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THE CHARACTERIZATIONS OF EFFECTIVE ORGANIZATIONS AMONG INSTITUTIONS PROVIDING LONG-TERM GERIATRIC CARE

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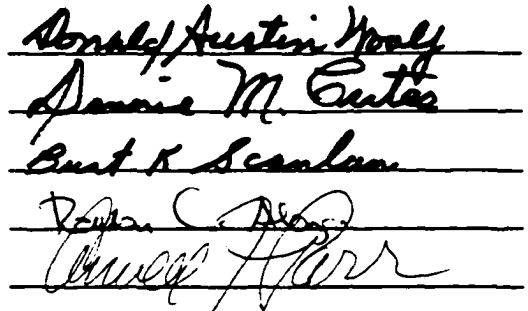

DISSERTATION COMMITTEE

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INTRODUCTION AND RESEARCH MODEL

Background

Possibly no other subject claims as much managerial time and attention as problems of organizational behavior. Managers are attempting continually to cope with problems of structure, cooperation, integration, communications, decision-making, motivation, and leadership. Those and other related areas have been found to influence significantly overall organizational effectiveness. Organizations will continue to remain effective only if they are able to develop feasible guidelines to deal with these various

structural process and behavioral problem areas.

The nursing home is an institution that is rapidly growing in importance in today's society and this is the primary reason for selecting it as the object of this study. On November 19, 1975, the Senate Subcommittee on Long-Term Care issued a critical report on the nursing home industry. The report criticized federal and state agencies for failing to enforce laws designed to eliminate abuses in nursing homes. Quoting from this report:

> The nursing home industry requires intense attention. That industry could be at the end of its controversial beginning. It could be on the verge of a second stage of growth combined with maturity and effectiveness of treatment. Or it could go through a very different type of stage two: A period marked by further failure in policy and clear cut goals. (U.S., Congress, Senate, Subcommittee on Long-Term Care, 1974 [hereafter cited as Subcommittee on Long-Term Care, 1974])

If the nursing home industry is to achieve maturity and effective treatment, it will not be through the creation and enforcement of public policy alone, but more appropriately, these goals can be accomplished through the development of administrative theory and practice, which will promote effective nursing home functioning.

Several recent research studies and articles have indicated a direct relationship between the quality of care a nursing home provides and administrative effectiveness

(see Levey et al., 1973; Kraslewski, 1971) and internal organizational relationships (Schwartz, 1974).

Yet there is still relatively little systematic research relating to the nursing home organization and its administration. We need to know much more than we presently do about the problems and needs of the nursing home if we are to understand its operations and evaluate its strengths and weaknesses.

Purpose of the Research

This study investigates the administrative practices and internal organizational relationship in a nursing home organization and their relative effects upon overall organizational effectiveness. The objective is to investigate systematically a number of questions about nursing home functioning with special emphasis on the areas of patient care, organizational coordination, intergroup relations, administrative behavior, and communications. Among the principal questions and issues to be examined are the following:

1. What are the requirements of effective nursing home functioning?
2. What are the criteria of nursing home effectiveness?

3. What accounts for the fact that some nursing homes are more effective than others?

4. Why do some nursing homes provide better patient care than others, even though they may have comparable physical and technological facilities?

Additional organizational behavioral issues to be explored include:

1. What are the interrelationships between the quality of patient care, nursing home effectiveness, and internal organizational relationships?

2. What are the factors and conditions that facilitate or hinder the nursing home adaptation to external and internal changes or demands?

3. What principles or practices of administration are most appropriate for this organization?

4. How important are communications and problem solving to internal relationships?

5. What are the requirements and consequences of good organizational coordination?

6. How does the "rational trust of administration" relate to organizational effectiveness and the quality of patient care?

And generally, what particular aspects of organizational planning, coordination, conditions for negotiating orders, rational trust relationships, and integration are crucial or significant in relation to the effectiveness of the nursing home organization? These and many more important questions will be investigated.

Stated more generally, the objective of this research

project is to define and develop measures of organization effectiveness in the nursing home industry, in order to distinguish the more from the less effective nursing homes. Additional objectives are to establish what relates to, hinders, or facilitates effective nursing home functioning and, finally, to evaluate the relationship between nursing home effectiveness and the quality of patient care.

In conclusion, it is hoped that this research study will contribute to our knowledge of important aspects of the structure and functioning of the nursing home and, in the process, contribute to the knowledge in the field of health care administration and organizational behavior.

The Growth of the Nursing Home Industry

Caring for older persons in need of long-term attention should be one of the most tender and effective services a society can offer to its people. It will be needed more and more as the number of elders increases and as the number of very old among them rises even faster (Subcommittee on Long-Term Care, 1974).

The average life span at the height of the Roman Empire was 23 years. At the turn of this century in the United States, it reached 47 years. Today life expectancy at birth is 70 years for the average American child. Those

who reach their sixty-fifth birthday can expect, on the average, 15 additional years of life. In 1900 only 4 percent of the population, or 3 million people, were aged 65 and over. Today that age group makes up 10 percent of the population and numbers 21 million (Subcommittee on Long-Term Care, 1974, p. 14).

In short, the number of 65-plus persons in the United States has increased 600 percent in just 74 years. About one-third of these people are past 75. During the 1960s, the number of the over-75 increased 37.1 percent, compared with a rate of 13 percent for those between 65 and 75. The over-75s are the fastest growing of all population groups (Subcommittee on Long-Term Care, 1974).

At the end of 1971, a little over 5 percent of the elderly were in institutions. Some 1,106,103 were in nursing homes and about 100,000 were in mental institutions (U.S., Department of Health, Education, and Welfare, 1973, p. 397 [hereafter cited as HEW, 1973]; see also HEW, 1974b, p. 3).

