

ABSTRACT

ADMINISTRATIVE OFFICE MANAGERS' UTILIZATION OF PARTICIPATIVE MANAGEMENT IN SUPERVISING OFFICE EMPLOYEES

By

Zane Keith Quible

This study was an analysis of the role that administrative office managers perceive for the utilization of participative management in supervising office employees. The primary purpose for undertaking the study was to enable business educators to develop instructional programs in light of current practices found in the business world.

Procedures

This study involved sending questionnaires to 250 administrative office managers employed in companies dually listed in the 1971 Fortune magazine 1,000 list and the 1971 College Placement Annual. The questionnaires consisted of two parts. Part I sought information from the administrative office managers concerning their sex, age, number of years in present position, number of subordinates, level of education, major area of specialization in college, military experience, military officer experience, and nature of office work experience. Part II consisted of a checklist on which the administrative office managers were asked to indicate the extent (always, often, sometimes, seldom, never) to which they utilize employee participation in 27 selected managerial activities in the planning, organizing, staffing, directing, and controlling functions. Chi-square test of independence was used to determine the level of significance

of the relationships between the items in Parts I and II of the questionnaire.

Conclusions

The following conclusions are based on the findings of the analysis of data:

1. Sex may have an effect on the extent to which administrative office managers utilize participative management in supervising office employees. On the basis of this study, the conclusive statement cannot be made that males tend to allow more participation than do females since only a few females were involved in the study.

2. Age apparently has an effect on the extent to which administrative office managers utilize participative management in supervising office employees. The older administrative office managers tend to allow more participation than do the younger administrative office managers.

3. The number of years that administrative office managers have been in their present positions apparently has little effect on the extent to which participative management is utilized in supervising office employees. In only two instances were there significant relationships between number of years in present position and the 27 selected managerial activities.

4. The analysis of data indicated that supervisory experience apparently has little effect on the extent to which administrative office managers utilize participative management in supervising office employees. The basis for this particular conclusion is the lack of extensive relationships between supervisory experience and the activities.

5. Having little effect on the extent to which administrative office managers utilize participative management in supervising office employees is clerical office experience. Only one significant relationship was found between clerical office experience and the managerial activities. Because of the lack of significant relationships, conclusive statements cannot be made as to the effect of clerical office experience on the managerial activities.

6. General office experience of administrative office managers apparently does not have an effect on the extent to which they utilize participative management in supervising office employees. Only one significant relationship was found; hence, the inconclusiveness of the effect of general office experience on the 27 managerial activities.

7. Other office experience apparently has an effect on the extent to which administrative office managers utilize participative management in supervising office employees. Generally speaking, as the years of other office experience increases, the amount of participation utilized decreases.

8. The number of subordinates supervised by administrative office managers may have an effect on the degree to which they utilize participative management in supervising office employees. This study found the larger the number of subordinates, the greater is the likelihood that participative management will be utilized by administrative office managers.

9. The level of education has very little effect on the extent to which administrative office managers use participative management in supervising office employees. Only one significant relationship was found to exist between level of education and the extent to which

participative management is utilized in the 27 selected managerial activities; therefore, no conclusive statement as to the effect can be made.

10. The college majors of the administrative office managers apparently have little effect in determining the extent to which they utilize participative management in supervising office employees. Since only two significant relationships were found to exist between the college major and the extent to which participative management is utilized in each of the 27 managerial activities, a conclusive statement cannot be made as to the effect of the college major.

11. The nature of military experience does affect the extent to which administrative office managers utilize participative management in supervising office employees. Generally, as the years of military experience of the respondents increases, the amount of participation utilized also increases.

12. Having served as an officer in the military does affect the extent to which administrative office managers utilize participative management in supervising office employees. The data analysis indicated that administrative office managers with military officer experience tend to utilize less participation in supervising office employees than do those with no military officer experience.

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Chapter 1

INTRODUCTION

How can the modern manager in business have a "democratic relationship" with his subordinates and at the same time be able to maintain the necessary organizational authority and control? This question is being asked with increasing frequency by modern managers in the business world.

The problems associated with this question are becoming more evident in that the recognized role of the manager has changed significantly during this century. Earlier in the century, the successful manager was generally pictured as "possessing intelligence, imagination, initiative; having the capacity to make rapid (and generally wise) decisions; and having the ability to inspire subordinates."¹ In the past, people tended to think of the world as being divided into leaders and followers.

More recently, social scientists have held the conviction that management which focuses on members of a group is more effective than management which focuses primarily on the leader of that group. The research of these social scientists emphasizes the importance of employees' involvement and employees' participation in decision making.

Furthermore, in recent years, a substantial portion of industrial-social psychology has focused on a managerial control system which many social scientists consider to be more adaptable to changing

social and economic environments. Among the reasons cited for the new managerial control system are as follows: staff and professional people replacing production workers; a better educated work force; more group activity replacing individual activity; and constant change in technological and social environments.² These new systems provide for more adaptability and a greater amount of utilization of the organization's personnel. According to Anthony,³ the discipline underlying many of these systems is primarily psychological, but the testing of the systems includes economic measures.

Social scientists have also claimed that this new management control system is more congruent with principles underlying modern organizational theory. Researchers and theorists have employed various terms in referring to this "system"--including participative management or decision-making, democratic leadership, multiple-management, management by objectives, Theory Y, and employee-centered leadership. This "system" has not been well defined but has been polemically endorsed by some of the more articulate and influential social scientists, including Likert, Argyris, and McGregor.

STATEMENT OF PROBLEM

The problem associated with this study was to analyze the role that administrative office managers perceive for the utilization of participative management in supervising office employees. An attempt was made to answer the following questions:

1. To what extent is participative management utilized by administrative office managers in each of the activities in the

planning, organizing, staffing, directing, and controlling functions?

A. Planning

1. Writing short-term departmental objectives
2. Evaluating existing resources necessary to achieve departmental objectives
3. Writing long-term departmental objectives
4. Identifying primary duties of jobs that must be performed

B. Organizing

1. Developing lines of communication within department
2. Defining relationships among jobs in department
3. Defining lines of authority within department
4. Defining responsibilities of subordinates in department
5. Developing efficient methods and procedures for office work

C. Staffing

1. Recruiting candidates for positions in department
2. Preparing descriptions of various departmental jobs
3. Orienting new employees in department
4. Appraising candidates for positions in department
5. Training new subordinates in department
6. Selecting candidates for positions in department

D. Directing

1. Formulating personnel policies necessary to maintain desirable level of morale
2. Establishing procedures for uniformity of work
3. Preparing directives for accomplishment of departmental objectives
4. Supervising subordinates in department
5. Making accurate measurement of work through development of systematic procedures

E. Controlling

1. Determining whether objectives are being achieved
2. Preparing office manuals for departmental employees
3. Formulating standards of performance based on goals, policies, programs, budgets
4. Adopting means of reviewing operations to check if expected results are obtained
5. Taking corrective action if there is a failure to achieve objectives
6. Writing departmental policies for employees
7. Measuring performance of departmental subordinates

2. How do the nine characteristics of administrative office managers listed below affect the degree to which administrative office managers seek employee participation in the 27 selected managerial activities and the five managerial functions?

- A. Sex
- B. Age
- C. Length of time in present position
- D. Number of subordinates
- E. Level of educational attainment
- F. College major or area of specialization
- G. Military experience
- H. Military officer experience
- I. Nature of office work experience, including number of years of supervisory, clerical, general, and other office work

PURPOSE OF STUDY

The primary purpose for undertaking this study was to enable business educators to develop instructional programs in light of current practices found in the business world. More specifically, it was anticipated that the study would assist educators in developing programs to enable students to adjust more quickly and easily to the world of work.

Another purpose for the study was to enable administrative office managers to evaluate, and modify if necessary, their current managerial practices and techniques. The findings may also enable administrative office managers to supervise employees in light of current managerial trends.

The study would also enable educators to determine to what extent teaching materials will need to be developed to help train students to succeed in participative work conditions.

HYPOTHESES

The following are the research hypotheses for this study:

1. There is a significant relationship between the sex of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

2. There is a significant relationship between the age of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

3. There is a significant relationship between the length of time the administrative office manager has been employed in his present position and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

4. There is a significant relationship between the number of subordinates that the administrative office manager supervises and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

5. There is a significant relationship between the educational attainment of the administrative office manager and the extent to

which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

6. There is a significant relationship between the college major or area of specialization of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

7. There is a significant relationship between the military experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

8. There is a significant relationship between the military officer experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

9. There is a significant relationship between the number of years of office work experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

For purposes of statistical analysis, these hypotheses will be tested in the null form.

NEED FOR THE STUDY

Educational institutions are frequently criticized because their instructional programs are not sufficiently responsive to the needs of the business world. Another criticism frequently leveled against educational institutions is the inadequacy of the instructional programs to prepare students for the business world. This study is being undertaken in an attempt to determine to what extent administrative office managers utilize participative management in supervising office employees. The results will be used to make instructional programs more relevant and more responsive to the needs of the business world.

If the analysis of the primary research indicates that participative management techniques are being used to a considerable extent in the business world, the recommendation will then be made that future office employees be taught to work and to succeed in a participative atmosphere. Furthermore, potential office employees will need more exposure to important elements of the participative management concept--especially, the decision-making processes.

In addition, if the research indicates that there is a trend toward utilizing participative management techniques, future administrative office managers will also need more educational exposure and training in the techniques of participative management.

The results of the study, consequently, could have educational implications for secondary education, post-secondary education, and collegiate levels of education.

DELIMITATIONS OF THE PROBLEM

The following are delimitations of this study:

1. Delimitations as to managerial activities. This study involves 27 selected activities; no attempt is made to determine the relative importance of the selected managerial activities.
2. Delimitations as to managerial functions. This study involves five managerial functions. No attempt is made to determine the relative importance of the selected functions.
3. Delimitations as to characteristics of administrative office managers. The study is concerned with nine specific characteristics of administrative office managers. Determining the relative importance of these characteristics is not an intended purpose of this study.

DEFINITIONS

The following definitions are appropriate for this study:

1. Participative management refers to an individual's mental and emotional involvement within a group situation which creates a desire for the individual to contribute to group goals and then to accept the responsibilities for these goals.
2. Administrative office manager refers to the individual in charge of planning, organizing, and controlling the office activities, of staffing the office, and of directing the staff to achieve the objectives of the business firm.

OPERATIONAL DEFINITIONS OF THE VARIABLES

The design of this study has five dependent variables and nine independent variables.

The dependent variables are the five different managerial functions--planning, organizing, staffing, directing, and controlling.

The independent variables are:

1. Sex--operationally defined as male or female.
2. Age--operationally defined as the age (in terms of years) of the administrative office manager.
3. Length of time in present position--operationally defined as the number of years in present position.
4. Number of subordinates--operationally defined as the number of subordinates supervised by the administrative office manager.
5. Educational preparation--operationally defined as the number of years of school of the administrative office manager.
6. College major--operationally defined as the nature of the declared major of each administrative office manager.
7. Military experience--operationally defined as the number of years that the administrative office manager has served in the military.
8. Military officer experience--operationally defined as to whether or not each administrative office manager has officer rank in the military.
9. Office work experience--operationally defined as the number of years that the administrative office manager has worked in an office.

ASSUMPTIONS OF THE STUDY

The following assumptions were established for the purpose of the study:

1. That major companies in the United States do employ an individual with the title of administrative office manager or an individual who performs the functions of an administrative office manager.
2. That the findings of the study will determine if potential office employees should be given more attention to working within a participative atmosphere.
3. That if more attention needs to be given to the participative management concept, educational institutions will be responsive to the needs of the business world.

ORGANIZATION OF THE STUDY

The organization of the study is as follows:

Chapter 1--An introduction to the study.

Chapter 2--A review of literature concerned with the problem under investigation.

Chapter 3--The development and use of the instrument utilized in gathering the data, the methodology employed in collecting and analyzing the data, and the statistical analysis used.

Chapter 4--An analysis of the data compiled from the questionnaires returned by the respondents.

Chapter 5--A summary of findings, conclusions, and recommendations.

FOOTNOTES

1. Robert A. Sutermeister, People and Productivity (New York: McGraw-Hill Book Company, 1963) p. 426.
2. Timothy L. Ross, "The Accountants's Role in Participative Decision-Making," (unpublished Doctoral dissertation, Michigan State University, 1969), p. 1.
3. R. N. Anthony, Planning and Control Systems: A Framework for Analysis (Boston: Harvard University Press, 1965) p. 45.

Chapter 2

REVIEW OF LITERATURE

The function of management, according to H. Lawrence Hall, is a continuing social and economic phenomenon. Over the years, styles of management have changed in accordance with changes in social and economic structures.¹

A considerable amount of recent industrial-social psychology is concerned with a management control system considered by many social scientists to be consistent with changing social and economic environments and with principles underlying modern organizational theory.

A detailed examination follows of several managerial concepts and styles which have evolved as a result of changes in social and economic structures. The basic organizational structure of this chapter begins with an examination of Herzberg's "Job Satisfiers" and "Job Dissatisfiers." Many of the components of this theory provide a foundation for the concept of participative management. Secondly, Maslow's "Hierarchy of Needs" is discussed. Many of the basic tenets of Maslow's theory are also consistent with the concept of participative management. Herzberg's and Maslow's theories provide a basic framework in which a philosophy of participative management can be built.

A discussion is also provided of several managerial concepts and styles within the managerial continuum that have participative

qualities. The fourth section is concerned with a thorough examination of the concept of participative management.

The basic aim of Chapter 2 is to synthesize literature that substantiates the claims made for and against participative management.

HERZBERG'S JOB SATISFIERS AND JOB DISSATISFIERS

Because of the relationship between Herzberg's concept and participative management, the concept is being included in this chapter. This concept identifies factors which lead to one's satisfaction and/or dissatisfaction with his job.

Herzberg's Job Satisfier and Job Dissatisfier concept is concerned with the motivation of employees. At one end of the continuum are those factors, which, if not present, can cause job dissatisfaction. These are labeled as hygiene factors. At the other end of the continuum are those factors, which, if present, can actually lead to positive attitudes and motivation. If these factors are not present, the result is a lack of positive attitudes.² These are called motivational factors.

According to Scanlan,

The hygiene factors (those that can cause or prevent dissatisfaction) include such things as wages, fringe benefits, physical working conditions, and overall company policy and administration. When these things are adequately taken care of, dissatisfaction will disappear, and more important, no positive attitudes and motivation result. Thus, the hygiene factors are preventive. They can prevent dissatisfaction but do not act as personal incentives which motivate people to high degrees of productivity.³

Job dissatisfaction is apparently associated with the conditions that surround a job rather than just the job itself. Job

dissatisfaction is also apparently related to the context of the job as opposed to the content of the job.

Deleterious factors in the context of the job can result in poor job attitudes. An improvement in the hygiene factors, however, can remove the barriers to positive job attitudes. If these hygiene factors then deteriorate to a level below that which employees consider to be minimum, job dissatisfaction (and poor job attitudes) can result. On the other hand, when the job context is considered to be optimal, employees may not have job dissatisfaction, nor may they have much in the way of positive job attitudes.⁴

According to Sutermeister, many rank-and-file jobs and jobs at managerial levels in modern industry are automatized, routine, and monotonous. Since these jobs offer little in the way of achievement and responsibility (motivational factors), there is a greater need for the presence of hygiene factors to make the job tolerable.⁵

Scanlan says the following about motivational factors:

The motivational factors (those that actually lead to the development of positive attitudes, motivate, and act as individual incentives) include such things as recognition, feelings of accomplishment and achievement, opportunity for advancement and potential for personal growth, responsibility, a sense of job and individual importance, new experiences, and challenging work.⁶

The motivational factors (those that lead to positive job attitudes) satisfy to a great extent the employees' needs for self-actualization in their work. The conditions that surround the context of the job, therefore, do not have the potential of satisfying the self-actualization needs of the employees. This function has to come from the content of the job.

Sutermeister says,

It should be understood that both kinds of factors meet the needs of the employee; but it is primarily the 'motivators' that serve to bring about the kind of job satisfaction and. . . the kind of improvement in performance that industry is seeking from its work force.⁸

Figure 1 shown on the next page illustrates those factors which tend to be satisfiers and those which tend to be dissatisfiers. The length of each box in the diagram represents the frequency with which each factor occurs, and the width of the box indicates the duration of time that the good or bad job attitude lasts, in terms of short or long duration. Those boxes with cross-hatching represent factors in which short duration is greater than long duration.

Figure 1 shows that five factors stand out as high determiners of job satisfaction: achievement, recognition, work itself, responsibility, and advancement. The last three are of greater importance because of longer duration. The concept of "job satisfaction" ties in with the concept of participative management in the following way: Participative management is predicated on employers giving employees more "recognition" and more "responsibility"--these being two determiners of high job satisfaction.

The job dissatisfiers (those concerned with job context) are: the nature of company's policies and administrative practices under which the job is performed, the type of supervision received when doing the job, the quality of the working conditions under which the job is done, and the salary received for doing the job.

In summarizing the concept of job satisfaction and job dissatisfaction, it can be said that "The factors which make people happy on

the job are not the same factors that make people unhappy on the job."⁹ The content and the context of the job also have much to do with one's satisfaction and/or dissatisfaction.

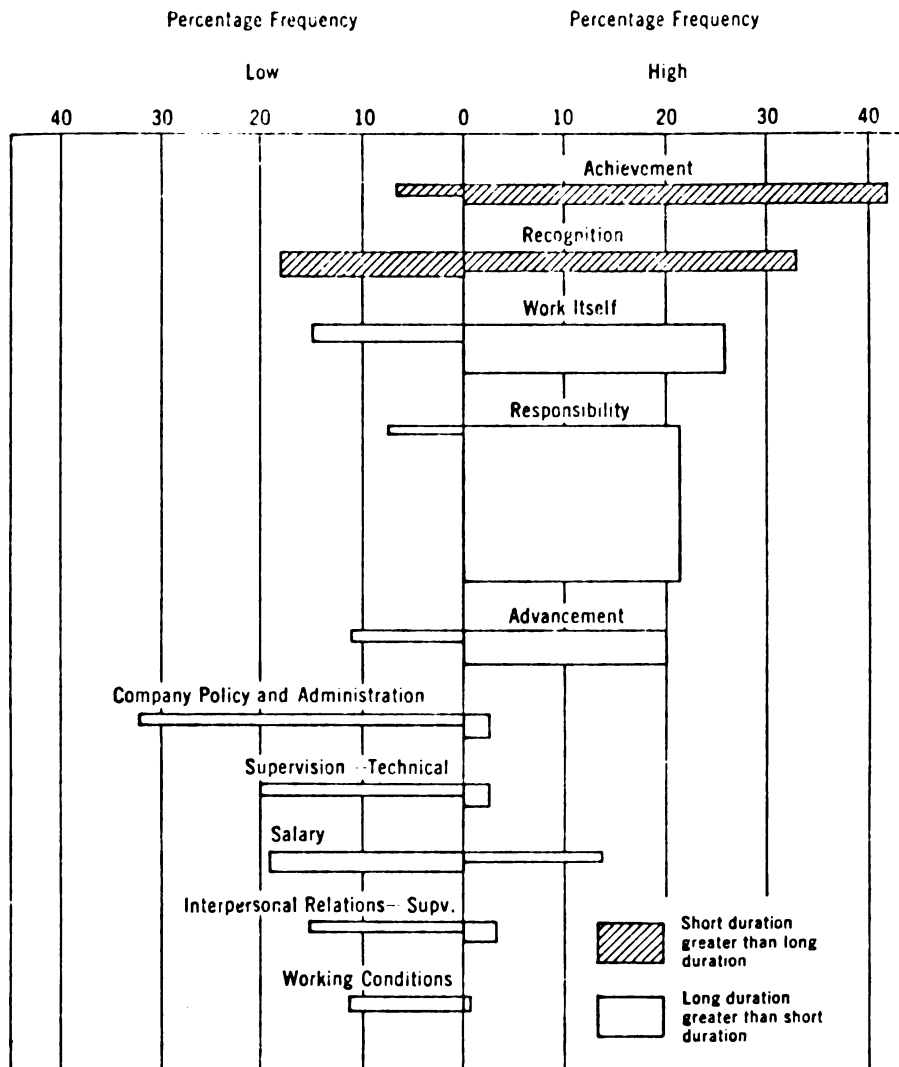


Figure 1: Comparison of Satisfiers and Dissatisfiers.

Source: Wadia, Management and the Behavioral Sciences, p. 301.

MASLOW'S HIERARCHY OF NEEDS

In his hierarchy of needs, Maslow identifies the following:

1. Physiological Needs. This category includes the needs of the body, including hunger, shelter, sex, and thirst. This is man's strong drive toward self-preservation.
2. Security Needs. The security needs of many include physical and economic factors.
3. Social Needs. Man's social needs include the desire for a feeling of belonging, the desire for a feeling of acceptance into a group, and a desire for a feeling of being an integral and important part of the operation.
4. Psychological Needs. Man's psychological needs involve the ego; status, recognition, prestige, and a high estimate of one's self are important factors.
5. Self-fulfillment Needs. This category involves a feeling of job importance, accomplishment and achievement, responsibility advancement, new experiences, challenging work, and growth opportunity.¹⁰

The hierarchy of needs and participative management are inter-related in that participative management provides employees "a feeling of being an integral and important part of the operation," "recognition," "a feeling of job importance," "accomplishment," "achievement," and "responsibility."

Sutcliffe states that most individuals have their highest degree of need satisfaction at the lower need levels. It has been found that average individuals are 85 percent satisfied in their

physiological needs, 70 percent satisfied in their safety or security needs, 50 percent satisfied in belonging or social needs, 40 percent satisfied in their egotistic or psychological needs, and only ten percent satisfied in their self-fulfillment needs.¹¹

The hierarchy of needs concept is significant in that the following statements are appropriate:

1. The most basic and the most strategic motivators of on-the-job behavior are the physiological and security needs.
2. Once the lower-level needs are satisfied, they take on less significance as motivators.
3. No two people are alike and, therefore, needs vary in type and intensity from individual to individual.
4. Usually the social, psychological, and in some cases, the self-fulfillment needs are not outwardly expressed, at least in a direct sense.¹²

Figure 2 shows in what ways Maslow's Hierarchy of Needs and Herzberg's Job Satisfiers and Job Dissatisfiers can be compared to identify significant relationships between the two concepts.

According to Davis, "Maslow centers on human needs of the psychological person at work or anywhere else. Herzberg focuses on the same person in terms of how job conditions affect his basic needs."¹³ Scanlan believes that the hygiene (maintenance) factors satisfy the physiological, security, and social needs, while the motivational factors are concerned with the psychological and self-fulfillment needs.¹⁴

It is generally agreed that when a need becomes satisfied, it generally ceases to function as a motivator of behavior. For most people, the lower-level needs, being more completely satisfied, do not motivate people as much as the higher-level needs. Davis

says that lower-level needs "are merely necessary for the worker's maintenance at his current level of progress."¹⁵

Maslow's need-priority model		Herzberg's motivation-maintenance model	
Self-realization and fulfillment	Motivational factors	Work itself Achievement Possibility of growth Responsibility	Overlapping Items
Esteem and status		Advancement Recognition	
Belonging and social activity	Maintenance factors	Status Interpersonal relations- supervision peers subordinates	
Safety and security		Supervision-technical Company policy and administration Job security	
Physiological needs		Working Conditions	
		Salary Personal life	

Figure 2: A Comparison of Maslow's Need-Priority Model with Herzberg's Motivation-Maintenance Model.

Source: Davis, Human Relations at Work, 3rd Ed., p. 36.

Herzberg's and Maslow's concepts are especially pertinent in discussing the topic of participative management since many of the factors involved in these two concepts (recognition, responsibility, a feeling of being an integral and important part of the operation, a feeling of job importance, accomplishment, and achievement) are frequently cited as advantages of employing participative management.

THE MANAGERIAL CONTINUUM

Theoretically, management styles can be completely authoritarian, can be completely democratic, or can be any degree between these two extremes. This section examines the managerial continuum through an analysis of Theory X and Theory Y, the Leadership Pattern, Mechanistic vs. Organic Organization, and Leadership Behavior.

Theory X and Theory Y

The concept of Theory X and Theory Y was originated by Douglas McGregor. Theory X is a less democratic process, whereas Theory Y is more democratic.

Darr states that Theory X is based on the following assumptions:

1. Management is responsible for organizing the elements of productive enterprise--money, materials, equipment, people--in the interest of economic ends.
2. With respect of people, this is a process directing their efforts, motivating them, controlling their actions, modifying their behavior, to fit the needs of the organization.
3. Without this active intervention by management, people would be passive--even resistant to organization needs. They must therefore be persuaded, rewarded, punished, controlled--their tasks must be directed. This is management's task--in managing subordinate managers or workers, we often sum it up by saying that management consists of getting things done through people.
4. The average man is indolent--he works as little as possible.
5. He lacks ambition, dislikes responsibility, prefers to be led.
6. He is inherently self-centered, indifferent on organizational needs.
7. He is by nature resistant to change.

8. He is gullible, not very bright, the ready dupe of the charlatan and the demagogue.¹⁶

Under Theory X organization, the role of the individual employee is reduced to that of a "cog in a machine."¹⁷ For the employee to exert the amount of effort needed to achieve organizational objectives, he has to be coerced, directed, and controlled. His function is to perform his present job, and he is given little incentive for self-development or advancement.

In organizations that are strictly Theory X oriented, employees are considered by managers to be "'economic men,' responding primarily to money rewards and requiring prodding by a strong-willed manager."¹⁸

It is the opinion of Darr that any form of organization that controls employees as if they are irresponsible, self-centered, and indifferent is likely to encourage them to act that way.¹⁹ This, then, is offered as a weakness of Theory X. Another weakness of Theory X is the assumption that a certain set of behavioral characteristics is common to all employees.²⁰

Theory X is the traditional or classical approach or organizational structure. Because of its nature, Theory X results in a work-centered organization. Theory Y, on the other hand, is employee centered in its organizational structure. Sisk has the following to say concerning Theory Y: "Theory Y is an approach to organization problems that emphasizes human relations and results in an organization characterized as participative."²¹

The underlying assumptions of Theory Y are as follows:

1. Management is responsible for organizing the elements of productive enterprise--money, materials, equipment, people--in the interests of economic ends.

2. People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations.
3. The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behavior toward organizational goals are all present in people. Management does not put them there. It is the responsibility for people to recognize and develop these human characteristics for themselves.
4. The essential task of management is to arrange organizational conditions and methods so that people can achieve their own goals best by directing their own efforts toward organizational objectives.
5. The expenditure of physical and mental effort is as natural as play and rest.
6. External control and the threat of punishment are not the only means for bringing the effort toward organizational objectives. Man will exercise self-direction and self-control toward organizational objectives to which he is committed.
7. Commitment to objectives is a function of the rewards associated with their achievement.
8. The average human being learns, under proper conditions, not only to accept but to seek responsibility.
9. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
10. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.²²

Theory Y eliminates some of the weaknesses found in Theory X in that Theory Y treats employees as intelligent and willing and functioning members of a group. Individual growth and development are encouraged.

Whereas Theory X is founded on external control and coercion, Theory Y is founded on self-control and motivation. Since employees have a chance to participate in the determination of the objectives

for the group, their goals become congruent with the goals of the organization.²³ In essence, in Theory Y, it is the process that is controlled, not the people.

Leadership Patterns

In his continuum, Rensis Likert classifies leadership patterns as follows:

1. Exploitive authoritative
2. Benevolent authoritative
3. Consultative
4. Participative

Likert differentiates between authoritative and participative systems of organization. Authoritative systems are categorized as exploitive, benevolent and consultative. The participative system is categorized as the participative group.

Likert develops this concept around the following characteristics: motivational forces; communication process; interaction-influence process; decision-making process; goal-setting or ordering; control process; and performance.

According to Argyris, the exploitive authoritative has the most unilateral control, whereas the participative has more mutually shared control.²⁴

Leadership Pattern Continuum

Beach, in his continuum, uses terminology very similar to that of Likert except for the following modifications: "exploitive autocratic, benevolent autocratic, consultative, and participative."²⁵ Figure 3 on the next page illustrates the continuum.

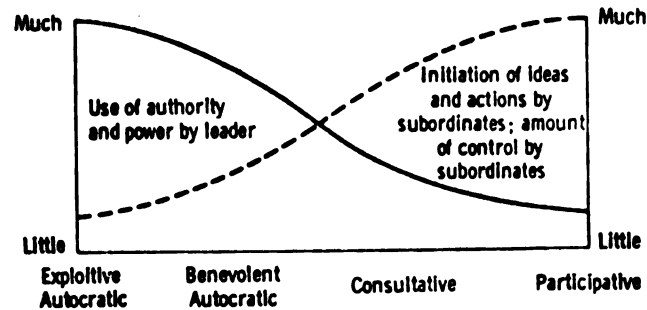


Figure 3: Patterns of Leadership and Relative Amounts of Authority by Leader and of Control by Subordinates.

Source: Beach, Personnel: The Management of People at Work, p. 447.

The autocratic leader (left end) relies heavily on force to compel his subordinates to obey his commands. This force generally produces a considerable amount of tension and frustration on the part of the subordinates. The exploitive autocratic pattern emphasizes money and basic physical working conditions as positive motivating factors. Fear of loss of job, fear of loss of pension, or fear of demotion are frequently used.²⁶

Moving to the right one category,

The benevolent autocrat is one who is reasonably sincere in believing that he must closely order the behavior of his subordinates and that he must provide their basic economic wants and to some extent, their social wants.²⁷

Benevolent autocracy is further categorized by a considerable amount of downward communication and little upward communication. Decision making is centered in the autocratic leader rather than in the subordinates.

Consultative leadership utilizes subordinates more than the previous two classifications. A consultative leader is one who invites

subordinates to make suggestions and to contribute ideas toward the solution of problems. It is the leaders, however, who make the final decision.²⁸

Under the form of full participative leadership, the superior invites participation by his subordinates in the solving of a wide range of problems. The subordinates are led in such a way that they make the plans or decisions as a group or team. The leader may set the boundaries beyond which the group cannot go, but he does not make the final decision. The group arrives at a decision jointly.²⁹

Mechanistic vs. Organic Organization

The Argyris continuum places mechanistic organization on the left and organic organization on the right. Mechanistic organization deviates from the essential properties of organization, whereas organic organization is consistent with the essential properties of organization. The mechanistic organization is thought to be least effective in change and in the development of new ideas. Perhaps its greatest strength is in its ability to cope with routine matters and to exist in an environment that is stable.

According to Argyris,

The scholars have concluded that the organic organization tends to develop greater organizational flexibility, commitment, responsibility, effectiveness in problem solving, and adapting to the environment.³⁰

The characteristics of mechanistic organization are:

1. Decision making and control at the top levels of the organization.
2. An emphasis on unilateral management action, based on dependency and passive conformity.

3. The specialization of tasks so that the concern for the whole is broken down.
4. The centralization of information, rewards, penalties, and membership.
5. The management being responsible for developing and maintaining the loyalty, commitment, and responsibility of all participants on as high a level as possible.
6. An emphasis on social status, inter-group and individual competition, and rivalry.³¹

The organic organization, on the other hand, is characterized by:

1. Decision making widely done throughout the organization.
2. An emphasis on mutual dependence and cooperation based on trust, confidence, and high technical or professional competence.
3. A constant pressure to enlarge tasks and interrelate them so that the concern for the whole is emphasized.
4. The centralization of responsibility for and use of information, rewards, penalties, and membership.
5. Participants at all levels being responsible for developing and maintaining loyalty and commitment at as high a level as possible.
6. An emphasis on status through contribution to the whole and inter-group and inter-individual cooperation.³²

Continuum of Leadership Behavior

Figure 4 illustrates the various degrees of authority that can be exercised by a superior over his subordinates.

As is shown in the illustration, boss-centered leadership (the most autocratic type) is at one end of the continuum, and subordinate-centered leadership (the most democratic type) is at the other end. The greatest amount of participation is found at the right. Various degrees of these two extremes are found between the right and left ends.

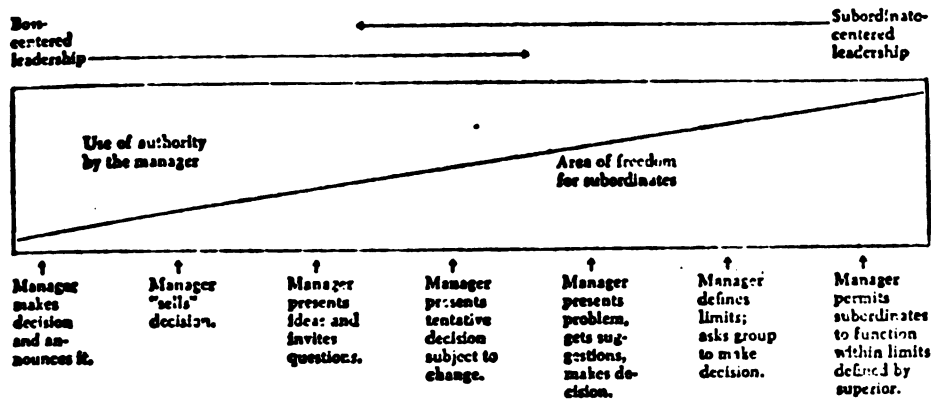


Figure 4. Continuum of Leadership Behavior.

Source: Chruden and Sherman, Personnel Management, p. 385.

The Theory X and Theory Y concept, the Leadership Patterns concept, the Mechanistic vs. Organic Organization concept, and the Continuum of Leadership Behavior concept have been included for two reasons: (1) as a means of illustrating various management patterns; and (2) to provide a theoretical framework for the concept of participative management and its adaptations.

THE PARTICIPATIVE MANAGEMENT CONCEPT

The following is a thorough examination of the concept of participative management.

Definitions of Participative Management

Many of the definitions of participative management that appear in the current literature tend to be patterned after Keith Davis' definition. That definition is as follows:

Participation is defined as mental and emotional involvement of a person in a group situation which encourages him to contribute to group goals and share responsibility for them.³³

The mental and/or emotional involvement mentioned in the Davis definition is also mentioned in the following definitions of participative management:

Participation means being active in pursuit of a goal which involves the ego.³⁴

(Participative management) means a mental involvement in the work enterprise in addition to the physical contribution that is obviously required by the job.³⁵

Participation is the term used to designate the process by which people contribute ideas toward the solution of problems affecting the organization of their jobs. Basically, it concerns the actions by which managers involve their subordinates in the decision-making process. Participation includes not only the physical participation of a person but also his intellectual and emotional involvement of the affairs of the organization.³⁶

Participation may be defined as a management practice that encourages employees to have mental and emotional involvement in their work.³⁷

Other definitions of participative management are as follows:

Participative management is the name of a relatively new style of management which lends itself to the reduction or removal of the traditional gap between management and rank-and-file employees.³⁸

Participative management can be viewed as a device for permitting management more fully in the making of decisions as well as a means for expanding the influence of lower echelons in the organization.³⁹

By participation, we mean giving supervisors and employees an increasing part in helping to determine the policies, objectives, and methods used in an organization.⁴⁰

An analysis of these definitions reveals several common characteristics of the various definitions of participative management.

These characteristics are as follows:

1. Mental and emotional involvement are present, as is physical involvement. In other words, the employees are ego-involved rather than merely being task involved.

2. Participation elicits a contribution on the part of the employees. Employees are given opportunities to direct their efforts, initiative, and creativity toward group objectives.
3. Participation encourages employees to accept responsibility for various activities. Since the employees are given an opportunity to make contributions to the group, they are more willing to accept responsibility for those activities.
4. Participation encourages a closer working relationship between subordinates and superiors.

Background of Participative Management

One of the most important reasons for the development of participative management has been the recent strong American belief in the use of democratic principles of management rather than a belief in the use of autocratic principles of management.

The democratic principles on which this managerial concept is based are as follows:

1. Every individual is equal before the law.
2. Each individual is accorded a basic respect regardless of his social or economic status.
3. The ideas of every individual, as well as those of his superiors, should be given consideration.
4. Each individual is given the right of appeal with regard to any important matters that involve justice.⁴¹
5. Emphasis is placed on the dignity of each individual and on the value of freely stated opinions before a decision is reached.⁴²

The value of using democratic principles in industry was realized by the Congress of the United States as early as 1912. In that year, the Congress appointed a Commission on Industrial Relations, which

made an intensive study of the problems of industrial organization. The importance that this Commission assigned to democratic principles is illustrated by the following statement which the Commission issued in 1914.

The question of industrial relations assigned by Congress to the Commission for investigation is more fundamental and of greater importance to the welfare of the nation than any other question except, perhaps, the form of government. The only hope for the solution of the tremendous problems created by industrial relations lies in the effective use of democratic institutions and in the rapid extension of democracy to industry.⁴³

Designs of Participative Management

The social scientists have contributed two designs for participation by employees. These two are "employee participation by leadership style" and "employee participation by formal plan."

The participative leadership style involves sharing more information with subordinates, eliciting their ideas, encouraging interchange among themselves, employing general rather than close supervision, and engaging in a supportive, interpersonal pattern. Emphasis is placed on face-to-face relationships.⁴⁴

On the other hand, in the formal plan, employees usually participate through joint union-management or worker-management committees that encourage, collect, and pass on suggestions for improving productivity. In most formal plans, some scheme is used to share the fruits of increased productivity.⁴⁵

The nature of these two designs provides some basic similarities between them:

1. Both styles are based on democratic principles.

2. Both styles assume that employees have knowledge, skill, and ingenuity that can improve the design of the production process.
3. Both styles assume that an opportunity to contribute ideas will have a further motivating effect by increasing employee sense of responsibility for product quality.
4. Both styles assume that the predicted increase in involvement and commitment to company goals will have the further effect of increasing employee readiness to accept technological change and other modifications in their work environment.⁴⁶

According to Wortman, there are several contrasts between the leadership style and the formal plan. The leadership style emphasizes face-to-face discussions between the immediate supervisor and the subordinates in the work group. If subordinates have any influence or participation beyond their work group, it is only because of their supervisor. In some situations, the supervisor represents his subordinates in the next higher echelon since the supervisor is a member of the next higher participating group.⁴⁷

The formal plan, on the other hand, places more emphasis on the structure and procedures for participation through selected representatives. The formal approach does not rely exclusively upon the same hierarchical channel for downward instructions, for allocation of individual rewards and penalties, and for upward communication of ideas and influences.

