Descriptive Index and the Job in General Scale. Based on this survey of support services middle management in the state of Virginia, scores on the five scales of the JDI and the JIG scale are presented in Tables IV.10 - IV.16. Similarly, the JDI scores have been graphically depicted in comparison with national norms provided by the designers of the instrument, and are found in Appendices III.A -III.J. In each case, the median score and scores between the 25th and 75th percentiles have been computed. The median was used rather than the arithmetic mean because the distribution of employees' JDI scores may make the mean scale score a biased index of employee satisfaction (Balzer and Smith, 1990).

In order to compare the results of this survey with the national norms, scores have been delineated according to:
(1) gender, (2) years of job tenure, broken down into five categories, and (3) years of education, defined by three categories.

**Scoring.** Each of the six scales had 9-18 items, for which the respondent answered "yes" if the item was an appropriate reflection of the work situation, "no" if the item was inappropriate, and "?" if the respondent could not decide. Each scale was scored separately, with each appropriate "yes" and "no" response receiving three points, and each "?" receiving one point. Four scales, *work on present job, supervision, coworkers,* and *job in general,* had eighteen items, two scales, *pay, opportunities for promotion* had nine items, and each scale had a possible sum of 54. The sums for the two scales of nine items were doubled before comparisons were made.

As suggested by the designers of the JDI and JIG, blank responses were treated as a "?" (and given a score of 1) if there were three or less missing responses on an 18-item scale, or two or less on a 9-item scale. The scale was not scored if these guidelines were not met.

In analyzing the results, several factors must be considered:

1. Norms provided by the authors of the JDI are available for males only. Norms for females have yet to be published.

2. Similarly, norms are provided for only the first
five scales, work on present job, present pay, opportunities for promotion, supervision, and coworkers. Norms for the JIG scale have not yet been fully developed.

3. Because of the educational level of the females in this survey, norms for males are considered as appropriate comparisons. Men's norms reflect the group to which women employees at higher, professional levels within the organization will compare themselves.

4. The JDI norms allow a comparison between a sample population with the national group in percentile terms. National norms are based on a stratified random sampling procedure of nearly 2600 male and female employees in the United States (Balzer and Smith, 1990).

Interpretation of the JDI and JIG. Two strategies are used in understanding the results on the JDI and JIG: (1) are employees generally satisfied or dissatisfied? and (2) are employees more or less satisfied than employees in other organizations?

In answering the first question of the absolute level of satisfaction, a neutral point on the 54-point scale would represent an ambivalent feeling, or a balance of positive and negative feelings about the job. Because it is impossible to determine an exact "neutral point" on the scales, Balzer and Smith (1990) have concluded that the midpoint (27) is a reasonable approximation of neutrality. Thus, a range from 22 - 32 is considered the neutral zone.
Scores above 32 indicate satisfaction, scores below 22 indicate dissatisfaction.

To evaluate the second question of relative levels of satisfaction, the JDI allows a general comparison between the scores of the survey respondents and the scores of a national group in percentile terms. More specifically, the JDI norms permit comparisons stratified by gender, education, and job tenure (Balzer and Smith, 1990).

**JDI and JIG Scores: All Respondents.** A profile of the JDI and JIG scores for all respondents is provided in Appendix II.L. Based on the concept of a neutral zone from 22 - 32, it appears that the respondents expressed satisfaction regarding work on present job (M=40.00), supervision (M=42.76), and coworkers (M=42.19), and a very satisfied rating for their job in general (M=45.65). Responses on present pay were borderline between neutrality and satisfaction (M=32.00). Scores for opportunities for promotion indicate a slight dissatisfaction (M=17.00), the only scale to fall below the neutral zone.

**JDI and JIG Scores: By Gender.** Stratifying the results by gender, males tend to score roughly the same as the national average (Appendix II.M, Appendices III.A and III.B). In fact, median scores for work on present job, opportunities for promotion, and coworkers were the same for males in this survey and the national norms. The only scale to show a noticeable difference is supervision, as the
respondents' median score was six points higher than the national norms (M=48 and M=42, respectively). Males seem very satisfied with their job in general (M=48.00), with a relatively small range between the 25th and 75th percentiles (43.0 - 51.0).

Females scored slightly below the national norms for work on present job, pay, opportunities for promotion, and coworkers. Their scores were equivalent to the norms for supervision. Females responded with a very satisfied rating for their job in general (M=45.00).

Using the Wilks Multivariate Test of Significance, there was no statistically significant difference on any of the six scales between males and females. These results are presented in Appendix II.N.

JDI and JIG Scores: By Educational Level. Scores stratified by educational level are presented in Appendix II.O and Appendices III.C, III.D, and III.E. Balzer and Smith categorize education in the following units: 10 years or less, 11-12 years, 13-14 years, 15-16 years, and 17 years or more. To approximate the responses given by those surveyed on the demographic questionnaire, "high school graduate" is estimated with 11-12 years of education, "bachelor's degree" is estimated with 15-16 years of education, and "Master’s degree" and beyond is estimated at 17 years or more of education.
Looking at the three educational levels together suggests that the respondents score about the same on all scales except for opportunities for promotion. Scores for work on present job, supervision, coworkers, and job in general were all well into the satisfactory range, with pay falling in or near the neutral zone. Scores for opportunities for promotion fell in the dissatisfaction range.