A widely publicized study by Dr. Robert Kastenbaum of Wayne State University notes: "While one in 20 seniors is in a nursing home or related facility on any given day, one out of five seniors will spend some time in a nursing

home during a lifetime" (Kastenbaum, 1973, p. 12).

In many ways the nursing home industry in the United States is unlike any other in the world. Part of it was established by church groups and philanthropic institutions, but these nonprofit facilities could not keep up with the burgeoning number of the chronically ill elderly. Predictably, the greatest growth of the industry came after the enactment of Medicare and Medicaid in 1965, as the availability of public funds helped fuel the tremendous expansion of the industry. Public funds account for about $2 out of every $3 in nursing home revenues (Subcommittee on Long-Term Care, 1974, p. 24). There are few industries so dependent on the government.

One of the first inventories of the nation's nursing home industry was a 1939 study on institutional mortality by the Bureau of the Census, which counted 1,200 facilities and 25,000 beds. By 1960, there were 9,582 homes and 33,000 beds. Between 1960 and 1970, the number of nursing homes and related facilities increased 140 percent to 23,000 (Subcommittee on Long-Term Care, 1974, p. 20).

However, mere numbers of institutions do not adequately measure the growth of the nursing home industry. An even more informative indicator of their growing importance

can be shaped from the following new and not generally known facts:

—There are more nursing home beds (1,235,404) in the United States than general and surgical hospital beds (1,000,951) (HEW, 1973, pp. 356, 385)

—There are more than three times as many nursing homes (23,000) as hospitals (6,630) (HEW, 1973, pp. 356, 385)

—More in-patient days of care were given in long-term care facilities (384.2 million) than in short-term general hospitals (262.7 million) (HEW, 1974a, p. 2)

—Expenditures for long-term care increased 640 percent from $500 million in 1960 to $3.7 billion in 1973 (less conservative estimates place the nursing home industry total operating outlays at $6.2 billion) (HEW, 1974a, p. 2)

—For the first time, Medicaid expenditure in 1972 for nursing home care exceeded payments to general and surgical hospitals: $1.6 billion (34 percent) as compared to $1.5 billion (31 percent) (U.S., Senate, 1974, p. 150)

There is every reason to believe that the need for high-quality long-term care facilities will continue to increase. One of the major reasons, as pointed out earlier, is that the number of elderly Americans is increasing rapidly. This is due primarily to the fact that more and more people are living longer and longer. Individuals with multiple disabilities and advanced age are likely candidates for institutionalization.

Second, there is a push on to reduce the cost of

federal programs. Officials say that one way to do this is to get as many patients as possible out of the hospitals, where the average cost is $70 per day, and into nursing homes where the cost ranges from $15 to $22 per day, according to the American Nursing Home Association ("Nursing Home Chains," 1969, p. 170). Shaving one hospital day from Medicare's national average could result in a saving of $400 million (Subcommittee on Long-Term Care, 1970, p. 625).

In addition, it is only a matter of time before Congress enacts a national health insurance program (see Riolin, 1974, pp. 8-9, and "National Health Insurance Is on the Way," 1974, pp. 70-71). This is likely to place a tremendous amount of pressure upon hospitals from an influx of patients previously unable to afford them. Nursing homes could relieve some of this pressure by accepting younger patients in the convalescent stages of an illness or surgery.

The Special Committee on Aging of the United States Senate stated the following conclusion in regard to the nursing home industry in its report released November 19, 1974: "It is time that nursing homes began realizing their full potential as full and legitimate partners in the American health care system" (Subcommittee on Long-Term Care, 1974, p. 11).

Because of the increasing importance of nursing homes in American society and an apparent lack of, and need for, research in this area, the nursing home industry was chosen as the subject of this study. The primary objective of this research project is the improvement of organizational effectiveness in the nursing home organization, in the belief that a more effective organization will be able to provide a better quality of patient care and a more pleasant life style for its residents.

The Research Model and Hypotheses

In recent years, the administrators and personnel in some of our large health care institutions have been concerned with the following problems:

1. How can we evaluate organizational performance when its accomplishments seem so intangible in comparison with industrial or military organizations?

2. How can we determine what kinds of policies, procedures, and employees and which behavioral characteristics are necessary for effective organizational functioning?

The primary purpose of this study is to investigate these issues as they relate to the nursing home organization. Research concerned with the assessment of the effectiveness of organizations has to contend with several interrelated

issues and problems. A brief discussion of these points should provide an overview of some of the conceptual and theoretical problems encountered in developing the research methods of this study.

A major task facing the researcher in this area involves the formulation of a conceptual scheme for approaching the study of organizational effectiveness in the nursing home. The types of questions that we must answer include: What is the composition of the nursing home's internal structure and its internal relationships? Should the nursing home organization as a whole be the focus of the study or should attention be directed at its component parts? Should we employ a closed-system or open-system model in designing the investigation?

Since the term "effective" implies successful in terms of given standards, a second task facing the researcher involves choosing meaningful criteria of organizational effectiveness. The type of questions that need to be answered in this regard are: What are the main objectives of the nursing home? What part should nursing home objectives play in the investigation? What does organizational effectiveness mean in the case of the long-term care nursing home facility? What criteria of effectiveness are available,

or might be developed?

The third major task involved in the study of organizational effectiveness involves the analysis of dynamics underlying organizational functioning or the study of "process." We need to determine the following: What are the parts of the system? What is the nature of the relationship of the parts to the whole and to the dimensions to be investigated? Which organizational characteristics are functional and which are dysfunctional in terms of the successful functioning of the nursing home? What are the forces which influence organizational success or failure in terms of the criteria selected for the investigation? The research task will be isolating and evaluating the variables connected to the chosen criteria of effectiveness.