These two styles place emphasis on different motivators. The leadership style approach emphasizes social and psychological satisfactions which employees can obtain directly from the

participative process itself. This approach allows employees to use more of their skills to exercise upward influence and to enjoy membership in a task group. The leadership style rarely stresses economic rewards. By contrast, the formal plan does stress the economic rewards which can result from participation.

The leadership style approach is more likely to be a local option, used only in one or more work groups or in only one or two of several levels in a given chain of command. The formal plan, on the other hand, is usually created by top officials of management and union.⁴⁸

Types of Management Structures Employing Participative Management

This section provides a discussion of the various types of management structures utilizing participation in the management of employees. Included are the following: multiple management, consultative management, suggestion systems, the Scanlon Plan, the Managerial Grid, management by objectives, committees and group participation, and the Linking-Pin concept.

Participative management may be formal, semi-formal, and informal in nature. The informal and semi-formal participative management may be either participation by individuals or by groups.

Informal individual participation may be nothing more than employees expressing a particular viewpoint to their superior. An example of informal (and semi-formal participation) group participation is consultative management. Two examples of formal participation are multiple management and suggestion systems.⁴⁹

Multiple Management. Multiple management is a type of participative management created by Charles P. McCormick in 1922 at McCormick & Company, Inc., Baltimore.⁵⁰

This concept is founded on the following principles:

1. Business is primarily a matter of people.
2. Employees are human beings first, citizens of our nation second, and factors in production third.
3. The United States is the bulwark of individual freedom and economic stability in the world today.
4. The welfare of the people cannot be legislated satisfactorily by any government.
5. The ability of American business managers acting jointly with American workers to preserve the 'dignity of man' and 'freedom of choice' for the individual is the only positive approach toward obtaining and preserving democracy throughout the world.
6. Finally, the destiny of man lies in being of service to others. No government or philosophy has ever lastingly endured unless it was based on a 'religious' or 'service' motive for bettering mankind.⁵¹

Multiple management functions through permanent committees that assist and advise the operating executives. Members of these committees consist of representatives from many different departments.⁵² These executives, supervisors, and younger men are those who show real management potential.⁵³ Ordinarily, these committees have no decision-making power. Instead, their job is to recommend, discuss, and review.⁵⁴

Consultative Management. The consultative type of participative management also utilizes committees. Rather than use the formal standing committees found in multiple management, consultative management uses ad hoc committees.

Whenever the situation is deemed necessary, utilizing the advice of subordinates is found at middle and lower levels of organization.

Suggestions Systems. Suggestion systems are another technique for obtaining participation, especially at rank-and-file levels. Those systems that provide financial rewards for suggestions that are ultimately implemented are considered to be more effective than those systems which do not provide financial rewards.⁵⁹

The Scanlon Plan. The Scanlon Plan, characterized by its incentive scheme, offers a flexible technique through which the company, union, and employees can adapt to changes in conditions in corporate structure.

This plan, developed by Joseph Scanlon, is based on the following philosophy:

Scanlon deeply believed that the typical company organization did not elicit the full potential from employees, either as individuals or as a group. He did not feel that the commonly held concept that 'the boss is the boss and a worker works' was a proper basis for stimulating the interest of employees in company problems; rather, he felt such a concept reinforced employees' belief that there was an 'enemy' somewhere above them in the hierarchy and that a cautious suspicion should be maintained at all times. He felt that employee interest and contribution could best be stimulated by providing the employee with a maximum amount of information and data concerning company problems and successes, and by soliciting his contribution as to how he felt the problem might best be solved and the job best done.⁶⁰

The characteristics of the Scanlon Plan are as follows:

1. The plan's purpose is to heighten cooperation between labor and management, to sustain it by mutual participation in decision making, and to nourish it by mutual sharing of the fruits of that cooperation.
2. The underlying assumption of the plan is that there is a wealth of imagination and inventiveness in most organizations that remain untapped (if not turned against the organization) when the individual has an adequate incentive to make suggestions and appropriate adaptations on his own.
3. The heart of the plan is one or more production committees, composed of equal numbers of management, personnel, and hourly employees who are elected periodically. Such committees consider management problems of appropriate (usually departmental) scope, evaluate suggestions from all sources, and perform an important function in communicating decisions and in providing broad representation in decision making.
4. A higher-level screening committee--with a similar composition--reviews suggestions of a very broad scope of those which require substantial cash expenditure.
5. The plan is a cost-saving plan.⁶¹

Because of the unique factors of the cost-saving plan, this facet of the Scanlon Plan is discussed in greater detail. The cost-saving plan is based on a ratio that measures in some historical period the relationship between total payroll in a particular production unit and the sales value of what is produced by the payroll. Once this relationship is established, the difference between norm payroll and

the actual payroll constitutes the bonus pool for any month in which the labor costs are below this norm.⁶²

Some of the sources of productivity that become realized under this plan are:

1. Conscious restriction of output by individuals and groups gradually disappears, a helping hand is offered when the going is tough, and workers no longer take their major satisfaction from procrastinating.
2. New ideas contributed by workers, often simple and obvious once they have been presented, are also an important source of productivity.
3. Old ideas that have previously been impossible to implement become readily acceptable after coming forth as a worker suggestion.
4. When management has an idea or a program for plan improvement, it can take them to the people affected and ask for further suggestions and comments.
5. When a particular problem arises of concern either to one department or to the plant as a whole, it is impossible to communicate the real nature of the problem to the people involved.
6. Management tends to improve the performance of its own function.⁶³

In essence, the Scanlon Plan gives adults in an adult society an opportunity to express ideas as to how jobs might best be done. It is management's responsibility to carry forth at that point.

Management by Objectives. Management by objectives has been defined as a "systematic way in which the subordinate participates with his superior in making certain managerial decisions."⁶⁴

This type of participative management is based on the following assumptions:

1. It assumes that certain basic performance requirements are met on a continual basis in all key areas of the job.

2. It emphasizes continual analysis of the operation with the purpose of improving results either in total or by specified individuals.
3. It assumes that the manager has identified the areas of the job or departmental activity where certain results are sought.
4. It implies that for each specified area of accountability, certain minimum acceptable levels of performance have been set and that these are met on a continual basis.
5. A concentrated effort is always made to reach new levels of achievement by identifying problems that hinder accomplishment and overcome these.⁶⁵

The process of managing by objectives follows basic steps. The first step is to establish through meetings of superiors and subordinates at all levels, the expected goals, results, or objectives for a specified period of time. Typical discussions include the specification of the scope and content of the subordinates' major areas of responsibility; the objectives that the subordinates should accomplish in terms of results; the methods by which the subordinates will achieve those objectives; and the standards of performance that the superior will use to evaluate progress. These established objectives of the subordinates and superiors should be related directly to the achievement of organizational goals. The second step is for a meeting of subordinates and superiors at a later date to evaluate the anticipated and actual goal achievement.⁶⁶

Many advantages have been offered for management by objectives. Among these are:

1. To participate in the development of one's own objectives, to be given the latitude to accomplish them, and to know that one's performance will be measured against him is quite a motivator.⁶⁷
2. It satisfies a number of basic individual psychological needs and provides the motivation to accomplish these tasks which have been set.⁶⁸
3. Employees' jobs begin to take on more importance as to how they are related to the total department since the employees become more involved in their jobs.⁶⁹
4. Management by objectives creates a climate in which all the company's managers get into the act of solving the company's problems.⁷⁰
5. The objective-setting process should result in the elimination of overlapping responsibilities and of the duplication of effort and misunderstanding common between groups within organizations.⁷¹
6. Management by objectives results in more precise and useful planning as well as tighter control.⁷²

Possible disadvantages of management by objectives are:

1. The objective-setting process is time-consuming.
2. Business organizations are dynamic, and as a result, the objective structure set at the beginning of an evaluation year may require frequent and significant revisions.⁷³
3. The desired end-results are often not obtainable because of improper implementation of and lack of supervisory involvement in management by objectives programs.⁷⁴

Tosi and Carroll⁷⁵ and Schrieber and Sloan⁷⁶ all point out that, for the most part, management by objectives has been implemented on the basis of its apparent theoretical practicality and advantages. There has been only limited empirical research examining its effects.

Managerial Grid. R. R. Blake's Managerial Grid concept has the potential of using participative management under certain conditions. Other conditions, however, could result in movement away from participative management conditions.

Figure 5 illustrates five theories of managerial behavior based on two key variables found in organizations. The variables are concern for people (vertical axis) and concern for production (horizontal axis). The five types of managerial behavior are characterized as follows:

- 1.1 - Minimum effort to get work done but sufficient to maintain organization.
- 9.1 - Emphasis on work with minimum interference from human factors.
- 1.9 - Primary emphasis on needs of people, a comfortable place to work.
- 5.5 - Balance between attention to work and attention to people.
- 9.9 - Work is accomplished by people committed to the organization; a high degree of congruence between the goals of the organization and the goals of its members.⁷⁷

The higher the numbers are on the vertical axis (concern for people), the more likely is the chance that participation is being utilized in the managerial process. Where management practices are oppressive, or production centered, with regard to the needs of workers, creativity is high, but this occurs in an anti-organization direction or pattern. Conflict is low, although latent, because management

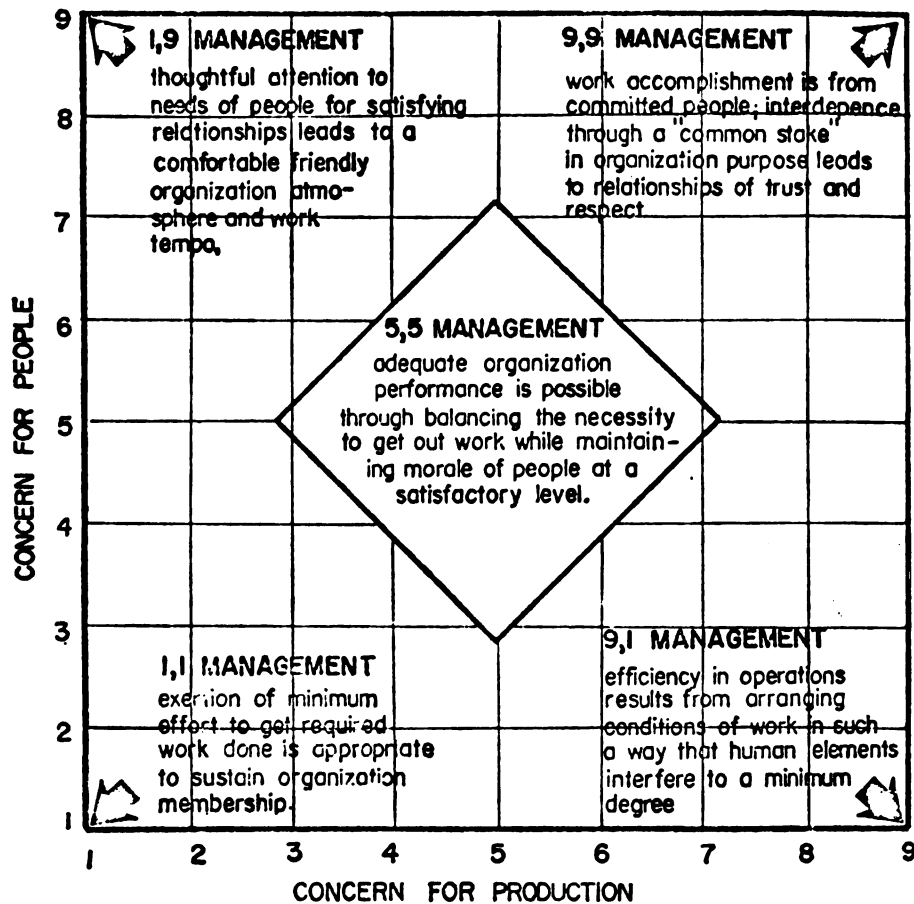


Figure 5: Managerial Styles of the Managerial Grid Program.

Source: Sisk, Principles of Management, p. 540.

has suppression strategies available to minimize it. Commitment is low, although commitment to one's peer group or to outside organizations hostile to their management may be high for purposes of defense and survival. Where concern for people is at a maximum but concern for production is low, creativity remains low although commitment is high and conflict is avoided.⁷⁸

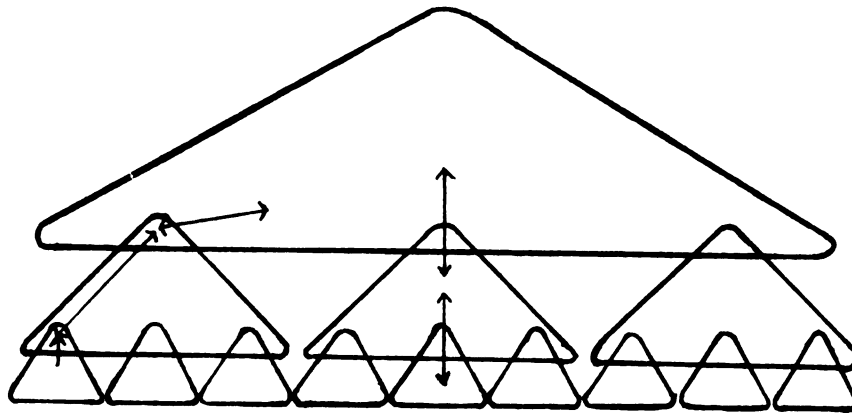
Linking-Pin Concept. Rensis Likert and his associates have developed an organizational structure that represents a move toward a more effective organization. It is partially based on the traditional formal organizational structure.

The Linking-Pin concept perceives a superior as a link between two groups. The superior is a representative of his group's viewpoint to the group containing his own peers and to his own superior. This provides subordinates with an opportunity to voice their views on a particular matter to their superior. The superior then accurately presents these views to his peers and executives above him.⁷⁹ These individuals who hold overlapping group membership are called linking pins.⁸⁰ This concept is illustrated in Figure 6.

The Linking-Pin concept places emphasis on work groups. According to Sutermeister, an organization functions best when personnel act not as individuals but as members of highly effective work groups with high performance goals. He also believes that management should deliberately endeavor to build these strong and effective work groups.⁸¹

The more multiple linkages there are among groups, the more influence participants may have. The greater the influence, the stronger will be the cohesiveness, loyalty, commitment, identification, and cooperation from within the organization.⁸²

Group Participation. Much of the participation found in organizations is characterized as group participation. In group participation, subordinates initiate proposals and listen to and react to one another's ideas at the same time and place and in the presence of one another.⁸³



(The arrows indicate linking pins)

Figure 6: Linking-Pin Concept.

Source: Likert, The Human Organization, p. 50.

Several characteristics of group decisions have been identified.

Among these are:

1. Area of freedom. The superior and his workers can make decisions only in their areas of freedom. This area is the limit of authority invested in the superior by higher management. It is obvious that the work group cannot make decisions that are in conflict with company policies or practices.
2. Unanimity. This is a goal of group decisions. If the majority forces its decisions on the minority, it is, in effect, acting autocratically. Hostility and aggression, which are common in groups led by autocratic leaders, are likely to appear.

3. Effect on channel of communication. Group decisions, when properly applied, begin at the top of the organization and continue to the bottom. Below the top man, the leader of one group is then a member of the next lower group, and on down the line. This provides a direct line of communication.⁸⁴

Some of the advantages accorded to group decisions are:

1. More creativity in decisions emerges when the participants discuss a problem together.
2. Group participation can also be a powerful means of arriving at an integrated decision.
3. Group decisions will save the manager's time.
4. Group decisions can stimulate group cohesion.⁸⁵
5. Group decision-making can result in a sharp increase in the level of production.⁸⁶

Committees. Koontz and O'Donnell define "committees" as:

Two or more persons appointed by their immediate superior for the purpose of acting or advising their superior about a subject that is not clearly within the competence of any of them.⁸⁷

Before any committee can function effectively, two basic requirements are necessary: (1) the structure of the enterprise and the association of activities in this structure must conform to the principles of good organization; (2) the enterprise has to have effective managers.⁸⁸

Among the advantages seen for the use of committees are:

1. Committees can make a significant contribution in the way of improved planning and motivation.⁸⁹

2. Committees can result in integrated group decisions when problems may require the coordinated application of a number of knowledge areas.⁹⁰
3. Committees offer an approach to the problem of coordinated inter-departmental activities.⁹¹
4. Committees make possible participation by subordinates in the decision-making process.⁹²
5. Committees, when formally established, can make efficient use of time.⁹³

Albers cites the following as disadvantages of committees:

1. Committees can become negative rather than positive instruments of cooperation.
2. The possibility of domination by a formally constructed or an informally derived leader is an ever-present danger.
3. The fact that an individual consented to a group decision does not mean necessarily that he is in accord with it.⁹⁴

Hierarchical Location of Participative Management

According to Beach, participation is appropriate for all levels in the organization hierarchy.⁹⁵ Participation can occur between a president and his executive committee. It is appropriate in an individual situation as well as in a group situation.⁹⁶

Leavitt feels that participative management has had its greatest impact at the managerial level rather than at the hourly level, even though it got its start at the hourly level.⁹⁷ In industry, it rarely takes place at the level of the blue-collar and white-collar non-supervisory employee.⁹⁸

Degrees of Participation

The degree of participation in solving a problem may fall between two extremes: (1) complete delegation of the problem to a subordinate, or (2) complete centralization of decision-making processes whereby a manager merely announces his conclusion and tries to get subordinates to carry out the plan. The degree of participation depends on three factors: (a) who initiates ideas; (b) how completely a subordinate carries out each phase of decision-making processes; (c) how much weight an executive attaches to the ideas he receives.⁹⁹

Davis identifies three main degrees of participation:

1. Mutual-understanding degree. Its purpose is "to help all members understand each other's functions and attitudes so that they will develop better teamwork. They become more self-involved, more creative, and more responsible members."¹⁰⁰
2. Advisory degree. It is "built upon the mutual-understanding degree because members are hardly ready to give sound advice until they understand the situation. In advisory participation, an individual can help make decisions and offer creative suggestions, but he lacks authority to apply his ideas. The leader finally decides the course of action after giving suitable weight to ideas of participants."¹⁰¹
3. Authoritative degree. It "gives the group a degree of power to effect its decision. This power may be formal, as when a manager delegates decision-making authority on a safety matter to his group, or informal, as when the group makes decisions subject to the manager's right to veto, but his veto is hardly ever invoked."¹⁰²

Fox suggests that the best results of participation are obtained when the degree of participation used is somewhat greater than what the subordinates expect but still within their capacity to make an effective response.¹⁰³

Prerequisites for Utilization of Participative Management

The success of participative management depends upon how well certain prerequisite conditions are met. Some of these conditions pertain to the participants--others depend upon conditions within the organization.

Major prerequisites are as follows:

1. There must be time to participate before action is required. Participation is hardly appropriate in emergency situations.
2. The financial cost of participation should not exceed the values, economic or otherwise, that come from it. Employees cannot spend all their time participating, to the exclusion of all other work.
3. The subject of participation must be relevant to the participants' organization or something in which they are interested, or else they will look upon it merely as busy work.
4. The participants should have the ability, such as intelligence and knowledge, to participate. . .
5. The participants must be able to communicate--to talk each other's language--in other words to be able to exchange ideas.
6. Neither party should feel that his position is threatened by participation. If a worker thinks his status will be adversely affected, he will not participate. If a manager feels that his authority is threatened, he will refuse participation or be defensive.
7. Participation for deciding a course of action in an organization can take place only within the group's area of job freedom. Some degree of restriction on subunits is necessary in any organization in order to maintain internal unity. Each separate subunit cannot make decisions which violate policy, collective-bargaining agreements, legal requirements and similar restraints. . .¹⁰⁴

Other prerequisites are:

1. The subordinates must be able to contribute something worthwhile.

2. The proper psychological conditions must be present; subordinates must become psychologically involved.
3. Union-management relations must be such that the union does not feel that employee participation is bad; otherwise, resistance will occur.¹⁰⁵

Factors Which Determine the Effectiveness of Participative Management

The effectiveness of participative management is contingent on many factors. Calhoun identifies the following factors:

expectency of the members, past experiences, and conditioning, communication, and the climate or atmosphere within the organization in general and in the group in particular.¹⁰⁶

A detailed discussion of some of these factors follows. Some of the characteristics of subordinates needed for effective participation are as follows:

1. Independence needs. Those subordinates who have strong needs for independence react more favorably toward the opportunity to participate in decision-making activities than do those who have low independence needs.
2. Desire to participate. In order for participation to succeed, the subordinates must be interested in the wider ramifications of their jobs, their department, and their organizations.
3. Intelligence and knowledge. The subordinates must possess a certain minimum amount of intelligence and knowledge for participation programs to succeed.
4. Training for participation. In order for participation to be effective, subordinates must be taught what is expected of them.¹⁰⁷

Other characteristics needed of participants are the following:

1. The participants must be capable of becoming psychologically involved in the participational process. The participants must be free from "blockages" which may prevent them from re-arranging their particular goal pattern in the light of new experience.
2. The participants must see the relevance of the things being considered to their personal life pattern. When subordinates realize that through participation, they may affect the course of their future in such a fashion as to increase its positive goal elements and to diminish the negative ones, they will become motivated.
3. The participants must be able to express themselves satisfactorily with respect to the things being considered. They must be psychologically able to communicate.¹⁰⁸
4. The participants should be made to feel that their efforts are important. As people, they are most likely to cooperate when they are made to feel indispensable.¹⁰⁹
5. Participants are affected by their perception of the legitimacy of participation.¹¹⁰
6. It is the responsibility of the individual leader to see that the requirements of the situation, including the need for action, are made clear to the subordinates.¹¹¹
7. For the greatest amount of effectiveness, the participants must be rewarded for substantial participation.¹¹²

Situational factors which determine the effectiveness of participation are as follows:

1. Organizational climate. Participation is most likely to succeed when top management, starting with the board of directors, believes in it.
2. Problem must be appropriate. The nature of the problem must be considered relevant to those doing the participating.
3. Scope and authority. Subordinates should be invited to participate only if the problems are within their sphere of authority and responsibility.¹¹³
4. Time available. The time necessary for using participative management may be more than that for authoritarian leadership.
5. Rational economics. The cost of participating in the decision-making process must not be so high that it will outweigh any positive values directly brought about by it.
6. Inter-plant strategy. Providing opportunities for participation must not open channels of communication to competing enterprises.
7. Provision for communication channels. For participation to be effective, channels must be provided through which subordinates may not participate in the decision-making process.¹¹⁴

Advantages of Participative Management

A brief list of the advantages of utilizing participative management follows:

1. Participation reduces resistance to change.¹¹⁵

2. Participation increases the degree of "we" feeling or cohesiveness that participants have for the organization.¹¹⁶
3. Participation provides employees with an over-all organizational point of view instead of the traditional point of view.¹¹⁷
4. Participation decreases the amount of conflict, hostility, and cut-throat competition among participants.¹¹⁸
5. Participation leads to increased tolerance and patience among the employees because of the individuals' understanding of one another.¹¹⁹
6. Participation helps to develop a work climate in which the employees find opportunities to be more creative and to come up with ideas beneficial to the organization.¹²⁰
7. It leads to formation of better decisions by the manager because of considerable amount of talent.¹²¹
8. Participation stimulates greater acceptance of the managers' orders, thereby contributing to more effective motivation.¹²²
9. Participation contributes to a feeling of importance since subordinates' ideas are valued and desired.¹²³
10. Subordinates are more willing to accept responsibility for and to carry out decisions they help make.¹²⁴
11. Participation can result in a higher rate of output.¹²⁵
12. Participation can result in fewer grievances and conflicts between co-workers and between labor and management.¹²⁶
13. Participation results in reduced turnover, absenteeism, and tardiness.¹²⁷
14. Participation enables employees to identify with their jobs.¹²⁸

15. Participation enables all the members of an organization to make greater contributions and to gain more meaningful satisfactions and rewards.¹²⁹

Disadvantages of Participative Management

Among the disadvantages commonly seen for participative management are as follows:

1. Participation depends upon the ability of the employees.¹³⁰
2. Subordinates' interest in the problem at hand may be lacking.¹³¹
3. The amount of time available for consultation may be limited.¹³²
4. The area of job freedom may be restricted.¹³³
5. The skill of the superior in creating a participative attitude may be limited.¹³⁴
6. The power structure of the organizational hierarchy may not be conducive to participative management.¹³⁵
7. There is present the fear that participation may undermine authority.¹³⁶
8. The democratic-participative philosophy of management is somewhat incompatible with the bureaucratic traditions of most companies.¹³⁷
9. Participation does not seem to work with all people in all situations.¹³⁸
10. Decision-making responsibilities cannot be completely delegated to employees without subjecting the organization to the destructive forces of compromise and indecision.¹³⁹

11. Participation, once started, gives the followers a greater feeling of responsibility and status--and it could be discontinued only at the risk of damaging attitudes and production.¹⁴⁰
12. The extent of employees' readiness of accepting and expecting participation methods will influence its effectiveness.¹⁴¹

Research on Participative Management

Much of the research conducted on the utilization of participative management is either fragmented or is incomplete. Many variables have an effect on worker productivity; and in attempting to conduct "scientific" research, variables other than participation have sometimes been underemphasized by some behavioralists. The extent of participation has also frequently not been carefully outlined. The following provides a discussion of what is thought to be some of the more significant studies in participative management.

Small-Scale Research. In a study by Lawrence and Smith,¹⁴² an investigation was made of the effect on production when groups discussed nonproduction matters and set production goals as opposed to the effect on production when groups also discussed nonproduction matters but did not set production rates. A total of 22 individuals were involved in the study (two groups, N = 5, N = 6). The data supported the hypothesis that goal-setting increased productivity significantly, whereas the discussion-only groups increased production also, but not to a significant level. The findings were positive.

Schlacter¹⁴³ conducted a study to determine whether increased participation in decision-making would bring about corresponding increases in productivity, morale, quality, and efficiency. The study was conducted among operatives in the Ohio Department of Highways. Six crews were divided into groups of two's. Each group was granted the opportunity to participate in scheduling its work activity for the six-month experimental period. Historically, the Central Office had been in charge of scheduling the work activity. The degree of participation in each group varied.

The findings of the Schlacter study were: (1) productivity did not improve as a result of the participative decision-making; (2) in some instances, there was evidence that productivity decreased; (3) morale and efficiency improved in only one group; (4) results of the quality measure were ambiguous; (5) there was not evidence that productivity, quality, or efficiency varied in direct relation to the degree of participation; and, (6) there was some evidence that morale varied in direct relation to the degree of participation.

One of the most enthusiastically endorsed experiments concerning participative management was a 1948 research study conducted by Coch and French.¹⁴⁴ The research was conducted in a Harwood Manufacturing Corporation plant in Marion, Virginia. The plant produced pajamas and employed approximately 600 individuals, mostly women. Frequent transfers of personnel and method changes necessitated by rapidly changing styles resulted in major problems. Widespread resistance was evidenced by grievances, group and individual restriction of

output, low efficiency, and high turnover rates.¹⁴⁵ The research tested the effect of participation on this resistance.

Four groups were included in the design of the Coch and French study: (1) two "total participation" groups, consisting of 15 employees in total; (2) one "participation through representation" group, 13 employees; and (3) one "no participation" group, 18 employees. In the "no participation" group, the change was implemented as usual and personnel involved were only informed of the pending change.

In the Coch and French study, the necessity for change was dramatically stressed in the "participation by representation" group; and the need to control costs was ultimately shared by group members. In the "total participation" groups, the need for the smaller groups were involved in two ways: (1) by helping to determine the new piece rates and work methods; and, (2) by training some of the other operators. To ensure the comparability of the groups, an attempt was made to match before-transfer efficiency, the degree of change, and the amount of observed group cohesiveness. Each of the three general groups, however, performed different tasks before and after the change.¹⁴⁶

The results of the Coch and French study were very significant. All of the groups dropped in productivity after the change, but the "total participation" group decreased less than the other two. Within five days, however, production (measured in units per hour) increased to a level above the before-transfer rate in the "total participation" groups. The "total participation" groups were above standard within two days after the change and ultimately increased

to a sustained level of 14 percent above standard. After four weeks, the "participation through representation" group ultimately attained a level approximately equaling the "total participation" groups, but the "no participation" group remained at its low productivity rate for the remainder of the original experiment. After two and a half months, the remaining 13 members (the other five had quit) of the "no participation" group were reassembled and assigned a new job employing the "total participation" procedure. Within 18 days, the new approach resulted in an increase in productivity of 14 percent above standard, a dramatic contrast with the earlier performance.¹⁴⁷

The limitations of the Coch and French study, however, have rarely been mentioned in the literature. First, the participants consisted of young, rural women. Secondly, the "total participation" groups were small, and the need for the change was dynamically emphasized only in the two general "participative conditions," each of which perhaps had an influence. Finally, in transferring the remaining employees from "no participation" to "total participation," perhaps the resistant employees were the ones who had already quit.¹⁴⁸

French, Israel, and As¹⁴⁹ attempted to duplicate the original Coch and French experiment--this time in a different cultural setting. French and his colleagues were perhaps the first to separate "psychological participation," or perceived influence, from "objective participation" or actual influence. A major hypothesis was that increased participation should result in increased productivity because the involvement in decisions would improve the

decisions, and, therefore, workers would be more motivated to implement the decisions. Other areas studied pertained to employee satisfaction and better employee-management relations.¹⁵⁰

The study by French, et. al., utilized nine groups of four workers each (N = 36). Two groups were allowed "moderate participation" including allocation of articles, length of training, division of labor, and job assignment; three groups were allowed "weak participation" consisting only of the allocation of articles; and, four groups were allowed "no participation," these being the control groups.

The French research team found no significant change from the preexperiment productivity level in any of the nine groups. The research team concluded that the lack of significant changes in the participation groups resulted from management's not permitting participation in such critical areas as production level or rate setting. Also investigated was a concept called legitimacy, or how right and proper parties involved viewed participative decision-making. The results of this investigation were also found to be inconclusive.¹⁵¹

Raia¹⁵² attempted to evaluate, in numerous company plants, a system of participative goal-setting and self-control at the managerial level. The system was established by the company personnel, and Raia's role was that of conducting only an evaluation or case study of the system. Goals were set at each organizational level, and performance reports were disseminated to each manager rather than being given first to the manager's

supervisor. Periodic performance reviews were also completed between the manager and his subordinates.¹⁵³

Raia found that over-all goal levels and productivity did increase over the period of the study, but the increase was small and not statistically significant. The degree of participation decreased as it moved down the organization hierarchy, possibly because management frequently viewed the program as a method of exerting tighter control on each lower level rather than of increasing the influence and utilization of managers at each lower level.¹⁵⁴ The study made no attempt to isolate or control the variables that may have influenced the productivity at the various plants over the life of the study. The study illustrates problems resulting from a reluctant management in implementing participative management techniques in a large multi-divisional organization.

Bavelas and Strauss¹⁵⁵ sought to assess the effect on productivity when eight girls were given complete control of a conveyor belt used on the job. The researchers found that the girls' productivity increased tremendously, as did group earnings. Other employees then demanded that these new inequities be corrected. Eventually, the conveyor belt was taken from the group's control, and productivity returned to a more normal rate. Within a month, all but two of the girls had quit.¹⁵⁶

Surveys. Ross¹⁵⁷ made a study to determine what (1) is believed to be the accountant's role, theoretically and empirically, in Scanlon Plan companies; and, (2) what the accountant's role should be in Scanlon Plan companies.

Ninety individuals participated in the Ross study--15 accountants in companies using the Scanlon Plan; 15 nonaccounting managers in companies using the Scanlon Plan; 20 accountants in non-Scanlon Plan companies; and 20 nonaccounting managers in non-Scanlon Plan companies.

The empirical segment of this study was divided into three main parts: (1) to determine whether accountants and operating managers in Scanlon Plan companies were "less traditional" in their views of organization behavior when compared with accountants and the various operating managers in non-Scanlon Plan companies; (2) to determine (a) whether employees in a participative setting were resistant to change from piece-rate pay system to a measured-day pay system, and, (b) whether the acceptance of the change was related to the attitudes pertaining to the need for production standards, or the trust in management to not arbitrarily change standards, or the over-all fairness of the new pay system, or the perceived size of the economic benefit received from the increased effort, or the adequacy of the performance information feedback, or the Scanlon Plan, or the technological change, or the perceived and desired influence in a natural experimental setting; (3) to determine the amount of knowledge pertaining to the Scanlon Plan computation.

The findings of the Ross study were: (1) accountants and operating managers in Scanlon Plan companies were significantly less traditional in their attitudes than were their counterparts in non-Scanlon Plan companies; (2) accountants in Scanlon Plan companies were found to be somewhat more traditional than were operating managers in Scanlon Plan companies; (3) attitudes associated with the

"perceived size of the economic benefit received from the increased effort" and the "technological change" were significantly related to acceptance of the change; (4) very favorable attitudes were found toward the need for "production standards," the "Scanlon Plan in general," and the "desire for more involvement"; (5) unfavorable attitudes were found regarding the "new pay system" and "adequacy of performance feedback"; (6) longer-tenured and higher positioned employees generally had more favorable attitudes toward participation; (7) total knowledge was significantly and positively correlated with tenure, position, and the extent of participation as measured by the number of suggestions made and the number of times the employees had been elected a Scanlon Plan representative.

Vroom¹⁵⁸ investigated the relationship between "personality" and "participative decision-making" of 108 supervisors in a parcel delivery company. Vroom hypothesized that performance and attitudes with respect to participation would be positively related to strong independence needs and low authoritarianism. The research found participation in decision-making significantly related and positively correlated with various measures of performance.

In a study which attempted to further substantiate Vroom's findings, Vroom and Mann¹⁵⁹ found that package handlers, whose work was highly interdependent, preferred general or employee-centered supervision. Truck drivers and dispatchers, on the other hand, whose work was primarily independent, preferred more of a production-centered or authoritarian approach to supervision. This study illustrated the effect that personality and the nature of the task may have on the benefits accruing from participative management.

Large-Scale Experiments. Morse and Reimer,¹⁶⁰ in one of the first large-scale field experiments, attempted to determine the effect of participative management on productivity. A large clerical department of an industrial organization was the research site. Two divisions of the department were redesigned to permit more rank-and-file decision-making, and two comparable divisions were redesigned to utilize more autocratic decisions. The experiment lasted one and one-half years, including a period of training for supervisors in the autonomous or participative program. Before-and-after questionnaire results and measures of productivity were obtained.

Morse and Reimer found that employee satisfaction with the participatory program was much greater than with the more autocratic program; the participatory groups wanted the program to continue, whereas the more autocratic groups wanted the program to end. However, the hypothesis related to productivity was not confirmed. Both programs resulted in significant increases in productivity, but the more autocratic program resulted in productivity significantly greater than the participatory program.¹⁶¹

Morse and Reimer pointed out that, since the work volume was not controlled by the groups, the productivity measurements were somewhat "stacked against" the participatory program. The only way to increase productivity was to rapidly decrease the number of personnel. The more autocratic supervisors did increase the number of personnel, but the participatory groups decided against this action. Instead, the participatory groups decided to reduce their staff by not replacing the employees who left and by trying to transfer certain others. Hence, over the short-run, the autocratic

program was able to decrease its staff more rapidly and increase productivity even more than the other groups. Turnover was also higher in the autocratic program but no effort was made to determine the cost of this variable. Likert and others have not questioned the short-run effectiveness and efficiency of autocratic cost reduction drives, but they have stressed the importance of the time variable in appraising the over-all results.¹⁶² Unfortunately, the experiment was not continued to test the time variable, so all that can be concluded from the study was that autocratically oriented cost reduction programs may be able to reduce costs even more than participative programs, at least in the short run.

Ritchie¹⁶³ conducted research to identify some of the variables that are related to a manager's satisfaction with an immediate supervisor. Included were 320 managers from six divisions of a large corporation. The subjects represented five hierarchical levels of management, ranging from division manager to first-line supervisors.

The design of Ritchie's study involved sending a questionnaire to respondents to determine: (1) the extent of involvement in the initiation of decision-making; (2) the degree of consultation by the superior; (3) the extent to which superiors follow subordinate recommendations; (4) the degree of final choice possessed by the manager. Data were also gathered to determine the degree of trust and confidence the superior had in subordinates and the degree of subordinate satisfaction with the immediate supervisor.

Ritchie found that: (1) superior attitudes toward subordinates had a greater impact on subordinate satisfaction than did the degree

of participation in decision-making; (2) different forms of participation had the following relationships with satisfaction: (a) consultation by superiors was the most significant form of participation; (b) the degree to which recommendations were followed was less significant than item "a" above; (c) the degree of initiation in the decision-making process and the degree to which the manager had a final choice in the decision-making were not significant; (3) managerial level and occupational field had an impact on the relationships of all variables; therefore, a superior's participative attitude toward subordinates had more significance at higher levels of management than at lower levels of management.

Seashore and Bowers¹⁶⁴ reported on a comprehensive three-year experiment, the purpose of which was to bring three departments of a manufacturing company's home plant closer to Likert's participative group style of organization. Two other departments within the home plant served as control groups. Extensively utilized were supervisory training sessions, individual counseling sessions, and meetings with employees. Before-and-after questionnaires were administered.