No significant difference was found between educational levels for the six scales, as depicted in Appendix II.P.

Comparing educational levels to the national norms factors out as follows:

(1) for 11-12 years of education, work on present job, opportunities for promotion, supervision, and coworkers were all above national averages. Scores for pay fell just below national norms.

(2) for 15-16 years of education, supervision was the only score above the national norms. Work on present job and pay fell considerably below the norms, and opportunities for promotion and coworkers fell just below the norms.

(3) for 17 or more years of education, scores were below national norms on the five JDI scales. Work on present job, pay, and opportunities for promotion were well below the norms, and supervision and coworkers were slightly less than the norms.
These findings suggest that those respondents with more years of education tend to feel differently about their work on present job, pay, and opportunities for promotion than the national norms, becoming particularly divergent as educational level increases. Educational level does not appear to be a major factor in determining feelings of satisfaction toward supervisors and coworkers.

**JDI and JIG Scores: By Years of Tenure.** Scores stratified by years of tenure are depicted in Appendix II.Q and Appendices III.F - III.J. The designers of the instrument have defined job tenure into five categories: 0-3 years, 4-6 years, 7-9 years, 10-15 years, and 16 or more years. Respondents to this survey fell into each category.

Scores for 0-3 years, 4-6 years, and 7-9 years tend to cluster together on all scales. On the six scales, a five point spread was the greatest difference in the median scores, that occurring on the opportunities for promotion scale.

The greatest divergence in scores occurred between those with 10-15 years of tenure and those with 16 or more years of tenure, particularly on the first three scales. It appears that those with more than 16 years of tenure find their work on present job, pay, and opportunities for promotion considerably more satisfying than those with 10-15 years of tenure. This divergence in scores, however, does not yield a significant difference, as depicted in Appendix
II.R.

Comparing years of tenure to the national norms, scores for three categories -- 0-3, 4-6, 7-9 years -- tend to cluster around the national scores, generally falling just below the national median for work on present job, pay, and opportunities for promotion, and within five points of the national median for supervision and coworkers. This suggests that those surveyed did not find their jobs to be appreciably different from those in a national survey.

Scores for those with 10-15 years of tenure and 16 or more years of tenure are considerably different from the national norms, but in opposite directions. Those with 10-15 years of tenure scored below the national norms on work on present job, pay, and opportunities for promotion, whereas those with 16 or more years of tenure scored well above the national norms for the same three scales. Both categories scored above the national median on supervision and coworkers by a considerable margin. Those with 16 or more years of tenure scored substantially above the national norms on the first four scales.
The purpose of this study was to determine what factors influence the work situation of support services middle management in higher education, with specific emphasis on job satisfaction. Robert A. Scott’s characterization of middle managers Lords, Squires, and Yeomen: Collegiate Middle Managers and Their Organizations (1978) was used as a baseline for comparison, and his research defined several areas of dissatisfaction among mid-administrative ranks. This study hoped to support and/or redefine trends that Scott had established in the late 1970s, to update them with research generated through the 1980s, and to determine if a sample of middle managers in 1991 would support or refute this research.

A random sample of Virginia’s middle managers were surveyed to determine trends in demographics, employment status, educational background, and years of tenure. To gain a quantitative representation of job satisfaction, the Job Descriptive Index and Job in General Scale scrutinized job satisfaction based on six variables -- work on present job, pay, opportunities for promotion, supervision,
coworkers, and job in general. Use of these scales aided in measuring job satisfaction with regard to specific job-related factors and to establish an overall rating of the job.

Based on a sample of four-year public institutions, two-year public institutions, and private institutions, middle managers in Virginia were found to be predominately white males, representing a two-to-one margin over females and a seven-to-one margin over minorities. Blacks were the only minorities represented in this survey, and two-thirds of their number were employed at traditionally Black institutions.

The mean age of respondents was 45.13 years, with males averaging four years older than females. Of the 37 different position titles held by the respondents, females occupied 18 different positions.

This finding shows that females are making headway in their attempts at securing administrative posts. They hold almost half of all the position titles listed by respondents, which suggests that employment opportunities for females are growing in number and scope, although the percentage of female administrators in this survey (33%) was not as high as the national percentage (40%), as reported in 1989 (Scollay et al, 1989). Perhaps this overall increase is attributable to the growing number of females seeking advanced educational training.
In 1987, females outnumbered males in graduate school by 60,000 students (Digest of Education Statistics, 1989). If this trend continues, the applicant pool of well-educated females may equal or surpass their male counterparts. It may take several years, however, for females to equal males in job experience, due to the predominance of males holding middle management positions today.