A fourth problem facing the researcher involves designing the research methods for conducting the investigation. We need to determine what techniques, tools and methods should be used in gathering and analyzing data pertinent to nursing home functioning and effectiveness.

In conceptualizing and developing the research design for this investigation, the four above mentioned points will need to be considered as a whole. In other words, they are not mutually exclusive but heavily interrelated. They were separated purely for the sake of discussion.

The Research Variables

In conceptualizing and developing the research design for this investigation, the variables to be investigated were divided into three categories: Organizational Effectiveness, Characteristics of Effective Organizations, and The Quality of Patient Care.

Organizational Effectiveness (see Chapter III)

Determining the criteria upon which to evaluate organizational performance in the nursing home industry is a very important function of this research model. Criteria of effectiveness were selected to reflect three different approaches to evaluating performance and to give the approach a "holistic" dimension. The three approaches are subjective measures, job attitudes, and profitability.

Characteristics of Effective Organizations (see Chapter V)

These variables were selected to study which organizational characteristics are functional and which are dysfunctional in terms of the successful functioning of the nursing home. For purposes of investigation they were divided into two groups: Administrative Effectiveness and Internal Organization Relationships. Administrative

effectiveness is an investigation into the application of administrative practices. Items that are considered include planning, clarity of objectives and rules, communication, problem solving, attention to employees' needs, and fairness.

Internal organization relationships is an investigation of individual, group, intergroup, and interdepartmental relationships within the nursing home. The nursing home situation contains all the recognized elements of social organization, such as specialized goals, integrated behavior oriented toward the attainment of the goals, and the occurrence in a social setting. This section attempts to measure the effectiveness of the social organization by measuring items such as blending of jobs to achieve objectives, ease of exchanging ideas and information, handling of interdepartmental problems, intershift cooperation, and many more.

The Quality of Patient Care
(see Chapter IV)

The main variable employed by the model is the "Quality of Patient Care." Improvement and measurement of this variable are one of the primary objectives of this dissertation. Quality of care could be regarded as an "ultimate" criterion measure by which to evaluate nursing home performance, because it is the main social objective of the

nursing home organization.

The Research Model

The research model was conceptualized with the intention of investigating the relationships among all three groupings of variables (see diagram, p. 16). It is the purpose of the model to explore the following relationships: Characteristics of Effective Organizations and Organizational Effectiveness, Characteristics of Effective Organizations and the Quality of Patient Care, and Organizational Effectiveness and the Quality of Care.

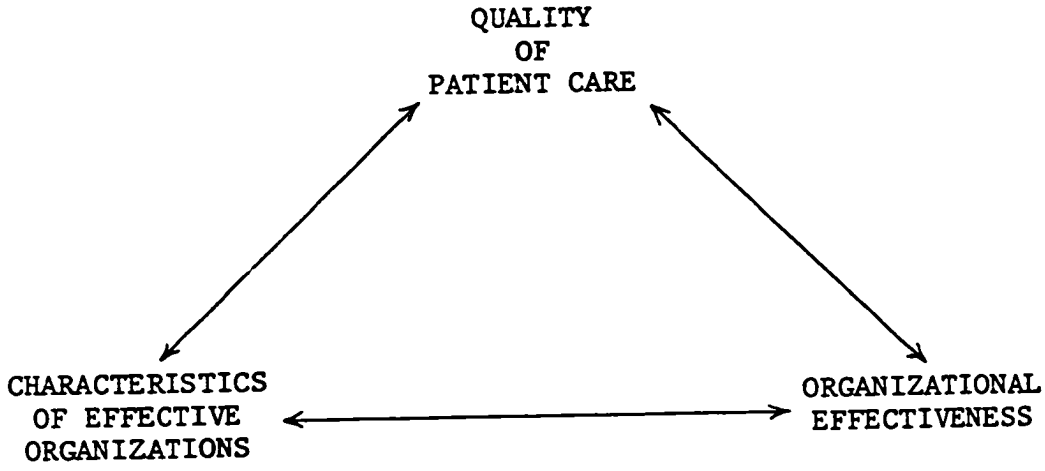
It is the purpose of this research to establish that a relationship, either direct or indirect, exists between the groupings of variables and/or individual variables within those groupings. Correlation analysis will be employed to establish these relationships. Therefore, it is not the objective of this research model to demonstrate or prove causality.

Characteristics of Effective Organizations and Organizational Effectiveness

Hypothesis 1: There will be a direct and significant relationship between administrative effectiveness and organizational effectiveness.

The purpose of this section of the study is to

RESEARCH MODEL



determine if any form of relationship exists between the component measures of administrative effectiveness and organizational effectiveness—individually or as a whole. The main contention is that in those nursing homes where the staff members give favorable ratings to their superior's planning ability and the administrator's ability to communicate and solve problems, they will also rate their co-workers as more productive and adaptable and as having a higher overall level of job satisfaction. Among the many questions that this hypothesis addresses are:

1. If the administrator is perceived as understanding employees' needs and problems, is this related to overall job satisfaction?

2. If the administrator is aware of and solves problems effectively, does this mean higher productivity?

3. If goals and objectives are clearly defined, what is the relationship to adaptability and job satisfaction?

4. Is there any connection between the extent to which the administrator and departments are seen to be fair and reasonable and the measures of job satisfaction?

These and many additional relationships will be explored in this section.

Hypothesis 2: There will be a direct and significant relationship between the effectiveness of internal organizational relationships and organizational effectiveness.

This hypothesis is a direct probe into the internal relationships of the nursing home organization. Some of the questions this hypothesis probes include the following:

1. What are the various interrelationships among the following factors: tension among departments, cooperation among shifts and solving interdepartmental problems, employee job satisfaction, productivity, and the ability of the facility to adapt to change?