The goals of the Seashore and Bowers study were to improve the following independent variables: group supervision, group interaction and influence, supervisory and peer supportiveness, and participative decision-making and control at the lower hierarchical levels. The research indicated that seven of the eleven predicted variables in the experimental departments improved significantly. The authors interpreted these results as substantiating Likert's interaction-influence theory.¹⁶⁵

Smith and Jones¹⁶⁶ utilized data from the Seashore and Bowers study, and investigated whether increases in the independent variables outlined above resulted in increased total control and increased rank-and-file control relative to higher level control. The findings resulted in the authors concluding that total control was increased, whereas the relative hypothesis was not substantiated. Most of the total control increase resulted from control increases in the middle levels of management.¹⁶⁷ The research substantiated the claim that total perceived control, especially at the middle management levels, may increase with increased participative management techniques.

A comprehensive study involving total organizational change toward participative management was reported by Marrow, Bowers, and Seashore.¹⁶⁸ In 1962, Harwood Manufacturing purchased Weldon Manufacturing Company. Financially, Weldon was a declining company, authoritatively controlled by two brothers. Reports were found to be falsified; supervisors were held responsible for uncontrollable costs on which they received little or no information; and there was continuous, ineffective cost reduction programs. Labor costs were approximately 50 percent of sales value, so efficient utilization of personnel was critical.¹⁶⁹

In the Marrow, Bowers, and Seashore study, the change program was substantial--both technically and behaviorally. The program offered a great opportunity for a systematic study of planned participative organizational change. Performance measurements were obtained weekly, and questionnaires were administered in 1962,

1963, and 1964. The performance measurements were compared to 1962 and 1964 questionnaire results at Harwood. Substantial amounts of new equipment were purchased, and equipment layout was greatly improved. Managers at all levels were given training in interpersonal relations. Group problem-solving sessions were extensively used in attempting to involve both supervisors and rank-and-file workers in Weldon's decision-making processes. At first, the problem-solving sessions were viewed with skepticism, hostility, and were even boycotted by some employees.¹⁷⁰ Eventually, information began to flow more freely, and many employees became more concerned with costs.

Performance at Weldon improved substantially from 1962 to 1964. Return on invested capital improved from a negative 17 percent; makeup pay decreased eight percent; and production efficiency as a percent of standard increased from a negative 11 percent to a positive 15 percent.¹⁷¹

Attitudes of the workers at Weldon improved only slightly and total control, as measured by Tannenbaum's influence approach did not increase at Weldon.¹⁷²

A CONCLUDING STATEMENT: THE ROLE OF PARTICIPATIVE MANAGEMENT IN SUPERVISING OFFICE EMPLOYEES

The proponents of participative management feel that participative management has a definite role in supervising office employees. These same proponents also feel that the extent of its utilization should be determined by the circumstances of each individual situation.

The value of using employee ideas in setting goals, in formulating plans, in improving morale, and in controlling performance has been discussed. A participative process brings to light many sound ideas.

In the following statement, Littlefield and Rachel provide a good summarization of the role of participative management:

Many managers have found that allowing and encouraging an employee, or group, to participate in setting goals will have highly beneficial effects. If they are provided information regarding general needs, measures by which to gauge performance, and a general atmosphere in which merit is recognized and rewarded, they usually will set higher goals for themselves than management would think of setting, and they probably will achieve them. This experience has been repeated with many types of achievement--quantity, quality, promptness, costs, getting to work on time, etc.¹⁷³

SUMMARY

Chapter 2 has been designed to accomplish the following purposes: (1) to identify a theoretical framework around which the concept of participative management could be developed; (2) to examine the managerial continuum--and the positions occupied by participative management within this continuum; (3) to examine in detail the concept of participative management, including definitions, background information, designs, types of management structures employing participative management, hierarchical location, degrees of utilization, necessary prerequisites, factors desirable for effective utilization of participative management, advantages, disadvantages; and (4) to examine significant research.

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Chapter 3

PROCEDURES

The purpose of this chapter is to discuss the sources of data, to describe the research instrument (questionnaire), the sampling techniques, the population, and the statistical tools utilized to determine the nature of and extent to which it is perceived that administrative office managers utilize participative management in supervising office employees.

SOURCES OF DATA

The data summarized in this study were compiled from the 132 usable questionnaires returned by the randomly selected sample of 250 administrative office managers employed in 250 of the companies identified in the 1971 Fortune magazine list of the 1,000 largest companies (as measured by sales volume).

For a company to be eligible for inclusion in this study, two requirements had to be met: (1) the company had to be listed in the 1971 Fortune magazine 1,000 list; and, (2) the company had to be included in the 1971 College Placement Annual. The rationale for using the dually listed companies was as follows: The belief that the personal approach would elicit a higher response necessitated sending each questionnaire to a specific individual within a company rather than to a "title" within a company. It was not feasible to obtain the names of each of the administrative

office managers in each of the 250 companies prior to mailing the questionnaires. It was, however, feasible to obtain the names of the personnel directors (or those with similar titles) from the College Placement Annual; and for this reason, the dual-listing technique was utilized. The individual to whom each questionnaire was sent was then requested to transmit it to the administrative office manager within his company.

Of the 1,000 companies listed in the 1971 Fortune magazine 1,000 list, 358 were also listed in the College Placement Annual, and thus were considered eligible for the study.

THE QUESTIONNAIRE

A portion of the questionnaire utilized in this study was originally constructed in 1970 as part of an independent investigation project conducted by this researcher. The 1970 questionnaire only consisted of a portion of what is Part II of the present questionnaire.

Part I of the questionnaire was concerned with the respondent's sex, age, number of years employed in present position, number of subordinates supervised, level of educational attainment, college major, military experience, military officer experience, and number of years of office experience. Part I of the questionnaire was revised in light of the suggestions and recommendations of the research consultants in the Office of Research Consultation, College of Education, Michigan State University. Also having an influence on the design and wording of Part I were other questionnaires seeking similar kinds of information.

Part II of the questionnaire (a portion of which was originally developed for the 1970 study), is concerned with the extent ("always," "often," "sometimes," "seldom," "never") to which administrative office managers utilize the help, ideas, and suggestions of their subordinates in selected managerial activities in each of the five managerial functions.

The basis for Part II of the questionnaire is the literature that was studied and reviewed. In Part II, care was taken to select words that represent concrete physical activities--for example, the use of the word "writing" as opposed to the word "developing." This caution was taken because of the conviction that the more concrete the physical activity, the easier it would be for the respondents to ascertain the extent to which they utilize the ideas, suggestions, and help of their subordinates.

The specific wording and design of Part II was refined by the research consultants in the Office of Research Consultation, the various members of the guidance committee, and a jury of selected individuals. Among the jurors serving on the panel were several administrative office managers in the Greater Lansing, Michigan, area and several individuals employed in the College of Business, Michigan State University, who perform some of the duties of administrative office managers.

The activities listed on the questionnaire were not categorized as to which of the five functions each belonged. It was thought that listing the activities in a random order would assure more accurate responses given by the respondents. When the data was processed, each activity was then categorized as to its proper managerial function.

After the questionnaire was sufficiently refined and was approved by the guidance committee, it was prepared for mailing to the 250 individuals selected for the study. A questionnaire, a cover letter, and a business reply envelope were sent to each of the selected individuals whose names were listed in the 1971 College Placement Annual. In most instances, these individuals had the title of "personnel director" or "college recruiter." The individuals to whom the questionnaires were mailed were instructed to transfer the questionnaire to the individual within their companies who had the title of "administrative office manager" and/or who performed many of the following functions: (1) aids in a staff capacity by coordinating office services, personnel, budget preparation and control, records control, and special management studies; (2) studies management methods in order to improve work flow; (3) simplifies reporting procedures and implements cost reductions; (4) analyzes unit operation practices, forms control, and office layout; (5) analyzes jobs for use in wage and salary administration; and (6) studies methods of improving work measurements.

SELECTING THE SAMPLE

The first step in selecting the sample was to determine which companies were dually listed in the 1971 College Placement Annual and the 1971 Fortune magazine 1,000 list. The companies dually listed were then numbered serially. Of the 358 companies dually listed, it was determined that a sample size of 250 would be

sufficient for the purposes of this study. With the utilization of a Rand Corporation Table of Random Numbers, 250 companies were then randomly selected.

DESCRIPTION OF THE POPULATION

The population for this study consisted of the administrative office managers employed in the 358 companies dually listed in the 1971 Fortune magazine 1,000 list and the 1971 College Placement Annual. Table 1 illustrates the number of companies selected in each of the ten categories (100 companies in each category and ranked according to sales volume), the number of responses in each category, the number of usable responses in each category, and the percentage of usable responses in each category.

As is shown in Table 1, of the 100 largest companies (as measured by sales volume), 48 companies were randomly selected to participate in the study. Of the 48 companies, 35 responded, and 26 of the returned questionnaires were usable, representing 54.17 percent of usable questionnaires in the 1-100 category. Each individual in the 1-100 category who responded but who could not complete the questionnaire stated that the administrative office manager functions in his company were performed by several individuals--not just one individual--and therefore, it was not feasible to complete the questionnaire.

Forty-four companies were selected in the 101-200 category. Twenty-two individuals responded, and 18 questionnaires were usable, representing 40.90 percent usable questionnaires in the category.

Table 1

NUMBER OF COMPANIES SELECTED IN EACH CATEGORY, NUMBER OF RESPONDENTS,
NUMBER OF USABLE QUESTIONNAIRES, AND PERCENTAGE OF
USABLE QUESTIONNAIRES

Rank in Sales	Number of Companies in Category	Number of Companies Responding	Number of Usable Questionnaires	Percent of Usable Questionnaires in Category
1- 100	48	35	26	54.17
101- 200	44	22	18	40.90
201- 300	37	24	22	59.46
301- 400	29	17	13	44.82
401- 500	27	18	16	59.25
501- 600	24	15	13	54.16
601- 700	17	10	8	47.05
701- 800	9	7	7	77.77
801- 900	8	5	4	50.00
901-1000	<u>7</u>	<u>6</u>	<u>5</u>	71.43
	250	159	132	

The 701-800 sales volume group had the highest percentage of usable questionnaires by category; the group with the lowest percent of usable questionnaires by category was the 101-200 group.

STATISTICAL ANALYSIS

The information from the returned questionnaires was transferred by keypunch machine to 80-column computer cards. The cards were then

processed through the Computer Laboratory facilities at Michigan State University.

The CISSR - ACT II - PFCOUNT (Computer Institute for Social Science Research - Analysis of Contingency Table II - Percentage and Frequency of Response Count) computer program was utilized to compile the data. Chi-square was selected as the statistical analysis method to study the nature of the relationships between the independent and dependent variables. Chi-square test of independence was used to test the null hypotheses that the selected variables were essentially independent of one another. The level of significance for the rejection of the null hypotheses of no significant relationships was set at the .05 level.

Product moment correlations were used to determine whether the significant relationships were positive or negative.

COMPOSITE PROFILE OF ADMINISTRATIVE OFFICE MANAGERS

Table 2 illustrates the frequency count and percentage of response for each of the 12 independent variables. The table shows that the levels most frequently selected for each of the 12 independent variables were as follows: male, between ages 36-45, having been employed in the present position for one to three years; having 21 or more subordinates, having a bachelor's degree in an area of business or commerce; having two through four years of military experience; not having served as an officer in the military; having 11 or more years of supervisory experience; and not having clerical, general, or other office experience.

Table 2
COMPOSITE PROFILE OF ADMINISTRATIVE OFFICE MANAGERS
(N = 132)

Question	Frequency	Percent
1. Sex		
Male	125	94.70
Female	7	5.30
TOTAL	132	100.00
2. Age		
35 or less	33	25.00
36 through 45	42	31.82
46 through 55	40	30.30
56 through 65	17	12.88
over 65	--	---
TOTAL	132	100.00
3. Number of years in present position		
Less than 1 year	24	18.18
1 through 3 years	40	30.30
4 through 6 years	30	22.73
7 through 9 years	12	9.09
10 or more years	25	19.70
TOTAL	132	100.00
4. Number of subordinates supervised		
5 or fewer	43	32.58
6 to 10	27	20.45
11 to 15	9	6.82
16 to 20	4	3.03
21 or more	49	37.12
TOTAL	132	100.00
5. Highest level of formal education		
Less than 12 years	--	---
High school graduate	5	3.79
Less than one year of college	2	1.52
At least one year of college but no degree	18	13.64
Bachelor's degree	77	58.33
Master's degree	21	15.90
Work beyond master's degree	9	6.82
TOTAL	132	100.00

Table 2, Continued

Question	Frequency	Percent
6. Major area of specialization in college		
Business or commerce	69	52.27
Other	57	43.18
Left blank	<u>6</u>	<u>4.55</u>
TOTAL	132	100.00
7. Military experience		
No military experience	37	28.03
Less than 2 years of active duty	13	9.05
2 through 4 years of active duty	71	53.79
More than 4 years of active duty	10	7.57
Left blank	<u>1</u>	<u>.76</u>
TOTAL	132	100.00
8. Military officer		
Yes	39	29.54
No	91	68.94
Left blank	<u>2</u>	<u>1.52</u>
TOTAL	132	100.00
9. Number of years of supervisory office experience		
No supervisory experience	13	9.85
Less than 2 years	3	2.27
2 through 4 years	20	15.15
5 through 7 years	15	11.36
8 through 10 years	11	8.33
11 or more years	<u>70</u>	<u>53.04</u>
TOTAL	132	100.00
10. Number of years of clerical office experience		
No clerical experience	104	78.79
Less than 2 years	9	6.81
2 through 4 years	10	7.58
5 through 7 years	5	3.79
8 through 10 years	3	2.27
11 or more years	<u>1</u>	<u>.76</u>
TOTAL	132	100.00
11. Number of years of general office experience		
No general office experience	88	66.67
Less than 2 years	12	9.09
2 through 4 years	15	11.37
5 through 7 years	7	5.30
8 through 10 years	3	2.27
11 or more years	<u>7</u>	<u>5.30</u>
TOTAL	132	100.00

Table 2, Continued

Question	Frequency	Percent
12. Number of years of other office experience		
No other office experience	99	75.00
Less than 2 years	7	5.30
2 through 4 years	4	3.03
5 through 7 years	11	8.33
8 through 10 years	4	3.04
11 or more years	7	5.30
TOTAL	<u>132</u>	<u>100.00</u>

SCHEMATIC TIME TABLE OF ACTIVITIES IN STUDY

Figure 7 provides a graphic illustration of the more important activities and time sequences involved in the completion of the study.

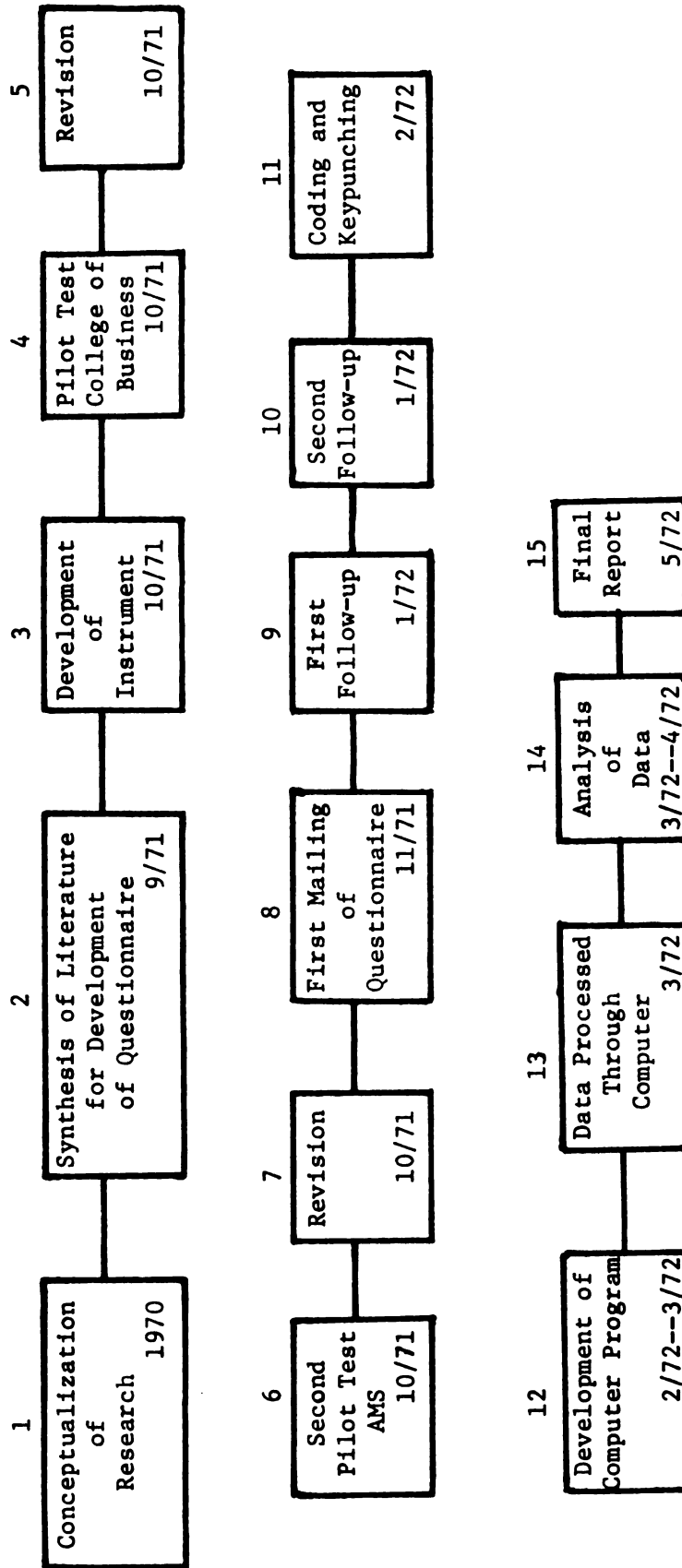


Figure 7. Flow Chart of Procedural Steps and Dates.

Chapter 4

THE FINDINGS: ANALYSIS OF THE RESPONSES OF ADMINISTRATIVE OFFICE MANAGERS

The purpose of this chapter is to present an analysis of the responses of the 132 administrative office managers who participated in the study.

This chapter is divided into three main parts. The first part presents an analysis of the effect of the 12 independent variables on the 27 selected managerial activities. The chi-square test of independence was used to analyze the data to determine the level of significance (.05 level). The product moment correlation analysis was used to determine whether the relationships were positive or negative. Although the hypotheses were stated in the research form in Chapter 1, each hypothesis was tested in the null form (for statistical purposes) in this chapter.

The second major part of the chapter (correlation matrix) is concerned with correlating the five dependent variables against one another to identify the significant correlations.

The third part is a frequency count and percent of response for each of the 27 selected managerial activities. Also provided in the third part are the mean numerical values for each of the 27 activities.

SEX

Of the 132 administrative office managers, 125 were male, which represents 94.70 percent of the total respondents. The seven females represent 5.30 percent of the total.

Planning Activities

Table 3 illustrates the relationships between sex and the four selected activities in the planning function. Using the chi-square

Table 3
RELATIONSHIPS BETWEEN SEX AND PLANNING ACTIVITIES
(df = 5)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	1.135	NS	.0354
2. Evaluating existing resources necessary to achieve departmental goals	2.542	NS	.0616
3. Writing long-term departmental objectives	1.669	NS	.0102
4. Identifying primary duties of jobs that must be performed	1.997	NS	.0813

analysis, no significant relationships were found to exist between the sex of the administrative office managers and each of the four planning activities. Therefore, the null hypothesis that the sex of the administrative office managers is independent of the four activities in the planning function cannot be rejected.

Organizing Activities

The relationships between sex and each of the five activities in the organizing function are illustrated in Table 4. The statistical analysis

Table 4
RELATIONSHIPS BETWEEN SEX AND ORGANIZING ACTIVITIES
(df = 5)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	1.451	NS	.0217
2. Defining relationships among jobs in department	4.846	NS	-.0535
3. Defining lines of authority within department	4.981	NS	-.0845
4. Defining responsibilities of subordinates in department	18.765	.05	-.1116
5. Developing efficient methods and procedures for office work	1.406	NS	.0019

reveals one significant relationship--between "sex" and "defining responsibilities of subordinates in department." The chi-square test of independence for this relationship is illustrated in Table I.* The product moment correlation for this comparison is $-.1116$, indicating that male administrative office managers tend to utilize more participation in this particular organizing activity than do female administrative office managers. The null hypothesis that sex is independent of "defining responsibilities of subordinates in department" is rejected.

*All tables with Roman numeral references appear in Appendix B.

Staffing Activities

Illustrated in Table 5 are the relationships between sex and the six staffing activities. A significant negative relationship is found to exist between "sex" and "appraising candidates for positions in department." The significant negative product moment correlation of $-.1299$

Table 5
RELATIONSHIPS BETWEEN SEX AND STAFFING ACTIVITIES
(df = 5)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	9.330	NS	-.0293
2. Preparing descriptions of various departmental jobs	4.044	NS	.0536
3. Orienting new employees in department	3.109	NS	-.0752
4. Appraising candidates for positions in department	12.758	.05	-.1299
5. Training new subordinates in department	2.058	NS	-.0606
6. Selecting candidates for positions in department	2.128	NS	-.1112

shown in Table II indicates that males tend to utilize more participation than do females when appraising candidates for positions in the department. The null hypothesis is rejected that the sex of administrative office managers is independent of "appraising candidates for positions in department" activity in the staffing function.

Directing Activities

As is shown in Table 6, none of the activities in the directing function are found to have a significant relationship with the sex of the administrative office managers. Consequently, the null hypothesis

Table 6
RELATIONSHIPS BETWEEN SEX AND DIRECTING ACTIVITIES
(df = 5)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	2.660	NS	-.0649
2. Establishing procedures for uniformity of work	1.267	NS	-.0198
3. Preparing directives for accomplishment of departmental objectives	2.738	NS	-.0821
4. Supervising subordinates in department	4.937	NS	-.0852
5. Making accurate measurement of work through development of systematic procedures	3.939	NS	-.0885

that sex is independent of the directing activities cannot be rejected.

Controlling Activities

Table 7 indicates that two of the seven controlling activities are found to be significantly related with sex. One significant negative relationship is found to exist between "sex" and "taking a corrective action if there is a failure to achieve objectives." This relationship is shown in Table III, and it has a product moment correlation of $-.0983$.

Table 7
 RELATIONSHIPS BETWEEN SEX AND CONTROLLING ACTIVITIES
 (df = 5)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	9.885	NS	-.1042
2. Preparing office manuals for departmental employees	1.100	NS	.0120
3. Formulating standards of performance based on goals, policies, programs, budgets	2.365	NS	-.0732
4. Adopting means of reviewing operations to check if expected results are obtained	3.652	NS	-.0526
5. Taking corrective action if there is a failure to achieve objectives	19.513	.05	-.0983
6. Writing departmental policies for employees	3.570	NS	-.0046
7. Measuring performance of departmental subordinates	14.944	.05	-.1315

Table IV illustrates the other significant relationship--between "sex" and "measuring performance of departmental subordinates." The negative relationship for each of these two controlling activities indicates that male administrative office managers have a tendency to permit more participation in each of the two activities than do their female counterparts. The null hypotheses are rejected that the sex of the administrative office manager is independent of "taking corrective action if there is a failure to achieve objectives" and "measuring performance of departmental subordinates" activities of the controlling function.

AGE

Of the 132 administrative office managers involved in the study, one fourth (33) were 35 years of age or less; 42 (31.82 percent) were between ages 36 and 45; 40 were between ages 46 and 55, representing 30.30 percent; and 17 (12.88 percent) were between ages 56 and 65. None of the respondents were over 65.

Planning Activities

As illustrated in Table 8, none of the four activities in the planning function are found to be significantly related to the age of the

Table 8
RELATIONSHIPS BETWEEN AGE AND PLANNING ACTIVITIES
(df = 15)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	23.525	NS	.1027
2. Evaluating existing resources necessary to achieve departmental goals	12.456	NS	.1377
3. Writing long-term departmental objectives	15.381	NS	.1573
4. Identifying primary duties of jobs that must be performed	24.856	NS	.2540

administrative office managers. Consequently, the null hypothesis that the age of the administrative office manager is independent of the four planning activities cannot be rejected.

Organizing Activities

The relationships between age and each of the organizing activities are illustrated in Table 9. Two significant relationships are found: between "age" and "defining responsibilities of subordinates in department" and between "age" and "developing efficient methods and procedures

Table 9

RELATIONSHIPS BETWEEN AGE AND ORGANIZING ACTIVITIES

(df = 15)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	22.874	NS	-.0716
2. Defining relationships among jobs in department	22.404	NS	.1647
3. Defining lines of authority within department	14.958	NS	.2088
4. Defining responsibilities of subordinates in department	28.862	.05	.2393
5. Developing efficient methods and procedures for office work	38.794	.05	.0455

for office work." According to Table V, the relationship between "age" and "defining responsibilities of subordinates in department" is positive, with a product moment correlation of .2393. Table VI compares "age" with "developing efficient methods and procedures for office work," and a product moment correlation of .0455 is found. The positive product moment correlations found in Tables V and VI indicate that as the age of the administrative office managers increases, so does their tendency to

utilize more participation in these two organizing activities. Therefore, the null hypotheses are rejected that age is independent of "defining responsibilities of subordinates in department" and "developing efficient methods and procedures for office work" activities in the organizing function.

Staffing Activities

Table 10 illustrates the relationships between age and the six selected activities in the staffing function. A significant relationship

Table 10
RELATIONSHIPS BETWEEN AGE AND STAFFING ACTIVITIES
(df = 15)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	25.872	.05	.1572
2. Preparing descriptions of various departmental jobs	15.504	NS	.1258
3. Orienting new employees in department	11.985	NS	-.0305
4. Appraising candidates for positions in department	23.678	NS	.2840
5. Training new subordinates in department	8.704	NS	.0221
6. Selecting candidates for positions in department	29.999	.05	.2599

at the 0.95 level of confidence is found between "age" and "recruiting candidates for positions in department." Table VII indicates that the

product moment correlation is .1572, which means that the older the administrative office manager is, the greater is the tendency for participative techniques to be utilized in recruiting candidates. Table VIII shows a positive product moment correlation of .2599 between "age" and "selecting candidates for positions in department." The older administrative office managers are more likely to permit participation in this particular activity than are the younger administrative office managers. The null hypotheses are rejected that age is independent of "recruiting candidates for positions in department" and "selecting candidates for positions in department" activities of the staffing function.

Directing Activities

Shown in Table 11 are the relationships between age and the five activities in the directing function. Since none of the relationships

Table 11
RELATIONSHIPS BETWEEN AGE AND DIRECTING FUNCTIONS
(df = 15)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	13.564	NS	.0630
2. Establishing procedures for uniformity of work	23.432	NS	.0898
3. Preparing directives for accomplishment of departmental objectives	10.838	NS	.0545
4. Supervising subordinates in department	20.210	NS	.1053
5. Making accurate measurements of work through development of systematic procedures	9.970	NS	-.0300

are found to be significant, the null hypothesis that age is independent of the activities in the directing function cannot be rejected.

Controlling Activities

The relationships between age and activities in the controlling function are illustrated in Table 12. No relationships are found to be

Table 12
RELATIONSHIPS BETWEEN AGE AND CONTROLLING ACTIVITIES
(df = 15)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	14.266	NS	.0348
2. Preparing office manuals for departmental employees	13.600	NS	-.0747
3. Formulating standards of performance based on goals, policies, programs, budgets	16.654	NS	.1303
4. Adopting means of reviewing operations to check if expected results are obtained	13.349	NS	.0084
5. Taking corrective action if there is a failure to achieve objectives	15.389	NS	.1461
6. Writing departmental policies for employees	15.537	NS	.0320
7. Measuring performance of departmental subordinates	14.524	NS	.1206

significant. Therefore, the null hypothesis that age is independent of the activities in the controlling function cannot be rejected.

NUMBER OF YEARS IN PRESENT POSITION

Twenty-four (18.18 percent) of the administrative office managers have been in the present position for less than one year. Forty (30.30 percent) have been in the present position for one through three years; 30 (22.73 percent), four through six years; 12 (9.09 percent), seven through nine years; and 25 (19.70 percent) ten or more years.

Planning Activities

None of the relationships between years in present position and the four activities in the planning function are significant. (See Table 13).

Table 13

RELATIONSHIPS BETWEEN YEARS IN PRESENT POSITION AND PLANNING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	18.837	NS	.0254
2. Evaluating existing resources necessary to achieve departmental goals	21.564	NS	.0004
3. Writing long-term departmental objectives	24.289	NS	.1409
4. Identifying primary duties of jobs that must be performed	16.448	NS	.1414

The null hypothesis that the number of years that administrative office managers have been in the present position is independent of the activities in the planning function, therefore, cannot be rejected.

Organizing Activities

Illustrated in Table 14 are the relationships between number of years in present position and five activities comprising the organizing function. None of the relationships are found to be significant.

Table 14
RELATIONSHIPS BETWEEN YEARS IN PRESENT POSITION
AND ORGANIZING ACTIVITIES
(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	24.265	NS	.0190
2. Defining relationships among jobs in department	21.043	NS	.1342
3. Defining lines of authority within department	12.181	NS	.1046
4. Defining responsibilities of subordinates in department	17.932	NS	.1742
5. Developing efficient methods and procedures for office work	21.000	NS	.0335

Therefore, the null hypothesis concerned with the independence between the number of years that administrative office managers have served in the present position and the activities in the organizing function cannot be rejected.

Staffing Activities

Of the six activities shown in Table 15, only "orienting new employees in department" is found to be significantly related to "number of years in present position." Table IX indicates that the relationship

Table 15

RELATIONSHIPS BETWEEN YEARS IN PRESENT POSITION AND STAFFING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	27.362	NS	.0700
2. Preparing descriptions of various departmental jobs	17.776	NS	.0178
3. Orienting new employees in department	32.201	.05	.0539
4. Appraising candidates for positions in department	20.574	NS	.2007
5. Training new subordinates in department	24.313	NS	.0393
6. Selecting candidates for positions in department	27.950	NS	.2356

is significantly positive with a product moment correlation of .0539.

This indicates that the longer an administrative office manager has served in his present position, the greater is the tendency for him to allow more participation in orienting new employees. The null hypothesis is rejected that the number of years that administrative office managers have served in their present positions is independent of "orienting new employees in department" activity of the staffing function.

Directing Activities

Table 16 illustrates the relationships between the number of years in the present position and the activities in the directing function.

Table 16
RELATIONSHIPS BETWEEN YEARS IN PRESENT POSITION AND DIRECTING ACTIVITIES
(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	29.413	NS	-.0405
2. Establishing procedures for uniformity of work	24.650	NS	.1325
3. Preparing directives for accomplishment of departmental objectives	15.061	NS	.1472
4. Supervising subordinates in department	41.458	.05	.1824
5. Making accurate measurement of work through development of systematic procedures	25.632	NS	.0218

"Supervising subordinates in department" and "number of years in present position" are significantly related at the 0.95 level of confidence.

Table X shows that the relationship of these two variables has a product moment correlation of .1824. Therefore, the longer administrative office managers have been in their present positions, the greater is the tendency for the managers to utilize participative management techniques in supervising subordinates. The null hypothesis is rejected that is concerned with the independence between number of years in present position and "supervising subordinates in department" activity.

Controlling Activities

Table 17 is concerned with the relationships between number of years in present position and the activities in the controlling function. No

Table 17

RELATIONSHIPS BETWEEN YEARS IN PRESENT POSITION

AND CONTROLLING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	16.349	NS	.0254
2. Preparing office manuals for departmental employees	14.227	NS	.0470
3. Formulating standards of performance based on goals, policies, programs, budgets	17.672	NS	.1090
4. Adopting means of reviewing operations to check if expected results are obtained	16.456	NS	.0150
5. Taking corrective action if there is a failure to achieve objectives	26.858	NS	.0841
6. Writing departmental policies for employees	20.854	NS	.1246
7. Measuring performance of departmental employees	20.120	NS	.1254

relationships are found to be significant. Consequently, the hypothesis related to the independence of the number of years that administrative office managers have served in the present position and the activities in the controlling function cannot be rejected.

NUMBER OF SUBORDINATES

The respondents were asked to indicate the number of subordinates under their supervision. Forty-three respondents (32.58 percent) supervise five or fewer subordinates, while 27 of the respondents (20.45 percent) supervise six to ten subordinates. Nine administrative office managers (6.82 percent) supervise 11 to 15; four (3.03 percent) supervise 16 to 20; and 49 (37.12 percent) supervise 21 or more employees.

Planning Activities

As shown in Table 18, none of the activities in the planning function are significantly related to the number of subordinates under the supervision of the administrative office managers. The null hypothesis that

Table 18

RELATIONSHIPS BETWEEN NUMBER OF SUBORDINATES AND PLANNING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	14.866	NS	.1226
2. Evaluating existing resources necessary to achieve departmental goals	19.464	NS	.1454
3. Writing long-term departmental objectives	19.337	NS	.1500
4. Identifying primary duties of jobs that must be performed	19.181	NS	.1633

the number of subordinates is independent of the activities in the planning function cannot be rejected.

Organizing Activities

The relationships between the number of subordinates supervised and the activities in the organizing function are illustrated in Table 19.

Table 19

RELATIONSHIPS BETWEEN NUMBER OF SUBORDINATES AND ORGANIZING ACTIVITIES
(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	27.102	NS	.1010
2. Defining relationships among jobs in department	25.902	NS	.1120
3. Defining lines of authority within department	18.320	NS	.0318
4. Defining responsibilities of subordinates in department	13.911	NS	.1070
5. Developing efficient methods and procedures for office work	13.846	NS	.1970

None of the relationships are significant. The null hypothesis that there is independence between the number of subordinates and the activities in the organizing function, therefore, cannot be rejected.

Staffing Activities

One significant relationship is found between the number of subordinates supervised and the six activities in the staffing function. (See Table 20). The relationship between "number of subordinates" and "preparing descriptions of various departmental jobs" is significant at the .05 level. Table XI indicates that the product moment correlation for

Table 20

RELATIONSHIPS BETWEEN NUMBER OF SUBORDINATES AND STAFFING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	13.270	NS	.0356
2. Preparing descriptions of various departmental jobs	31.626	.05	.2638
3. Orienting new employees in department	12.426	NS	.0470
4. Appraising candidates for positions in department	22.206	NS	.2837
5. Training new subordinates in department	19.073	NS	.1641
6. Selecting candidates for positions in department	27.984	NS	.2557

this relationship is .2638, meaning that as the number of subordinates supervised by the administrative office managers increases, so does the tendency for the managers to permit participation in preparing descriptions of jobs. The null hypothesis is rejected, therefore, that the number of subordinates is independent of the "preparing descriptions of various departmental jobs" activity in the staffing function.

Directing Activities

Of the five activities shown in Table 21, only "preparing directives for accomplishment of departmental objectives" is found to be related significantly to the "number of subordinates" supervised by administrative

Table 21

RELATIONSHIPS BETWEEN NUMBER OF SUBORDINATES AND DIRECTING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	16.446	NS	-.0038
2. Establishing procedures for uniformity of work	14.181	NS	.1790
3. Preparing directives for accomplishment of departmental objectives	32.126	.05	.1432
4. Supervising subordinates in department	20.214	NS	.0777
5. Making accurate measurement of work through development of systematic procedures	30.863	NS	.2565

office managers. Table XII shows that the relationship has a product moment correlation of .1432, interpreted to mean that administrative office managers seek more participation in preparing directives as the number of subordinates increases. The null hypothesis that is concerned with the independence of the number of subordinates supervised and the activities in the directing function is rejected.

Controlling Activities

Table 22 illustrates the relationships between the number of subordinates and the activities in the controlling function. A significant relationship is found between "number of subordinates" and "formulating standards of performance based goals, policies, programs, and budgets." As is shown in Table XIII, the product moment correlation is

Table 22

RELATIONSHIPS BETWEEN NUMBER OF SUBORDINATES AND

CONTROLLING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	17.615	NS	.1362
2. Preparing office manuals for office employees	16.371	NS	.0633
3. Formulating standards of performance based on goals, policies, programs, budgets	40.376	.05	.1565
4. Adopting means of reviewing operations to check if expected results are obtained	29.468	NS	.1527
5. Taking corrective action if there is a failure to achieve objectives	15.683	NS	.0712
6. Writing departmental policies for employees	27.083	NS	.1085
7. Measuring performance of departmental employees	20.668	NS	.3001

.1565, which means that as the number of subordinates increases, so does the amount of participation that administrative office managers utilize in formulating standards of performance based on goals, policies, programs, and budgets. The null hypothesis is rejected that is concerned with the independence between the number of subordinates supervised and "formulating standards of performance based on goals, policies, programs, budgets" activity of the controlling function.

LEVEL OF EDUCATION

Each of the administrative office managers was asked to indicate the highest level of formal education that he had attained. All of the respondents had been graduated from high school. Five (3.79 percent) of the respondents had not gone beyond high school. Two (1.52 percent) had less than one year of college, while 18 (13.64 percent) had at least one year of college but had not received a degree. Seventy-seven (58.33 percent) had received a bachelor's degree; 21 (15.90 percent), a master's degree; and nine (6.82 percent) of the administrative office managers had work beyond a master's degree.

Planning Activities

Table 23 presents the relationships between education and the activities in the planning function. Since none of the activities are found to

Table 23

RELATIONSHIPS BETWEEN EDUCATION AND PLANNING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	20.821	NS	-.1024
2. Evaluating existing resources necessary to achieve departmental goals	28.873	NS	.0935
3. Writing long-term departmental objectives	22.865	NS	-.0879
4. Identifying primary duties of jobs that must be performed	27.145	NS	-.1787

be significant, the null hypothesis that the education level of the administrative office managers is independent of the activities in the planning function cannot be rejected.