The outlook for minorities is not as positive as for females. The representation of minorities in this study fell beneath the national percentages (9% and 11%, respectively). In 1986, the total minority population in graduate school was 11.6% of all student enrollment. This represents a 1.8% increase in minority enrollment since 1976, or about 47,000 more minority students over a ten-year period. This number compares to 1,130,000 White Non-Hispanics enrolled in graduate study (Digest of Education Statistics, 1989).

Over three-quarters of those who responded regarding educational background hold either a Master’s, post-Master’s, or doctoral degree. For males, 83.8% hold a Master’s degree or beyond, compared to 63.6% for females. Less than 6% of the respondents had no educational training beyond high school.

It appears that an advanced degree, beyond the baccalaureate level, is expected for someone holding a middle management position. Perhaps this is exaggerated
because the college environment fosters academic credentialing, and thus search committees are looking for a greater specialized education.

A variety of career paths were used to acquire middle management positions. Terminal degrees in higher education and educational administration, and Master's and baccalaureate degrees in business administration were the most common academic backgrounds, although 34 different backgrounds were listed. Those in positions requiring technical and professional training such as accounting, computer services, and counseling tended to hold degrees more closely related to their job.

Respondents had served in their current position for almost seven years, had been at their present institution for almost ten years, and in positions in higher education for fourteen years. In each of these classifications, males had a slightly longer tenure. Twenty-nine individuals had been employed at their institution for over 20 years. Almost two-thirds of those surveyed were employed at institutions enrolling under 5,000 students.

The length of service given their institutions is a positive indicator of middle managers' loyalty to the institution and to higher education. This same factor, conversely, may be contributing to the unavailability of positions for those seeking an entry into higher education. The respondents had been employed at their institutions
longer than they had been employed in their present job, which suggests that they have either changed positions since their initial hiring or their job had been modified to include new responsibilities. This is a positive step for inter-institution job movement, but a stumbling block to those outside the institution.

On average, middle managers supervised 17 employees. Stratified by gender, males supervise over 2 1/2 times the number of employees than females. This concurs with earlier findings that middle managers must be efficient time managers, in order to handle the responsibilities specific to their job as well as supervising the activities of a large support staff.

Responses to the Job Descriptive Index and the Job in General Scale were delineated by gender, years of education, and years of job tenure. This survey showed no significant difference in the responses given by any of these delineations on the six scales. These results suggest that support services middle managers in Virginia respond similarly regardless of gender, years of education, and years of job tenure.

The Job Descriptive Index allows for comparisons to be made against national norms, and several trends were noted:

(1) males scored roughly the same as the national norms, with higher ratings on supervision and job in general
(2) females scored slightly below national norms for work on present job, pay, opportunities for promotion, and coworkers, equivalent to the norms for supervision, and rated their job in general as highly satisfactory.

(3) regarding educational level, respondents with more years of education tend to feel differently about their work on present job, pay, and opportunities for promotion than the national norms, and the gap increases as education increases.

(4) educational level does not appear to be a major factor in determining feelings of dissatisfaction toward supervisors and coworkers.

(5) respondents with less than ten years of tenure score roughly the same as the national norms.

(6) respondents with 10-15 years of tenure scored below national norms on work on present job, pay, and opportunities for promotion, whereas those with more than 16 years of tenure scored above national norms on the same three scales.

(7) years of tenure is not an indicator of levels of dissatisfaction for supervision or coworkers.

Responses for the Job in General Scale were all highly satisfactory, regardless of gender, years of education, or years of tenure. This finding concurs with previous research, which revealed that despite aspects of the job
that are unsatisfactory, middle managers' overall perception of their employment is very favorable. It appears that a complex system of interpersonal values, beyond those tested here, are important factors in determining job satisfaction among middle management.

Implications

This data suggest that one must look beyond the extrinsic values defined by the scales of the JDI and JIG to explore the motivations that may cause job satisfaction. The collegiate middle manager operates within an environment that promotes scholastic achievement, personal accomplishments through creativity and the generation of new ideas and knowledge, and autonomy and independence for some of its members. However, because these middle managers operate outside of the academic realm of the institution, they are not given access to a similar reward structure as faculty, who are in some cases their educational equals.

These middle managers are highly educated, suggesting that they possess the intelligence, motivation, and stamina to achieve rather high-level goals. Collegiate middle managers appear to have the desire to use their intellect in making decisions in which they are directly affected. It seems that the nature of their positions precludes them from using skills they have acquired because of bureaucratic minutia and time and staff demands.
Their commitment to higher education seems relatively strong, despite research that suggests otherwise. Few industries can expect a lifelong commitment from their administrative ranks, particularly those in mid-level positions. Promotions and moving "up the employment ladder" are part of the American socialization process.

A clear problem in studying middle management is the lack of definition that accompanies these positions. There are no clear lines that delineate who is a member of this group and who is not. Because of the relative autonomy of institutions, the chances of codifying a framework for evaluating middle management is minimal. And this is certainly appropriate for the structure of individual colleges and universities, which should place people in positions as their needs demand.