2. Does the blending and timing of jobs to achieve objectives affect employees' perceptions of productivity and adaptability?

3. Is there any relationship between the ease of exchanging ideas and information among the nursing home staff and the nursing home's response in emergency situations?

4. How does pressure for performance relate to productivity and job satisfaction?

5. When employees have a high level of identification with the nursing home and its goals, their immediate work group, and their occupation, what is the relationship to job satisfaction and turnover?

These research questions examine how successful the administrators have been in establishing the proper organizational climate. Have they established a climate that promotes communication, integration of activities between departments, and employee identification with the nursing home and its goals?

The Characteristics of Effective Organizations and the Quality of Patient Care

Hypothesis 3: There will be a direct and significant relationship between administrative effectiveness and the quality of patient care.

In this section the relationship between the administrative practices of the nursing home and the quality of care it renders its patients is examined. Questions to be examined include the following:

1. Do clarity of and adherence to rules and regulations by the administrator, department heads, and staff affect the quality of care?

2. Does the ability of the administrator to communicate to the staff and solve organizational problems relate to the quality of care provided?

3. Were nursing homes where the administrator and department heads are perceived as fair, reasonable, and understanding of the workers' needs also perceived as providing a better quality of patient care?

The relationship between administrative effectiveness and the quality of care takes on added importance because it is the one relationship we can most readily do something about.

Hypothesis 4: There will be a direct and significant relationship between the effectiveness of internal organizational relationships and the quality of patient care.

Here it is the objective of the study to investigate

whether the internal relationship and interactions within the nursing home directly affect the quality of care rendered. Some of the following subjects will be probed:

1. Does staff identification with the nursing home and its goals mean a higher quality of patient care?

2. What are the consequences of coordination, timing of activities, and handling of problems between departments in relation to the quality of patient care?

3. What is the relationship between patient care and interdepartmental tensions and conflicts?

4. Are there any associations between nursing home staff members' evaluation of the quality of care and their perceptions of the degree to which the various shifts cooperate with one another?

It is the purpose of this part of the study to identify those internal organizational factors that are functional and dysfunctional to providing quality patient care.

Organizational Effectiveness and the Quality of Patient Care

Hypothesis 5: There will be a direct and significant relationship between organizational effectiveness and the quality of patient care.

Those nursing homes that rank higher on the effectiveness criteria should also provide a higher quality of patient care. The relationships to be investigated are the following:

1. Is there any relationship between employee perceptions of productivity and their perceptions of the quality of care?

2. What is the relationship between patient care and the ability of the nursing home to adapt to environmental changes and emergency situations?

3. Do those nursing homes that have a high level of employee job satisfaction and a low level of turnover provide a higher quality of patient care?

4. What is the relationship between patient care and profitability?

Establishing a relationship between the criteria of nursing home performance and the quality of patient care is an essential part of this research. If the criteria of organizational effectiveness do not relate to the quality of patient care, there is a strong likelihood that the improper criteria have been selected or that the criteria have been improperly measured.

Discovering those factors that are functional and dysfunctional to the ability of a nursing home to provide quality care to its patients is the central thesis of this research.

Summary

In 1900 only 4 percent of the population, or 3 million people, were age 65 and over. Today that age group makes up 10 percent of the population and numbers 21 million.

Studies have estimated that one out of five seniors will spend some time in a nursing home during his or her lifetime. After the enactment of Medicare and Medicaid in 1965 the nursing home industry grew rapidly in the United States and at the present time there are approximately three times as many nursing homes as hospitals. Because of the growing importance of this institution within our society and the lack of behavioral research relating to it, the nursing home organization was selected as the subject of this study.

The objectives of the research model were to develop methods of evaluating organizational effectiveness and the quality of care within a nursing home. Furthermore, the model attempted to measure the effectiveness of administration and internal interrelationships within the nursing home, which were both considered under the title of Characteristics of Effective Organizations. The purpose in measuring these factors was to probe the interrelationships among them. The primary purpose of the research model was to investigate the following relationships: (1) Characteristics of Effective Organizations and Organizational Effectivness, (2) Characteristics of Effective Organizations and The Quality of Care, and (3) Organizational Effectiveness and The Quality of Care. The central purpose was to discover factors

that directly relate to the quality of care.

In Chapter II, "The Nursing Home as an Organization," we look at the organization chart of the typical nursing home. The duties and responsibilities of the administrator and departments are explained along with a description of the tasks performed within each department. Chapter III, "Organizational Effectiveness," explores the theoretical foundation of the evaluation of organizational effectiveness and presents the measures selected for this study: productivity, adaptability, flexibility, job satisfaction, turnover, and profitability. The concept of each one is explained along with how it will be measured. In Chapter IV, "Quality of Care," we explore the various methods that have been developed to evaluate the quality of care provided by a health care institution and explain the reasons for selecting the method employed by this study. Chapter V, "Characteristics of Effective Organizations," presents the theoretical foundation for all the variable components of "administrative effectiveness" and "internal organizational relationships." Chapter VI, "Research Methods," will discuss how the data were collected and the processes and statistical techniques used in their analysis. Chapter VII, "Analysis of the Relationship between the Characteristics of

Effective Organizations and Organizational Effectiveness, Part I: Administrative Effectiveness and Organizational Effectiveness," presents the empirical findings of the study regarding administrative practice within the nursing home and its relation to organizational performance. Chapter VIII, "Analysis of the Relationship between the Characteristics of Effective Organizations and Organizational Effectiveness, Part II: Internal Organizational Relationships and Organizational Effectiveness," presents the empirical findings relating to how well the staff members interrelate with one another to coordinate their activities and the relationship of this factor to organizational effectiveness. In Chapter IX, "Factors Relating to the Quality of Care," we explain our findings regarding those variables that directly relate to the quality of care. Chapter X, "Summary and Conclusions," summarizes the major findings of the study and indicates some areas for further research into the nursing home organization.