Organizing Activities

Presented in Table 24 are the relationships between the education level and the activities in the organizing function. None of the activities are significant; therefore, the null hypothesis that the education

Table 24

RELATIONSHIPS BETWEEN EDUCATION AND ORGANIZING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	20.773	NS	-.1824
2. Defining relationships among jobs in department	28.498	NS	-.1717
3. Defining lines of authority within department	17.088	NS	-.0742
4. Defining responsibilities of subordinates in department	25.602	NS	-.1690
5. Developing efficient methods and procedures for office work	19.633	NS	-.0711

level is independent of the activities in the organizing function cannot be rejected.

Staffing Activities

The relationships between the education level of administrative office managers and the activities in the staffing function are illustrated in Table 25. None of the relationships are found to be significant. Therefore, the null hypothesis that the education level is independent of the activities in the staffing function cannot be rejected.

Table 25

RELATIONSHIPS BETWEEN EDUCATION AND STAFFING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	18.673	NS	-.1762
2. Preparing descriptions of various departmental jobs	29.006	NS	-.0691
3. Orienting new employees in department	14.706	NS	-.0479
4. Appraising candidates for positions in department	18.996	NS	-.1541
5. Training new subordinates in department	16.091	NS	-.0984
6. Selecting candidates for positions in department	15.432	NS	-.1721

Directing Activities

The relationships between the education level of administrative office managers and the activities in the directing function are illustrated in Table 26. A significant negative relationship between the

Table 26

RELATIONSHIPS BETWEEN EDUCATION AND DIRECTING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	25.435	NS	.0349
2. Establishing procedures for uniformity of work	11.894	NS	-.0225
3. Preparing directives for accomplishment of departmental objectives	29.201	NS	-.0949
4. Supervising subordinates in department	57.101	.05	-.1088
5. Making accurate measurements of work through development of systematic procedures	37.423	NS	-.1870

education level of the administrative office managers and "supervising subordinates in department" is found. As shown in Table XIV, the relationship has a product moment correlation of $-.1088$, meaning that as the education level of the administrative office managers increases, there is a tendency for the managers to allow less participation in this particular activity. The null hypothesis is rejected, therefore, that the education level of the administrative office managers is independent of "supervising subordinates in department" activity of the directing function.

Controlling Activities

The relationships between the education level of administrative office managers and the activities in the controlling function are

illustrated in Table 27. None of the activities are found to be significant at the .05 level. Therefore, the null hypothesis that the

Table 27
RELATIONSHIPS BETWEEN EDUCATION AND CONTROLLING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	20.049	NS	-.0673
2. Preparing office manuals for departmental employees	28.096	NS	.0014
3. Formulating standards of performance based on goals, policies, programs, budgets	22.106	NS	-.1164
4. Adopting means of reviewing operations to check if expected results are obtained	15.899	NS	-.0198
5. Taking corrective action if there is a failure to achieve objectives	28.211	NS	-.0723
6. Writing departmental policies for employees	25.924	NS	-.1805
7. Measuring performance of departmental subordinates	27.619	NS	-.1382

education level is independent of the activities in the controlling function cannot be rejected.

MAJOR IN COLLEGE

The respondents were asked to identify the nature of their major area of specialization in college. Sixty-nine (52.27 percent) indicated they were business or commerce majors. Fifty-seven (43.18 percent)

indicated a major in an area other than business or commerce. Majors other than business most frequently cited were psychology, education, and engineering. Six of the respondents (including the five who did not attend college) did not respond to the questionnaire item.

Planning Activities

Illustrated in Table 28 are the relationships between the major area of specialization in college and the activities in the planning function.

Table 28

RELATIONSHIPS BETWEEN MAJOR IN COLLEGE AND PLANNING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	6.574	NS	-.1237
2. Evaluating existing resources necessary to achieve departmental goals	15.432	NS	-.1594
3. Writing long-term departmental objectives	9.307	NS	-.0840
4. Identifying primary duties of jobs that must be performed	13.032	NS	-.2372

None of the activities are shown to be significant. The null hypothesis that the major area of specialization is independent of the activities in the planning function cannot be rejected.

Organizing Activities

The relationships between the major area of specialization in college and the five activities in the organizing function are presented

in Table 29. Since none of the relationships are found to be at a significant level, the null hypothesis that independence exists between

Table 29
RELATIONSHIPS BETWEEN MAJOR IN COLLEGE AND ORGANIZING ACTIVITIES
(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	5.903	NS	-.1290
2. Defining relationships among jobs in department	10.191	NS	-.1718
3. Defining lines of authority within department	3.595	NS	.0240
4. Defining responsibilities of subordinates in department	7.082	NS	-.1846
5. Developing efficient methods and procedures for office work	6.166	NS	-.1549

the major area of specialization in college and the activities in the organizing function cannot be rejected.

Staffing Activities

Illustrated in Table 30 are the relationships between the major area of specialization in college and the six staffing activities. No significant relationships are found between the major area of specialization and the various activities in the staffing function. The hypothesis, therefore, that the major area of collegiate specialization of the administrative office managers is independent of the activities in the staffing function cannot be rejected.

Table 30

RELATIONSHIPS BETWEEN MAJOR IN COLLEGE AND STAFFING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	5.065	NS	.0046
2. Preparing descriptions of various departmental jobs	10.489	NS	-.0553
3. Orienting new employees in department	10.407	NS	-.0916
4. Appraising candidates for positions in department	10.130	NS	-.1906
5. Training new subordinates in department	12.667	NS	-.1326
6. Selecting candidates for positions in department	7.015	NS	-.1477

Directing Activities

Table 31 illustrates the relationships between the major area of college specialization and the activities in the directing function. A significant negative relationship is found between the major area of specialization and "making accurate measurements of work through development of systematic procedures." Table XV shows that the relationship has a product moment correlation of $-.2810$, which means that those administrative office managers who were business or commerce majors in college tend to seek less participation in this particular activity than do the nonbusiness majors. The null hypothesis is rejected that is concerned with the independence between the major area of specialization

Table 31

RELATIONSHIPS BETWEEN MAJOR IN COLLEGE AND DIRECTING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	17.054	NS	.0484
2. Establishing procedures for uniformity of work	5.748	NS	-.1333
3. Preparing directives for accomplishment of departmental objectives	8.772	NS	-.0429
4. Supervising subordinates in department	14.046	NS	-.1175
5. Making accurate measurement of work through development of systematic procedures	20.457	.05	-.2810

and "making accurate measurement of work through development of systematic procedures" activity of the directing function.

Controlling Activities

As illustrated in Table 32, the relationships between the major area of specialization in college and the activities in the controlling function have one significant (negative) comparison--"measuring performance of departmental subordinates." Table XVI shows that the relationship has a product moment correlation of $-.3526$, which indicates that business or commerce majors are less participative in this activity than are those who majored in a nonbusiness area. The null hypothesis is rejected that is concerned with the independence between the major area of specialization and "measuring performance of departmental subordinates" activity of the controlling function.

Table 32

RELATIONSHIPS BETWEEN MAJOR IN COLLEGE AND CONTROLLING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	9.642	NS	-.0956
2. Preparing office manuals for departmental employees	8.033	NS	.0355
3. Formulating standards of performance based on goals, policies, programs, budgets	10.667	NS	-.0817
4. Adopting means of reviewing operations to check if expected results are obtained	9.488	NS	-.1013
5. Taking corrective action if there is a failure to achieve objectives	10.109	NS	-.1095
6. Writing departmental policies for employees	8.872	NS	-.1136
7. Measuring performance of departmental subordinates	19.290	.05	-.3526

MILITARY EXPERIENCE

Of the 132 respondents, 37 (28.03 percent) reported no military experience. Thirteen (9.05 percent) reported less than two years of active duty, while 71 (53.79 percent) served two through four years of active duty in the military. Ten (7.57 percent) have served more than four years of active duty in the military, and one of the respondents did not respond to the questionnaire item.

Planning Activities

The relationships between military experience and activities in the planning function are illustrated in Table 33. None of the activities

Table 33

RELATIONSHIPS BETWEEN MILITARY EXPERIENCE AND PLANNING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	24.109	NS	-.0415
2. Evaluating existing resources necessary to achieve departmental goals	14.495	NS	-.0620
3. Writing long-term departmental objectives	21.281	NS	.0796
4. Identifying primary duties of jobs that must be performed	18.821	NS	.0041

are significant; therefore, the null hypothesis that military experience is independent of the activities in the planning function cannot be rejected.

Organizing Activities

Table 34 shows the relationships between military experience and activities in the organizing function. The relationships between military experience and the following three activities are found to be significant: (1) "defining relationships among jobs in department"; (2) "defining lines of authority within department"; and, (3) "defining responsibilities of subordinates in department." Table XVII reflects

Table 34

RELATIONSHIPS BETWEEN MILITARY EXPERIENCE AND ORGANIZING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	10.851	NS	.0189
2. Defining relationships among jobs in department	41.333	.05	-.0009
3. Defining lines of authority within department	54.788	.05	.1161
4. Defining responsibilities of subordinates in department	140.355	.05	.0884
5. Developing efficient methods and procedures for office work	14.678	NS	.0280

the relationship between "military experience" and "defining relationships among jobs in department," and a product moment correlation of -.0009 is found. The correlation shows that the fewer the years of military experience of administrative office managers, the greater is the tendency for the managers to utilize participation in defining relationships among departmental jobs. Table XVIII is concerned with the relationship between military experience of administrative office managers and defining departmental lines of authority. The product moment correlation of .1161 indicates that as the number of years of military experience increases, there is a greater tendency for administrative office managers to use participation in this organizing activity. The relationship between "military experience" and "defining responsibilities of subordinates in department" is illustrated in Table XIX. The product

moment correlation of .0884 indicates that as the number of years of military experience increases, so does the amount of participation utilized by administrative office managers increase. The null hypotheses are rejected that relate to the independence between military experience and "defining relationships among jobs in department," "defining lines of authority within department," and "defining responsibilities of subordinates in department" activities of the organizing function.

Staffing Activities

Illustrated in Table 35 are the relationships between military experience and activities in the staffing function. Three of the

Table 35

RELATIONSHIPS BETWEEN MILITARY EXPERIENCE AND STAFFING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	10.352	NS	.0584
2. Preparing descriptions of various departmental jobs	21.581	NS	-.0121
3. Orienting new employees in department	32.788	.05	.1557
4. Appraising candidates for positions in department	72.035	.05	.0521
5. Training new subordinates in department	41.959	.05	.0207
6. Selecting candidates for positions in department	28.926	NS	.0344

activities are significantly related to military experience. Table XX shows that "orienting new departmental employees" is significantly related to military experience, and the relationship has a product moment correlation of .1557. This relationship means that as the number of years of military experience increases, the greater is the tendency for the administrative office managers to utilize participative management in orienting new departmental employees. Table XXI shows that "military experience" and "appraising candidates for positions in the department" are correlated with a product moment correlation of .0521. The correlation indicates that as the number of years of military experience increases, administrative office managers tend to utilize participative techniques in appraising candidates for positions in the department. The third significant relationship, as shown in Table XXII, is between military experience and training new departmental subordinates. The positive product moment correlation of .0207 indicates that the number of years of military experience of administrative office managers is directly correlated with their tendency to utilize participative management techniques in this particular activity. The null hypotheses are rejected that military experience is independent of "orienting new employees in department," "appraising candidates for positions in department," and "training new subordinates in department" activities of the staffing function.

Directing Activities

Table 36 indicates that one of the activities in the directing function is significantly related to military experience. "Establishing procedures for uniformity of work," as shown in Table XXIII, has a

Table 36

RELATIONSHIPS BETWEEN MILITARY EXPERIENCE AND DIRECTING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	17.545	NS	-.0662
2. Establishing procedures for uniformity of work	34.079	.05	-.0760
3. Preparing directives for accomplishment of departmental objectives	16.687	NS	-.0157
4. Supervising subordinates in department	22.145	NS	.0730
5. Making accurate measurement of work through development of systematic procedures	24.213	NS	.0344

significant negative relationship with "military experience," and a product moment correlation of $-.0760$ is found to exist. This is interpreted to mean that as the number of years of military experience increases, the less likely are the administrative office managers to use participation in establishing procedures for uniformity of work. The null hypothesis is rejected that military experience is independent of "establishing procedures for uniformity of work" activity of the directing function.

Controlling Activities

The relationships between military experience and the activities in the controlling function are shown in Table 37. A significant relationship (presented in Table XXIV) is found between "military experience" and

Table 37

RELATIONSHIPS BETWEEN MILITARY EXPERIENCE AND CONTROLLING ACTIVITIES

(df = 20)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	20.499	NS	-.0273
2. Preparing office manuals for departmental employees	18.580	NS	.0235
3. Formulating standards of performance based on goals, policies, programs, budgets	15.712	NS	.0328
4. Adopting means of reviewing operations to check if expected results are obtained	28.660	NS	-.1247
5. Taking corrective action if there is a failure to achieve objectives	25.419	NS	-.0475
6. Writing departmental policies for employees	38.165	.05	.0471
7. Measuring performance of departmental subordinates	31.912	.05	.0196

"writing departmental policies for employees." With a product moment correlation of .0471, the interpretation is that as the number of years of military experience increases, so does the tendency for administrative office managers to utilize participation in this particular controlling activity. Another significant relationship is found to exist between "military experience" and "measuring performance of departmental subordinates" (see Table XXV). These two variables have a product moment correlation of .0196, which indicates that as the number of years of military experience increases, administrative office managers tend to utilize more participation in this particular activity. The null hypotheses are

rejected that military experience is independent of the "writing departmental policies for employees" and "measuring performance of departmental subordinates" activities of the controlling function.

MILITARY OFFICER EXPERIENCE

When the respondents were asked if they were an officer in the military, 39 (29.54 percent) replied in the affirmative. Ninety-one (68.94 percent) have not served in the capacity of a military officer, and two did not respond to the item on the questionnaire.

Planning Activities

The relationships between military officer experience and the four activities in the planning function are shown in Table 38. A significant

Table 38

RELATIONSHIPS BETWEEN MILITARY OFFICER EXPERIENCE AND PLANNING ACTIVITIES
(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	21.684	.05	.1653
2. Evaluating existing resources necessary to achieve departmental goals	12.769	NS	.1045
3. Writing long-term departmental objectives	13.064	NS	-.0137
4. Identifying primary duties of jobs that must be performed	20.087	.05	.0510

relationship is found to exist between "military officer experience" and "writing short-term departmental objectives," as reflected in Table XXVI.

With a product moment correlation of .1653, the interpretation is that administrative office managers who do not have experience as a military officer tend to use more participation in "writing short-term departmental objectives" than those who do have military officer experience. "Identifying primary duties of jobs that must be performed" is also significantly related to military officer experience. (See Table XXVII). A product moment correlation of .0510 indicates that administrative office managers who have not served in the capacity of military officers tend to utilize more participation in this particular planning activity. The null hypotheses are rejected that military officer experience is independent of "writing short-term departmental objectives" and "identifying primary duties of jobs that must be performed" activities of the planning function.

Organizing Activities

Illustrated in Table 39 are the relationships between "military officer experience" and the five activities in the organizing function. Three of the activities are found to be significant. Table XXVIII shows a significant relationship between "military officer experience" and "defining relationships among jobs in the department." For this relationship, the product moment correlation is .1760. Table XXIX shows a significant relationship between "defining lines of authority within the department" and "military officer experience," with a product moment correlation of .0925. A significant relationship is also found between "defining responsibilities of subordinates in the department" and "military officer experience"; and as shown in Table XXX, a product moment correlation of .0523 exists. The interpretation of the three significant relationships found between military officer experience and the three

Table 39

RELATIONSHIPS BETWEEN MILITARY OFFICER EXPERIENCE AND

ORGANIZING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	10.011	NS	.0709
2. Defining relationships among jobs in department	24.353	.05	.1760
3. Defining lines of authority within department	20.352	.05	.0925
4. Defining responsibilities of subordinates in department	69.362	.05	.0523
5. Developing efficient methods and procedures for office work	7.931	NS	-.0074

activities in the organizing function is that nonmilitary officers tend to seek more participation than do the military officers. The null hypotheses are rejected that military officer experience is independent of "defining relationships among jobs in department," "defining lines of authority within department," and "defining responsibilities of subordinates in department" activities of the organizing function.

Staffing Activities

Table 40 illustrates the relationships between military officer experience and the activities in the staffing function. According to Table XXXI, a significant relationship exists between "military officer experience" and "appraising candidates for positions in department."

Table 40
RELATIONSHIPS BETWEEN MILITARY OFFICER EXPERIENCE AND
STAFFING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	15.025	NS	.1066
2. Preparing descriptions of various departmental jobs	7.567	NS	.1147
3. Orienting new employees in department	13.966	NS	-.0116
4. Appraising candidates for positions in department	37.221	.05	.0638
5. Training new subordinates in department	18.198	NS	.0729
6. Selecting candidates for positions in department	14.478	NS	.0611

With a product moment correlation of .0638, the interpretation is that nonmilitary officers have a greater tendency to utilize more participation in appraising candidates for positions in department than do the military officers. The null hypothesis is rejected that is concerned with the independence between military officer experience and "appraising candidates for positions in department" activity of the staffing function.

Directing Activities

The relationships between military officer experience and the five activities in the directing function are illustrated in Table 41. Since

Table 41

RELATIONSHIPS BETWEEN MILITARY OFFICER EXPERIENCE AND
DIRECTING ACTIVITIES
(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	4.811	NS	.0290
2. Establishing procedures for uniformity of work	10.143	NS	.0523
3. Preparing directives for accomplishment of departmental objectives	13.990	NS	.1907
4. Supervising subordinates in department	12.826	NS	.0529
5. Making accurate measurement of work through development of systematic procedures	6.873	NS	.0719

none are found to be significant, the null hypothesis that is concerned with the independence between military officer experience and activities in the directing function cannot, therefore, be rejected.

Controlling Activities

The relationships between military officer experience and the seven activities in the controlling function are illustrated in Table 42. A significant relationship exists between "military officer experience" and "measuring performance of departmental subordinates." According to Table XXXII, the product moment correlation between these two variables is .0569, which means that administrative office managers who have served in the capacity of military officers tend to utilize less amounts

Table 42

RELATIONSHIPS BETWEEN MILITARY OFFICER EXPERIENCE AND
CONTROLLING ACTIVITIES

(df = 10)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	8.873	NS	.0638
2. Preparing office manuals for departmental employees	9.381	NS	-.0290
3. Formulating standards of performance based on goals, policies, programs, budgets	14.204	NS	.1288
4. Adopting means of reviewing operations to check if expected results are obtained	12.940	NS	.1233
5. Taking corrective action if there is a failure to achieve objectives	7.101	NS	.1254
6. Writing departmental policies for employees	18.026	NS	.0523
7. Measuring performance of departmental subordinates	20.304	.05	.0569

of participation in this particular activity than do those with no military officer experience. The null hypothesis is rejected that is concerned with the independence between military officer experience and "measuring performance of departmental subordinates" activity of the controlling function.

SUPERVISORY EXPERIENCE

The administrative office managers were asked to report the extent of their supervisory office experience. Thirteen (9.85 percent) listed

no previous supervisory experience; three (2.27 percent) reported less than two years; and two through four years of supervisory office experience was reported by 20 (15.15 percent). Fifteen of the respondents (11.36 percent) reported five through seven years of supervisory experience; 11 (8.33 percent), eight through ten years; and 70 (53.04 percent) reported 11 or more years of supervisory experience.

Planning Activities

Illustrated in Table 43 are the relationships between supervisory office experience and the activities in the planning function. None are

Table 43
RELATIONSHIPS BETWEEN SUPERVISORY EXPERIENCE AND
PLANNING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	19.799	NS	-.0857
2. Evaluating existing resources necessary to achieve departmental goals	25.029	NS	.0513
3. Writing long-term departmental objectives	21.323	NS	.0573
4. Identifying primary duties of jobs that must be performed	24.531	NS	.1532

found to be significantly related. Consequently, the null hypothesis concerned with independence between supervisory office experience and planning activities cannot be rejected.

Organizing Activities

The relationships between supervisory office experience and the organizing activities are the substance of Table 44. Since none of the

Table 44
RELATIONSHIPS BETWEEN SUPERVISORY EXPERIENCE AND
ORGANIZING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	22.235	NS	-.0248
2. Defining relationships among jobs in department	29.227	NS	.0614
3. Defining lines of authority within department	28.450	NS	.0676
4. Defining responsibilities of subordinates in department	28.087	NS	.1860
5. Developing efficient methods and procedures for office work	20.722	NS	.0425

relationships are found to be significant, the null hypothesis that supervisory office experience is independent of organizing activities cannot be rejected.

Staffing Activities

Illustrated in Table 45 are the relationships between supervisory experience and the six activities in the staffing function. Table XXXIII, concerned with the significant relationship between "supervisory experience" and "appraising candidates for positions in department," indicates

Table 45
 RELATIONSHIPS BETWEEN SUPERVISORY EXPERIENCE AND
 STAFFING ACTIVITIES
 (df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	24.755	NS	.0230
2. Preparing descriptions of various departmental jobs	16.018	NS	.1669
3. Orienting new employees in department	22.979	NS	.0381
4. Appraising candidates for positions in department	49.811	.05	.2298
5. Training new subordinates in department	30.390	NS	.1123
6. Selecting candidates for positions in department	43.605	.05	.1814

a product moment correlation of .2298. This correlation means that the greater the number of years of supervisory experience of administrative office managers, the greater is the amount of participation utilized in this particular activity. Illustrated in Table XXXIV is the significant relationship between "supervisory experience" and selecting candidates for positions in the department. Since the product moment correlation is .1814, the interpretation is that the longer administrative office managers serve in a supervisory capacity, the more participative they tend to be in this particular activity. The null hypotheses are rejected that there is independence between supervisory experience and "appraising

candidates for positions in department" and "selecting candidates for positions in department" activities of the staffing function.

Directing Activities

The relationships between supervisory experience and activities in the directing function are illustrated in Table 46. None of the

Table 46
RELATIONSHIPS BETWEEN SUPERVISORY EXPERIENCE AND
DIRECTING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	28.115	NS	.0759
2. Establishing procedures for uniformity of work	27.568	NS	.0551
3. Preparing directives for accomplishment of departmental objectives	25.663	NS	.0077
4. Supervising subordinates in department	25.842	NS	.1250
5. Making accurate measurement of work through systematic development of procedures	24.374	NS	.0129

relationships are significant at the .05 level of significance. Therefore, the null hypothesis concerned with the independence between supervisory experience and activities in the directing function cannot be rejected.

Controlling Activities

Table 47, concerned with the relationships between supervisory experience and activities in the controlling function, indicates that

Table 47
RELATIONSHIPS BETWEEN SUPERVISORY EXPERIENCE AND
CONTROLLING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	23.100	NS	.0493
2. Preparing office manuals for departmental employees	22.457	NS	-.0451
3. Formulating standards of performance based on goals, policies, programs, budgets	31.549	NS	.0965
4. Adopting means of reviewing operations to check if expected results are obtained	23.418	NS	-.0020
5. Taking corrective action if there is a failure to achieve objectives	22.521	NS	.1292
6. Writing departmental policies for employees	10.385	NS	-.0130
7. Measuring performance of departmental subordinates	21.496	NS	.1084

none of the relationships are significant. Hence, the hypothesis concerned with the independence between the supervisory experience of administrative office managers and the controlling activities cannot be rejected.

CLERICAL OFFICE EXPERIENCE

Of the 132 respondents, 104 (78.79 percent) reported no clerical office experience. Nine (6.81 percent) have had less than two years of clerical office experience, and ten (7.58 percent) have had two through four years of clerical office experience. Five of the respondents (3.79 percent) have had five through seven years of experience, while three (2.27 percent) have had eight through eleven years of experience in a clerical capacity. One respondent (.76 percent) has had 11 or more years of experience in this category.

Planning Activities

Illustrated in Table 48 are the relationships between clerical experience and the activities in the planning function. None are found significant; therefore, the null hypothesis concerned with the amount

Table 48

RELATIONSHIPS BETWEEN CLERICAL EXPERIENCE AND PLANNING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	17.165	NS	.0683
2. Evaluating existing resources necessary to achieve departmental goals	31.180	NS	.0350
3. Writing long-term departmental objectives	19.624	NS	.0007
4. Identifying primary duties of jobs that must be performed	15.483	NS	.1609

of independence between clerical experience and the activities in the planning function cannot be rejected.

Organizing Activities

Since none of the relationships between clerical experience and the activities in the organizing function (see Table 49) are found to be

Table 49

RELATIONSHIPS BETWEEN CLERICAL EXPERIENCE AND ORGANIZING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	22.233	NS	.0993
2. Defining relationships among jobs in department	8.882	NS	.1326
3. Defining lines of authority within department	22.098	NS	-.1570
4. Defining responsibilities of subordinates in department	20.707	NS	.0857
5. Developing efficient methods and procedures for office work	11.534	NS	.0510

significant, the null hypothesis concerned with the independence of these two variables cannot be rejected.

Staffing Activities

Illustrated in Table 50 are the relationships between clerical experience and the activities in the staffing function. None of the relationships between clerical experience and the staffing activities

Table 50

RELATIONSHIPS BETWEEN CLERICAL EXPERIENCE AND STAFFING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	19.560	NS	.0099
2. Preparing descriptions of various departmental jobs	24.301	NS	-.0432
3. Orienting new employees in department	20.320	NS	-.0267
4. Appraising candidates for positions in department	24.391	NS	-.0054
5. Training new subordinates in department	26.365	NS	.0696
6. Selecting candidates for positions in department	25.999	NS	.0608

are significant. Therefore, the null hypothesis concerned with the independence between the staffing activities and clerical experience cannot be rejected.

Directing Activities

The purpose of Table 51 is to show the relationships between clerical experience and activities in the directing function. Table XXXV indicates that a significant relationship (negative) exists between "clerical experience" and "formulating personnel policies necessary to maintain a desirable level of morale." The correlation is $-.1534$, which means that as the number of years of clerical experience of administrative office managers increases, the amount of participation that the managers utilize

Table 51

RELATIONSHIPS BETWEEN CLERICAL EXPERIENCE AND DIRECTING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign.	PMC
		Level	
1. Formulating personnel policies necessary to maintain desirable level of morale	42.926	.05	-.1534
2. Establishing procedures for uniformity of work	18.629	NS	.1705
3. Preparing directives for accomplishment of departmental objectives	13.443	NS	.0803
4. Supervising subordinates in department	24.477	NS	-.0350
5. Making accurate measurement of work through development of systematic procedures	17.285	NS	.1379

decreases. The null hypothesis is rejected that clerical experience is independent of "formulating personnel policies necessary to maintain desirable level of morale" activity of the directing function.

Controlling Activities

Illustrated in Table 52 are the relationships between clerical experience and the activities in the controlling function. None are found to be significant; therefore, the null hypothesis that clerical experience is independent of the activities in the controlling function cannot be rejected.

Table 52

RELATIONSHIPS BETWEEN CLERICAL EXPERIENCE AND CONTROLLING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	12.353	NS	.0697
2. Preparing office manuals for departmental employees	19.503	NS	-.0623
3. Formulating standards of performance based on goals, policies, programs, budgets	21.469	NS	-.0449
4. Adopting means of reviewing operations to check if expected results are obtained	17.869	NS	-.0659
5. Taking corrective action if there is a failure to achieve objectives	35.067	NS	.0148
6. Writing departmental policies for employees	28.966	NS	.1056
7. Measuring performance of departmental employees	34.057	NS	.0604

GENERAL OFFICE EXPERIENCE

The respondents were asked to indicate the number of years of general office experience they have had. Eighty-eight (66.67 percent) claimed no general office experience; 12 (9.09 percent) reported less than two years of general office experience; and fifteen indicated two through four years of general office experience. Seven (5.30 percent) have had between five and seven years of experience; three (2.27 percent), eight through ten years; and seven (5.30 percent), 11 or more years of general office experience.

Planning Activities

The relationships between general office experience and the four activities in the planning function are illustrated in Table 53. Since

Table 53

RELATIONSHIPS BETWEEN GENERAL OFFICE EXPERIENCE AND PLANNING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	23.704	NS	.0254
2. Evaluating existing resources necessary to achieve departmental goals	28.718	NS	.0321
3. Writing long-term departmental objectives	22.822	NS	.0078
4. Identifying primary duties of jobs that must be performed	30.006	NS	-.1106

none are below the .05 level of significance, the null hypothesis that general office experience is independent of the activities in the planning function cannot be rejected.

Organizing Activities

Table 54 illustrates the relationships between general office experience and the activities in the organizing function. All of the chi-square values are at a nonsignificant level. Hence, the null hypothesis that general office experience and the activities in the organizing function are independent of one another cannot be rejected.

Table 54

RELATIONSHIPS BETWEEN GENERAL OFFICE EXPERIENCE AND ORGANIZING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	26.102	NS	-.0302
2. Defining relationships among jobs in department	26.954	NS	.0014
3. Defining lines of authority within department	24.962	NS	-.0603
4. Defining responsibilities of subordinates in department	31.262	NS	-.0568
5. Developing efficient methods and procedures for office work	25.520	NS	.0491

Staffing Activities

Table 55 illustrates a significant relationship (negative) between general office experience and one of the activities in the staffing function. Table XXXVI indicates that the correlation between "general office experience" and selecting candidates for positions in the department is $-.0659$, which means that as the number of years of general office experience increases, administrative office managers tend to use less participation in this particular activity. Therefore, the null hypothesis is rejected that general office experience is independent of "selecting candidates for positions in department" activity of the staffing function.

Table 55

RELATIONSHIPS BETWEEN GENERAL OFFICE EXPERIENCE AND

STAFFING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	24.622	NS	.0285
2. Preparing descriptions of various departmental jobs	27.443	NS	-.1441
3. Orienting new employees in department	20.890	NS	-.0647
4. Appraising candidates for positions in department	22.938	NS	-.0433
5. Training new subordinates in department	19.069	NS	-.0484
6. Selecting candidates for positions in department	38.189	.05	-.0659

Directing Activities

Table 56 illustrates the relationships between general office experience and the activities in the directing function. None of the relationships are significant; consequently, the null hypothesis concerned with the independence between these two variables cannot be rejected.

Table 56

RELATIONSHIPS BETWEEN GENERAL OFFICE EXPERIENCE AND

DIRECTING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	14.570	NS	-.0539
2. Establishing procedures for uniformity of work	15.692	NS	-.0810
3. Preparing directives for accomplishment of departmental objectives	24.931	NS	.0239
4. Supervising subordinates in department	31.753	NS	-.0054
5. Making accurate measurement of work through development of systematic procedures	32.605	NS	.0754

Controlling Activities

Illustrated in Table 57 are the relationships between general office experience and the five selected activities in the controlling function. The null hypothesis that general office experience is independent of the activities in the controlling function cannot be rejected since none of the relationships are significant.

Table 57

RELATIONSHIPS BETWEEN GENERAL OFFICE EXPERIENCE AND
CONTROLLING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	25.708	NS	-.0173
2. Preparing office manuals for departmental employees	32.449	NS	.0192
3. Formulating standards of performance based on goals, policies, programs, budgets	22.784	NS	.0107
4. Adopting means of reviewing operations to check if expected results are obtained	27.277	NS	-.0480
5. Taking corrective action if there is a failure to achieve objectives	29.765	NS	-.0883
6. Writing departmental policies for employees	29.070	NS	-.0007
7. Measuring performance of departmental subordinates	27.727	NS	-.1214

OTHER OFFICE EXPERIENCE

The respondents were asked to indicate the nature of any office experience other than supervisory, clerical, or general. Ninety-nine (75 percent) indicated no other type of office experience, whereas seven (5.30 percent) indicated they had less than two years of other office experience. Four of the respondents (3.03 percent) had two through four years of experience; 11 (8.33 percent) had five through seven years; and four had eight through ten years of experience classified as "other."

Seven (5.30 percent) had 11 or more years of experience. The most frequently listed kind of other office experience was "administrative staff assistant."

Planning Activities

Illustrated in Table 58 are the relationships between other kinds of office experience and activities in the planning function. "Evaluating existing resources necessary to achieve departmental goals" is

Table 58

RELATIONSHIPS BETWEEN OTHER OFFICE EXPERIENCE AND PLANNING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Writing short-term departmental objectives	28.294	NS	-.0130
2. Evaluating existing resources necessary to achieve departmental goals	40.293	.05	.1186
3. Writing long-term departmental objectives	29.555	NS	.0589
4. Identifying primary duties of jobs that must be performed	21.990	NS	.0010

significant at the .05 level of significance. Table XXXVII indicates that the product moment correlation is .1186, which means that as administrative office managers have a greater number of years of "other office experience," they tend to use more participation in this particular activity. The null hypothesis is rejected that is concerned with the independence between other types of office experience and "evaluating existing resources

necessary to achieve departmental goals" activity of the planning function.

Organizing Activities

Shown in Table 59 are the relationships between other office experience and five activities in the organizing function. A significant negative relationship is found between "other office experience" and "defining responsibilities of subordinates in department." Table XXXVIII

Table 59

RELATIONSHIPS BETWEEN OTHER OFFICE EXPERIENCE AND ORGANIZING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Developing lines of communication within department	24.542	NS	.0365
2. Defining relationships among jobs in department	27.052	NS	.0698
3. Defining lines of authority within department	21.678	NS	-.0088
4. Defining responsibilities of subordinates in department	47.087	.05	-.0799
5. Developing efficient methods and procedures for office work	36.963	NS	-.0049

indicates that the product moment correlation is $-.0799$, which means that as administrative office managers have more years of other office experience, the managers tend to utilize less participation in this particular activity. The null hypothesis is rejected that other office experience is independent of this particular activity in the organizing function.

Staffing Activities

Table 60 reflects the relationships between other office experience and the activities in the staffing function. Four of the six activities

Table 60

RELATIONSHIPS BETWEEN OTHER OFFICE EXPERIENCE AND STAFFING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Recruiting candidates for positions in department	37.761	.05	-.0294
2. Preparing descriptions of various departmental jobs	30.444	NS	.0222
3. Orienting new employees in department	52.120	.05	-.0151
4. Appraising candidates for positions in department	40.366	.05	.0041
5. Training new subordinates in department	24.097	NS	-.0722
6. Selecting candidates for positions in department	43.042	.05	-.0010

are found to be significant at the .05 level. An examination of Table XXXIX reveals that "other office experience" and "recruiting candidates for positions in department" are negatively correlated (-.0294), which means that the greater the number of years of other office experience, the less is the tendency for administrative office managers to utilize participation in this particular staffing activity. Table XL, concerned with the relationship between "other office experience" and "orienting new employees in department," has a product moment correlation of -.0151.

This indicates that the fewer the number of years of other office experience, the greater is the tendency for the administrative office managers to utilize participation in orienting new office employees. Table XLI, illustrating the relationship between "other office experience" and "appraising candidates for positions in department," shows a product moment correlation of .0041. This correlation means that the greater the number of years of other office experience of administrative office managers, the more likely are the managers to utilize participation in this particular activity. Illustrated in Table XLII is the relationship between "other office experience" and "selecting candidates for positions in department." The product moment correlation of $-.0010$ is interpreted to mean that as administrative office managers have more years of other office experience, they are less likely to use participation in selecting candidates for positions in the department. The null hypotheses are rejected that other office experience is independent of "recruiting candidates for positions in department," "orienting new employees in department," and "selecting candidates for positions in department" activities of the staffing function.

Directing Activities

The relationships between other office experience and the activities in the directing function are illustrated in Table 61. As illustrated in Table XLIII, a significant relationship exists between "other office experience" and "establishing procedures for uniformity of work." The product moment correlation of $-.0418$ indicates that the fewer the years of other office experience, the greater is the tendency for administrative office managers to utilize participation in this particular activity. Table XLIV shows a product moment correlation of .0628 between "other

Table 61

RELATIONSHIPS BETWEEN OTHER OFFICE EXPERIENCE AND DIRECTING ACTIVITIES
(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Formulating personnel policies necessary to maintain desirable level of morale	32.914	NS	.0349
2. Establishing procedures for uniformity of work	60.010	.05	-.0418
3. Preparing directives for accomplishment of departmental objectives	15.179	NS	-.0262
4. Supervising subordinates in department	38.314	.05	.0628
5. Making accurate measurement of work through development of systematic procedures	20.010	NS	.0097

office experience" and "supervising subordinates in department." This is interpreted to mean that the greater the years of other office experience, the greater is the tendency for administrative office managers to utilize participation in supervising office employees. The null hypotheses are rejected that are concerned with the independence between other office experience and "establishing procedures for uniformity of work" and "supervising subordinates in department" activities of the directing function.

Controlling Activities

Table 62 illustrates that three of the seven activities in the controlling function are significantly related to other office experience. Table XLV illustrates the relationship between "other office experience"

Table 62

RELATIONSHIPS BETWEEN OTHER OFFICE EXPERIENCE AND CONTROLLING ACTIVITIES

(df = 25)

Activities	Chi-Sq.	Sign. Level	PMC
1. Determining whether objectives are being achieved	48.533	.05	-.1438
2. Preparing office manuals for departmental employees	26.682	NS	-.0637
3. Formulating standards of performance based on goals, policies, programs, budgets	52.619	.05	-.0619
4. Adopting means of reviewing operations to check if expected results are obtained	31.190	NS	.0181
5. Taking corrective action if there is a failure to achieve objectives	25.976	NS	.0540
6. Writing departmental policies for employees	24.346	NS	.0173
7. Measuring performance of departmental subordinates	55.551	.05	.1030

and "determining whether objectives are being achieved." A $-.1438$ product moment correlation is found, which indicates that as administrative office managers have a greater number of years of other office experience, the managers tend to utilize less participation in this particular activity. Also found to be significant is the relationship between "other office experience" and "formulating standards of performance based on goals, policies, programs, budgets" (see Table XLVI). Since a $-.0619$ product moment correlation is found, the interpretation is made that administrative office managers with fewer years of other office experience generally tend to utilize more participation in this

particular activity. The relationship between "other office experience" and "measuring performance of departmental employees" is shown in Table XLVII. A product moment correlation of .1030 is shown, which means that the fewer the years of other office experience that administrative office managers have, the less likely is the chance that participation is utilized in this particular activity. The null hypotheses are rejected that other office experience is independent of "determining whether objectives are being achieved," "formulating standards of performance based on goals, policies, programs, budgets," and "measuring performance of departmental subordinates" activities of the controlling function.