There appears that little has changed over the last 15 years for collegiate middle managers serving in support services, except a greater opportunity for employment of females. Perhaps the growth of support services has diminished somewhat due to the projected, but not realized, enrollment declines of the 1980s, or the present budget crises that many universities are struggling with today.

Suggestions for Future Research

There are several aspects of middle management that were beyond the scope of this study, and research is needed
in these areas to bring into clearer focus the work environment of middle management. The responses on the JDI and JIG helped in reducing the emphasis placed on extrinsic values in determining job satisfaction. Further studies are needed to examine intrinsic values, such as autonomy, pride in work, and recognition, to discover where problems lie within the institution, which in turn may strengthen the administration of higher education. This may also impact the way administration courses in graduate programs are taught.

It is important to monitor the effectiveness of Affirmative Action and Equal Employment Opportunity guidelines on campus. As the student body becomes more heterogeneous, the applicant pool for administrative positions will grow, and it is incumbent on institutions of higher education to respond to this diversification by placing females and minorities in administrative posts.

An investigation is warranted into the animosity between faculty and administration, to determine if there exists a valid concern, and if so, what factors may be causing the rift. Perhaps a clearer understanding of the roles of administration and unobstructed lines of communication between the two sides of academia will help alleviate the tension.

As budgetary concerns plague most of higher education, a re-examination of the administrative bureaucracy may be
necessary. Higher education has come to rely on the ranks of support services middle managers to provide the services that parents and students are demanding; similarly, student "development" and the formation of the "complete" student has added new programs and staff to student personnel services. It should be determined where the lines must be drawn between funding for academics and funding for administrative and student services.
Appendix I
### Appendix I.A

**Middle Managers**

<table>
<thead>
<tr>
<th>Academic Affairs</th>
<th>Chief Public Relations Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director, Institutional</td>
<td>Director, Information Service</td>
</tr>
<tr>
<td>Research</td>
<td>Administrative Affairs</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>Chief Planning Officer</td>
</tr>
<tr>
<td>Registrar</td>
<td>Director, Computer Center</td>
</tr>
<tr>
<td>Director of Admissions</td>
<td>Director, Information Service</td>
</tr>
<tr>
<td>Director, Student Housing</td>
<td>Chief Business Officer</td>
</tr>
<tr>
<td>Chief Student Life Officer</td>
<td>Chief Budgeting Officer</td>
</tr>
<tr>
<td>Director, Student Union</td>
<td>Director, Personnel Services</td>
</tr>
<tr>
<td>Director, Student</td>
<td>Affirmative Action/Equal</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>Opportunity Officer</td>
</tr>
<tr>
<td>Director, Counseling</td>
<td>Director, Physical Plant</td>
</tr>
<tr>
<td>Director, Athletics</td>
<td>Purchasing Agent</td>
</tr>
<tr>
<td>External Affairs</td>
<td>Director, Food Services</td>
</tr>
<tr>
<td>Director, Community</td>
<td>Comptroller</td>
</tr>
<tr>
<td>Services</td>
<td>Manager, Bookstore</td>
</tr>
<tr>
<td>Chief Development Officer</td>
<td>Chief Health Affairs Officer</td>
</tr>
</tbody>
</table>

**Note.** From *Lords, Squires, and Yeomen: Collegiate Middle Managers and Their Organizations* (p. 4) by R. A. Scott, 1978, Washington, D.C.: American Association for Higher Education.
PLEASE NOTE

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108-114 The Job Descriptive Index (Revised)

University Microfilms International
Appendix I.C

Demographics Questionnaire

Current Position Title ______________________________

Number of employees you supervise ___

Type of institution: public 4-year ( )
public 2-year ( )
private ( )

Enrollment:
(headcount, undergraduate only)
under 1,000 ( )
1,000 - 2,500 ( )
2,500 - 5,000 ( )
5,000 - 7,500 ( )
7,500 - 10,000 ( )
10,000 - 15,000 ( )
Over 15,000 ( )

Personal Information*

Sex: M ( ) F ( )
Age: ___
Race: White ( )
Black ( )
Hispanic ( )
Asian & Asian American ( )
American Indian ( )
Other ( )

Education: ___ High School Graduate
___ Bachelor’s Degree
concentration ________________________
___ Master’s Degree
field ________________________
___ Post-Master’s Study
number of hours beyond Master’s ___
___ Doctorate or Professional Degree
field ________________________

Years Employed in Current Position ___
Years Employed at Institution ______
Years Employed in Higher Education ___

*This information is optional and will be used solely for purposes of this study.
Appendix I.D

Cover Letter

The College Of

WILLIAM & MARY

School of Education

Williamsburg, Virginia 23185

The enclosed questionnaire, the Job Descriptive Index, is part of my doctoral dissertation at the College of William and Mary. The dissertation will address the function of support services middle management in higher education, including their roles and responsibilities, relationships with campus constituents, place within the administrative hierarchy, and changes in the position over the last twenty years.