CHAPTER II

THE NURSING HOME AS AN ORGANIZATION

Introduction

What is a nursing home? This question elicits varying and often conflicting responses from individuals throughout the country. The Public Health Service publication, "Nursing Home Utilization and Cost in Selected States," defined the nursing home as:

> . . . facility or unit which is designated, staffed, and equipped for the accommodation of individuals not requiring hospital care but needing nursing and related medical services prescribed by or performed under the direction of persons licensed to provide such services. (Public Health Service, 1968, p. 1)

Basically, nursing homes can be divided into two types as distinguished by the level of care provided, although one home may provide both levels of care.

1. Skilled nursing facilities. These provide continuous, 24-hour nursing service for convalescent or

chronically ill patients. The emphasis is on medical nursing care, restorative physical and occupational therapy, and the like.

2. Residential or intermediate-care facilities. These provide a comparatively lower level of nursing care for persons not capable of fully independent living, yet not necessarily ill. The emphasis is on personal care and social services.

This study deals primarily with the skilled nursing facility.

The objectives of the modern nursing home are of a positive and challenging nature. They are:

1. To provide continuing care for those recovering from surgical or medical disorders.
2. To assist patients in reaching optimal physical and emotional health.
3. To provide for the total needs of patients—physical, emotional, and spiritual.
4. To assist the aging toward an active participation in life.
5. To provide for rehabilitative services when the need exists.
6. To work cooperatively with other community and social agencies. (McQuillan, 1969, p. 3)

Because of these expanded responsibilities, nursing home management must expect more rigid regulations governing

their operations to be established by federal, state, and local governments. In fact, this is already apparent through the tightening of regulations governing nursing home licensing in many states.

In any enterprise administrators must perform the management function known as "organization." This implies two things: first, the total package of work activities must be divided up and assigned to separate departments, which are headed by designated individuals (division of labor) and second, the authority to use resources of the enterprise to perform these work activities must be allocated to these department heads and to other people within each department (delegation of authority) (Shore, 1971, p. 10).

Nursing homes employ "departmentation by function," which means that the types of work activities that go on within a department are all identical or very similar in nature, as the basis upon which activities are grouped. The nursing home organization is made up of three primary departments—nursing, dietary, and housekeeping. In addition, depending on the nursing home, there are several small departments that may be considered supportive in nature. These include maintenance, office staff, activities director,

and rehabilitation. All of the major departments and supportive functions have their own head or director, each of whom reports directly to the administrator, who is the chief executive officer in the nursing home organization (see chart, p. 29).

Administrator

In a position paper adopted by the Board of Governors of the American College of Nursing Home Administration, Donavan T. Perkins proposes the following definitions for the "Nursing Home Administrator" and the "Practice of Nursing Home Administration":

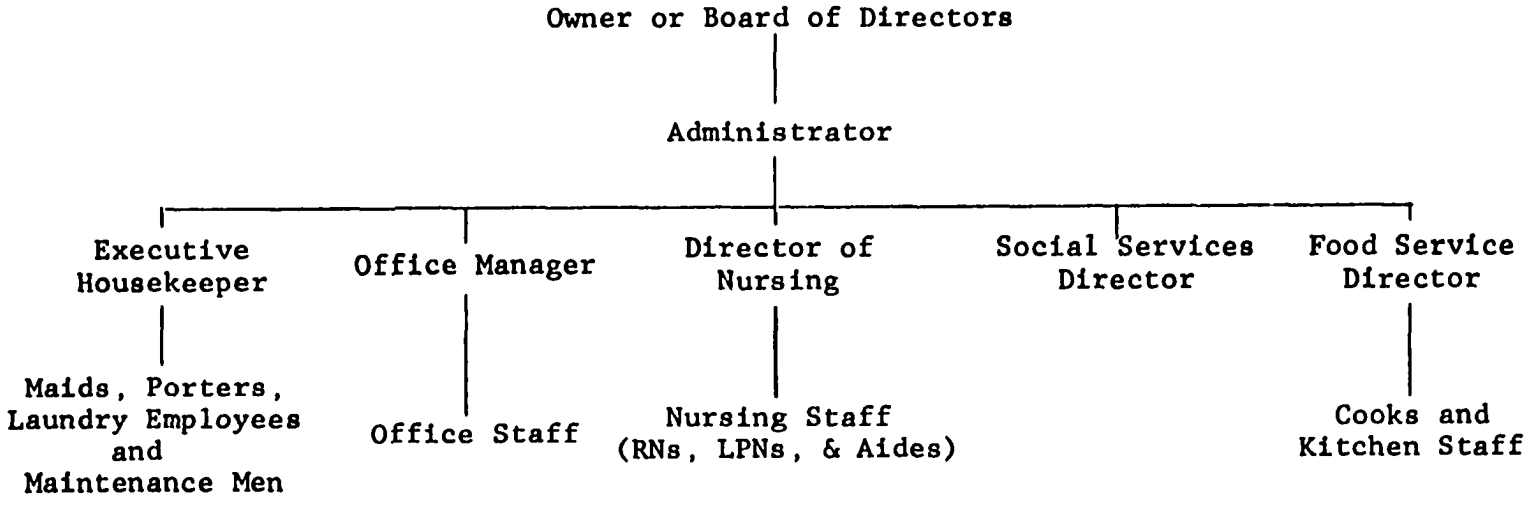
> "Nursing Home Administrator" means any individual who by training and experience is qualified to assume the responsibility of planning, organizing, directing and/or controlling, the operation of a nursing home.
>
> "Practice of Nursing Home Administration" means the performance of any act or the making of any decisions involved in planning, organizing, directing and/or control of a nursing home. (Perkins, 1973, p. 21)

E. Eagle defined the position as follows:

> The administrator of a nursing home (sometimes called manager, executive officer, operator, or superintendent) is the owner or a person designated by the owner to assume the accountability as executive head of the home for overall management and day-to-day operations. (Eagle, 1968, p. 673)

According to Abraham Kostic, the role of the administrator of a nursing home involves the organization of the

THE NURSING HOME ORGANIZATION



staff so that each member of each profession can function properly within the structure and utilize his skill to the utmost (Kostic, 1964).