Summary of Relationships Between Independent Variables and Activities

Table 63 is a composite summary of the relationships between the 12 independent variables and the 27 selected managerial activities. The significant relationships are indicated by an "X" at the appropriate grid.

It is found that the planning function has three significant relationships with the independent variables; organizing, ten significant relationships; staffing, sixteen significant relationships; directing, eight significant relationships; and controlling, ten significant relationships.

The five independent variables with the greatest number of significant relationships with the dependent variables are as follows: other office experience, military experience, military officer experience, sex, and age.

The managerial activities with the greatest number of significant relationships are as follows: (1) defining responsibilities of subordinates in department; (2) training new subordinates in department; (3) measuring performance of departmental subordinates; (4) selecting candidates for positions in department; and (5) orienting new employees.

Table 63

SUMMARY OF RELATIONSHIPS BETWEEN INDEPENDENT VARIABLES AND MANAGERIAL ACTIVITIES

Activities	Sex	Age	Number of years in position	Number of subordinates	Education level	Major	Military experience	Military officer	Supervisory experience	Clerical experience	General office experience	Other office experience	Row totals
								X*					1
												X	1
													0
													1
PLANNING													
1. Writing short-term departmental objectives													
2. Evaluating existing resources necessary to achieve departmental goals												X	1
3. Writing long-term departmental objectives													0
4. Identifying primary duties of jobs that must be performed													1

X = denotes significance at .05 level

[illegible]

Table 63, Continued

Activities	Sex	Age	Number of years in position	Number of subordinates	Education level	Major	Military experience	Military officer	Supervisory experience	Clerical office experience	General office experience	Other office experience	Row totals
STAFFING													
1. Recruiting candidates for positions in department		X										X	2
2. Preparing descriptions of various departmental jobs			X	X									1
3. Orienting new employees in department							X					X	3
4. Appraising candidates for positions in department	X						X	X	X			X	5
5. Training new subordinates in department							X						1
6. Selecting candidates for positions in department		X							X		X	X	4

Table 63, Continued

Activities	Sex	Age	Number of years in position	Number of subordinates	Education level	Major	Military experience	Military officer experience	Supervisory experience	Clerical office experience	General office experience	Other office experience	Row totals
DIRECTING 1. Formulating personnel policies necessary to maintain desirable level of morale 2. Establishing procedures for uniformity of work 3. Preparing directives for accomplishment of departmental objectives 4. Supervising subordinates in department 5. Making accurate measurement of work through development of systematic procedures										X			1
							X					X	2
				X									1
			X		X							X	3
						X							1

Table 63, Continued

Activities	Sex	Age	Number of years in position	Number of subordinates	Education level	Major	Military experience	Military officer experience	Supervisory experience	Clerical office experience	General office experience	Other office experience	Row totals
CONTROLLING 1. Determining whether objectives are being achieved 2. Preparing office manuals for employees 3. Formulating standards of performance based on goals, policies, programs, budgets 4. Adopting means of reviewing operations to check if expected results are obtained 5. Taking corrective action if there is a failure to achieve objectives 6. Writing departmental policies for employees 7. Measuring performance of departmental subordinates												X	1
													0
				X								X	2
													0
	X												1
							X						1
	X					X	X	X				X	5
Column totals	4	4	2	3	1	2	9	7	2	1	1	11	47

CORRELATION MATRIX

Table 64 illustrates the correlations between each of the five managerial functions. It is found that there are low correlations between staffing and planning, between staffing and directing, between

Table 64

CORRELATION MATRIX

	Functions				
	Planning	Organizing	Staffing	Directing	Controlling
Planning	1.00000				
Organizing	0.72573	1.00000			
Staffing	0.44695	0.62073	1.00000		
Directing	0.60702	0.68615	0.55069	1.00000	
Controlling	0.72054	0.75690	0.58681	0.72428	1.00000

staffing and controlling; and between staffing and organizing.

Figure 8 provides a graphic illustration of the percentage of responses for each of the five managerial functions. This figure also illustrates the dissimilarity between staffing and the other functions.

FREQUENCY AND PERCENT OF RESPONSE

Table 65 provides a frequency count and percentage of response for each of the 27 managerial activities. The table also provides a weighted mean ("always" equals 6 points; "often" equals 5; "sometimes," 4; "seldom," 3; "never," 2; "not applicable," 1 point). Thus, the higher the weighted

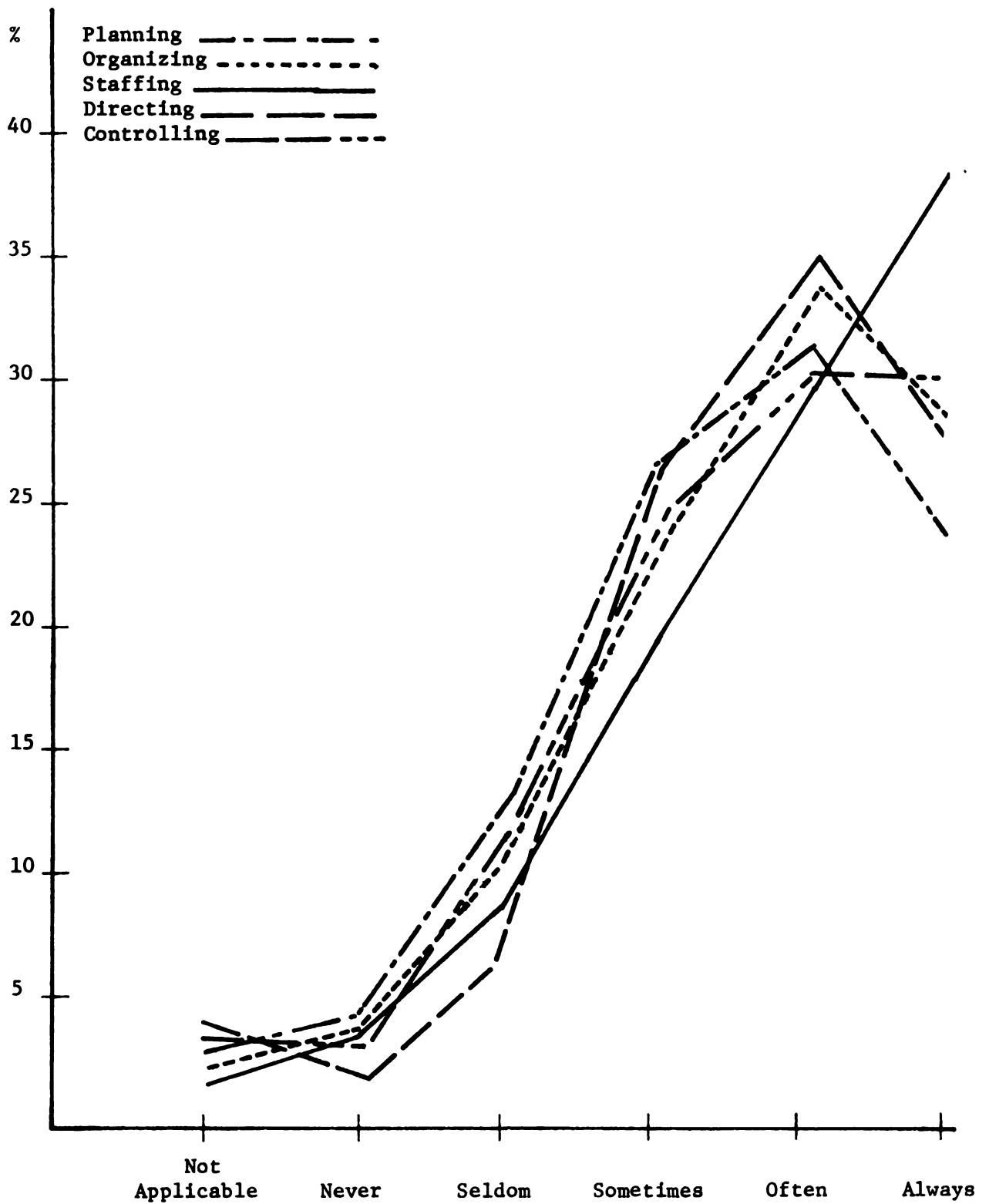


Figure 8: Percentage of Response for Managerial Functions

FREQUENCY COUNTS AND PERCENTAGE RESPONSES FOR SELECTED MANAGERIAL ACTIVITIES

Activities	Not Applicable					Seldom	Sometimes	Often	Always	Weighted Mean
PLANNING										
1. Writing short-term departmental objectives	F	4	4	4	16	12.1	34.1	38	25	4.39
	P	3.0	3.0	3.0	12.1	12.1	34.1	28.8	18.9	
2. Evaluating existing resources necessary to achieve departmental goals	F	4	1	10	29	22.0	58	30	4.71	
	P	3.0	0.7	7.6	22.0	43.9	22.7			
3. Writing long-term departmental objectives	F	5	9	23	38	28.8	21.2	29	4.23	
	P	3.8	6.8	17.4	28.8	21.2	22.0			
4. Identifying primary duties of jobs that must be performed	F	2	5	20	26	45	34	4.48		
	P	1.5	3.8	15.2	19.7	34.1	25.6			
TOTAL	F	15	19	69	138	169	118	4.48		
	P	2.8	3.6	13.1	26.1	32.0	22.3			
ORGANIZING										
1. Developing lines of communication within department	F	2	1	8	21	46	54	5.05		
	P	1.5	0.7	6.1	15.9	34.8	40.9			

Table 65, Continued

Activities	Not					Weighted				
	Applicable	Never	Seldom	Sometimes	Often	Always	Mean			
ORGANIZING, Continued										
2. Defining relationships among jobs in department	F	4	2	19	30	45	32	4.56		
	P	3.0	1.5	14.4	22.7	34.1	24.2			
3. Defining lines of authority within department	F	4	9	19	37	34	29	4.33		
	P	3.0	6.8	14.4	28.0	25.8	22.0			
4. Defining responsibilities of subordinates in department	F	1	8	14	35	41	33	4.56		
	P	0.7	6.1	10.6	26.5	31.1	25.0			
5. Developing efficient methods and procedures for office work	F	3	2	4	30	57	36	4.85		
	P	2.3	1.5	3.0	22.7	43.2	27.3			
TOTAL	F	14	22	64	153	223	184	4.67		
	P	2.1	3.3	9.7	23.2	33.8	27.9			
STAFFING										
1. Recruiting candidates for positions in department	F	1	5	5	24	45	52	4.99		
	P	0.7	3.8	3.8	18.2	34.1	39.4			
2. Preparing descriptions of various departmental jobs	F	5	1	16	27	39	44	4.71		
	P	3.8	0.7	12.1	20.5	29.5	33.3			

Table 65, Continued

Activities	Not		Applicable					Weighted Mean
	Applicable	Never	Seldom	Sometimes	Often	Always		
STAFFING, Continued								
3. Orienting new employees in department	F	6	2	5	22	38	59	4.98
	P	4.5	1.5	3.8	16.7	28.8	44.7	
4. Appraising candidates for positions in department	F	2	6	12	22	42	48	4.82
	P	1.5	4.5	9.1	16.7	31.8	36.4	
5. Training new subordinates in department	F	1	5	9	23	32	62	5.02
	P	0.7	3.8	6.8	17.4	24.2	47.0	
6. Selecting candidates for positions in department	F	1	9	9	32	37	44	4.72
	P	0.7	6.8	6.8	24.2	28.0	33.3	
TOTALS	F	16	28	56	150	233	309	4.87
	P	2.0	3.5	7.1	18.9	29.4	39.0	
DIRECTING								
1. Formulating personnel policies necessary to maintain desirable level of morale	F	2	1	5	32	61	31	4.83
	P	1.5	0.7	3.8	24.2	46.2	23.5	
2. Establishing procedures for uniformity of work	F	3	1	2	26	63	37	4.94
	P	2.3	0.7	1.5	19.7	47.7	28.0	

Table 65, Continued

Activities	Not					Weighted		
	Applicable	Never	Seldom	Sometimes	Often	Always	Mean	
DIRECTING, Continued								
3. Preparing directives for accomplishment of departmental objectives	F	6	1	10	44	37	34	4.57
	P	4.5	0.7	7.6	33.3	28.0	25.8	
4. Supervising subordinates in department	F	4	5	12	27	34	50	4.76
	P	3.0	3.8	9.1	20.5	25.8	37.9	
5. Making accurate measurement of work through development of systematic procedures	F	14	4	14	43	35	22	4.11
	P	10.6	3.0	10.6	32.6	26.5	16.7	
TOTALS	F	29	12	43	172	230	174	4.64
	P	4.4	1.8	6.5	26.1	34.8	26.4	
CONTROLLING								
1. Determining whether objectives are being achieved	F	3	2	6	29	43	49	4.92
	P	2.3	1.5	4.5	22.0	32.6	37.1	
2. Preparing office manuals for departmental employees	F	15	2	14	30	33	38	4.35
	P	11.4	1.5	10.6	22.7	25.0	28.8	

Table 65, Continued

Activities	Not					Weighted		
	Applicable	Never	Seldom	Sometimes	Often	Always	Mean	
CONTROLLING, continued								
3. Formulating standards of performance based on goals, policies, programs, budgets	F	2	1	18	26	40	45	4.79
	P	1.5	0.7	13.6	19.7	30.3	34.1	
4. Adopting means of reviewing operations to check if expected results are obtained	F	5	1	15	37	43	31	4.55
	P	3.8	0.7	11.4	28.0	32.6	23.5	
5. Taking corrective action if there is a failure to achieve objectives	F	1	5	11	30	47	38	4.75
	P	0.7	3.8	8.3	22.7	35.6	28.8	
6. Writing departmental policies of employees	F	5	6	18	42	36	25	4.31
	P	3.8	4.5	13.6	31.8	27.3	18.9	
7. Measuring performance of departmental employees	F	2	11	14	28	32	45	4.61
	P	1.5	8.3	10.6	21.2	24.2	34.1	
TOTAL	F	33	28	96	222	274	271	4.61
	P	3.6	3.0	10.4	24.0	29.7	29.3	

mean value, the more participation that administrative office managers utilize in that particular activity.

The five most participative activities are:

- A. Developing lines of communication in department
- B. Training new subordinates in department
- C. Recruiting candidates for positions in department
- D. Orienting new employees in department
- E. Establishing procedures for uniformity of work

The five least participative activities are:

- A. Making accurate measurement of work through development of systematic procedures
- B. Writing long-term departmental objectives
- C. Writing departmental policies for employees
- D. Defining lines of authority within department
- E. Preparing office manuals for departmental employees

The ranking of the functions from the most participative to the least participative is as follows:

- A. Staffing--4.87
- B. Organizing--4.67
- C. Directing--4.64
- D. Controlling--4.61
- E. Planning--4.48

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

PURPOSE OF THE STUDY

This study was an analysis of the role that administrative office managers perceive for the utilization of participative management in supervising office employees. The primary purpose for undertaking the study was to enable business educators to develop relevant instructional programs in light of the current practices found in the business world.

Hypotheses of the Study

The following hypotheses were tested in light of the analysis of the data.

1. There is a significant relationship between the sex of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
2. There is a significant relationship between the age of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
3. There is a significant relationship between the length of time the administrative office manager has been employed in his present position and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
4. There is a significant relationship between the number of subordinates that the administrative office manager supervises and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

5. There is a significant relationship between the educational attainment of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
6. There is a significant relationship between the college major or area of specialization of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
7. There is a significant relationship between the military experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
8. There is a significant relationship between the military officer experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.
9. There is a significant relationship between the number of years of office work experience of the administrative office manager and the extent to which he utilizes participative management in each of the activities in the planning, organizing, staffing, directing, and controlling functions.

Need for the Study

The primary need for undertaking this study was to determine to what extent participative management is utilized by administrative office managers. The results will be used to make instructional programs more relevant and more responsive to the needs of the business world.

Assumptions of the Study

For the purpose of this study, the following assumptions were made:

1. That major companies in the United States do employ an individual with the title of administrative office manager or an individual who performs the functions of an administrative office manager.

2. That the findings of the study will determine if potential office employees should be given more attention to working within a participative atmosphere.
3. That if more attention needs to be given to the participative management concept, educational institutions will be responsive to the needs of the business world.

PROCEDURES FOR THE STUDY

Sources of Data

The data involved in this study were compiled from 132 usable responses returned by the randomly selected sample of 250 administrative office managers employed in 250 companies that were dually listed in the 1971 Fortune magazine 1,000 list and the 1971 College Placement Annual.

The Questionnaire

The questionnaire consisted of two parts. Part I was concerned with the respondent's sex, age, number of years employed in present position, number of subordinates supervised, level of educational attainment, college major, military experience, military officer experience, and number of years of office work experience.

Part II was concerned with the extent ("always," "often," "sometimes," "seldom," "never") to which administrative office managers utilize the help, ideas, and suggestions of their subordinates in selected managerial activities in each of five managerial functions--planning, organizing, staffing, directing, and controlling.

Selecting the Sample

In selecting the sample, the first step was to determine which companies were dually listed in the 1971 College Placement Annual and

the 1971 Fortune magazine 1,000 list. Of the 358 companies dually listed, 250 were then selected randomly by utilizing a table of random numbers.

Statistical Analysis

The CISSR - ACT II - PFCOUNT computer program was utilized to compile the data. Chi-square statistical analysis was used to study the nature of the relationships between the independent and dependent variables. Chi-square test of independence was used to test the null hypotheses that the selected variables were essentially independent of one another. The .05 level of significance was used.

SUMMARY OF FINDINGS

Sex

Approximately 95 percent of the respondents were male and five percent were female.

The relationships between sex and each of the 27 managerial activities resulted in the following significant relationships (.05 level):

1. Defining responsibilities of subordinates in department.

Males tend to utilize more participation; females, less participation.

2. Appraising candidates for positions in department.

Males tend to utilize more participation; females, less participation.

3. Taking corrective action if there is a failure to achieve objectives.

Males tend to utilize more participation; females, less participation.

4. Measuring performance of departmental subordinates.

Males tend to utilize more participation; females, less participation.

Age

Nearly two-thirds of the respondents were between ages of 35 and 55. Approximately 25 percent were less than 35 years of age, and 12 percent were between 55 and 65.

Significant relationships were found between age and the following managerial activities:

1. Defining responsibilities of subordinates in department.

The older administrative office managers tend to use more participation than do the younger administrative office managers.

2. Developing efficient methods and procedures for office work.

The older administrative office managers tend to use more participation than do the younger administrative office managers.

3. Recruiting candidates for positions in department.

The older administrative office managers tend to use more participation than do the younger administrative office managers.

4. Selecting candidates for positions in department.

The older administrative office managers tend to use more participation than do the younger administrative office managers.

Number of Years in Present Position

Approximately 30 percent of the respondents had been in their present positions for one through three years, and nearly 23 percent had held their present jobs for four through six years. Eighteen percent had held their present positions for less than one year; nine

percent, seven through nine years; and nineteen percent, ten or more years.

The following two significant relationships were found to exist between number of years in present position and the selected managerial activities:

1. Orienting new employees in department.

As the administrative office managers hold their present positions for a longer time, they tend to utilize more participation.

2. Supervising subordinates in department.

As the administrative office managers hold their present positions for a longer time, they tend to utilize more participation.

Number of Subordinates

Nearly 33 percent of the respondents supervised five or fewer subordinates while 20 percent supervised six to ten subordinates. Six percent of the respondents supervised 11 to 15 subordinates, three percent, 16 to 20, and 37 percent, 21 or more subordinates.

The following illustrate the significant relationships between number of subordinates and the 27 selected managerial activities:

1. Preparing descriptions of various departmental jobs.

As the number of subordinates supervised increases, so does the amount of participation utilized by administrative office managers.

2. Preparing directives for accomplishment of departmental jobs.

As the number of subordinates supervised increases, so does the amount of participation utilized by administrative office managers.

3. Formulating standards of performance based on goals, policies, programs, budgets.

As the number of subordinates supervised increases, so does the amount of participation utilized by administrative office managers.

Level of Education

All of the respondents had been graduated from high school, but three percent had not gone beyond the high school level of educational attainment. One percent had less than one year of college, whereas 13 percent had at least one year of college but had not received a degree. Fifty-eight percent had received a bachelor's degree; 15 percent, a master's degree; and six percent had work beyond a master's degree.

The following is the only significant relationship found to exist between level of education and the managerial activities:

1. Supervising subordinates in department.

The administrative office managers with higher levels of education tend to utilize less participation than do those with lower levels of education.

Major in College

Fifty-two percent of the respondents majored in business or commerce in college, whereas 43 percent majored in a nonbusiness or non-commerce area. Nonbusiness/commerce areas most frequently cited were psychology, education, and engineering. (Six respondents did not answer the questionnaire item).

The significant relationships between major in college and the 27 selected managerial activities are as follows:

1. Making accurate measurement of work through development of systematic procedures.

Nonbusiness/commerce majors tend to utilize more participation than do their counterparts.

2. Measuring performance of departmental subordinates.

Nonbusiness/commerce majors tend to utilize more participation than do their counterparts.

Military Experience

Approximately 28 percent of the administrative office managers reported no military experience; nine percent reported less than two years of active duty; 53 percent, two through four years of active duty; and seven percent, more than four years of active duty.

Significant relationships were found to exist between military experience and the following activities:

1. Defining relationships among jobs in department.

As the length of military experience of the respondents increases, there is less participation utilized.

2. Defining lines of authority in department.

As the length of military experience of the respondents increases, there is more participation utilized.

3. Defining responsibilities of subordinates in department.

As the length of military experience of the respondents increases, there is more participation utilized.

4. Orienting new employees in department.

As the length of military experience of the respondents increases, there is more participation utilized.

5. Appraising candidates for positions in department.

As the length of military experience of the respondents increases, there is more participation utilized.

6. Training new subordinates in department.

As the length of military experience of the respondents increases, there is more participation utilized.

7. Establishing procedures for uniformity of work.

As the length of military experience of the respondents increases, there is less participation utilized.

8. Writing departmental policies for employees.

As the length of military experience of the respondents increases, there is more participation utilized.

Military Officer Experience

Approximately 30 percent of the respondents have been an officer in the military while 69 percent have not been an officer in the military. (Two individuals did not respond to the item).

The following are the significant relationships between military officer experience and the managerial activities:

1. Writing short-term departmental objectives.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

2. Identifying primary duties of jobs that must be performed.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

3. Defining relationships among jobs in department.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

4. Defining lines of authority within department.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

5. Defining responsibilities of subordinates in department.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

6. Appraising candidates for positions in department.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

7. Measuring performance of departmental subordinates.

The respondents with military officer experience tend to utilize less participation than do their counterparts.

Supervisory Experience

Nearly ten percent of the respondents reported no previous supervisory experience while two percent reported less than two years.

Fifteen percent listed two through four years of experience; 11 percent, five through seven years; eight percent, eight through ten years; and 53 percent, 11 or more years of supervisory experience.

The following are the significant relationships between supervisory experience and the selected managerial activities:

1. Appraising candidates for positions in department.

The respondents with greater amounts of supervisory experience tend to allow more participation than those with lesser amounts of supervisory experience.

2. Selecting candidates for positions in department.

The respondents with greater amounts of supervisory experience tend to allow more participation than those with lesser amounts of supervisory experience.

Clerical Office Experience

Nearly 79 percent of the respondents reported no clerical office experience; six percent, less than two years of clerical office experience; seven percent, two through four years; three percent, five through seven years; two percent, eight through ten years; and .76 percent, 11 or more years of clerical experience.

The following is the one significant relationship between clerical office experience and the selected managerial activities:

1. Formulating personnel policies necessary to maintain desirable level of morale.

As the number of years of clerical office experience of the administrative office managers increases, the amount of participation utilized decreases.

General Office Experience

Approximately 67 percent of the respondents reported no general office experience; nine percent, less than two years; 11 percent, two

through four years of general office experience; five percent, five through seven years; two percent, eight through ten years; and five percent reported 11 or more years of general office experience.

The following is the one significant relationship between general office experience and the managerial activities:

1. Selecting candidates for positions in department.

As the number of years of general office experience increases, the amount of participation utilized decreases.

Other Office Experience

Seventy-five percent of the respondents reported no other type of office experience; five percent, less than two years of other office experience; three percent, two through four years; eight percent, five through seven years; three percent, eight through ten years; and five percent had 11 or more years of other office experience.

The significant relationships between other office experience and the managerial activities are as follows:

1. Evaluating existing resources necessary to achieve departmental goals.

As the amount of other office experience increases, so does the amount of participation utilized.

2. Defining responsibilities of subordinates in department.

As the amount of other office experience increases, the amount of participation utilized decreases.

3. Recruiting candidates for positions in department.

As the amount of other office experience increases, the amount of participation utilized decreases.

4. Orienting new employees in department.

As the amount of other office experience increases, the amount of participation utilized decreases.

5. Appraising candidates for positions in department.

As the amount of other office experience increases, so does the amount of participation utilized.

6. Selecting candidates for positions in department.

As the amount of other office experience increases, the amount of participation utilized decreases.

7. Establishing procedures for uniformity of work.

As the amount of other office experience increases, the amount of participation utilized decreases.

8. Supervising subordinates in department.

As the amount of other office experience increases, so does the amount of participation utilized.

9. Determining whether objectives are being achieved.

As the amount of other office experience increases, the amount of participation utilized decreases.

10. Formulating standards of performance based on goals, policies, programs, budgets.

As the amount of other office experience increases, the amount of participation utilized decreases.

11. Measuring performance of departmental subordinates.

As the amount of other office experience increases, so does the amount of participative management utilized.

Correlations Between Functions

Low correlations were found to exist between staffing and each of the other four managerial functions. In other words, the staffing function was found to be dissimilar from the other four functions.

Frequency and Percentage of Response

The rank order of the most participative to the least participative functions is as follows: Staffing, organizing, directing, controlling, and planning.

CONCLUSIONS

The following conclusions are based on the findings of the analysis of data:

1. Sex may have an effect on the extent to which administrative office managers utilize participative management in supervising office employees. On the basis of this study, the conclusive statement cannot be made that males tend to allow more participation than do females. Too few females were involved in the study to make such a statement.

2. Age apparently has an effect on the extent to which administrative office managers utilize participative management in supervising office employees. The older administrative office managers tend to allow more participation than do the younger administrative office managers.

3. The number of years that administrative office managers have been in their present positions apparently has little effect on the extent to which participative management is utilized in supervising office employees. In only two instances were there significant relationships between number of years in present position and the 27 selected managerial activities.

4. The analysis of data indicated that supervisory experience apparently has little effect on the extent to which administrative office managers utilize participative management in supervising office employees. The basis for this particular conclusion is the lack of extensive relationships between supervisory experience and the managerial activities.

5. Having little effect on the extent to which administrative office managers utilize participative management in supervising office

employees is clerical office experience. Only one significant relationship was found between clerical office experience and the managerial activities. Because of the lack of significant relationships, conclusive statements cannot be made as to the effect of clerical office experience on the managerial activities.

6. General office experience of administrative office managers apparently does not have an effect on the extent to which they utilize participative management in supervising office employees. Only one significant relationship was found; hence, the inconclusiveness of the effect of general office experience on the 27 managerial activities.

7. Other office experience apparently has an effect on the extent to which administrative office managers utilize participative management in supervising office employees. Generally speaking, as the years of other office experience increases, the amount of participation utilized decreases.

8. The number of subordinates supervised by administrative office managers may have an effect on the degree to which they utilize participative management in supervising office employees. This study found the larger the number of subordinates supervised by administrative office managers, the greater is the likelihood that participative management will be utilized in supervising office employees.

9. The level of education has very little effect on the extent to which administrative office managers use participative management in supervising office employees. Only one significant relationship was found to exist between level of education and the extent to which participative management is utilized in the 27 selected managerial activities; therefore, no conclusive statement as to the effect can be made.

10. The college majors of the administrative office managers apparently have little influence in determining the extent to which they utilize participative management in supervising office employees. Since only two significant relationships were found to exist between the college major and the extent of participation utilized in each of the 27 managerial activities, a conclusive statement cannot be made as to the effect of the college major.

11. The nature of military experience does affect the extent to which administrative office managers utilize participative management in supervising office employees. Generally, as the years of military experience of the respondents increases, the amount of participation utilized in supervising office employees also increases.

12. Having served as an officer in the military does affect the extent to which administrative office managers utilize participative management in supervising office employees. The data analysis indicated that administrative office managers with military officer experience tend to utilize less participative management in supervising office employees than do those with no military officer experience.

RECOMMENDATIONS AND RESEARCH IMPLICATIONS

This section provides recommendations for educational institutions and business enterprises, as well as implications for additional research.

Educational Institutions

1. One of the basic purposes of undertaking this study was to assist business educators in developing quality instructional programs. To provide students with an education that is relevant and responsive

to the needs of the business world, it is recommended that the information presented in this study be utilized in curriculum development and improvement.

2. It is recommended that research be conducted to determine the nature of the educational preparation of employees who frequently participate in the decision-making processes in the office. Future office employees who will frequently participate in the decision-making processes in the office should be adequately prepared for this task. Therefore, the curricula of the educational institutions preparing office employees should include instruction about effectively participating in decision-making processes.

3. It is recommended that additional studies be conducted to determine the most efficient and appropriate techniques for teaching future office employees to participate in decision-making processes. In addition, it is desirable to determine the educational value of case studies, role playing, simulation exercises, instructional games, and model offices in teaching future office employees to participate in decision-making processes. Those strategies that are most effective should be incorporated into the curricula.

4. It is recommended that studies be conducted to determine which levels and/or classifications of office employees most frequently participate in decision-making processes. It is recommended that future office employees preparing for these levels and/or job classifications be given considerable exposure to the participative decision-making processes in the educational and training programs.

5. It is recommended that educational programs give future office employees considerable exposure to decision-making processes in those

activities in which office employees frequently participate. This study found administrative office managers to utilize the greatest amount of participative management in the following activities.

- A. Developing lines of communication in department
- B. Training new subordinates in department
- C. Recruiting candidates for positions in department
- D. Orienting new employees in department
- E. Establishing procedures for uniformity of work

Business Enterprises

1. It is recommended that administrative office managers utilize participative management where conditions justify utilization of employee participation in the decision-making processes.

2. It is recommended that empirical research be conducted on administrative office managers' utilization of participative management in supervising office employees. The effect of participative management on morale, turnover, productivity, and job satisfaction of office employees needs to be determined.

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APPENDIX A

MICHIGAN STATE UNIVERSITY EAST LANSING • MICHIGAN 48824

COLLEGE OF BUSINESS

DEPARTMENT OF BUSINESS LAW AND OFFICE ADMINISTRATION • EPPLEY CENTER

November 17, 1971

Dear Sir:

Your company has been selected for inclusion in this study for two reasons: (1) it is represented in the 1971 Fortune magazine 1,000 list; and, (2) it is included in the 1971 College Placement Annual.

I will appreciate your transferring the enclosed questionnaire to the individual in your company who has the title of "office manager" or "administrative office manager" and/or who may have many of the following functions under his jurisdiction:

(1) aids in a staff capacity by coordinating office services, personnel, budget preparation and control, records control, and special management studies; (2) studies management methods for improvement of work flow; (3) simplifies reporting procedures and implements cost reductions; (4) analyzes unit operation practices, forms control, and office layout; (5) analyzes jobs for use in salary administration; and, (6) studies methods of improving work measurements.

The data compiled from this questionnaire will be utilized in the Ph.D. dissertation I am currently working on at Michigan State University. The purpose of this study is to determine to what extent administrative office managers utilize participative management techniques in supervising office employees. Upon completion of the study, my intentions are to submit the results for publication in professional literature. The results will also be used by educators to provide a more relevant education for potential office employees.

I will appreciate your cooperation in forwarding the enclosed questionnaire and envelope to the individual described above.

Sincerely yours,

Jane K. Quible
Jane K. Quible
Instructor

Enclosure

MICHIGAN STATE UNIVERSITY EAST LANSING • MICHIGAN 48823

COLLEGE OF BUSINESS

DEPARTMENT OF BUSINESS LAW AND OFFICE ADMINISTRATION • EPPLEY CENTER

January 7, 1972

Dear Sir:

Your company was selected for inclusion in this participative management study for two reasons: (1) it is represented in the 1971 Fortune magazine 1,000 list; and (2) it is also included in the 1971 College Placement Annual.


A questionnaire was mailed to you on November 17 with the request that you transfer it to an individual in your company who has the title of "office manager" or "administrative office manager" and/or who may have many of the following functions under his jurisdiction:

(1) aids in a staff capacity by coordinating office services, personnel, budget preparation and control, records control, and special management studies; (2) studies management methods for improvement of work flow; (3) simplifies reporting procedures and implements cost reductions; (4) analyzes unit operation practices, forms control, and office layout; (5) analyzes jobs for use in salary administration; and, (6) studies methods of improving work measurements.

Because of your more pressing duties and/or the duties of the person to whom you transferred the questionnaire, it is quite possible that the questionnaire has been overlooked. I need your help in obtaining a sufficient response. The results of this research will help me in my teaching duties at Michigan State University, and it is hoped that it will also be of benefit to office managers throughout the country.

Your assistance in my receiving a completed questionnaire from your company will be appreciated. A questionnaire and an envelope are enclosed for the convenience of the respondent.

Sincerely yours,


Jane K. Quible

Instructor

Enclosures

ADMINISTRATIVE OFFICE MANAGERS' UTILIZATION OF PARTICIPATIVE
MANAGEMENT IN SUPERVISING OFFICE EMPLOYEES

Dear Administrative Office Manager:

Your company has been selected for inclusion in this administrative office management study for two reasons: (1) it is represented in the 1971 Fortune magazine 1,000 list; and, (2) it is included in the 1971 College Placement Annual.

I will appreciate your taking time to complete this questionnaire which is vital to make the study more valid. If possible, I should like to have the questionnaire returned within two weeks. A business reply envelope is enclosed for your convenience in returning the completed questionnaire.

The data obtained from this questionnaire will be utilized in the dissertation required for the Ph.D. degree that I am currently working on at Michigan State University. It is intended that the results of the study will be submitted for publication in professional literature and will also enable business educators to provide a more relevant education for future office employees.

As administrative office manager, many of the following functions may be under your jurisdiction: (1) aids in a staff capacity by coordinating office services, personnel, budget preparation and control, records control, and special management studies; (2) studies management methods in order to improve work flow; (3) simplifies reporting procedures and implements cost reductions; (4) analyzes unit operation practices, forms control, and office layout; (5) analyzes jobs for use in wage and salary administration; and (6) studies methods of improving work measurements.

If you will place your name and address in the space provided on the last page, I will be happy to send you a copy of the results of the study.

Sincerely yours,

Zane K. Quible

Directions: Please check the one answer that is most appropriate for you in questions 1 through 12.

1. Sex:
☐ Male
☐ Female
2. Present age:
☐ 35 or less
☐ 36 through 45
☐ 46 through 55
☐ 56 through 65
☐ over 65

3. Number of years in present position:
- ☐ Less than 1 year
 - ☐ 1 through 3 years
 - ☐ 4 through 6 years
 - ☐ 7 through 9 years
 - ☐ 10 or more years
4. Number of subordinates you supervise: (include both part-time and full-time employees in total)
- ☐ 5 or fewer
 - ☐ 6 to 10
 - ☐ 11 to 15
 - ☐ 16 to 20
 - ☐ 21 or more
5. Highest level of formal education:
- ☐ Less than 12 years
 - ☐ High school graduate
 - ☐ Less than one year of college
 - ☐ At least one year of college but no degree
 - ☐ Bachelor's degree
 - ☐ Master's degree
 - ☐ Work beyond Master's degree
6. Major area of specialization in college:
- ☐ Business or commerce
 - ☐ Other (please specify) _____
7. Military experience:
- ☐ No military experience
 - ☐ Less than 2 years of active duty
 - ☐ 2 through 4 years of active duty
 - ☐ More than 4 years of active duty
8. Military officer:
- ☐ Yes
 - ☐ No

Number of years worked full time in any type of office. Include your present position in your response. Please equate any part-time experience to full time; for example, 2 years of half-time work is equated to 1 year of full-time work. (Please place a check mark in appropriate box).

	-2 years	2-4 years	5-7 years	8-10 years	11+ years
9. Supervisory _____					
10. Clerical _____					
11. General office _____					
12. Other _____					
(please specify)					

Directions: Please indicate by circling the correct number the extent to which you perceive yourself as administrative office manager as utilizing the help, ideas, or suggestions of your subordinates in each of the activities listed below.