Your response to this questionnaire is particularly important in determining current trends in job satisfaction and motivation for middle managers serving in support fields. The demographic data will aid in defining the composition of the middle management workforce in the state of Virginia. The enclosed instrument, the Job Descriptive Index, has received high validity and reliability ratings in assessing one's job situation, and takes only a few minutes to complete. The time required to finish the index and the questionnaire is about 15 minutes.

It will be appreciated if you will complete the enclosed forms prior to February 8, 1991 and return them in the self-addressed, stamped envelope enclosed. All responses made on these forms will be held in strictest confidence.

After the questionnaires have been returned, the data will be scrutinized and a summary of the information will be made available. I will be happy to send you a copy of the results if you desire. Thank you very much for your cooperation.

Sincerely,

Robert K. Seal

enclosures: Job Descriptive Index
Demographic Questionnaire
Appendix I.E

Do you wish to receive the results of this study? If so, please give your name and address below. To assure complete anonymity, please return this page under separate cover.

Name __________________________________________________________

Address ________________________________________________________
Appendix II
Appendix II.A

Respondents' Position Titles and Frequency of Occurrence

Academic and Instructional Support Director
Admissions Director (10)
Affirmative Action Coordinator
Athletics Director (4)
Auxiliary Services Assistant Vice-President
Bookstore Director/Manager (3)
Business Office Manager/Treasurer (2)
Career Services Director (9)
College Relations Director (4)
Computer Services Director (5)
Continuing Education and Extension Program Director (5)
Controller Associate
Counseling Center Director (4)
Data Processing Director
Development Director
Enrollment Management and Student Services Coordinator (2)
Financial Planning and Administrative Services Dean (4)
Housing Division Director
Human Resource Manager
Information Systems and Telecommunications Assistant Provost
Institutional Research/Studies and Planning Director (5)
Instructional Technology/Computing Assistant Vice-President
Management Systems and Resources Director
Appendix II.A (continued)

Respondents' Position Titles and Frequency of Occurrence

Media Services Director
Personnel Services Coordinator (2)
Public Relations Assistant Vice-President/Coordinator (4)
Publications Director (2)
Regional Programs Director
Registrar (7)
Residence Life Director/Associate Dean of Students (2)
Special Projects and College Events Director
Student Activities and Commuter Services Director
Student Affairs Vice President
Student Financial Aid Director (10)
Student Services Dean/Director (6)
Student Development Dean/Director (3)
University Advancement Assistant Vice-President

*For some smaller two-year colleges, one middle manager may serve in more than one capacity (i.e., Director of Admissions, Records, and Financial Aid).*
### Enrollment at Respondents' Institution of Employment

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<th>Headcount Enrollment</th>
<th>Frequency</th>
<th>Percent of Total</th>
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<td>Under 1,000</td>
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<td>1,000 - 2,500</td>
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<td>2,500 - 5,000</td>
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<tr>
<td>7,500 - 10,000</td>
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<td>7.7%</td>
</tr>
<tr>
<td>10,000 - 15,000</td>
<td>11</td>
<td>10.6%</td>
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<tr>
<td>Over 15,000</td>
<td>9</td>
<td>8.7%</td>
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**Note.** Distribution based on 104 responses.
Appendix II.C

Age of Respondents, by gender

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<th>Mean Age</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>Male</td>
<td>46.54</td>
<td>8.812</td>
<td>28</td>
<td>68</td>
</tr>
<tr>
<td>Female</td>
<td>42.13</td>
<td>7.192</td>
<td>30</td>
<td>59</td>
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<tr>
<td>All</td>
<td>45.13</td>
<td>8.547</td>
<td>28</td>
<td>68</td>
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Note. Age distribution based on 94 responses.
Appendix II.D

Number of Respondents, by gender and race

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<td>Female</td>
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<tr>
<td>All</td>
<td>92</td>
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Note. Distribution based on 101 responses.
Appendix II.E

Respondents by institutional type, gender, and race*  

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<th>Male Black</th>
<th>Female White</th>
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<td>23</td>
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<tr>
<td></td>
<td>30.6%</td>
<td>71.9%</td>
<td>9.4%</td>
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<td></td>
<td>37.0%</td>
<td>64.1%</td>
<td>0.0%</td>
<td>28.2%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Private³</td>
<td>35</td>
<td>15</td>
<td>2</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>32.4%</td>
<td>48.3%</td>
<td>64.5%</td>
<td>41.9%</td>
<td>3.2%</td>
</tr>
<tr>
<td>All Institutions</td>
<td>108</td>
<td>63</td>
<td>5</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>62.3%</td>
<td>5.0%</td>
<td>28.7%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

* There were no respondents identified as Hispanic, Asian and Asian American, American Indian, or Other.

² One respondent was not identified by race.

³ Four respondents were not identified by race.