In Modern Nursing Homes, Baumgartner also defined the function of the nursing home administrator as involving the creation of an environment in which professional people can practice their professions most adequately. Further, he contended that nursing home administrators differ from some other types of administrators because of a lack of control by the administrators over the activities of the staff and the production by members. The administrator provides optimum conditions for the professionals but not necessarily directives (Baumgartner, 1968).

Experience indicates that the successful nursing home administrator requires a working knowledge of:

1. Administrative principles and functions
2. Psychology and mental hygiene
3. Finance, bookkeeping and general office practice
4. Purchasing
5. Personnel management
6. Safety
7. Gerontology
8. Dietetics
9. Legal aspects of nursing home management
10. Social sciences
11. Techniques of evaluating general services.[1]

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[1]Unless otherwise stated, the balance of the material in the Nursing Home Organization section is taken from the text of McQuillan (1969).

Therefore, it can readily be seen that the operation of a nursing home is rapidly becoming a complex and skilled management job. It is now interwoven with professional skills such as social work, rehabilitation, recreational therapy, nursing, and medicine. Actually, no one person can have all the knowledge necessary to enable him to competently direct all these areas. For this reason, the delegation of authority is considered to be a vital administrative function.

After an administrator delegates authority and initiates specific plans, he must be certain that the wheels are kept in motion. It is here that organizational skills are brought into focus. In specific terms, this involves establishing clearly defined functions for each classification, setting up lines of authority, promoting opportunities for building interdepartmental relations, and establishing two-way communication.

Similarly, the administrator has a duty to promote teamwork in the field of health; it is most important that he be aware of how his team is functioning. In the nursing home field, unification of the team may call for greater direction from the administrator because physicians who write medical orders and direct medical care are not readily

available in nursing homes. As leader, the administrator must guide the staff toward the attainment of objectives and evaluate the results of their efforts. As a teacher, he advises and instructs personnel in the areas of policies, procedures, and changing concepts. Thus it can definitely be said that the executive officer must fill varied roles. His effectiveness depends in large measure upon how well he understands these roles and his ability to evaluate his own performance.

In 1969 there were about 18,390 nursing home administrators in the United States. Their median age was 53. Some 47 percent were employees; 44 percent were self-employed; and 9 percent were both owners and administrators (Subcommittee on Long-Term Care, 1974, p. 23).

Some 91 percent were administrators of only one facility. Median experience for these individuals was eight years in a hospital or nursing home and many had been at their current jobs for five years or less (Subcommittee on Long-Term Care, 1974, p. 23). The length of administrative experience in the 24 nursing homes studied ranged from a maximum of 14 years to a minimum of eight months, with the average being six years.

Best current estimates show that 60 percent of

administrators are male (Stone, 1972). Salaries range from $12,000 to $15,000 per year.

All administrative personnel had a turnover rate of 21 percent in 1970 (Subcommittee on Long-Term Care, 1974, p. 23).

Nursing Service

Nursing can be considered the primary service that a skilled nursing home has to offer and has come to be regarded as the backbone of a nursing home. It is because of a need for this service that most patients are admitted to a long-term facility. In both nursing homes and hospitals it is regarded as the largest department and the one that requires 24-hour on-the-job service. Nursing service not only provides basic care but also maintains constant vigilance against emergency situations and serves as a channel of communication between the physician and the patient.

The primary functions of the Nursing Services Department are:

1. Application and execution of physician's legal orders.
2. Observation of symptoms and reactions.
3. Supervision of the patient.
4. Supervision of those participating in care.
5. Reporting and recording.
6. Application of nursing procedures and techniques.
7. Promotion of health by direction and teaching. (Phaneuf, 1969, p. 1828)

Therefore, it is essential in any well-operated nursing home that this department be carefully organized and competently managed.

Director of Nursing

It is essential that the nursing department function under the direction of a registered professional nurse. The director of nursing must be adept at directing people, not just activities. In other words, she must be sensitive to the attitudes around her in order to promote good staff relationships on her service.

As an expert in nursing, she has the responsibility to evaluate the needs of the nursing service and to work with the administrator in meeting those needs. She should be capable of formulating job function analysis. This includes making decisions with respect to the functions assigned to aides, orderlies, practical nurses, and professional nurses.

Among the other main functions of a director of nurses are: hiring personnel for nursing service, assigning staff members to various services, and promoting and dismissing staff members. It is also her responsibility to keep personnel records and time schedules of members of the nursing service department.

As far as personnel is concerned, she needs skill in supervising and evaluating work standards and a good professional background in handling personnel problems and complaints.

In working with the administrator, the director should be able to assist in establishing personnel policies. In addition, she carries the responsibility for developing an effective communication system in order to relay administrative directives to the staff promptly and clearly.

The director of nursing can be of further service to the administrator by preparing a budget for her department and by keeping him informed on a regular basis of the capabilities or deficiencies noted in members of the staff.