6 = always
5 = often
4 = sometimes
3 = seldom
2 = never
1 = not applicable

- | | |
|---|-------------|
| 1. Recruiting candidates for positions in department | 6 5 4 3 2 1 |
| 2. Formulating personnel policies necessary to maintain desirable level of morale within department | 6 5 4 3 2 1 |
| 3. Establishing procedures for uniformity of work | 6 5 4 3 2 1 |
| 4. Determining whether objectives are being achieved | 6 5 4 3 2 1 |
| 5. Preparing directives for accomplishment of departmental objectives | 6 5 4 3 2 1 |
| 6. Preparing office manuals | 6 5 4 3 2 1 |
| 7. Developing lines of communication within department | 6 5 4 3 2 1 |
| 8. Formulating standards of performance based on goals, policies, programs, budgets | 6 5 4 3 2 1 |
| 9. Preparing descriptions of various departmental jobs | 6 5 4 3 2 1 |
| 10. Defining relationships among jobs in department | 6 5 4 3 2 1 |
| 11. Adopting a systematic means of reviewing operations to determine if the expected results are obtained | 6 5 4 3 2 1 |
| 12. Writing short-term departmental objectives | 6 5 4 3 2 1 |
| 13. Supervising subordinates in department | 6 5 4 3 2 1 |
| 14. Evaluating existing resources necessary to achieve departmental goals | 6 5 4 3 2 1 |
| 15. Defining lines of authority in department | 6 5 4 3 2 1 |
| 16. Orienting new subordinates | 6 5 4 3 2 1 |
| 17. Taking corrective action in the event that there is a failure to achieve objectives | 6 5 4 3 2 1 |
| 18. Appraising candidates for positions | 6 5 4 3 2 1 |
| 19. Writing departmental policies | 6 5 4 3 2 1 |
| 20. Making accurate measurements of work through development of systematic procedures | 6 5 4 3 2 1 |
| 21. Defining responsibilities of subordinates | 6 5 4 3 2 1 |
| 22. Writing long-term departmental objectives | 6 5 4 3 2 1 |
| 23. Identifying primary duties of jobs that must be performed | 6 5 4 3 2 1 |
| 24. Training new subordinates | 6 5 4 3 2 1 |
| 25. Measuring performance of subordinates | 6 5 4 3 2 1 |
| 26. Developing efficient methods and procedures for office work | 6 5 4 3 2 1 |
| 27. Selecting candidates for positions in office | 6 5 4 3 2 1 |

APPENDIX B

Table I

RELATIONSHIP BETWEEN SEX AND DEFINING RESPONSIBILITIES
OF SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MALE						
Freq.	0.00	8.00	13.00	33.00	39.00	32.00
Per. across	0.00	6.40	10.40	26.40	31.20	25.60
Per. down	0.00	100.00	92.86	94.29	95.12	96.97
Per. of total	0.00	6.06	9.85	25.00	29.55	24.24
Theoret. freq.	.95	7.58	13.26	33.14	38.83	31.25
Cell chi-sq.	.95	.02	.01	.00	.00	.02
FEMALE						
Freq.	1.00	0.00	1.00	2.00	2.00	1.00
Per. across	14.29	0.00	14.29	28.57	28.57	14.29
Per. down	100.00	0.00	7.14	5.71	4.88	3.03
Per. of total	.76	0.00	.76	1.52	1.52	.76
Theoret. freq.	.05	.42	.74	1.86	2.17	1.75
Cell chi-sq.	16.91	.42	.09	.01	.01	.32
TOTAL						
Freq.	1.00	8.00	14.00	35.00	41.00	33.00
Per. across	.76	6.06	10.61	26.52	31.06	25.00
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.06	10.61	26.52	31.06	25.00

Chi-square = 18.765; degrees of freedom = 5

Product moment correlation = -.1116

Significant at .05 level

Table IV

RELATIONSHIP BETWEEN SEX AND MEASURING PERFORMANCE
OF DEPARTMENTAL SUBORDINATES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MALE						
Freq.	2.00	8.00	14.00	28.00	29.00	44.00
Per. across	1.60	6.40	11.20	22.40	23.20	35.20
Per. down	100.00	72.73	100.00	100.00	90.63	97.78
Per. of total	1.52	6.06	10.61	21.21	21.97	33.33
Theoret. freq.	1.89	10.42	13.26	26.52	30.30	42.61
Cell chi-sq.	.01	.56	.04	.08	.06	.05
FEMALE						
Freq.	0.00	3.00	0.00	0.00	3.00	1.00
Per. across	0.00	42.86	0.00	0.00	42.86	14.29
Per. down	0.00	27.27	0.00	0.00	9.38	2.22
Per. of total	0.00	2.27	0.00	0.00	2.27	.76
Theoret. freq.	.11	.58	.74	1.48	1.70	2.39
Cell chi-sq.	.11	10.01	.74	1.48	1.00	.81
TOTAL						
Freq.	2.00	11.00	14.00	28.00	32.00	45.00
Per. across	1.52	8.33	10.61	21.21	24.24	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	8.33	10.61	21.21	24.24	34.09
Chi-square = 14.944; degrees of freedom = 5						
Product moment correlation = -.1315						
Significant at .05 level						

Table V
RELATIONSHIP BETWEEN AGE AND DEFINING RESPONSIBILITIES
OF SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
35 OR LESS						
Freq.	1.00	4.00	4.00	11.00	9.00	4.00
Per. across	3.03	12.12	12.12	33.33	27.27	12.12
Per. down	100.00	50.00	28.57	31.43	21.95	12.12
Per. of total	.76	3.03	3.03	8.33	6.82	3.13
Theoret. freq.	.25	2.00	3.50	8.75	10.25	8.25
Cell chi-sq.	2.25	2.00	.07	.58	.15	2.19
36 TO 45						
Freq.	0.00	2.00	5.00	5.00	19.00	11.00
Per. across	0.00	4.76	11.90	11.90	45.24	26.19
Per. down	0.00	25.00	35.71	14.29	46.34	33.33
Per. of total	0.00	1.52	3.79	3.79	14.39	8.33
Theoret. freq.	.32	2.55	4.45	11.14	13.05	10.50
Cell chi-sq.	.32	.12	.07	3.38	2.72	.02
46 TO 55						
Freq.	0.00	2.00	5.00	14.00	11.00	8.00
Per. across	0.00	5.00	12.50	35.00	27.50	20.00
Per. down	0.00	25.00	35.71	40.00	26.83	24.24
Per. of total	0.00	1.52	3.79	10.61	8.33	6.06
Theoret. freq.	.30	2.42	4.24	10.61	12.42	10.00
Cell chi-sq.	.30	.07	.14	1.09	.16	.40
56 TO 65						
Freq.	0.00	0.00	0.00	5.00	2.00	10.00
Per. across	0.00	0.00	0.00	29.41	11.76	58.82
Per. down	0.00	0.00	0.00	14.29	4.88	30.30
Per. of total	0.00	0.00	0.00	3.79	1.52	7.58
Theoret. freq.	.13	1.03	1.80	4.51	5.28	4.25
Cell chi-sq.	.13	1.03	1.80	.05	2.04	7.78

Continued on Next Page

Table V, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
TOTAL						
Freq.	1.00	8.00	14.00	35.00	41.00	33.00
Per. across	.76	6.06	10.61	26.52	31.06	25.00
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.06	10.61	26.52	31.06	25.00

Chi-sqaure = 28.862; degrees of freedom = 15
Product moment correlation = .2393
Significant at .05 level

Table VI

RELATIONSHIP BETWEEN AGE AND DEVELOPING EFFICIENT METHODS
AND PROCEDURES FOR OFFICE WORK

	Not Applicable	Never	Seldom	Sometimes	Often	Always
35 OR LESS						
Freq.	0.00	2.00	2.00	10.00	16.00	3.00
Per. across	0.00	6.06	6.06	30.30	48.48	9.09
Per. down	0.00	100.00	50.00	33.33	28.07	8.33
Per. of total	0.00	1.52	1.52	7.58	12.12	2.27
Theoret. freq.	.75	.50	1.00	7.50	14.25	9.00
Cell chi-sq.	.75	4.50	1.00	.83	.21	4.00
36 TO 45						
Freq.	0.00	0.00	1.00	7.00	18.00	16.00
Per. across	0.00	0.00	2.38	16.67	42.86	38.10
Per. down	0.00	0.00	25.00		31.58	44.44
Per. of total	0.00	0.00	.76	5.30	13.64	12.12
Theoret. freq.	.95	.64	1.27	9.55	18.14	11.45
Cell chi-sq.	.95	.64	.06	.68	.00	1.80
46 TO 55						
Freq.	0.00	0.00	1.00	11.00	18.00	10.00
Per. across	0.00	0.00	2.50	27.50	45.00	25.00
Per. down	0.00	0.00	25.00	36.67	31.58	27.78
Per. of total	0.00	0.00	.76	8.33	13.64	7.58
Theoret. freq.	.91	.61	1.21	9.09	17.27	10.91
Cell chi-sq.	.91	.61	.04	.40	.03	.08
56 TO 65						
Freq.	3.00	0.00	0.00	2.00	5.00	7.00
Per. across	17.65	0.00	0.00	11.76	29.41	41.18
Per. down	100.00	0.00	0.00	6.67	8.77	19.44
Per. of total	2.27	0.00	0.00	1.52	3.79	5.30
Theoret. freq.	.39	.26	.52	3.86	7.34	4.64
Cell chi-sq.	17.68	.26	.52	.90	.75	1.20

Continued on Next Page

Table VI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
TOTAL						
Freq.	3.00	2.00	4.00	30.00	57.00	36.00
Per. across	2.27	1.52	3.03	22.73	43.18	27.27
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	2.27	1.52	3.03	22.73	43.18	27.27

Chi-square = 38.794; degrees of freedom = 15
Produce moment correlation = .0455
Significant at .05 level

Table VII

RELATIONSHIP BETWEEN AGE AND RECRUITING CANDIDATES
FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
35 OR LESS						
Freq.	1.00	1.00	0.00	11.00	12.00	8.00
Per. across	3.03	3.03	0.00	33.33	36.36	24.24
Per. down	100.00	20.00	0.00	45.83	26.67	15.38
Per. of total	.76	.76	0.00	8.33	9.09	6.06
Theoret. freq.	.25	1.25	1.25	6.00	11.25	13.00
Cell chi-sq.	2.25	.05	1.25	4.17	.05	1.92
36 TO 45						
Freq.	0.00	1.00	2.00	3.00	19.00	17.00
Per. across	0.00	2.38	4.76	7.14	45.24	40.48
Per. down	0.00	20.00	40.00	12.50	42.22	32.69
Per. of total	0.00	.76	1.52	2.27	14.39	12.88
Theoret. freq.	.32	1.59	1.59	7.64	14.32	16.55
Cell chi-sq.	.32	.22	.11	2.81	1.53	.01
46 TO 55						
Freq.	0.00	3.00	3.00	8.00	11.00	15.00
Per. across	0.00	7.50	7.50	20.00	27.50	37.50
Per. down	0.00	60.00	60.00	33.33	24.44	28.85
Per. of total	0.00	2.27	2.27	6.06	8.33	11.36
Theoret. freq.	.30	1.52	1.52	7.27	13.64	15.76
Cell chi-sq.	.30	1.46	1.46	.07	.51	.04
56 TO 65						
Freq.	0.00	0.00	0.00	2.00	3.00	12.00
Per. across	0.00	0.00	0.00	11.76	17.65	70.59
Per. down	0.00	0.00	0.00	8.33	6.67	23.08
Per. of total	0.00	0.00	0.00	1.52	2.27	9.09
Theoret. freq.	.13	.64	.64	3.09	5.80	6.70
Cell chi-sq.	.13	.64	.64	.39	1.35	4.20

Continued on Next Page

Table VII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
TOTAL						
Freq.	1.00	5.00	5.00	24.00	45.00	52.00
Per. across	.76	3.79	3.79	18.18	34.09	39.39
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	3.79	3.79	18.18	34.09	39.39

Chi-square = 25.872; degrees of freedom = 15
Product moment correlation = .1572
Significant at .05 level

Table VIII

RELATIONSHIP BETWEEN AGE AND SELECTING CANDIDATES
FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
35 OR LESS						
Freq.	0.00	7.00	3.00	9.00	7.00	7.00
Per. across	0.00	21.21	9.09	27.27	21.21	21.21
Per. down	0.00	77.78	33.33	28.13	18.92	15.91
Per. of total	0.00	5.30	2.27	6.82	5.30	5.30
Theoret. freq.	.25	2.25	2.25	8.00	9.25	11.00
Cell chi-sq.	.25	10.03	.25	.13	.55	1.45
36 TO 45						
Freq.	1.00	1.00	1.00	8.00	15.00	16.00
Per. across	2.38	2.38	2.38	19.05	35.71	38.10
Per. down	100.00	11.11	11.11	25.00	40.54	36.36
Per. of total	.76	.76	.76	6.06	11.36	12.12
Theoret. freq.	.32	2.86	2.86	10.18	11.77	14.00
Cell chi-sq.	1.46	1.21	1.21	.47	.88	.29
46 TO 55						
Freq.	0.00	1.00	5.00	13.00	10.00	11.00
Per. across	0.00	2.50	12.50	32.50	25.00	27.50
Per. down	0.00	11.00	55.56	40.63	27.03	25.00
Per. of total	0.00	.76	3.79	9.85	7.58	8.33
Theoret. freq.	.30	2.73	2.73	9.70	11.21	13.33
Cell chi-sq.	.30	1.09	1.89	1.13	.13	.41
56 TO 65						
Freq.	0.00	0.00	0.00	2.00	5.00	10.00
Per. across	0.00	0.00	0.00	11.76	29.41	58.82
Per. down	0.00	0.00	0.00	6.25	13.51	22.73
Per. of total	0.00	0.00	0.00	1.52	3.79	7.58
Theoret. freq.	.13	1.16	1.16	4.12	4.77	5.67
Cell chi-sq.	.13	1.16	1.16	1.09	.01	3.31

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Table VIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
TOTAL						
Freq.	1.00	9.00	9.00	32.00	37.00	44.00
Per. across	.76	6.82	6.82	24.24	28.03	33.33
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.82	6.82	24.24	28.03	33.33

Chi-square = 29.999; degrees of freedom = 15
Product moment correlation = .2599
Significant at .05 level

Table IX

RELATIONSHIP BETWEEN NUMBER OF YEARS IN PRESENT POSITION AND
ORIENTING NEW EMPLOYEES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LESS THAN 1						
Freq.	2.00	0.00	1.00	5.00	8.00	8.00
Per. across	8.33	0.00	4.17	20.83	33.33	33.33
Per. down	33.33	0.00	20.00	22.73	21.05	13.56
Per. of total	1.52	0.00	.76	3.79	6.06	6.06
Theoret. freq.	1.09	.36	.91	4.00	6.91	10.73
Cell chi-sq.	.76	.36	.01	.25	.17	.69
1 THROUGH 3						
Freq.	3.00	0.00	0.00	4.00	12.00	21.00
Per. across	7.50	0.00	0.00	10.00	30.00	52.50
Per. down	50.00	0.00	0.00	18.18	31.58	35.59
Per. of total	2.27	0.00	0.00	3.03	9.09	15.91
Theoret. freq.	1.82	.61	1.52	6.67	11.52	17.88
Cell chi-sq.	.77	.61	1.52	1.07	.02	.54
4 THROUGH 6						
Freq.	0.00	1.00	1.00	6.00	9.00	13.00
Per. across	0.00	3.33	3.33	20.00	30.00	43.33
Per. down	0.00	50.00	20.00	27.27	23.68	22.03
Per. of total	0.00	.76	.76	4.55	6.82	9.85
Theoret. freq.	1.36	.45	1.14	5.00	8.64	13.41
Cell chi-sq.	1.36	.65	.02	.20	.02	.01
7 THROUGH 9						
Freq.	1.00	1.00	3.00	1.00	2.00	4.00
Per. across	8.33	8.33	25.00	8.33	16.67	33.33
Per. down	16.67	50.00	60.00	4.55	5.26	6.78
Per. of total	.76	.76	2.27	.76	1.52	3.03
Theoret. freq.	.55	.18	.45	2.00	3.45	5.36
Cell chi-sq.	.38	3.68	14.25	.50	.61	.35

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Table IX, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
10 OR MORE						
Freq.	0.00	0.00	0.00	6.00	7.00	13.00
Per. across	0.00	0.00	0.00	23.08	26.92	50.00
Per. down	0.00	0.00	0.00	27.27	18.42	22.03
Per. of total	0.00	0.00	0.00	4.55	5.30	9.85
Theoret. freq.	1.18	.39	.98	4.33	7.48	11.62
Cell chi-sq.	1.18	.39	.98	.64	.03	.16
TOTAL						
Freq.	6.00	2.00	5.00	22.00	38.00	59.00
Per. across	4.55	1.52	3.79	16.67	28.79	44.70
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	4.55	1.52	3.79	16.67	28.79	44.70

Chi-square = 32.201; degrees of freedom = 20

Product moment correlation = .0539

Significant at .05 level

Table X

RELATIONSHIP BETWEEN NUMBER OF YEARS IN PRESENT POSITION AND
SUPERVISING SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LESS THAN 1						
Freq.	2.00	4.00	5.00	7.00	3.00	3.00
Per. across	8.33	16.67	20.83	29.17	12.50	12.50
Per. down	50.00	80.00	41.67	25.93	8.82	6.00
Per. of total	1.52	3.03	3.79	5.30	2.27	2.27
Theoret. freq.	.73	.91	2.18	4.91	6.18	9.09
Cell chi-sq.	2.23	10.51	3.64	.89	1.64	4.08
1 THROUGH 3						
Freq.	0.00	0.00	2.00	6.00	11.00	21.00
Per. across	0.00	0.00	5.00	15.00	27.50	52.20
Per. down	0.00	0.00	16.67	22.22	32.35	42.00
Per. of total	0.00	0.00	1.52	4.55	8.33	15.91
Theoret. freq.	1.21	1.52	3.64	8.18	10.30	15.15
Cell chi-sq.	1.21	1.52	.74	.58	.05	2.26
4 THROUGH 6						
Freq.	0.00	0.00	3.00	8.00	8.00	11.00
Per. across	0.00	0.00	10.00	26.67	26.67	36.67
Per. down	0.00	0.00	25.00	29.63	23.53	22.00
Per. of total	0.00	0.00	2.27	6.06	6.06	8.33
Theoret. freq.	.91	1.14	2.73	6.14	7.73	11.36
Cell chi-sq.	.91	1.14	.03	.57	.01	.01
7 THROUGH 9						
Freq.	0.00	1.00	2.00	2.00	2.00	5.00
Per. across	0.00	8.33	16.67	16.67	16.67	41.67
Per. down	0.00	20.00	16.67	7.41	5.88	10.00
Per. of total	0.00	.76	1.52	1.52	1.52	3.79
Theoret. freq.	.36	.45	1.09	2.45	3.09	4.55
Cell chi-sq.	.36	.65	.76	.08	.39	.05

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Table X, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
10 OR MORE						
Freq.	2.00	0.00	0.00	4.00	10.00	10.00
Per. across	7.69	0.00	0.00	15.38	38.46	38.46
Per. down	50.00	0.00	0.00	14.81	29.41	20.00
Per. of total	1.52	0.00	0.00	3.03	7.58	7.58
Theoret. freq.	.79	.98	2.36	5.32	6.70	9.85
Cell chi-sq.	1.86	.98	2.36	.33	1.63	.00
TOTAL						
Freq.	4.00	5.00	12.00	27.00	34.00	50.00
Per. across	3.03	3.79	9.09	20.45	25.76	37.88
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	3.79	9.09	20.45	25.76	37.88
Chi-square = 41.458; degrees of freedom = 20						
Product moment correlation = .1824						
Significant at .05 level						

Table XI

RELATIONSHIP BETWEEN NUMBER OF SUBORDINATES AND PREPARING
DESCRIPTIONS OF VARIOUS DEPARTMENTAL JOBS

	Not Applicable	Never	Seldom	Sometimes	Often	Always
5 OR FEWER						
Freq.	3.00	0.00	8.00	10.00	13.00	9.00
Per. across	6.98	0.00	18.60	23.26	30.23	20.93
Per. down	60.00	0.00	50.00	37.04	33.33	20.45
Per. of total	2.27	0.00	6.06	7.58	9.85	6.82
Theoret. freq.	1.63	.33	5.21	8.80	12.70	14.33
Cell chi-sq.	1.15	.33	1.49	.16	.01	1.98
6 THROUGH 10						
Freq.	0.00	1.00	3.00	8.00	6.00	9.00
Per. across	0.00	3.70	11.11	29.63	22.22	33.33
Per. down	0.00	100.00	18.75	29.63	15.38	20.45
Per. of total	0.00	.76	2.27	6.06	4.55	6.82
Theoret. freq.	1.02	.20	3.27	5.52	7.98	9.00
Cell chi-sq.	1.02	3.09	.02	1.11	.49	.00
11 THROUGH 15						
Freq.	1.00	0.00	1.00	3.00	3.00	1.00
Per. across	11.11	0.00	11.11	33.33	33.33	11.11
Per. down	20.00	0.00	6.25	11.11	7.69	2.27
Per. of total	.76	0.00	.76	2.27	2.27	.76
Theoret. freq.	.34	.07	1.09	1.84	2.66	3.00
Cell chi-sq.	1.27	.07	.01	.73	.04	1.33
16 THROUGH 20						
Freq.	0.00	0.00	0.00	0.00	4.00	0.00
Per. across	0.00	0.00	0.00	0.00	100.00	0.00
Per. down	0.00	0.00	0.00	0.00	10.26	0.00
Per. of total	0.00	0.00	0.00	0.00	3.03	0.00
Theoret. freq.	.15	.03	.48	.82	1.18	1.33
Cell chi-sq.	.15	.03	.48	.82	6.72	1.33

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Table XI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
10 OR MORE						
Freq.	1.00	0.00	4.00	6.00	13.00	25.00
Per. across	2.04	0.00	8.16	12.24	26.53	51.02
Per. down	20.00	0.00	25.00	22.22	33.33	56.82
Per. of total	.76	0.00	3.03	4.55	9.85	18.94
Theoret. freq.	1.86	.37	5.94	10.22	14.48	16.33
Cell chi-sq.	.39	.37	.63	1.61	.15	4.60
TOTAL						
Freq.	5.00	1.00	16.00	27.00	39.00	44.00
Per. across	3.79	.76	12.12	20.45	29.55	33.33
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.79	.76	12.12	20.45	29.55	33.33
Chi-square = 31.626; degrees of freedom = 20						
Product moment correlation = .2638						
Significant at .05 level						

Table XII

RELATIONSHIP BETWEEN NUMBER OF SUBORDINATES AND PREPARING DIRECTIVES
FOR ACCOMPLISHMENT OF DEPARTMENTAL OBJECTIVES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
5 OR FEWER						
Freq.	2.00	0.00	4.00	18.00	11.00	8.00
Per. across	4.65	0.00	9.30	41.86	25.58	18.60
Per. down	33.33	0.00	40.00	40.91	29.73	23.53
Per. of total	1.52	0.00	3.03	13.64	8.33	6.06
Theoret. freq.	1.95	.33	3.26	14.33	12.05	11.08
Cell chi-sq.	.00	.33	.17	.94	.09	.85
6 THROUGH 10						
Freq.	1.00	1.00	3.00	8.00	7.00	7.00
Per. across	3.70	3.70	11.11	29.63	25.93	25.93
Per. down	16.67	100.00	30.00	18.18	18.92	20.59
Per. of total	.76	.76	2.27	6.06	5.30	5.30
Theoret. freq.	1.23	.20	2.05	9.00	7.57	6.95
Cell chi-sq.	.04	3.09	.45	.11	.04	.00
11 THROUGH 15						
Freq.	0.00	0.00	0.00	4.00	4.00	1.00
Per. across	0.00	0.00	0.00	44.44	44.44	11.11
Per. down	0.00	0.00	0.00	9.09	10.81	2.94
Per. of total	0.00	0.00	0.00	3.03	3.03	.76
Theoret. freq.	.41	.07	.68	3.00	2.52	2.32
Cell chi-sq.	.41	.07	.68	.33	.87	.75
16 THROUGH 21						
Freq.	2.00	0.00	0.00	0.00	1.00	1.00
Per. across	50.00	0.00	0.00	0.00	25.00	25.00
Per. down	33.33	0.00	0.00	0.00	2.70	2.94
Per. of total	1.52	0.00	0.00	0.00	.76	.76
Theoret. freq.	.18	.03	.30	1.33	1.12	1.03
Cell chi-sq.	18.18	.03	.30	1.33	.01	.00

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Table XII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
21 OR MORE						
Freq.	1.00	0.00	3.00	14.00	14.00	17.00
Per. across	2.04	0.00	6.12	28.57	28.57	34.69
Per. down	16.67	0.00	30.00	31.82	37.84	50.00
Per. of total	.76	0.00	2.27	10.61	10.61	12.88
Theoret. freq.	2.23	.37	3.71	16.33	13.73	12.62
Cell chi-sq.	.68	.37	.14	.33	.01	1.52
TOTAL						
Freq.	6.00	1.00	10.00	44.00	37.00	34.00
Per. across	4.55	.76	7.58	33.33	28.03	25.76
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	4.55	.76	7.58	33.33	28.03	25.76
Chi-square = 32.126; degrees of freedom = 20						
Product moment correlation = .1432						
Significant at .05 level						

Table XIII

RELATIONSHIP BETWEEN NUMBER OF SUBORDINATES AND FORMULATING STANDARDS
OF PERFORMANCE BASED ON GOALS, POLICIES, PROGRAMS, BUDGETS

	Not Applicable	Never	Seldom	Sometimes	Often	Always
5 OR FEWER						
Freq.	1.00	0.00	9.00	9.00	12.00	12.00
Per. across	2.33	0.00	20.93	20.93	27.91	27.91
Per. down	50.00	0.00	50.00	34.62	30.00	26.67
Per. of total	.76	0.00	6.82	6.82	9.09	9.09
Theoret. freq.	.65	.33	5.86	8.47	13.03	14.66
Cell chi-sq.	.19	.33	1.68	.03	.08	.48
6 THROUGH 10						
Freq.	0.00	1.00	3.00	7.00	5.00	11.00
Per. across	0.00	3.70	11.11	25.93	18.52	40.74
Per. down	0.00	100.00	16.67	26.92	12.50	24.44
Per. total	0.00	.76	2.27	5.30	3.79	8.33
Theoret. freq.	.41	.20	3.68	5.32	8.18	9.20
Cell chi-sq.	.41	3.09	.13	.53	1.24	.35
11 THROUGH 15						
Freq.	0.00	0.00	0.00	4.00	5.00	0.00
Per. across	0.00	0.00	0.00	44.44	55.56	0.00
Per. down	0.00	0.00	0.00	15.38	12.50	0.00
Per. total	0.00	0.00	0.00	3.03	3.79	0.00
Theoret. freq.	.14	.07	1.23	1.77	2.73	3.07
Cell chi-sq.	.14	.07	1.23	2.80	1.89	3.07
16 THROUGH 21						
Freq.	1.00	0.00	0.00	0.00	0.00	3.00
Per. across	25.00	0.00	0.00	0.00	0.00	75.00
Per. down	50.00	0.00	0.00	0.00	0.00	6.67
Per. total	.76	0.00	0.00	0.00	0.00	2.27
Theoret. freq.	.06	.03	.55	.79	1.21	1.36
Cell chi-sq.	14.56	.03	.55	.79	1.21	1.96

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Table XIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
21 OR MORE						
Freq.	0.00	0.00	6.00	6.00	18.00	19.00
Per. across	0.00	0.00	12.24	12.24	36.73	38.78
Per. down	0.00	0.00	33.33	23.08	45.00	42.22
Per. of total	0.00	0.00	4.55	4.55	13.64	14.39
Theoret. freq.	.74	.37	6.68	9.65	14.85	16.70
Cell chi-sq.	.74	.37	.07	1.38	.67	.32
TOTAL						
Freq.	2.00	1.00	18.00	26.00	40.00	45.00
Per. across	1.52	.76	13.64	19.70	30.30	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	.76	13.64	19.70	30.30	34.09
Chi-square = 40.376; degrees of freedom = 20						
Product moment correlation = .1565						
Significant at .05 level						

Table XIV

RELATIONSHIP BETWEEN LEVEL OF EDUCATION AND
SUPERVISING SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
HIGH SCHOOL						
Freq.	0.00	0.00	1.00	1.00	2.00	1.00
Per. across	0.00	0.00	20.00	20.00	40.00	20.00
Per. down	0.00	0.00	8.33	3.70	5.88	2.00
Per. of total	0.00	0.00	.76	.76	1.52	.76
Theoret. freq.	.15	.19	.45	1.02	1.29	1.89
Cell chi-sq.	.15	.19	.65	.00	.39	.42
LESS THAN 1 YR. OF COLLEGE						
Freq.	1.00	0.00	0.00	0.00	0.00	1.00
Per. across	50.00	0.00	0.00	0.00	0.00	50.00
Per. down	25.00	0.00	0.00	0.00	0.00	2.00
Per. of total	.76	0.00	0.00	0.00	0.00	.76
Theoret. freq.	.06	.08	.18	.41	.52	.76
Cell chi-sq.	14.56	.08	.18	.41	.52	.08
AT LEAST 1 YR. OF COLLEGE BUT NO DEGREE						
Freq.	0.00	0.00	2.00	0.00	4.00	12.00
Per. across	0.00	0.00	11.11	0.00	22.22	66.67
Per. down	0.00	0.00	16.67	0.00	11.76	24.00
Per. of total	0.00	0.00	1.52	0.00	3.03	9.09
Theoret. freq.	.55	.68	1.64	3.68	4.64	6.82
Cell chi-sq.	.55	.68	.08	3.68	.09	3.94
BACHELOR'S						
Freq.	0.00	3.00	9.00	17.00	21.00	27.00
Per. across	0.00	3.90	11.69	22.08	27.27	35.06
Per. down	0.00	60.00	75.00	62.96	61.76	54.00
Per. of total	0.00	2.27	6.82	12.88	15.91	20.45
Theoret. freq.	2.33	2.92	7.00	15.75	19.83	29.17
Cell chi-sq.	2.33	.00	.57	.10	.07	.16

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Table XIV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MASTER'S						
Freq.	3.00	0.00	0.00	8.00	3.00	7.00
Per. across	14.29	0.00	0.00	38.10	14.29	33.33
Per. down	75.00	0.00	0.00	29.63	8.82	14.00
Per. of total	2.27	0.00	0.00	6.06	2.27	5.30
Theoret. freq.	.64	.80	1.91	4.30	5.41	7.95
Cell chi-sq.	8.78	.80	1.91	3.19	1.07	.11
WORK BEYOND MASTER'S						
Freq.	0.00	2.00	0.00	1.00	4.00	2.00
Per. across	0.00	22.22	0.00	11.11	44.44	22.22
Per. down	0.00	40.00	0.00	3.70	11.76	4.00
Per. of total	0.00	1.52	0.00	.76	3.03	1.52
Theoret. freq.	.27	.34	.82	1.84	2.32	3.41
Cell chi-sq.	.27	8.07	.82	.38	1.22	.58
TOTAL						
Freq.	4.00	5.00	12.00	27.00	34.00	50.00
Per. across	3.03	3.79	9.09	20.45	25.76	37.88
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	3.79	9.09	20.45	25.76	37.88
Chi-square = 57.101; degrees of freedom = 25 Product moment correlation = -.1088 Significant at .05 level						

Table XV

RELATIONSHIP BETWEEN MAJOR IN COLLEGE AND MAKING ACCURATE MEASUREMENT
OF WORK THROUGH DEVELOPMENT OF SYSTEMATIC PROCEDURES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	0.00	0.00	0.00	5.00	1.00
Per. across	0.00	0.00	0.00	0.00	83.33	16.67
Per. down	0.00	0.00	0.00	0.00	14.29	4.55
Per. of total	0.00	0.00	0.00	0.00	3.79	.76
Theoret. freq.	.64	.18	.64	1.95	1.59	1.00
Cell chi-sq.	.64	.18	.64	1.95	7.31	0.00
BUSINESS						
Freq.	4.00	2.00	5.00	26.00	17.00	15.00
Per. across	5.80	2.90	7.25	37.68	24.64	21.74
Per. down	28.57	50.00	35.71	60.47	48.57	68.18
Per. of total	3.03	1.52	3.79	19.70	12.88	11.36
Theoret. freq.	7.32	2.09	7.32	22.48	18.30	11.50
Cell chi-sq.	1.50	.00	.73	.55	.09	1.07
OTHER						
Freq.	10.00	2.00	9.00	17.00	13.00	6.00
Per. across	17.54	3.51	15.79	29.82	22.81	10.53
Per. down	71.43	50.00	64.29	39.53	37.14	27.27
Per. of total	7.58	1.52	6.82	12.88	9.85	4.55
Theoret. freq.	6.05	1.73	6.05	18.57	15.11	9.50
Cell chi-sq.	2.59	.04	1.44	.13	.30	1.29
TOTAL						
Freq.	14.00	4.00	14.00	43.00	35.00	22.00
Per. across	10.61	3.03	10.61	32.58	26.52	16.67
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	10.61	3.03	10.61	32.58	26.52	16.67

Chi-square = 20.457; degrees of freedom = 10

Product moment correlation = -.2810

Significant at .05 level

Table XVI

RELATIONSHIP BETWEEN MAJOR IN COLLEGE AND MEASURING

PERFORMANCE OF DEPARTMENTAL SUBORDINATES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	0.00	0.00	0.00	3.00	3.00
Per. across	0.00	0.00	0.00	0.00	50.00	50.00
Per. down	0.00	0.00	0.00	0.00	9.38	6.67
Per. of total	0.00	0.00	0.00	0.00	2.27	2.27
Theoret. freq.	.09	.50	.64	1.27	1.45	2.05
Cell chi-sq.	.09	.50	.64	1.27	1.64	.45
BUSINESS						
Freq.	0.00	3.00	5.00	14.00	16.00	31.00
Per. across	0.00	4.35	7.25	20.29	23.19	44.93
Per. down	0.00	27.27	35.71	50.00	50.00	68.89
Per. of total	0.00	2.27	3.79	10.61	12.12	23.48
Theoret. freq.	1.05	5.75	7.32	14.64	16.73	23.52
Cell chi-sq.	1.05	1.32	.73	.03	.03	2.38
OTHER						
Freq.	2.00	8.00	9.00	14.00	13.00	11.00
Per. across	3.51	14.04	15.79	24.56	22.81	19.30
Per. down	100.00	72.73	64.29	50.00	40.63	24.44
Per. of total	1.52	6.06	6.82	10.61	9.85	8.33
Theoret. freq.	.86	4.75	6.05	12.09	13.82	19.43
Cell chi-sq.	1.50	2.22	1.44	.30	.05	3.66
TOTAL						
Freq.	2.00	11.00	14.00	28.00	32.00	45.00
Per. across	1.52	8.33	10.61	21.21	24.24	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	8.33	10.61	21.21	24.24	34.09
Chi-square = 19.290; degrees of freedom = 10						
Product moment correlation = -.3526						
Significant at .05 level						

Table XVII

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND DEFINING RELATIONSHIPS
AMONG JOBS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	25.00	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.03	.02	.14	.23	.34	.24
Cell chi-sq.	31.03	.02	.14	.23	.34	.24
NO MILITARY						
Freq.	1.00	0.00	6.00	6.00	16.00	8.00
Per. across	2.70	0.00	16.22	16.22	43.24	21.62
Per. down	25.00	0.00	31.58	20.00	35.56	25.00
Per. of total	.76	0.00	4.55	4.55	12.12	6.06
Theoret. freq.	1.12	.56	5.33	8.41	12.61	8.97
Cell chi-sq.	.01	.56	.09	.69	.91	.10
LESS THAN 2 YRS.						
Freq.	0.00	0.00	1.00	3.00	3.00	6.00
Per. across	0.00	0.00	7.69	23.08	23.08	46.15
Per. down	0.00	0.00	5.26	10.00	6.67	18.75
Per. of total	0.00	0.00	.76	2.27	2.27	4.55
Theoret. freq.	.39	.20	1.87	2.95	4.43	3.15
Cell chi-sq.	.39	.20	.41	.00	.46	2.57
2 THROUGH 4						
Freq.	2.00	2.00	10.00	18.00	24.00	15.00
Per. across	2.82	2.82	14.08	25.35	33.80	21.13
Per. down	50.00	100.00	52.63	60.00	53.33	46.88
Per. of total	1.52	1.52	7.58	13.64	18.18	11.36
Theoret. freq.	2.15	1.08	10.22	16.14	24.20	17.21
Cell chi-sq.	.01	.79	.00	.22	.00	.28

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	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YRS.						
Freq.	0.00	0.00	2.00	3.00	2.00	3.00
Per. across	0.00	0.00	20.00	30.00	20.00	30.00
Per. down	0.00	0.00	10.53	10.00	4.44	9.38
Per. of total	0.00	0.00	1.52	2.27	1.52	2.27
Theoret. freq.	.30	.15	1.44	2.27	3.41	2.42
Cell chi-sq.	.30	.15	.22	.23	.58	.14
TOTAL						
Freq.	4.00	2.00	19.00	30.00	45.00	32.00
Per. across	3.03	1.52	14.39	22.73	34.09	24.24
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	1.52	14.39	22.73	34.09	24.24
Chi-square = 41.333; degrees of freedom = 20						
Product moment correlation = -.0009						
Significant at .05 level						

Table XVIII

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND DEFINING LINES
OF AUTHORITY WITHIN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	25.00	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.03	.07	.14	.28	.26	.22
Cell chi-sq.	31.03	.07	.14	.28	.26	.22
NO MILITARY						
Freq.	2.00	3.00	5.00	11.00	11.00	5.00
Per. across	5.41	8.11	13.51	29.73	29.73	13.51
Per. down	50.00	33.33	26.32	29.73	32.35	17.24
Per. of total	1.52	2.27	3.79	8.33	8.33	3.79
Theoret. freq.	1.12	2.52	5.33	10.37	9.53	8.13
Cell chi-sq.	.69	.09	.02	.04	.23	1.20
LESS THAN 2 YR.						
Freq.	0.00	0.00	1.00	2.00	4.00	6.00
Per. across	0.00	0.00	7.69	15.38	30.77	46.15
Per. down	0.00	0.00	5.26	5.41	11.76	20.69
Per. of total	0.00	0.00	.76	1.52	3.03	4.55
Theoret. freq.	.39	.89	1.87	3.64	3.35	2.86
Cell chi-sq.	.39	.89	.41	.74	.13	3.46
2 THROUGH 4						
Freq.	1.00	6.00	12.00	23.00	12.00	17.00
Per. across	1.41	8.45	16.90	32.39	16.90	23.94
Per. down	25.00	66.67	63.16	62.16	35.29	58.62
Per. of total	.76	4.55	9.09	17.42	9.09	12.88
Theoret. freq.	2.15	4.84	10.22	19.90	18.29	15.60
Cell chi-sq.	.62	.28	.31	.48	2.16	.13