⁴ Percentages reflect percentage of institutional type.
## Appendix II.F

**Educational Background of Respondents, by gender**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduate</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>5.8%</td>
<td>0.0%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>16.3%</td>
<td>15.9%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>34</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>32.7%</td>
<td>30.4%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Post-Master's Study</td>
<td>23</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>22.1%</td>
<td>23.2%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Doctorate/Professional</td>
<td>23</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>22.1%</td>
<td>29.0%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>68</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>67.3%</td>
<td>32.7%</td>
</tr>
</tbody>
</table>

- Percentages reflect percentage of total.
- One respondent was not identified by gender.
- Five respondents were not identified by education.
Appendix II.G

Academic Backgrounds of Respondents and Frequency of Occurrence

Doctorate in Higher Education/Educational Administration (12)
Master's of Business Administration (10)
Bachelor's of Business Administration (8)
Master's in Education (5)
Master's in Counseling (5)
Master's in English (4)
Master's in Higher Education (3)
Master's in Recreational Administration (3)
Doctorate in Counseling (2)
Master's in Public Administration (2)
Master's in Mathematical Science (2)
Master's in College Student Personnel Administration (2)
Bachelor's in English Literature (2)
Master's in History (2)
Bachelor's in Journalism
Master's in Industrial and Organizational Psychology
Master's in Media Management
Bachelor's in Classics
Doctorate in Experimental Psychology
Doctorate in Geology
Juris Doctorate
Doctorate in Economics
Appendix II.G (continued)

**Academic Backgrounds of Respondents and Frequency of Occurrence**

- Doctorate in Animal Science and Biochemistry
- Master's in Public Relations
- Doctorate in Child Development and Family Relations
- Doctorate in Psychology
- Bachelor's in Public Administration
- Bachelor's in Biology
- Doctorate in Classics
- Doctorate in Mathematical Education
- Master's in Social Work
- Master's in Religion
- Bachelor's in Sociology
## Employment History, by gender

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years employed...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in current position</td>
<td>7.36</td>
<td>6.35</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>at institution</td>
<td>10.84</td>
<td>7.81</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>in higher education</td>
<td>15.71</td>
<td>7.83</td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years employed...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in current position</td>
<td>5.70</td>
<td>4.60</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>at institution</td>
<td>8.50</td>
<td>8.18</td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>in higher education</td>
<td>12.42</td>
<td>6.56</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years employed...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in current position</td>
<td>6.75</td>
<td>5.84</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>at institution</td>
<td>9.96</td>
<td>7.93</td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>in higher education</td>
<td>14.54</td>
<td>7.59</td>
<td>1</td>
<td>35</td>
</tr>
</tbody>
</table>

Note. Data for males based on 63 responses; for females based on 31 responses; and all based on 94 responses.
Appendix II.I

**Number of Employees Supervised by Respondents, by gender**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18.61</td>
<td>46.405*</td>
<td>0</td>
<td>350</td>
</tr>
<tr>
<td>Female</td>
<td>7.41</td>
<td>9.380</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>All</td>
<td>17.02</td>
<td>43.898*</td>
<td>0</td>
<td>350</td>
</tr>
</tbody>
</table>

*Because one respondent supervised 350 employees (which was considerably greater than the other respondents), the standard deviation is positively skewed.*
Appendix II.J

Age, employment history, and number of employees supervised:
Using the Wilks Multivariate Test of Significance, by enrollment

<table>
<thead>
<tr>
<th>Approximate</th>
<th>Degrees of Freedom</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.98913</td>
<td>5.00</td>
<td>86.00</td>
<td>.966</td>
</tr>
</tbody>
</table>
Appendix II.K

Age, employment history, and number of employees supervised:

Using the Wilks Multivariate Test of Significance, by type of institution

<table>
<thead>
<tr>
<th>Approximate F</th>
<th>Degrees of Freedom</th>
<th>Degrees of Error</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.90382</td>
<td>10.00</td>
<td>174.00</td>
<td>.532</td>
</tr>
</tbody>
</table>
### Appendix II.L

**Scores on the Job Descriptive Index - All Respondents**

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Standard Deviation</th>
<th>25</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work on present job</td>
<td>40.00</td>
<td>7.51</td>
<td>35.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Present pay</td>
<td>32.00</td>
<td>14.24</td>
<td>20.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>17.00</td>
<td>13.35</td>
<td>8.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Supervision</td>
<td>42.76</td>
<td>11.76</td>
<td>36.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Coworkers</td>
<td>42.19</td>
<td>11.66</td>
<td>36.3</td>
<td>51.0</td>
</tr>
<tr>
<td>Job in general</td>
<td>45.65</td>
<td>8.19</td>
<td>43.0</td>
<td>51.0</td>
</tr>
</tbody>
</table>