From the broader aspects of nursing administration, the effectively functioning director of nursing must be able to coordinate the work of nursing service with other departments. She should also be able to promote an atmosphere that is conducive to loyalty and stability as far as members of the nursing staff are concerned. At all times, the director of nursing must be a person who demands respect. She must recognize the fact that in her position, she represents not only the nursing department but also the administrator. Indeed, the director of nursing should be regarded

as the good will ambassador for the nursing home she serves.

Professional Nurses (RN)

Almost without exception, all professional nurses employed in a nursing home have some supervisory responsibility. The professional nurse's function in the nursing home has been defined by a government report as follows:

> The practice of professional nursing shall mean the performance for compensation of any act in the observation or care of the ill, injured or infirm or in the maintenance of health or prevention of illness of others or in the supervision and teaching of other personnel or the administration of medicines and treatments as prescribed by a person licensed to practice medicine or dentistry requiring substantial specialized judgement and skill based upon specialized knowledge and application of the principles of biological, physical, and social sciences. The foregoing shall not be deemed to include acts of diagnosis or prescription of therapeutics or corrective measures. (HEW, 1970, pp. 34-35)

In addition to the previously mentioned "functions of nursing," the registered professional nurse serving in the role of supervisor or charge nurse with responsibility for nursing care and management of a nursing unit may perform the following additional functions:

1. Periodically assess the total needs of the patient and develops nursing plans for meeting the patient needs;
2. Assists in developing organizational plans as they relate to nursing, including work schedules, policies, and review of nursing procedures;
3. Makes decisions in emergency situations and practices first aid measures;

4. Orders supplies and equipment for units;
5. Makes general interpretation of home rules and policies to co-workers, allied professional groups and the public. (HEW, 1970, p. 35)

The professional nurse is very much the administrator of her own unit. She is responsible for establishing and maintaining adequate communication within the unit and for ensuring that the staff members cooperate and coordinate their activities with each other and with other departments within the nursing home. She also has a direct influence on the morale of the unit and on how the individual staff members feel about the nursing home and its goals.

Because of the very special nature of the nursing home's residents, the professional nurse may be called upon to perform some of the following functions:

1. Evaluating the patient's emotional needs and the means by which the patient manifests these needs;
2. Fostering self-respect and self-esteem by accepting the patient's behavior as symptomatic of age and illness;
3. Considering the forces that mold social and cultural traits in the geriatrics patient;
4. Guiding the patient toward more rational and socially acceptable behavior;
5. Recognizing the patient's physical limitations and utilizing measures to prevent additional limitations;
6. Assisting in the implementation of restorative nursing care measures that enable the patient to progress from a state of dependency to one in which he reaches his maximum level of self-sufficiency. (HEW, 1970, p. 35)

Therefore, it can readily be seen that in order to

become a truly successful professional nurse in a nursing home, it takes a very special personal dedication to the geriatric patient and his needs.

In 1973, 56,235 registered nurses were working in nursing homes. They made up 20 percent of the nursing home staff in Connecticut and 3 percent in Oklahoma and Arkansas (Subcommittee on Long-Term Care, 1974, p. 24).

In a recent survey by the United States Department of Labor, full-time registered nurses in New York averaged $6.07 an hour, compared with the next highest average of $4.87 in Los Angeles County-Anaheim. The lowest average wage for full-time registered nurses—$3.76—was recorded in Denver and Atlanta (Department of Labor, 1975, p. 4).

The survey showed that full-time registered nurses had a vacancy rate of 8 percent and a turnover rate of 71 percent (Department of Labor, 1969).

Licensed Practical Nurse

The basic qualifications for a licensed practical nurse include: graduation from a national or state approved school of practical nursing and current licensing by the state in which the practice is done. The practice of practical nursing has been defined as follows:

> . . . means the performance for compensation of selected acts in the care of the ill, injured or infirm under the direction of a registered professional nurse or a licensed physician or a licensed dentist; and not requiring the specialized skill, judgement and knowledge required in professional nursing. (HEW, 1970, p. 36)

Some of the functions that may be performed by a licensed practical nurse working under the supervision of a registered nurse and/or licensed physician include the following:

1. Assists with direct patient care;
2. Administers selected medicines and treatments;
3. Assists physicians and professional nurses in care of patients during examinations, treatments, etc.;
4. Provides preparation and after care of equipment used in nursing procedures and/or treatments;
5. Practices principles of asepsis during administration of sterile procedures and/or handling sterile equipment;
6. Employs good principles of nursing practice. (HEW, 1970, p. 36)

In addition to performing their general nursing functions, the majority of licensed practical nurses practicing in nursing homes have auxiliary personnel (aides or orderlies) working under their supervision. Therefore, they may take on the additional responsibilities of assisting the professional nurse in evaluating the work performance of auxiliary personnel and participating in inservice education programs. It is very important that the practical nurse help keep lines of communication open and coordinate the activities of her unit with the others in the nursing home.

She must employ sound supervisory techniques and have a general knowledge and understanding of nursing home rules and policies.

There were some 40,000 licensed practical nurses employed in nursing homes in the United States in 1970. Twenty-five percent were licensed by waiver (that is, by past experience rather than on the basis of formal education) (Subcommittee on Long-Term Care, 1974, p. 24). According to a recent United States Department of Labor wage survey covering nursing homes, in 20 selected cities, the two highest hourly wage averages for full-time licensed practical nurses were $4.70 in New York and $3.77 in the Los Angeles area. The lowest average for full-time licensed practical nurses—$2.80—was recorded in Denver and Atlanta (Department of Labor, 1975, p. 4). The survey showed a vacancy rate of 4 percent and a turnover rate of 35 percent (Department of Labor, 1969, pp. 10-11).