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Table XVIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YRS.						
Freq.	0.00	0.00	1.00	1.00	7.00	1.00
Per. across	0.00	0.00	10.00	10.00	70.00	10.00
Per. down	0.00	0.00	5.26	2.70	20.59	3.45
Per. of total	0.00	0.00	.76	.76	5.30	.76
Theoret. freq.	.30	.68	1.44	2.80	2.58	2.20
Cell chi-sq.	.30	.68	.13	1.16	7.60	.65
TOTAL						
Freq.	4.00	9.00	19.00	37.00	34.00	29.00
Per. across	3.03	6.82	14.39	28.03	25.76	21.97
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	6.82	14.39	28.03	25.76	21.97
Chi-square = 54.788; degrees of freedom = 20						
Product moment correlation = .1161						
Significant at .05 level						

Table XIX

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND DEFINING
RESPONSIBILITIES OF SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	100.00	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.01	.06	.11	.27	.31	.25
Cell chi-sq.	130.01	.06	.11	.27	.31	.25
NO MILITARY						
Freq.	0.00	2.00	4.00	14.00	9.00	8.00
Per. across	0.00	5.41	10.81	37.84	24.32	21.62
Per. down	0.00	25.00	28.57	40.00	21.95	24.24
Per. of total	0.00	1.52	3.03	10.61	6.82	6.06
Theoret. freq.	.28	2.24	3.92	9.81	11.49	9.25
Cell chi-sq.	.28	.03	.00	1.79	.54	.17
LESS THAN 2 YR.						
Freq.	0.00	1.00	2.00	0.00	5.00	5.00
Per. across	0.00	7.69	15.38	0.00	38.46	38.46
Per. down	0.00	12.50	14.29	0.00	12.20	15.15
Per. of total	0.00	.76	1.52	0.00	3.79	3.79
Theoret. freq.	.10	.79	1.38	3.45	4.04	3.25
Cell chi-sq.	.10	.06	.28	3.45	.23	.94
2 THROUGH 4						
Freq.	0.00	4.00	7.00	19.00	23.00	18.00
Per. across	0.00	5.63	9.86	26.76	32.39	25.35
Per. down	0.00	50.00	50.00	54.29	56.10	54.55
Per. of total	0.00	3.03	5.30	14.39	17.42	13.64
Theoret. freq.	.54	4.30	7.53	18.83	22.05	17.75
Cell chi-sq.	.54	.02	.04	.00	.04	.00

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	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	0.00	1.00	1.00	2.00	4.00	2.00
Per. across	0.00	10.00	10.00	20.00	40.00	20.00
Per. down	0.00	12.50	7.14	5.71	9.76	6.06
Per. of total	0.00	.76	.76	1.52	3.03	1.52
Theoret. freq.	.08	.61	1.06	2.65	3.11	2.50
Cell chi-sq.	.08	.26	.00	.16	.26	.10
TOTAL						
Freq.	1.00	8.00	14.00	35.00	41.00	33.00
Per. across	.76	6.06	10.61	26.52	31.06	25.00
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.06	10.61	26.52	31.06	25.00
Chi-square = 140.355; degrees of freedom = 20						
Product moment correlation = .0884						
Significant at .05 level						

Chi-square = 140.355; degrees of freedom = 20
Product moment correlation = .0884
Significant at .05 level

Table XX

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND ORIENTING NEW EMPLOYEES
IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	16.67	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.05	.02	.04	.17	.29	.45
Cell chi-sq.	20.05	.02	.04	.17	.29	.45
NO MILITARY						
Freq.	2.00	0.00	2.00	10.00	10.00	13.00
Per. across	5.41	0.00	5.41	27.03	27.03	35.14
Per. down	33.33	0.00	40.00	45.45	26.32	22.03
Per. of total	1.52	0.00	1.52	7.58	7.58	9.85
Theoret. freq.	1.68	.56	1.40	6.17	10.65	16.54
Cell chi-sq.	.06	.56	.26	2.38	.04	.76
LESS THAN 2 YR.						
Freq.	1.00	0.00	0.00	1.00	5.00	6.00
Per. across	7.69	0.00	0.00	7.69	38.46	46.15
Per. down	16.67	0.00	0.00	4.55	13.16	10.17
Per. of total	.76	0.00	0.00	.76	3.79	4.55
Theoret. freq.	.59	.20	.49	2.17	3.74	5.81
Cell chi-sq.	.28	.20	.49	.63	.42	.01
2 THROUGH 4						
Freq.	2.00	2.00	2.00	9.00	19.00	37.00
Per. across	2.82	2.82	2.82	12.68	26.76	52.11
Per. down	33.33	100.00	40.00	40.91	50.00	62.71
Per. of total	1.52	1.52	1.52	6.82	14.39	28.03
Theoret. freq.	3.23	1.08	2.69	11.83	20.44	31.73
Cell chi-sq.	.47	.79	.18	.68	.10	.87

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Table XX, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	0.00	0.00	1.00	2.00	4.00	3.00
Per. across	0.00	0.00	10.00	20.00	40.00	30.00
Per. down	0.00	0.00	20.00	9.09	10.53	5.08
Per. of total	0.00	0.00	.76	1.52	3.03	2.27
Theoret. freq.	.45	.15	.38	1.67	2.88	4.47
Cell chi-sq.	.45	.15	1.02	.07	.44	.48
TOTAL						
Freq.	6.00	2.00	5.00	22.00	38.00	59.00
Per. across	4.55	1.52	3.79	16.67	28.79	44.70
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	4.55	1.52	3.79	16.67	28.79	44.70
Chi-square = 32.788; degrees of freedom = 20						
Product moment correlation = .1557						
Significant at .05 level						

Table XXI

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND APPRAISING

CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	50.00	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.02	.05	.09	.17	.32	.36
Cell chi-sq.	64.02	.05	.09	.17	.32	.36
NO MILITARY						
Freq.	1.00	2.00	2.00	7.00	12.00	13.00
Per. across	2.70	5.41	5.41	18.92	32.43	35.14
Per. down	50.00	33.33	16.67	31.82	28.57	27.08
Per. of total	.76	1.52	1.52	5.30	9.09	9.85
Theoret. freq.	.56	1.68	3.36	6.17	11.77	13.45
Cell chi-sq.	.34	.06	.55	.11	.00	.02
LESS THAN 2 YR.						
Freq.	0.00	0.00	0.00	2.00	5.00	6.00
Per. across	0.00	0.00	0.00	15.38	38.46	46.15
Per. down	0.00	0.00	0.00	9.09	11.90	12.50
Per. of total	0.00	0.00	0.00	1.52	3.79	4.55
Theoret. freq.	.20	.59	1.18	2.17	4.14	4.73
Cell chi-sq.	.20	.59	1.18	.01	.18	.34
2 THROUGH 4						
Freq.	0.00	4.00	9.00	11.00	21.00	26.00
Per. across	0.00	5.63	12.68	15.49	29.58	36.62
Per. down	0.00	66.67	75.00	50.00	50.00	54.17
Per. of total	0.00	3.03	6.82	8.33	15.91	19.70
Theoret. freq.	1.08	3.23	6.45	11.83	22.59	25.82
Cell chi-sq.	1.08	.19	1.00	.06	.11	.00

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	Not Applicable	Never	Seldom	Sometimes	Often	Always
<hr/>						
MORE THAN 4 YR.						
Freq.	0.00	0.00	1.00	2.00	4.00	3.00
Per. across	0.00	0.00	10.00	20.00	40.00	30.00
Per. down	0.00	0.00	8.33	9.09	9.52	6.25
Per. of total	0.00	0.00	.76	1.52	3.03	2.27
Theoret. freq.	.15	.45	.91	1.67	3.18	3.64
Cell chi-sq.	.15	.45	.01	.07	.21	.11
TOTAL						
Freq.	2.00	6.00	12.00	22.00	42.00	48.00
Per. across	1.52	4.55	9.09	16.67	31.82	36.36
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	4.55	9.09	16.67	31.82	36.36
<p>Chi-square = 72.035; degrees of freedom = 20</p> <p>Product moment correlation = .0521</p> <p>Significant at .05 level</p>						

Table XXII

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND TRAINING

NEW SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	0.00	1.00	0.00	0.00	0.00
Per. across	0.00	0.00	100.00	0.00	0.00	0.00
Per. down	0.00	0.00	11.11	0.00	0.00	0.00
Per. of total	0.00	0.00	.76	0.00	0.00	0.00
Theoret. freq.	.01	.04	.07	.17	.24	.47
Cell chi-sq.	.01	.04	12.73	.17	.24	.47
NO MILITARY						
Freq.	0.00	1.00	0.00	13.00	8.00	15.00
Per. across	0.00	2.70	0.00	35.14	21.62	40.54
Per. down	0.00	20.00	0.00	56.52	25.00	24.19
Per. of total	0.00	.76	0.00	9.85	6.06	11.36
Theoret. freq.	.28	1.40	2.52	6.45	8.97	17.38
Cell chi-sq.	.28	.12	2.52	6.66	.10	.33
LESS THAN 2 YR.						
Freq.	0.00	0.00	0.00	4.00	2.00	7.00
Per. across	0.00	0.00	0.00	30.77	15.38	53.85
Per. down	0.00	0.00	0.00	17.39	6.25	11.29
Per. of total	0.00	0.00	0.00	3.03	1.52	5.30
Theoret. freq.	.10	.49	.89	2.27	3.15	6.11
Cell chi-sq.	.10	.49	.89	1.33	.42	.13
2 THROUGH 4						
Freq.	1.00	4.00	5.00	5.00	20.00	36.00
Per. across	1.41	5.63	7.04	7.04	28.17	50.70
Per. down	100.00	80.00	55.56	21.74	62.50	58.06
Per. of total	.76	3.03	3.79	3.79	15.15	27.27
Theoret. freq.	.54	2.69	4.84	12.37	17.21	33.35
Cell chi-sq.	.40	.64	.01	4.39	.45	.21

Continued on Next Page

Table XXII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	0.00	0.00	3.00	1.00	2.00	4.00
Per. across	0.00	0.00	30.00	10.00	20.00	40.00
Per. down	0.00	0.00	33.33	4.35	6.25	6.45
Per. of total	0.00	0.00	2.27	.76	1.52	3.03
Theoret. freq.	.08	.38	.68	1.74	2.42	4.70
Cell chi-sq.	.08	.38	7.88	.32	.07	.10
TOTAL						
Freq.	1.00	5.00	9.00	23.00	32.00	62.00
Per. across	.76	3.79	6.82	17.42	24.24	46.97
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	3.79	6.82	17.42	24.24	46.97

Chi-square = 41.959; degrees of freedom = 20

Product moment correlation = .0207

Significant at .05 level

Table XXIII

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND ESTABLISHING
PROCEDURES FOR UNIFORMITY OF WORK

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	0.00	0.00	0.00	1.00	0.00
Per. across	0.00	0.00	0.00	0.00	100.00	0.00
Per. down	0.00	0.00	0.00	0.00	1.59	0.00
Per. of total	0.00	0.00	0.00	0.00	.76	0.00
Theoret. freq.	.02	.01	.02	.20	.48	.28
Cell chi-sq.	.02	.01	.02	.20	.57	.28
NO MILITARY						
Freq.	0.00	0.00	0.00	10.00	15.00	12.00
Per. across	0.00	0.00	0.00	27.03	40.54	32.43
Per. down	0.00	0.00	0.00	38.46	23.81	32.43
Per. of total	0.00	0.00	0.00	7.58	11.36	9.09
Theoret. freq.	.84	.28	.56	7.29	17.66	10.37
Cell chi-sq.	.84	.28	.56	1.01	.40	.26
LESS THAN 2 YR.						
Freq.	2.00	0.00	0.00	0.00	7.00	4.00
Per. across	15.38	0.00	0.00	0.00	53.85	30.77
Per. down	66.67	0.00	0.00	0.00	11.11	10.81
Per. of total	1.52	0.00	0.00	0.00	5.30	3.03
Theoret. freq.	.30	.10	.20	2.56	6.20	3.64
Cell chi-sq.	9.83	.10	.20	2.56	.10	.03
2 THROUGH 4						
Freq.	1.00	0.00	2.00	12.00	37.00	19.00
Per. across	1.41	0.00	2.82	16.90	52.11	26.76
Per. down	33.33	0.00	100.00	46.15	58.73	51.35
Per. of total	.76	0.00	1.52	9.09	28.03	14.39
Theoret. freq.	1.61	.54	1.08	13.98	33.89	19.90
Cell chi-sq.	.23	.54	.79	.28	.29	.04

Continued on Next Page

Table XXIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	0.00	1.00	0.00	4.00	3.00	2.00
Per. across	0.00	10.00	0.00	40.00	30.00	20.00
Per. down	0.00	100.00	0.00	15.38	4.76	5.41
Per. of total	0.00	.76	0.00	3.03	2.27	1.52
Theoret. freq.	.23	.08	.15	1.97	4.77	2.80
Cell chi-sq.	.23	11.28	.15	2.09	.66	.23
TOTAL						
Freq.	3.00	1.00	2.00	26.00	63.00	37.00
Per. across	2.27	.76	1.52	19.70	47.73	28.03
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	2.27	.76	1.52	19.70	47.73	28.03
Chi-square = 34.079; degrees of freedom = 20						
Product moment correlation = -.0760						
Significant at .05 level						

Table XXIV

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND WRITING

DEPARTMENTAL POLICIES FOR EMPLOYEES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	0.00	0.00
Per. across	100.00	0.00	0.00	0.00	0.00	0.00
Per. down	20.00	0.00	0.00	0.00	0.00	0.00
Per. of total	.76	0.00	0.00	0.00	0.00	0.00
Theoret. freq.	.04	.05	.14	.32	.27	.19
Cell chi-sq.	24.44	.05	.14	.32	.27	.19
NO MILITARY						
Freq.	1.00	0.00	9.00	11.00	11.00	5.00
Per. across	2.70	0.00	24.32	29.73	29.73	13.51
Per. down	20.00	0.00	50.00	26.19	30.56	20.00
Per. of total	.76	0.00	6.82	8.33	8.33	3.79
Theoret. freq.	1.40	1.68	5.05	11.77	10.09	7.01
Cell chi-sq.	.12	1.68	3.10	.05	.08	.58
LESS THAN 2 YR.						
Freq.	0.00	0.00	1.00	4.00	3.00	5.00
Per. across	0.00	0.00	7.69	30.77	23.08	38.46
Per. down	0.00	0.00	5.56	9.52	8.33	20.00
Per. of total	0.00	0.00	.76	3.03	2.27	3.79
Theoret. freq.	.49	.59	1.77	4.14	3.55	2.46
Cell chi-sq.	.49	.59	.34	.00	.08	2.62
2 THROUGH 4						
Freq.	3.00	5.00	7.00	24.00	19.00	13.00
Per. across	4.23	7.04	9.86	33.80	26.76	18.31
Per. down	60.00	83.33	38.89	57.14	52.78	52.00
Per. of total	2.27	3.79	5.30	18.18	14.39	9.85
Theoret. freq.	2.69	3.23	9.68	22.59	19.36	13.45
Cell chi-sq.	.04	.97	.74	.09	.01	.01

Continued on Next Page

Table XXIV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	0.00	1.00	1.00	3.00	3.00	2.00
Per. across	0.00	10.00	10.00	30.00	30.00	20.00
Per. down	0.00	16.67	5.56	7.14	8.33	8.00
Per. of total	0.00	.76	.76	2.27	2.27	1.52
Theoret. freq.	.38	.45	1.36	3.18	2.73	1.89
Cell chi-sq.	.38	.65	.10	.01	.03	.01
TOTAL						
Freq.	5.00	6.00	18.00	42.00	36.00	25.00
Per. across	3.79	4.55	13.64	31.82	27.27	18.94
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.79	4.55	13.64	31.82	27.27	18.94
Chi-square = 38.165; degrees of freedom = 20						
Product moment correlation = .0471						
Significant at .05 level						

Table XXV

RELATIONSHIP BETWEEN MILITARY EXPERIENCE AND MEASURING
PERFORMANCE OF DEPARTMENTAL SUBORDINATES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	1.00	0.00	0.00	0.00	0.00
Per. across	0.00	100.00	0.00	0.00	0.00	0.00
Per. down	0.00	9.09	0.00	0.00	0.00	0.00
Per. of total	0.00	.76	0.00	0.00	0.00	0.00
Theoret. freq.	.02	.08	.11	.21	.24	.34
Cell chi-sq.	.02	10.08	.11	.21	.24	.34
NO MILITARY						
Freq.	0.00	5.00	2.00	8.00	11.00	11.00
Per. across	0.00	13.51	5.41	21.62	29.73	29.73
Per. down	0.00	45.45	14.29	28.57	34.38	24.44
Per. of total	0.00	3.79	1.52	6.06	8.33	8.33
Theoret. freq.	.56	3.08	3.92	7.85	8.97	12.61
Cell chi-sq.	.56	1.19	.94	.00	.46	.21
LESS THAN 2 YR.						
Freq.	0.00	2.00	0.00	2.00	2.00	7.00
Per. across	0.00	15.38	0.00	15.38	15.38	53.85
Per. down	0.00	18.18	0.00	7.14	6.25	15.56
Per. of total	0.00	1.52	0.00	1.52	1.52	5.30
Theoret. freq.	.20	1.08	1.38	2.76	3.15	4.43
Cell chi-sq.	.20	.78	1.38	.21	.42	1.49
2 THROUGH 4						
Freq.	1.00	2.00	12.00	16.00	15.00	25.00
Per. across	1.41	2.82	16.90	22.54	21.13	35.21
Per. down	50.00	18.18	85.71	57.14	46.88	55.56
Per. of total	.76	1.52	9.09	12.12	11.36	18.94
Theoret. freq.	1.08	5.92	7.53	15.06	17.21	24.20
Cell chi-sq.	.01	2.59	2.65	.06	.28	.03

Continued on Next Page

Table XXV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
MORE THAN 4 YR.						
Freq.	1.00	1.00	0.00	2.00	4.00	2.00
Per. across	10.00	10.00	0.00	20.00	40.00	20.00
Per. down	50.00	9.09	0.00	7.14	12.50	4.44
Per. of total	.76	.76	0.00	1.52	3.03	1.52
Theoret. freq.	.15	.83	1.06	2.12	2.42	3.41
Cell chi-sq.	4.75	.03	1.06	.01	1.02	.58
TOTAL						
Freq.	2.00	11.00	14.00	28.00	32.00	45.00
Per. across	1.52	8.33	10.61	21.21	24.24	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	8.33	10.61	21.21	24.24	34.09

Chi-square = 31.912; degrees of freedom = 20

Product moment correlation = .0196

Significant at .05 level

Table XXVI

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND WRITING
SHORT-TERM DEPARTMENTAL OBJECTIVES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	0.00	2.00	0.00	0.00	0.00
Per. across	0.00	0.00	100.00	0.00	0.00	0.00
Per. down	0.00	0.00	12.50	0.00	0.00	0.00
Per. of total	0.00	0.00	1.52	0.00	0.00	0.00
Theoret. freq.	.06	.06	.24	.68	.58	.38
Cell chi-sq.	.06	.06	12.74	.68	.58	.38
YES						
Freq.	2.00	3.00	5.00	10.00	13.00	6.00
Per. across	5.13	7.69	12.82	25.64	33.33	15.38
Per. down	50.00	75.00	31.25	22.22	34.21	24.00
Per. of total	1.52	2.27	3.79	7.58	9.85	4.55
Theoret. freq.	1.18	1.18	4.73	13.30	11.23	7.39
Cell chi-sq.	.57	2.80	.02	.82	.28	.26
NO						
Freq.	2.00	1.00	9.00	35.00	25.00	19.00
Per. across	2.20	1.10	9.89	38.46	27.47	20.88
Per. down	50.00	25.00	56.25	77.78	65.79	76.00
Per. of total	1.52	.76	6.82	26.52	18.94	14.39
Theoret. freq.	2.76	2.76	11.03	31.02	26.20	17.23
Cell chi-sq.	.21	1.12	.37	.51	.05	.18
TOTAL						
Freq.	4.00	4.00	16.00	45.00	38.00	25.00
Per. across	3.03	3.03	12.12	34.09	28.79	18.94
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	3.03	12.12	34.09	28.79	18.94

Chi-square = 21.684; degrees of freedom = 10
Product moment correlation = .1653
Significant at .05 level

Table XXVII

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND IDENTIFYING
PRIMARY DUTIES OF JOBS THAT MUST BE PERFORMED

	Not Applicable	Never	Seldom	Sometimes	Oftem	Always
LEFT BLANK						
Freq.	0.00	1.00	0.00	1.00	0.00	0.00
Per. across	0.00	50.00	0.00	50.00	0.00	0.00
Per. down	0.00	20.00	0.00	3.85	0.00	0.00
Per. of total	0.00	.76	0.00	.76	0.00	0.00
Theoret. freq.	.03	.08	.30	.39	.68	.52
Cell chi-sq.	.03	11.28	.30	.93	.68	.52
YES						
Freq.	1.00	3.00	4.00	5.00	14.00	12.00
Per. across	2.56	7.69	10.26	12.82	35.90	30.77
Per. down	50.00	60.00	20.00	19.23	31.11	35.29
Per. of total	.76	2.27	3.03	3.79	10.61	9.09
Theoret. freq.	.59	1.48	5.91	7.68	13.30	10.05
Cell chi-sq.	.28	1.57	.62	.94	.04	.38
NO						
Freq.	1.00	1.00	16.00	20.00	31.00	22.00
Per. across	1.10	1.10	17.58	21.98	34.07	24.18
Per. down	50.00	20.00	80.00	76.92	68.89	64.71
Per. of total	.76	.76	12.12	15.15	23.48	16.67
Theoret. freq.	1.38	3.45	13.79	17.92	31.02	23.44
Cell chi-sq.	.10	1.74	.35	.24	.00	.09
TOTAL						
Freq.	2.00	5.00	20.00	26.00	45.00	34.00
Per. across	1.52	3.79	15.15	19.70	34.09	25.76
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	3.79	15.15	19.70	34.09	25.76

Chi-square = 20.087; degrees of freedom = 10
Product moment correlation = .0510
Significant at .05 level

Table XXVIII

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND DEFINING
RELATIONSHIPS AMONG JOBS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	0.00	1.00	0.00
Per. across	50.00	0.00	0.00	0.00	50.00	0.00
Per. down	25.00	0.00	0.00	0.00	2.22	0.00
Per. of total	.76	0.00	0.00	0.00	.76	0.00
Theoret. freq.	.06	.03	.29	.45	.68	.48
Cell chi-sq.	14.56	.03	.29	.45	.15	.48
YES						
Freq.	2.00	2.00	7.00	6.00	13.00	9.00
Per. across	5.13	5.13	17.95	15.38	33.33	23.08
Per. down	50.00	100.00	36.84	20.00	28.89	28.13
Per. of total	1.52	1.52	5.30	4.55	9.85	6.82
Theoret. freq.	1.18	.59	5.61	8.86	13.30	9.45
Cell chi-sq.	.57	3.36	.34	.93	.01	.02
NO						
Freq.	1.00	0.00	12.00	24.00	31.00	23.00
Per. across	1.10	0.00	13.19	26.37	34.07	25.27
Per. down	25.00	0.00	63.16	80.00	68.89	71.88
Per. of total	.76	0.00	9.09	18.18	23.48	17.42
Theoret. freq.	2.76	1.38	13.10	20.68	31.02	22.06
Cell chi-sq.	1.12	1.38	.09	.53	.00	.04
TOTAL						
Freq.	4.00	2.00	19.00	30.00	45.00	32.00
Per. across	3.03	1.52	14.39	22.73	34.09	24.24
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	1.52	14.39	22.73	34.09	24.24

Chi-square = 24.353; degrees of freedom = 10

Product moment correlation = .1760

Significant at .05 level

Table XXIX

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND DEFINING
LINES OF AUTHORITY IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	1.00	0.00	0.00	0.00
Per. across	50.00	0.00	50.00	0.00	0.00	0.00
Per. down	25.00	0.00	5.26	0.00	0.00	0.00
Per. of total	.76	0.00	.76	0.00	0.00	0.00
Theoret. freq.	.06	.14	.29	.56	.52	.44
Cell chi-sq.	14.56	.14	1.76	.56	.52	.44
YES						
Freq.	0.00	4.00	5.00	11.00	11.00	8.00
Per. across	0.00	10.26	12.82	28.21	28.21	20.51
Per. down	0.00	44.44	26.32	29.73	32.35	27.59
Per. of total	0.00	3.03	3.79	8.33	8.33	6.06
Theoret. freq.	1.18	2.66	5.61	10.93	10.05	8.57
Cell chi-sq.	1.18	.68	.07	.00	.09	.04
NO						
Freq.	3.00	5.00	13.00	26.00	23.00	21.00
Per. across	3.30	5.49	14.29	28.57	25.27	23.08
Per. down	75.00	55.56	68.42	70.27	67.65	72.41
Per. of total	2.27	3.79	9.85	19.70	17.42	15.91
Theoret. freq.	2.76	6.20	13.10	25.51	23.44	19.99
Cell chi-sq.	.02	.23	.00	.01	.01	.05
TOTAL						
Freq.	4.00	9.00	19.00	37.00	34.00	29.00
Per. across	3.03	6.82	14.39	28.03	25.76	21.97
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	6.82	14.39	28.03	25.76	21.97

Chi-square = 20.352; degrees of freedom = 10
Product moment correlation = .0925
Significant at .05 level

Table XXX

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND DEFINING
RESPONSIBILITIES OF SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	1.00	0.00	0.00
Per. across	50.00	0.00	0.00	50.00	0.00	0.00
Per. down	100.00	0.00	0.00	2.86	0.00	0.00
Per. of total	.76	0.00	0.00	.76	0.00	0.00
Theoret. freq.	.02	.12	.21	.53	.62	.50
Cell chi-sq.	64.02	.12	.21	.42	.62	.50
YES						
Freq.	0.00	3.00	4.00	9.00	10.00	13.00
Per. across	0.00	7.69	10.26	23.08	25.64	33.33
Per. down	0.00	37.50	28.57	25.71	24.39	39.39
Per. of total	0.00	2.27	3.03	6.82	7.58	9.85
Theoret. freq.	.30	2.36	4.14	10.34	12.11	9.75
Cell chi-sq.	.30	.17	.00	.17	.37	1.08
NO						
Freq.	0.00	5.00	10.00	25.00	31.00	20.00
Per. across	0.00	5.49	10.99	27.47	34.07	21.98
Per. down	0.00	62.50	71.43	71.43	75.61	60.61
Per. of total	0.00	3.79	7.58	18.94	23.48	15.15
Theoret. freq.	.69	5.52	9.65	24.13	28.27	22.75
Cell chi-sq.	.69	.05	.01	.03	.26	.33
TOTAL						
Freq.	1.00	8.00	14.00	35.00	41.00	33.00
Per. across	.76	6.06	10.61	26.52	31.06	25.00
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.06	10.61	26.52	31.06	25.00

Chi-square = 69.362; degrees of freedom = 10

Product moment correlation = .0523

Significant at .05 level

Table XXXI

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND APPRAISING
CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	1.00	0.00	0.00	1.00	0.00	0.00
Per. across	50.00	0.00	0.00	50.00	0.00	0.00
Per. down	50.00	0.00	0.00	4.55	0.00	0.00
Per. of total	.76	0.00	0.00	.76	0.00	0.00
Theoret. freq.	.03	.09	.18	.33	.64	.73
Cell chi-sq.	31.03	.09	.18	1.33	.64	.73
YES						
Freq.	0.00	1.00	4.00	5.00	16.00	13.00
Per. across	0.00	2.56	10.26	12.82	41.03	33.33
Per. down	0.00	16.67	33.33	22.73	38.10	27.08
Per. of total	0.00	.76	3.03	3.79	12.12	9.85
Theoret. freq.	.59	1.77	3.55	6.50	12.41	14.18
Cell chi-sq.	.59	.34	.06	.35	1.04	.10
NO						
Freq.	1.00	5.00	8.00	16.00	26.00	35.00
Per. across	1.10	5.49	8.79	17.58	28.57	38.46
Per. down	50.00	83.33	66.67	72.73	61.90	72.92
Per. of total	.76	3.79	6.06	12.12	19.70	26.52
Theoret. freq.	1.38	4.14	8.27	15.17	28.95	33.09
Cell chi-sq.	.10	.18	.01	.05	.30	.11
TOTAL						
Freq.	2.00	6.00	12.00	22.00	42.00	48.00
Per. across	1.52	4.55	9.09	16.67	31.82	36.36
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	4.55	9.09	16.67	31.82	36.36

Chi-square = 37.221; degrees of freedom = 10
Product moment correlation = .0638
Significant at .05 level

Table XXXII

RELATIONSHIP BETWEEN MILITARY OFFICER EXPERIENCE AND MEASURING
PERFORMANCE OF DEPARTMENTAL SUBORDINATES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
LEFT BLANK						
Freq.	0.00	1.00	1.00	0.00	0.00	0.00
Per. across	0.00	50.00	50.00	0.00	0.00	0.00
Per. down	0.00	9.09	7.14	0.00	0.00	0.00
Per. of total	0.00	.76	.76	0.00	0.00	0.00
Theoret. freq.	.03	.17	.21	.42	.48	.68
Cell chi-sq.	.03	4.17	2.93	.42	.48	.68
YES						
Freq.	2.00	1.00	4.00	10.00	5.00	17.00
Per. across	5.13	2.56	10.26	25.64	12.82	43.59
Per. down	100.00	9.09	28.57	35.71	15.63	37.78
Per. of total	1.52	.76	3.03	7.58	3.79	12.88
Theoret. freq.	.59	3.25	4.14	8.27	9.45	13.30
Cell chi-sq.	3.36	1.56	.00	.36	2.10	1.03
NO						
Freq.	0.00	9.00	9.00	18.00	27.00	28.00
Per. across	0.00	9.89	9.89	19.78	29.67	30.77
Per. down	0.00	81.82	64.29	64.29	84.83	62.22
Per. of total	0.00	6.82	6.82	13.64	20.45	21.21
Theoret. freq.	1.38	7.58	9.65	19.30	22.06	31.02
Cell chi-sq.	1.38	.26	.04	.09	1.11	.29
TOTAL						
Freq.	2.00	11.00	14.00	28.00	32.00	45.00
Per. across	1.52	8.33	10.61	21.21	24.24	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	8.33	10.61	21.21	24.24	34.09

Chi-square = 20.304; degrees of freedom = 10

Product moment correlation = .0569

Significant at .05 level

Table XXXIII

RELATIONSHIP BETWEEN SUPERVISORY EXPERIENCE AND APPRAISING

CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	0.00	1.00	3.00	4.00	4.00
Per. across	7.69	0.00	7.69	23.08	30.77	30.77
Per. down	50.00	0.00	8.33	13.64	9.52	8.33
Per. of total	.76	0.00	.76	2.27	3.03	3.03
Theoret. freq.	.20	.59	1.18	2.17	4.14	4.73
Cell chi-sq.	3.27	.59	.03	.32	.00	.11
LESS THAN 2 YR.						
Freq.	1.00	0.00	0.00	1.00	1.00	0.00
Per. across	33.33	0.00	0.00	33.33	33.33	0.00
Per. down	50.00	0.00	0.00	4.55	2.38	0.00
Per. of total	.76	0.00	0.00	.76	.76	0.00
Theoret. freq.	.05	.14	.27	.50	.95	1.09
Cell chi-sq.	20.05	.14	.27	.50	.00	1.09
2 THROUGH 4						
Freq.	0.00	2.00	4.00	4.00	6.00	4.00
Per. across	0.00	10.00	20.00	20.00	30.00	20.00
Per. down	0.00	33.33	33.33	18.18	14.29	8.33
Per. of total	0.00	1.52	3.03	3.03	4.55	3.03
Theoret. freq.	.30	.91	1.82	3.33	6.36	7.27
Cell chi-sq.	.30	1.31	2.62	.13	.02	1.47
5 THROUGH 7						
Freq.	0.00	0.00	0.00	5.00	6.00	4.00
Per. across	0.00	0.00	0.00	33.33	40.00	26.67
Per. down	0.00	0.00	0.00	22.73	14.29	8.33
Per. of total	0.00	0.00	0.00	3.79	4.55	3.03
Theoret. freq.	.23	.68	1.36	2.50	4.77	5.45
Cell chi-sq.	.23	.68	1.36	2.50	.32	.39

Continued on Next Page

Table XXXIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	3.00	2.00	1.00	4.00
Per. across	0.00	9.09	27.27	18.18	9.09	36.36
Per. down	0.00	16.67	25.00	9.09	2.38	8.33
Per. of total	0.00	.76	2.27	1.52	.76	3.03
Theoret. freq.	.17	.50	1.00	1.83	3.50	4.00
Cell chi-sq.	.17	.50	4.00	.02	1.79	0.00
11 OR MORE						
Freq.	0.00	3.00	4.00	7.00	24.00	32.00
Per. across	0.00	4.29	5.71	10.00	34.29	45.71
Per. down	0.00	50.00	33.33	31.82	57.14	66.67
Per. of total	0.00	2.27	3.03	5.30	18.18	24.24
Theoret. freq.	1.06	3.18	6.36	11.67	22.27	25.45
Cell chi-sq.	1.06	.01	.88	1.87	.13	1.68
TOTAL						
Freq.	2.00	6.00	12.00	22.00	42.00	48.00
Per. across	1.52	4.55	9.09	16.67	31.82	36.36
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	4.55	9.09	16.67	31.82	36.36
Chi-square = 49.811; degrees of freedom = 25						
Product moment correlation = .2298						
Significant at .05 level						

Table XXXIV

RELATIONSHIP BETWEEN SUPERVISORY EXPERIENCE AND SELECTING
CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	0.00	1.00	1.00	3.00	5.00	3.00
Per. across	0.00	7.69	7.69	23.08	38.46	23.08
Per. down	0.00	11.11	11.11	9.38	13.51	6.82
Per. of total	0.00	.76	.76	2.27	3.79	2.27
Theoret. freq.	.10	.89	.89	3.15	3.64	4.33
Cell chi-sq.	.10	.01	.01	.01	.50	.41
LESS THAN 2 YR.						
Freq.	0.00	0.00	0.00	3.00	0.00	0.00
Per. across	0.00	0.00	0.00	100.00	0.00	0.00
Per. down	0.00	0.00	0.00	9.38	0.00	0.00
Per. of total	0.00	0.00	0.00	2.27	0.00	0.00
Theoret. freq.	.02	.20	.20	.73	.84	1.00
Cell chi-sq.	.02	.20	.20	7.10	.84	1.00
2 THROUGH 4						
Freq.	0.00	5.00	1.00	2.00	8.00	4.00
Per. across	0.00	25.00	5.00	10.00	40.00	20.00
Per. down	0.00	55.56	11.11	6.25	21.62	9.09
Per. of total	0.00	3.79	.76	1.52	6.06	3.03
Theoret. freq.	.15	1.36	1.36	4.85	5.61	6.67
Cell chi-sq.	.15	9.70	.10	1.67	1.02	1.07
5 THROUGH 7						
Freq.	1.00	0.00	0.00	6.00	5.00	3.00
Per. across	6.67	0.00	0.00	40.00	33.33	20.00
Per. down	100.00	0.00	0.00	18.75	13.51	6.82
Per. of total	.76	0.00	0.00	4.55	3.79	2.27
Theoret. freq.	.11	1.02	1.02	3.64	4.20	5.00
Cell chi-sq.	6.91	1.02	1.02	1.54	.15	.80

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Table XXXIV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	2.00	2.00	1.00	5.00
Per. across	0.00	9.09	18.18	18.18	9.09	45.45
Per. down	0.00	11.11	22.22	6.25	2.70	11.36
Per. of total	0.00	.76	1.52	1.52	.76	3.79
Theoret. freq.	.08	.75	.75	2.67	3.08	3.67
Cell chi-sq.	.08	.08	2.08	.17	1.41	.48
11 OR MORE						
Freq.	0.00	2.00	5.00	16.00	18.00	29.00
Per. across	0.00	2.86	7.14	22.86	25.71	41.43
Per. down	0.00	22.22	55.56	50.00	48.65	65.91
Per. of total	0.00	1.52	3.79	12.12	13.64	21.97
Theoret. freq.	.53	4.77	4.77	16.97	19.62	23.33
Cell chi-sq.	.53	1.61	.01	.06	.13	1.38
TOTAL						
Freq.	1.00	9.00	9.00	32.00	37.00	44.00
Per. across	.76	6.82	6.82	24.24	28.03	33.33
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.82	6.82	24.24	28.03	33.33

Chi-square = 43.065; degrees of freedom = 25

Product moment correlation = .1814

Significant at .05 level

Table XXXV

RELATIONSHIP BETWEEN CLERICAL OFFICE EXPERIENCE AND FORMULATING
PERSONNEL POLICIES NECESSARY TO MAINTAIN DESIRABLE LEVEL OF MORALE