**Note.** Total possible points for each scale is 54.
Appendix II.M

Scores on the Job Descriptive Index, by gender

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Deviation</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>40.00</td>
<td>7.02</td>
</tr>
<tr>
<td>Present pay</td>
<td>36.00</td>
<td>14.12</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>18.00</td>
<td>13.60</td>
</tr>
<tr>
<td>Supervision</td>
<td>48.00</td>
<td>10.60</td>
</tr>
<tr>
<td>Coworkers</td>
<td>45.00</td>
<td>10.18</td>
</tr>
<tr>
<td>Job in general</td>
<td>48.00</td>
<td>5.81</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>37.50</td>
<td>7.74</td>
</tr>
<tr>
<td>Present pay</td>
<td>29.00</td>
<td>14.29</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>12.00</td>
<td>12.01</td>
</tr>
<tr>
<td>Supervision</td>
<td>43.00</td>
<td>12.77</td>
</tr>
<tr>
<td>Coworkers</td>
<td>43.00</td>
<td>13.76</td>
</tr>
<tr>
<td>Job in general</td>
<td>45.00</td>
<td>11.27</td>
</tr>
</tbody>
</table>

Note. For males, n=69; for females, n=33. Total possible points for each scale is 54.
Appendix II.N

Scores on the JDI and JIG: Using the Wilks Multivariate Test of Significance, by gender

<table>
<thead>
<tr>
<th>Exact F</th>
<th>Degrees of Freedom</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
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<tbody>
<tr>
<td>1.71317</td>
<td>6.00</td>
<td>87.00</td>
<td>.127</td>
</tr>
</tbody>
</table>
### Scores on the Job Descriptive Index, by education

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Deviation</td>
</tr>
<tr>
<td><strong>11-12 Years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>42.00</td>
<td>7.99</td>
</tr>
<tr>
<td>Present pay</td>
<td>30.00</td>
<td>13.25</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>28.00</td>
<td>17.24</td>
</tr>
<tr>
<td>Supervision</td>
<td>45.00</td>
<td>10.61</td>
</tr>
<tr>
<td>Coworkers</td>
<td>49.00</td>
<td>6.62</td>
</tr>
<tr>
<td>Job in general</td>
<td>48.00</td>
<td>4.71</td>
</tr>
<tr>
<td><strong>15-16 Years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>40.00</td>
<td>7.87</td>
</tr>
<tr>
<td>Present pay</td>
<td>34.00</td>
<td>13.30</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>18.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Supervision</td>
<td>51.00</td>
<td>11.87</td>
</tr>
<tr>
<td>Coworkers</td>
<td>47.00</td>
<td>11.48</td>
</tr>
<tr>
<td>Job in general</td>
<td>47.00</td>
<td>5.32</td>
</tr>
</tbody>
</table>

Note. For 11-12 years, n=6; for 15-16 years, n=17. Total possible points for each scale is 54.
Appendix II.O (continued)

**Scores on the Job Descriptive Index, by education**

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Deviation</td>
</tr>
<tr>
<td>17 Years or More</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>40.00</td>
<td>7.46</td>
</tr>
<tr>
<td>Present pay</td>
<td>32.00</td>
<td>14.71</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>14.00</td>
<td>12.93</td>
</tr>
<tr>
<td>Supervision</td>
<td>46.00</td>
<td>11.86</td>
</tr>
<tr>
<td>Coworkers</td>
<td>45.00</td>
<td>12.05</td>
</tr>
<tr>
<td>Job in general</td>
<td>46.50</td>
<td>8.87</td>
</tr>
</tbody>
</table>

*Note. n=81. Total possible points for each scale is 54.*
Appendix II.P

Scores on the JDI and JIG: Using the Wilks Multivariate Test of Significance, by educational level

<table>
<thead>
<tr>
<th>Approximate F</th>
<th>Degrees of Freedom</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.62951</td>
<td>24.00</td>
<td>294.25</td>
<td>.912</td>
</tr>
</tbody>
</table>
Appendix II.Q

Scores on the Job Descriptive Index, by job tenure

<table>
<thead>
<tr>
<th></th>
<th>Standard Median</th>
<th>Standard Deviation</th>
<th>Percentiles 25</th>
<th>Percentiles 75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-3 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>40.00</td>
<td>7.57</td>
<td>33.8</td>
<td>45.0</td>
</tr>
<tr>
<td>Present pay</td>
<td>30.00</td>
<td>16.23</td>
<td>18.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>18.00</td>
<td>13.62</td>
<td>7.5</td>
<td>26.5</td>
</tr>
<tr>
<td>Supervision</td>
<td>48.00</td>
<td>12.16</td>
<td>37.5</td>
<td>54.0</td>
</tr>
<tr>
<td>Coworkers</td>
<td>45.00</td>
<td>11.43</td>
<td>36.0</td>
<td>50.8</td>
</tr>
<tr>
<td>Job in general</td>
<td>48.00</td>
<td>8.44</td>
<td>43.8</td>
<td>52.5</td>
</tr>
</tbody>
</table>

|                          |                 |                    |               |               |
| 4-6 Years                |                 |                    |               |               |
| Work on present job     | 39.50           | 6.73               | 36.0          | 42.8          |
| Present pay              | 33.00           | 12.45              | 24.0          | 44.5          |
| Opportunities for promotion | 13.00         | 14.55              | 5.5           | 20.0          |
| Supervision              | 46.00           | 12.01              | 35.0          | 51.0          |
| Coworkers                | 44.00           | 10.94              | 35.5          | 50.3          |
| Job in general           | 45.00           | 9.87               | 39.0          | 48.3          |