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	0.00	1.00	3.00	28.00	45.00	27.00
Per. across	0.00	.96	2.88	26.92	43.27	25.96
Per. down	0.00	100.00	60.00	87.50	73.77	87.10
Per. of total	0.00	.76	2.27	21.21	34.09	20.45
Theoret. freq.	1.58	.79	3.94	25.21	48.06	24.42
Cell chi-sq.	1.58	.06	.22	.31	.19	.27
LESS THAN 2 YR.						
Freq.	0.00	0.00	1.00	3.00	3.00	2.00
Per. across	0.00	0.00	11.11	33.33	33.33	22.22
Per. down	0.00	0.00	20.00	9.38	4.92	6.45
Per. of total	0.00	0.00	.76	2.27	2.27	1.52
Theoret. freq.	.14	.07	.34	2.18	4.16	2.11
Cell chi-sq.	.14	.07	1.27	.31	.32	.01
2 THROUGH 4						
Freq.	1.00	0.00	0.00	0.00	8.00	1.00
Per. across	10.00	0.00	0.00	0.00	80.00	10.00
Per. down	50.00	0.00	0.00	0.00	13.11	3.23
Per. of total	.76	0.00	0.00	0.00	6.06	.76
Theoret. freq.	.15	.08	.38	2.42	4.62	2.35
Cell chi-sq.	4.75	.08	.38	2.42	2.47	.77
5 THROUGH 7						
Freq.	0.00	0.00	1.00	1.00	3.00	0.00
Per. across	0.00	0.00	20.00	20.00	60.00	0.00
Per. down	0.00	0.00	20.00	3.13	4.92	0.00
Per. of total	0.00	0.00	.76	.76	2.27	0.00
Theoret. freq.	.08	.04	.19	1.21	2.31	1.17
Cell chi-sq.	.08	.04	3.47	.04	.21	1.17

Continued on Next Page

Table XXXV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	1.00	0.00	0.00	0.00	1.00	1.00
Per. across	33.33	0.00	0.00	0.00	33.33	33.33
Per. down	50.00	0.00	0.00	0.00	1.64	3.23
Per. of total	.76	0.00	0.00	0.00	.76	.76
Theoret. freq.	.05	.02	.11	.73	1.39	.70
Cell chi-sq.	20.05	.02	.11	.73	.11	.12
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	1.00	0.00
Per. across	0.00	0.00	0.00	0.00	100.00	0.00
Per. down	0.00	0.00	0.00	0.00	1.64	0.00
Per. of total	0.00	0.00	0.00	0.00	.76	0.00
Theoret. freq.	.02	.01	.04	.24	.46	.23
Cell chi-sq.	.02	.01	.04	.24	.63	.23
TOTAL						
Freq.	2.00	1.00	5.00	32.00	61.00	31.00
Per. across	1.52	.76	3.79	24.24	46.21	23.48
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	.76	3.79	24.24	46.21	23.48
Chi-square = 42.926; degrees of freedom = 25						
Product moment correlation = -.1534						
Significant at .05 level						

Table XXXVI

RELATIONSHIP BETWEEN GENERAL OFFICE EXPERIENCE AND SELECTING
CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	0.00	6.00	7.00	17.00	23.00	35.00
Per. across	0.00	6.82	7.95	19.32	26.14	39.77
Per. down	0.00	66.67	77.78	53.13	62.16	79.55
Per. of total	0.00	4.55	5.30	12.88	17.42	26.52
Theoret. freq.	.67	6.00	6.00	21.33	24.67	29.33
Cell chi-sq.	.67	.00	.17	.88	.11	1.09
LESS THAN 2 YR.						
Freq.	0.00	2.00	1.00	2.00	5.00	2.00
Per. across	0.00	16.67	8.33	16.67	41.67	16.67
Per. down	0.00	22.22	11.11	6.25	13.51	4.55
Per. of total	0.00	1.52	.76	1.52	3.79	1.52
Theoret. freq.	.09	.82	.82	2.91	3.36	4.00
Cell chi-sq.	.09	1.71	.04	.28	.80	1.00
2 THROUGH 4						
Freq.	0.00	1.00	1.00	8.00	2.00	3.00
Per. across	0.00	6.67	6.67	53.33	13.33	20.00
Per. down	0.00	11.11	11.11	25.00	5.41	6.82
Per. of total	0.00	.76	.76	6.06	1.52	2.27
Theoret. freq.	.11	1.02	1.02	3.64	4.20	5.00
Cell chi-sq.	.11	.00	.00	5.24	1.16	.80
5 THROUGH 7						
Freq.	1.00	0.00	0.00	2.00	2.00	2.00
Per. across	14.29	0.00	0.00	28.57	28.57	28.57
Per. down	100.00	0.00	0.00	6.25	5.41	4.55
Per. of total	.76	0.00	0.00	1.52	1.52	1.52
Theoret. freq.	.05	.48	.48	1.70	1.96	2.33
Cell chi-sq.	16.91	.48	.48	.05	.00	.05

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Table XXXVI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	0.00	0.00	2.00	1.00
Per. across	0.00	0.00	0.00	0.00	66.67	33.33
Per. down	0.00	0.00	0.00	0.00	5.41	2.27
Per. of total	0.00	0.00	0.00	0.00	1.52	.76
Theoret. freq.	.02	.20	.20	.73	.84	1.00
Cell chi-sq.	.02	.20	.20	.73	1.60	0.00
11 OR MORE						
Freq.	0.00	0.00	0.00	3.00	3.00	1.00
Per. across	0.00	0.00	0.00	42.86	42.86	14.29
Per. down	0.00	0.00	0.00	9.38	8.11	2.27
Per. of total	0.00	0.00	0.00	2.27	2.27	.76
Theoret. freq.	.05	.48	.48	1.70	1.96	2.33
Cell chi-sq.	.05	.48	.48	1.00	.55	.76
TOTAL						
Freq.	1.00	9.00	9.00	32.00	37.00	44.00
Per. across	.76	6.82	6.82	24.24	28.03	33.33
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.82	6.82	24.24	28.03	33.33
Chi-square = 38.189; degrees of freedom = 25						
Product moment correlation = -.0659						
Significant at .05 level						

Table XXXVII

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND EVALUATING
EXISTING RESOURCES NECESSARY TO ACHIEVE DEPARTMENTAL GOALS

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	4.00	1.00	8.00	15.00	51.00	20.00
Per. across	4.04	1.01	8.08	15.15	51.52	20.20
Per. down	100.00	100.00	80.00	51.72	87.93	66.67
Per. of total	3.03	.76	6.06	11.36	38.64	15.15
Theoret. freq.	3.00	.75	7.50	21.75	43.50	22.50
Cell chi-sq.	.33	.08	.03	2.09	1.29	.28
LESS THAN 2 YR.						
Freq.	0.00	0.00	1.00	4.00	1.00	1.00
Per. across	0.00	0.00	14.29	57.14	14.29	14.29
Per. down	0.00	0.00	10.00	13.79	1.72	3.33
Per. of total	0.00	0.00	.76	3.03	.76	.76
Theoret. freq.	.21	.05	.53	1.54	3.08	1.59
Cell chi-sq.	.21	.05	.42	3.94	1.40	.22
2 THROUGH 4						
Freq.	0.00	0.00	0.00	2.00	2.00	0.00
Per. across	0.00	0.00	0.00	50.00	50.00	0.00
Per. down	0.00	0.00	0.00	6.90	3.45	0.00
Per. of total	0.00	0.00	0.00	1.52	1.52	0.00
Theoret. freq.	.12	.03	.30	.88	1.76	.91
Cell chi-sq.	.12	.03	.30	1.43	.03	.91
5 THROUGH 7						
Freq.	0.00	0.00	1.00	5.00	2.00	3.00
Per. across	0.00	0.00	9.09	45.45	18.18	27.27
Per. down	0.00	0.00	10.00	17.24	3.45	10.00
Per. of total	0.00	0.00	.76	3.79	1.52	2.27
Theoret. freq.	.33	.08	.83	2.42	4.83	2.50
Cell chi-sq.	.33	.08	.03	2.76	1.66	.10

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Table XXXVII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	0.00	3.00	1.00	0.00
Per. across	0.00	0.00	0.00	75.00	25.00	0.00
Per. down	0.00	0.00	0.00	10.34	1.72	0.00
Per. of total	0.00	0.00	0.00	2.27	.76	0.00
Theoret. freq.	.12	.03	.30	.88	1.76	.91
Cell chi-sq.	.12	.03	.30	5.12	.33	.91
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	1.00	6.00
Per. across	0.00	0.00	0.00	0.00	14.29	85.71
Per. down	0.00	0.00	0.00	0.00	1.72	20.00
Per. of total	0.00	0.00	0.00	0.00	.76	4.55
Theoret. freq.	.21	.05	.53	1.54	3.08	1.59
Cell chi-sq.	.21	.05	.53	1.54	1.40	12.22
TOTAL						
Freq.	4.00	1.00	10.00	29.00	58.00	30.00
Per. across	3.03	.76	7.58	21.97	43.94	22.73
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	3.03	.76	7.58	21.97	43.94	22.73

Chi-square = 40.293; degrees of freedom = 25

Product moment correlation = .1186

Significant at .05 level

Table XXXVIII

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND DEFINING
RESPONSIBILITIES OF SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	0.00	5.00	9.00	22.00	37.00	26.00
Per. across	0.00	5.05	9.09	22.22	37.37	26.26
Per. down	0.00	62.50	64.29	62.86	90.24	78.79
Per. of total	0.00	3.79	6.82	16.67	28.03	19.70
Theoret. freq.	.75	6.00	10.50	26.25	30.75	24.75
Cell chi-sq.	.75	.17	.21	.69	1.27	.06
LESS THAN 2 YR.						
Freq.	1.00	2.00	1.00	2.00	1.00	0.00
Per. across	14.29	28.57	14.29	28.57	14.29	0.00
Per. down	100.00	25.00	7.14	5.71	2.44	0.00
Per. of total	.76	1.52	.76	1.52	.76	0.00
Theoret. freq.	.05	.42	.74	1.86	2.17	1.75
Cell chi-sq.	16.91	5.85	.09	.01	.63	1.75
2 THROUGH 4						
Freq.	0.00	0.00	0.00	2.00	1.00	1.00
Per. across	0.00	0.00	0.00	50.00	25.00	25.00
Per. down	0.00	0.00	0.00	5.71	2.44	3.03
Per. of total	0.00	0.00	0.00	1.52	.76	.76
Theoret. freq.	.03	.24	.42	1.06	1.24	1.00
Cell chi-sq.	.03	.24	.42	.83	.05	0.00
5 THROUGH 7						
Freq.	0.00	1.00	2.00	5.00	0.00	3.00
Per. across	0.00	9.09	18.18	45.45	0.00	27.27
Per. down	0.00	12.50	14.29	14.29	0.00	9.09
Per. of total	0.00	.76	1.52	3.79	0.00	2.27
Theoret. freq.	.08	.67	1.17	2.92	3.42	2.75
Cell chi-sq.	.08	.17	.60	1.49	3.42	.02

Continued on Next Page

Table XXXVIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	2.00	2.00	0.00	0.00
Per. across	0.00	0.00	50.00	50.00	0.00	0.00
Per. down	0.00	0.00	14.29	5.71	0.00	0.00
Per. of total	0.00	0.00	1.52	1.52	0.00	0.00
Theoret. freq.	.03	.24	.42	1.06	1.24	1.00
Cell chi-sq.	.03	.24	5.85	.83	1.24	1.00
11 OR MORE						
Freq.	0.00	0.00	0.00	2.00	2.00	3.00
Per. across	0.00	0.00	0.00	28.57	28.57	42.86
Per. down	0.00	0.00	0.00	5.71	4.88	9.09
Per. of total	0.00	0.00	0.00	1.52	1.52	2.27
Theoret. freq.	.05	.42	.74	1.86	2.17	1.75
Cell chi-sq.	.05	.42	.74	.01	.01	.89
TOTAL						
Freq.	1.00	8.00	14.00	35.00	41.00	33.00
Per. across	.76	6.06	10.61	26.52	31.06	25.00
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.06	10.61	26.52	31.06	25.00
Chi-square = 47.087; degrees of freedom = 25						
Product moment correlation = -.0799						
Significant at .05 level						

Table XXXIX

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND RECRUITING

CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	3.00	5.00	17.00	30.00	43.00
Per. across	1.01	3.03	5.05	17.17	30.30	43.43
Per. down	100.00	60.00	100.00	70.83	66.67	82.69
Per. of total	.76	2.27	3.79	12.88	22.73	32.58
Theoret. freq.	.75	3.75	3.75	18.00	33.75	39.00
Cell chi-sq.	.08	.15	.42	.06	.42	.41
LESS THAN 2 YR.						
Freq.	0.00	0.00	0.00	2.00	4.00	1.00
Per. across	0.00	0.00	0.00	28.57	57.14	14.29
Per. down	0.00	0.00	0.00	8.33	8.89	1.92
Per. of total	0.00	0.00	0.00	1.52	3.03	.76
Theoret. freq.	.05	.27	.27	1.27	2.39	2.76
Cell chi-sq.	.05	.27	.27	.42	1.09	1.12
2 THROUGH 4						
Freq.	0.00	0.00	0.00	2.00	1.00	1.00
Per. across	0.00	0.00	0.00	50.00	25.00	25.00
Per. down	0.00	0.00	0.00	8.33	2.22	1.92
Per. of total	0.00	0.00	0.00	1.52	.76	.76
Theoret. freq.	.03	.15	.15	.73	1.36	1.58
Cell chi-sq.	.03	.15	.15	2.23	.10	.21
5 THROUGH 7						
Freq.	0.00	0.00	0.00	3.00	5.00	3.00
Per. across	0.00	0.00	0.00	27.27	45.45	27.27
Per. down	0.00	0.00	0.00	12.50	11.11	5.77
Per. of total	0.00	0.00	0.00	2.27	3.79	2.27
Theoret. freq.	.08	.42	.42	2.00	3.75	4.33
Cell chi-sq.	.08	.42	.42	.50	.42	.41

Continued on Next Page

Table XXXIX, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	2.00	0.00	0.00	2.00	0.00
Per. across	0.00	50.00	0.00	0.00	50.00	0.00
Per. down	0.00	40.00	0.00	0.00	4.44	0.00
Per. of total	0.00	1.52	0.00	0.00	1.52	0.00
Theoret. freq.	.03	.15	.15	.73	1.36	1.58
Cell chi-sq.	.03	22.55	.15	.73	.30	1.58
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	3.00	4.00
Per. across	0.00	0.00	0.00	0.00	42.86	57.14
Per. down	0.00	0.00	0.00	0.00	6.67	7.69
Per. of total	0.00	0.00	0.00	0.00	2.27	3.03
Theoret. freq.	.05	.27	.27	1.27	2.39	2.76
Cell chi-sq.	.05	.27	.27	1.27	.16	.56
TOTAL						
Freq.	1.00	5.00	5.00	24.00	45.00	52.00
Per. across	.76	3.79	3.79	18.18	34.09	39.39
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	3.79	3.79	18.18	34.09	39.39

Chi-square = 37.761; degrees of freedom = 25

Product moment correlation = -.0294

Significant at .05 level

Table XL

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND ORIENTING

NEW EMPLOYEES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	4.00	1.00	3.00	19.00	27.00	45.00
Per. across	4.04	1.01	3.03	19.19	27.27	45.45
Per. down	66.67	50.00	60.00	86.36	71.05	76.27
Per. of total	3.03	.76	2.27	14.39	20.45	34.09
Theoret. freq.	4.50	1.50	3.75	16.50	28.50	44.25
Cell chi-sq.	.06	.17	.15	.38	.08	.01
LESS THAN 2 YR.						
Freq.	1.00	0.00	0.00	1.00	4.00	1.00
Per. across	14.29	0.00	0.00	14.29	57.14	14.29
Per. down	16.67	0.00	0.00	4.55	10.53	1.69
Per. of total	.76	0.00	0.00	.76	3.03	.76
Theoret. freq.	.32	.11	.27	1.17	2.02	3.13
Cell chi-sq.	1.46	.11	.27	.02	1.96	1.45
2 THROUGH 4						
Freq.	0.00	0.00	0.00	0.00	1.00	3.00
Per. across	0.00	0.00	0.00	0.00	25.00	75.00
Per. down	0.00	0.00	0.00	0.00	2.63	5.08
Per. of total	0.00	0.00	0.00	0.00	.76	2.27
Theoret. freq.	.18	.06	.15	.67	1.15	1.79
Cell chi-sq.	.18	.06	.15	.67	.02	.82
5 THROUGH 7						
Freq.	1.00	0.00	0.00	2.00	2.00	6.00
Per. across	9.09	0.00	0.00	18.18	18.18	54.55
Per. down	16.67	0.00	0.00	9.09	5.26	10.17
Per. of total	.76	0.00	0.00	1.52	1.52	4.55
Theoret. freq.	.50	.17	.42	1.83	3.17	4.92
Cell chi-sq.	.50	.17	.42	.02	.43	.24

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Table XL, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	2.00	0.00	1.00	0.00
Per. across	0.00	25.00	50.00	0.00	25.00	0.00
Per. down	0.00	50.00	40.00	0.00	2.63	0.00
Per. of total	0.00	.76	1.52	0.00	.76	0.00
Theoret. freq.	.18	.06	.15	.67	1.15	1.79
Cell chi-sq.	.18	14.56	22.55	.67	.02	1.79
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	3.00	4.00
Per. across	0.00	0.00	0.00	0.00	42.86	57.14
Per. down	0.00	0.00	0.00	0.00	7.89	6.78
Per. of total	0.00	0.00	0.00	0.00	2.27	3.03
Theoret. freq.	.32	.11	.27	1.17	2.02	3.13
Cell chi-sq.	.32	.11	.27	1.17	.48	.24
TOTAL						
Freq.	6.00	2.00	5.00	22.00	38.00	59.00
Per. across	4.55	1.52	3.79	16.67	28.79	44.70
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	4.55	1.52	3.79	16.67	28.79	44.70
Chi-square = 52.120; degrees of freedom = 25						
Product moment correlation = -.0151						
Significant at .05 level						

Table XLI

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND APPRAISING
CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	3.00	10.00	15.00	31.00	39.00
Per. across	1.01	3.03	10.10	15.15	31.31	39.39
Per. down	50.00	50.00	83.33	68.18	73.81	81.25
Per. of total	.76	2.27	7.58	11.36	23.48	29.55
Theoret. freq.	1.50	4.50	9.00	16.50	31.50	36.00
Cell chi-sq.	.17	.50	.11	.14	.01	.25
LESS THAN 2 YR.						
Freq.	1.00	2.00	1.00	2.00	1.00	0.00
Per. across	14.29	28.57	14.29	28.57	14.29	0.00
Per. down	50.00	33.33	8.33	9.09	2.38	0.00
Per. of total	.76	1.52	.76	1.52	.76	0.00
Theoret. freq.	.11	.32	.64	1.17	2.23	2.55
Cell chi-sq.	7.53	8.89	.21	.60	.68	2.55
2 THROUGH 4						
Freq.	0.00	0.00	0.00	1.00	0.00	3.00
Per. across	0.00	0.00	0.00	25.00	0.00	75.00
Per. down	0.00	0.00	0.00	4.55	0.00	6.25
Per. of total	0.00	0.00	0.00	.76	0.00	2.27
Theoret. freq.	.06	.18	.36	.67	1.27	1.45
Cell chi-sq.	.06	.18	.36	.17	1.27	1.64
5 THROUGH 7						
Freq.	0.00	0.00	0.00	3.00	6.00	2.00
Per. across	0.00	0.00	0.00	27.27	54.55	18.18
Per. down	0.00	0.00	0.00	13.64	14.29	4.17
Per. of total	0.00	0.00	0.00	2.27	4.55	1.52
Theoret. freq.	.17	.50	1.00	1.83	3.50	4.00
Cell chi-sq.	.17	.50	1.00	.74	1.79	1.00

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Table XLI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	1.00	1.00	1.00	0.00
Per. across	0.00	25.00	25.00	25.00	25.00	0.00
Per. down	0.00	16.67	8.33	4.55	2.38	0.00
Per. of total	0.00	.76	.76	.76	.76	0.00
Theoret. freq.	.06	.18	.36	.67	1.27	1.45
Cell chi-sq.	.06	3.68	1.11	.17	.06	1.45
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	3.00	4.00
Per. across	0.00	0.00	0.00	0.00	42.86	57.14
Per. down	0.00	0.00	0.00	0.00	7.14	8.33
Per. of total	0.00	0.00	0.00	0.00	2.27	3.03
Theoret. freq.	.11	.32	.64	1.17	2.23	2.55
Cell chi-sq.	.11	.32	.64	1.17	.27	.83
TOTAL						
Freq.	2.00	6.00	12.00	22.00	42.00	48.00
Per. across	1.52	4.55	9.09	16.67	31.82	36.36
Per. across	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	4.55	9.09	16.67	31.82	36.36
Chi-square = 40.366; degrees of freedom = 25						
Product moment correlation = .0041						
Significant at .05 level						

Table XLII

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND SELECTING
CANDIDATES FOR POSITIONS IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	0.00	6.00	6.00	23.00	28.00	36.00
Per. across	0.00	6.06	6.06	23.23	28.28	36.36
Per. down	0.00	66.67	66.67	71.88	75.68	81.82
Per. of total	0.00	4.55	4.55	17.42	21.21	27.27
Theoret. freq.	.75	6.75	6.75	24.00	27.75	33.00
Cell chi-sq.	.75	.08	.08	.04	.00	.27
LESS THAN 2 YR.						
Freq.	1.00	2.00	1.00	2.00	1.00	0.00
Per. across	14.29	28.57	14.29	28.57	14.29	0.00
Per. down	100.00	22.22	11.11	6.25	2.70	0.00
Per. of total	.76	1.52	.76	1.52	.76	0.00
Theoret. freq.	.05	.48	.48	1.70	1.96	2.33
Cell chi-sq.	16.91	4.86	.57	.05	.47	2.33
2 THROUGH 4						
Freq.	0.00	0.00	1.00	1.00	1.00	1.00
Per. across	0.00	0.00	25.00	25.00	25.00	25.00
Per. down	0.00	0.00	11.11	3.13	2.70	2.27
Per. of total	0.00	0.00	.76	.76	.76	.76
Theoret. freq.	.03	.27	.27	.97	1.12	1.33
Cell chi-sq.	.03	.27	1.94	.00	.01	.08
5 THROUGH 7						
Freq.	0.00	0.00	0.00	4.00	5.00	2.00
Per. across	0.00	0.00	0.00	36.36	45.45	18.18
Per. down	0.00	0.00	0.00	12.50	13.51	4.55
Per. of total	0.00	0.00	0.00	3.03	3.79	1.52
Theoret. freq.	.08	.75	.75	2.67	3.08	3.67
Cell chi-sq.	.08	.75	.75	.67	1.19	.76

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Table XLII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	1.00	1.00	1.00	0.00
Per. across	0.00	25.00	25.00	25.00	25.00	0.00
Per. down	0.00	11.11	11.11	3.13	2.70	0.00
Per. of total	0.00	.76	.76	.76	.76	0.00
Theoret. freq.	.03	.27	.27	.97	1.12	1.33
Cell chi-sq.	.03	1.94	1.94	.00	.01	1.33
11 OR MORE						
Freq.	0.00	0.00	0.00	1.00	1.00	5.00
Per. across	0.00	0.00	0.00	14.29	14.29	71.43
Per. down	0.00	0.00	0.00	3.13	2.70	11.36
Per. of total	0.00	0.00	0.00	.76	.76	3.79
Theoret. freq.	.05	.48	.48	1.70	1.96	2.33
Cell chi-sq.	.05	.48	.48	.29	.47	3.05
TOTAL						
Freq.	1.00	9.00	9.00	32.00	37.00	44.00
Per. across	.76	6.82	6.82	24.24	28.03	33.33
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	.76	6.82	6.82	24.24	28.03	33.33
Chi-square = 43.042; degrees of freedom = 25						
Product moment correlation = -.0010						
Significant at .05 level						

Table XLIII

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND ESTABLISHING
PROCEDURES FOR UNIFORMITY OF WORK

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	0.00	1.00	20.00	48.00	29.00
Per. across	1.01	0.00	1.01	20.20	48.48	29.29
Per. down	33.33	0.00	50.00	76.92	76.19	78.38
Per. of total	.76	0.00	.76	15.15	36.36	21.97
Theoret. freq.	2.25	.75	1.50	19.50	47.25	27.75
Cell chi-sq.	.69	.75	.17	.01	.01	.06
LESS THAN 2 YR.						
Freq.	1.00	0.00	0.00	3.00	3.00	0.00
Per. across	14.29	0.00	0.00	42.86	42.86	0.00
Per. down	33.33	0.00	0.00	11.54	4.76	0.00
Per. of total	.76	0.00	0.00	2.27	2.27	0.00
Theoret. freq.	.16	.05	.11	1.38	3.34	1.96
Cell chi-sq.	4.44	.05	.11	1.91	.03	1.96
2 THROUGH 4						
Freq.	1.00	0.00	0.00	0.00	2.00	1.00
Per. across	25.00	0.00	0.00	0.00	50.00	25.00
Per. down	33.33	0.00	0.00	0.00	3.17	2.70
Per. of total	.76	0.00	0.00	0.00	1.52	.76
Theoret. freq.	.09	.03	.06	.79	1.91	1.12
Cell chi-sq.	9.09	.03	.06	.79	.00	.01
5 THROUGH 7						
Freq.	0.00	0.00	1.00	2.00	4.00	4.00
Per. across	0.00	0.00	9.09	18.18	36.36	36.36
Per. down	0.00	0.00	50.00	7.69	6.35	10.81
Per. of total	0.00	0.00	.76	1.52	3.03	3.03
Theoret. freq.	.25	.08	.17	2.17	5.25	3.08
Cell chi-sq.	.25	.08	4.17	.01	.30	.27

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Table XLIII, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	1.00	0.00	1.00	2.00	0.00
Per. across	0.00	25.00	0.00	25.00	50.00	0.00
Per. down	0.00	100.00	0.00	3.85	3.17	0.00
Per. of total	0.00	.76	0.00	.76	1.52	0.00
Theoret. freq.	.09	.03	.06	.79	1.91	1.12
Cell chi-sq.	.09	31.03	.06	.06	.00	1.12
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	4.00	3.00
Per. across	0.00	0.00	0.00	0.00	57.14	42.86
Per. down	0.00	0.00	0.00	0.00	6.35	8.11
Per. of total	0.00	0.00	0.00	0.00	3.03	2.27
Theoret. freq.	.16	.05	.11	1.38	3.34	1.96
Cell chi-sq.	.16	.05	.11	1.38	.13	.55
TOTAL						
Freq.	3.00	1.00	2.00	26.00	63.00	37.00
Per. across	2.27	.76	1.52	19.70	47.73	28.03
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	2.27	.76	1.52	19.70	47.73	28.03
Chi-square = 60.010; degrees of freedom = 25						
Product moment correlation = -.0418						
Significant at .05 level						

Table XLIV

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND SUPERVISING
SUBORDINATES IN DEPARTMENT

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	3.00	3.00	8.00	20.00	29.00	36.00
Per. across	3.03	3.03	8.08	20.20	29.29	36.36
Per. down	75.00	60.00	66.67	74.07	85.29	72.00
Per. of total	2.27	2.27	6.06	15.15	21.97	27.27
Theoret. freq.	3.00	3.75	9.00	20.25	25.50	37.50
Cell chi-sq.	0.00	.15	.11	.00	.48	.06
LESS THAN 2 YR.						
Freq.	0.00	2.00	1.00	2.00	2.00	0.00
Per. across	0.00	28.57	14.29	28.57	28.57	0.00
Per. down	0.00	40.00	8.33	7.41	5.88	0.00
Per. of total	0.00	1.52	.76	1.52	1.52	0.00
Theoret. freq.	.21	.27	.64	1.43	1.80	2.65
Cell chi-sq.	.21	11.35	.21	.23	.02	2.65
2 THROUGH 4						
Freq.	0.00	0.00	0.00	1.00	0.00	3.00
Per. across	0.00	0.00	0.00	25.00	0.00	75.00
Per. down	0.00	0.00	0.00	3.70	0.00	6.00
Per. of total	0.00	0.00	0.00	.76	0.00	2.27
Theoret. freq.	.12	.15	.36	.82	1.03	1.52
Cell chi-sq.	.12	.15	.36	.04	1.03	1.46
5 THROUGH 7						
Freq.	1.00	0.00	1.00	3.00	1.00	5.00
Per. across	9.09	0.00	9.09	27.27	9.09	45.45
Per. down	25.00	0.00	8.33	11.11	2.94	10.00
Per. of total	.76	0.00	.76	2.27	.76	3.79
Theoret. freq.	.33	.42	1.00	2.25	2.83	4.17
Cell chi-sq.	1.33	.42	0.00	.25	1.19	.17

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Table XLV

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND DETERMINING
WHETHER OBJECTIVES ARE BEING ACHIEVED

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	2.00	2.00	19.00	34.00	41.00
Per. across	1.01	2.02	2.02	19.19	34.34	41.41
Per. down	33.33	100.00	33.33	65.52	79.07	83.67
Per. of total	.76	1.52	1.52	14.39	25.76	31.06
Theoret. freq.	2.25	1.50	4.50	21.75	32.25	36.75
Cell chi-sq.	.69	.17	1.39	.35	.09	.49
LESS THAN 2 YR.						
Freq.	0.00	0.00	1.00	3.00	3.00	0.00
Per. across	0.00	0.00	14.29	42.86	42.86	0.00
Per. down	0.00	0.00	16.67	10.34	6.98	0.00
Per. of total	0.00	0.00	.76	2.27	2.27	0.00
Theoret. freq.	.16	.11	.32	1.54	2.28	2.60
Cell chi-sq.	.16	.11	1.46	1.39	.23	2.60
2 THROUGH 4						
Freq.	1.00	0.00	0.00	2.00	0.00	1.00
Per. across	25.00	0.00	0.00	50.00	0.00	25.00
Per. down	33.33	0.00	0.00	6.90	0.00	2.04
Per. of total	.76	0.00	0.00	1.52	0.00	.76
Theoret. freq.	.09	.06	.18	.88	1.30	1.48
Cell chi-sq.	9.09	.06	.18	1.43	1.30	.16
5 THROUGH 7						
Freq.	0.00	0.00	3.00	3.00	3.00	2.00
Per. across	0.00	0.00	27.27	27.27	27.27	18.18
Per. down	0.00	0.00	50.00	10.34	6.98	4.08
Per. of total	0.00	0.00	2.27	2.27	2.27	1.52
Theoret. freq.	.25	.17	.50	2.42	3.58	4.08
Cell chi-sq.	.25	.17	12.50	.14	.09	1.06

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Table XLV, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	0.00	2.00	2.00	0.00
Per. across	0.00	0.00	0.00	50.00	50.00	0.00
Per. down	0.00	0.00	0.00	6.90	4.65	0.00
Per. of total	0.00	0.00	0.00	1.52	1.52	0.00
Theoret. freq.	.09	.06	.18	.88	1.30	1.48
Cell chi-sq.	.09	.06	.18	1.43	.37	1.48
11 OR MORE						
Freq.	1.00	0.00	0.00	0.00	1.00	5.00
Per. across	14.29	0.00	0.00	0.00	14.29	71.43
Per. down	33.33	0.00	0.00	0.00	2.33	10.20
Per. of total	.76	0.00	0.00	0.00	.76	3.79
Theoret. freq.	.16	.11	.32	1.54	2.28	2.60
Cell chi-sq.	4.44	.11	.32	1.54	.72	2.22
TOTAL						
Freq.	3.00	2.00	6.00	29.00	43.00	49.00
Per. across	2.27	1.52	4.55	21.97	32.58	37.12
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	2.27	1.52	4.55	21.97	32.58	37.12
Chi-square = 48.533; degrees of freedom = 25						
Product moment correlation = -.1438						
Significant at .05 level						

Table XLVI

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND FORMULATING
STANDARDS OF PERFORMANCE BASED ON GOALS, POLICIES, PROGRAMS, BUDGET

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	1.00	0.00	10.00	20.00	31.00	37.00
Per. across	1.01	0.00	10.10	20.20	31.31	37.37
Per. down	50.00	0.00	55.56	76.92	77.50	82.22
Per. of total	.76	0.00	7.58	15.15	23.48	28.03
Theoret. freq.	1.50	.75	13.50	19.50	30.00	33.75
Cell chi-sq.	.17	.75	.91	.01	.03	.31
LESS THAN 2 YR.						
Freq.	0.00	1.00	2.00	2.00	2.00	0.00
Per. across	0.00	14.29	28.57	28.57	28.57	0.00
Per. down	0.00	100.00	11.11	7.69	5.00	0.00
Per. of total	0.00	.76	1.52	1.52	1.52	0.00
Theoret. freq.	.11	.05	.95	1.38	2.12	2.39
Cell chi-sq.	.11	16.91	1.15	.28	.01	2.39
2 THROUGH 4						
Freq.	1.00	0.00	1.00	0.00	1.00	1.00
Per. across	25.00	0.00	25.00	0.00	25.00	25.00
Per. down	50.00	0.00	5.56	0.00	2.50	2.22
Per. of total	.76	0.00	.76	0.00	.76	.76
Theoret. freq.	.06	.03	.55	.79	1.21	1.86
Cell chi-sq.	14.56	.03	.38	.79	.04	.10
5 THROUGH 7						
Freq.	0.00	0.00	3.00	3.00	3.00	2.00
Per. across	0.00	0.00	27.27	27.27	27.27	18.18
Per. down	0.00	0.00	16.67	11.54	7.50	4.44
Per. of total	0.00	0.00	2.27	2.27	2.27	1.52
Theoret. freq.	.17	.08	1.50	2.17	3.33	3.75
Cell chi-sq.	.17	.08	1.50	.32	.03	.82

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Table XLVI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	2.00	1.00	1.00	0.00
Per. across	0.00	0.00	50.00	25.00	25.00	0.00
Per. down	0.00	0.00	11.11	3.85	2.50	0.00
Per. of total	0.00	0.00	1.52	.76	.76	0.00
Theoret. freq.	.06	.03	.55	.79	1.21	1.36
Cell chi-sq.	.06	.03	3.88	.06	.04	1.36
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	2.00	5.00
Per. across	0.00	0.00	0.00	0.00	28.57	71.43
Per. down	0.00	0.00	0.00	0.00	5.00	11.11
Per. of total	0.00	0.00	0.00	0.00	1.52	3.79
Theoret. freq.	.11	.05	.95	1.38	2.12	2.39
Cell chi-sq.	.11	.05	.95	1.38	.01	2.86
TOTAL						
Freq.	2.00	1.00	18.00	26.00	40.00	45.00
Per. across	1.52	.76	13.64	19.70	30.30	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	.76	13.64	19.70	30.30	34.09
Chi-square = 52.619; degrees of freedom = 25						
Product moment correlation = -.0619						
Significant at .05 level						

Table XLVII

RELATIONSHIP BETWEEN OTHER OFFICE EXPERIENCE AND MEASURING
PERFORMANCE OF DEPARTMENTAL SUBORDINATES

	Not Applicable	Never	Seldom	Sometimes	Often	Always
NONE						
Freq.	2.00	7.00	10.00	19.00	29.00	32.00
Per. across	2.02	7.07	10.10	19.19	29.29	32.32
Per. down	100.00	63.64	71.43	67.86	90.63	71.11
Per. of total	1.52	5.30	7.58	14.39	21.97	24.24
Theoret. freq.	1.50	8.25	10.50	21.00	24.00	33.75
Cell chi-sq.	.17	.19	.02	.19	1.04	.09
LESS THAN 2 YR.						
Freq.	0.00	4.00	1.00	1.00	1.00	0.00
Per. across	0.00	57.14	14.29	14.29	14.29	0.00
Per. down	0.00	36.36	7.14	3.57	3.13	0.00
Per. of total	0.00	3.03	.76	.76	.76	0.00
Theoret. freq.	.11	.58	.74	1.48	1.70	2.39
Cell chi-sq.	.11	20.01	.09	.16	.29	2.39
2 THROUGH 4						
Freq.	0.00	0.00	1.00	0.00	0.00	3.00
Per. across	0.00	0.00	25.00	0.00	0.00	75.00
Per. down	0.00	0.00	7.14	0.00	0.00	6.67
Per. of total	0.00	0.00	.76	0.00	0.00	2.27
Theoret. freq.	.06	.33	.42	.85	.97	1.36
Cell chi-sq.	.06	.33	.78	.85	.97	1.96
5 THROUGH 7						
Freq.	0.00	0.00	1.00	5.00	1.00	4.00
Per. across	0.00	0.00	9.09	45.45	9.09	36.36
Per. down	0.00	0.00	7.14	17.86	3.13	8.89
Per. of total	0.00	0.00	.76	3.79	.76	3.03
Theoret. freq.	.17	.92	1.17	2.33	2.67	3.75
Cell chi-sq.	.17	.92	.02	3.05	1.04	.02

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Table XLVI, Continued

	Not Applicable	Never	Seldom	Sometimes	Often	Always
8 THROUGH 10						
Freq.	0.00	0.00	1.00	3.00	0.00	0.00
Per. across	0.00	0.00	25.00	75.00	0.00	0.00
Per. down	0.00	0.00	7.14	10.71	0.00	0.00
Per. of total	0.00	0.00	.76	2.27	0.00	0.00
Theoret. freq.	.06	.33	.42	.85	.97	1.36
Cell chi-sq.	.06	.33	.78	5.46	.97	1.36
11 OR MORE						
Freq.	0.00	0.00	0.00	0.00	1.00	6.00
Per. across	0.00	0.00	0.00	0.00	14.29	85.71
Per. down	0.00	0.00	0.00	0.00	3.13	13.33
Per. of total	0.00	0.00	0.00	0.00	.76	4.55
Theoret. freq.	.11	.58	.74	1.48	1.70	2.39
Cell chi-sq.	.11	.58	.74	1.48	.29	5.47
TOTAL						
Freq.	2.00	11.00	14.00	28.00	32.00	45.00
Per. across	1.52	8.33	10.61	21.21	24.24	34.09
Per. down	100.00	100.00	100.00	100.00	100.00	100.00
Per. of total	1.52	8.33	10.61	21.21	24.24	34.09
Chi-square = 52.551; degrees of freedom = 25						
Product moment correlation = .1030						
Significant at .05 level						

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