Note. For 0-3 years, n=38; for 4-6 years, n=30. Total possible points for each scale is 54.
Appendix II.Q (continued)

Scores on the Job Descriptive Index, by job tenure

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Deviation</td>
</tr>
<tr>
<td>7-9 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>42.00</td>
<td>10.03</td>
</tr>
<tr>
<td>Present pay</td>
<td>32.00</td>
<td>13.58</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>18.00</td>
<td>9.91</td>
</tr>
<tr>
<td>Supervision</td>
<td>45.00</td>
<td>9.33</td>
</tr>
<tr>
<td>Coworkers</td>
<td>45.00</td>
<td>12.12</td>
</tr>
<tr>
<td>Job in general</td>
<td>47.00</td>
<td>8.19</td>
</tr>
<tr>
<td>10-15 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>38.00</td>
<td>7.09</td>
</tr>
<tr>
<td>Present pay</td>
<td>27.00</td>
<td>11.55</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>12.00</td>
<td>11.15</td>
</tr>
<tr>
<td>Supervision</td>
<td>48.00</td>
<td>12.87</td>
</tr>
<tr>
<td>Coworkers</td>
<td>54.00</td>
<td>14.09</td>
</tr>
<tr>
<td>Job in general</td>
<td>45.50</td>
<td>4.89</td>
</tr>
</tbody>
</table>

Note. For 7-9 years, n=13; for 10-15 years, n=10. Total possible points for each scale is 54.
Appendix II.Q (continued)

Scores on the Job Descriptive Index, by job tenure

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Deviation</th>
<th>25</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Years or More</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work on present job</td>
<td>45.50</td>
<td>6.76</td>
<td>36.3</td>
<td>47.8</td>
</tr>
<tr>
<td>Present pay</td>
<td>43.00</td>
<td>13.44</td>
<td>31.5</td>
<td>47.5</td>
</tr>
<tr>
<td>Opportunities for promotion</td>
<td>22.00</td>
<td>13.31</td>
<td>10.5</td>
<td>30.0</td>
</tr>
<tr>
<td>Supervision</td>
<td>51.00</td>
<td>13.14</td>
<td>43.5</td>
<td>51.8</td>
</tr>
<tr>
<td>Coworkers</td>
<td>47.00</td>
<td>14.00</td>
<td>42.8</td>
<td>51.3</td>
</tr>
<tr>
<td>Job in general</td>
<td>49.00</td>
<td>4.36</td>
<td>43.5</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Note. n=12. Total possible points for each scale is 54.
### Appendix II.R

**Scores on the JDI and JIG: Using the Wilks Multivariate Test of Significance, by years of tenure**

<table>
<thead>
<tr>
<th>Approximate F</th>
<th>Degrees of Freedom</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.83435</td>
<td>24.00</td>
<td>297.74</td>
<td>.887</td>
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Appendix III
Appendix III.A JDI Summary Graph: Men

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Legend:
- **Median Score for Norm Group**
- **Scores for Norm Group Between the 25th and 75th Percentiles**
- **** Median Score from Sample Data
Appendix III.B JDI Summary Graph: Women
Appendix III.C JDI Summary Graph: 11-12 Years Education
Appendix III.E JDI Summary Graph: 17 or More Years Education

- JDI: Work itself
- JDI: Pay
- JDI: Opportunities for Promotion
- JDI: Supervision
- JDI: People on Your Present Job (Co-Workers)

- Median Score for Norm Group
- Scores for Norm Group Between the 25th and 75th Percentiles
- ***** Median Score from Sample Data
Appendix III.F  

JDI Summary Graph: 0-3 Years Job Tenure

- Median Score for Norm Group
- Scores for Norm Group Between the 25th and 75th Percentiles
- Median Score from Sample Data
Appendix III.G JDI Summary Graph: 4-6 Years Job Tenure

- JDI: Work Itself
- JDI: Pay
- JDI: Opportunities for Promotion
- JDI: Supervision
- JDI: People on Your Present Job (Co-Workers)

- Median Score for Norm Group
- Scores for Norm Group Between the 25th and 75th Percentiles
- Median Score from Sample Data
Appendix III.H JDI Summary Graph: 7-9 Years Job Tenure
Appendix III.I JDI Summary Graph: 10-15 Years Job Tenure

- Median Score for Norm Group
- Scores for Norm Group Between the 25th and 75th Percentiles
- Median Score from Sample Data
Appendix III.J JDI Summary Graph: >16 Years Job Tenure

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Median Score for Norm Group

Scores for Norm Group Between the 25th and 75th Percentiles

Median Score from Sample Data
Bibliography


Vita

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