Auxiliary Personnel: Aide or Orderly

The responsibility of an aide or orderly is not to offer nursing care, but rather to carry out simple, uncomplicated procedures that are intended to assist the nurse in providing patient care. The position of auxiliary personnel has been defined as follows:

> Auxiliary personnel are persons employed and trained to perform tasks that involve special services for patients, delegated by the Registered Nurse or Licensed Practical Nurse, which are supportive and complementary to nursing practice. (HEW, 1970, p. 37)

In this respect, nursing aides can provide valuable service to nursing homes and hospitals.

The work of the nurse's aide should be controlled through proper planning, firm policies, on-the-job training, and a clearly defined job function analysis. Such controls are essential to a well-operated institution.

The American Nurses' Association has provided a list of functions that it regards as being within the scope of nursing aide responsibility. These functions are as follows:

1. Answer patient's signal, provide necessary assistance in conformance with delegated task and notify the appropriate nurse when the situation so indicates.
2. Assist with the admissions, transfer, and discharge of patients.
3. Assist with dressing and undressing patients.
4. Assist with the patient's bath.
5. Assist with measuring fluid intake and output and record it on the appropriate forms.
6. Assist with feeding the patients.
7. Assist with the collection of urine, stool, and sputum specimens.
8. Assist with the weighing of patients.
9. Assist with the making of patients' beds.
10. Assist with the application and removal of such protective devices as side rails, foot boards, and bed cradles. (McQuillan, 1969, p. 155)

These functions should more than justify the

employment of nursing aides without expecting them to become increasingly involved with nursing procedures. In fact, when they are concerned with any area of direct patient care, they should function under the direct supervision of a qualified nurse.

Unlicensed personnel comprise 43 percent of the staff, and most are women. The 215,000 aides and orderlies received an average of $1.70 an hour in 1970 for their work. Later wage surveys put their hourly wage rate at approximately $2.40 per hour or minimum wage. They had a job vacancy rate of 4 percent and a turnover rate of 75 percent per year (Subcommittee on Long-Term Care, 1974, p. 24).

Dietary

The dietary department is headed by a food service supervisor and under her supervision will be a number of cooks and kitchen helpers, depending on the size of the nursing home. If the food service supervisor is not a licensed dietitian, the nursing home usually employs one on a consultant fee basis.

Regardless of who heads the dietary department in a nursing home, a food service supervisor or dietitian, the objective for this department must be clear. The primary objectives are to promote good nutrition among patients, to

increase the emotional well-being of patients, and to meet patients' needs with respect to therapeutic diets.

The nursing home dietary service must measure up to its responsibility to make meal service a vital link in the chain of events designed to make life happier for all patients. The major factors that contribute to the patients' contentment are:

1. Providing variety in the menu.
2. Providing well-balanced nutritional meals.
3. Maintaining flexibility in the menu to allow for individual preferences.
4. Providing for the special diets of patients.
5. Providing for the inputs of patients into the menu.
6. Serving foods that are properly cooked, neither over-cooked nor under-cooked.
7. Serving foods at the expected temperature—hot dishes should be served hot and cold dishes should be served cold.
8. Attractively arranging trays and tables with that added touch which shows that somebody cares.
9. Providing a cheerful setting which promotes rehabilitation.

In order that the nursing home may operate effectively, it is very important that the dietary department coordinate its activities with the nursing department and vice-versa. In addition, it is important that trays and meals be served at the appointed times. On the other hand, it is very important that patients are prepared to receive meals. The interface between nursing and dietary services can be one of the major centers of conflict in a nursing home.

Housekeeping

It has been said that we all are affected by the environment in which we work and live. The way in which the environment of a nursing home affects the patients and personnel depends in large measure upon the housekeeping staff.

The housekeeping department is intimately involved with management in developing a public relations image. It is also directly concerned with providing comfortable and satisfying surroundings for patients. It has a definite responsibility to cooperate with the nursing and dietary departments in promoting sanitary conditions that prevent the spread of infection. This department must also be concerned with making the premises safe for sick and elderly patients.

In light of these responsibilities, it must be agreed that it can be a costly mistake to underestimate the importance of this department and the need for management skills on the part of its director.

The executive housekeeper has the responsibility for outlining a job function analysis for each job classification in her department. The job function analysis should include the duties of the housekeeper and her assistants. She should not only make it clear to each worker precisely what

his duties are, but on the basis of a time study should also have a realistic idea of how much work each maid and each porter can accomplish in a day.

After considering the factual information she has accumulated, the director of housekeeping can make her staffing needs known to the administrator. She has the responsibility not only for approving job openings, but also for knowing what duties are carried on under each job classification on all levels of activity.

In most instances the scope of the executive housekeeper's responsibility is determined to some extent by administrative policy. For example, it is the administrator who determines whether the housekeeper will be involved with purchasing, decorating, and supervising repairs. Whether the executive housekeeper has purchasing responsibility or presents requisitions for supplies to administration, she is concerned with cost factors and should operate within a budget. She must also be concerned with the effectiveness of the equipment and supplies utilized by her department. She is an expert in this area and as such must be informed regarding every aspect of housekeeping service.

The reason the housekeeping function is so vital to the success of the nursing home is because it is the most

visible. The first thing visitors will notice as they walk through the front door is the presence of odors or unkept floors.

In-Service Education

In-service education is widely regarded as necessary for the development of satisfactory work standards and attitudes on the part of nonprofessional workers in nursing homes and hospitals. This program takes the form of on-the-job training, with formal instructions, demonstrations, practice, and evaluation.

The in-service education program should include the following:

1. Philosophy and aims of the institution.
2. Particular role and function of the new employee.
3. Policies, procedures and standards of practice in the facility.
4. Employee's role in relation to other personnel in the nursing department as well as other departments in the facility.
5. Means by which the employee's performance will be evaluated.
6. Conditions of employment. (HEW, 1968, p. 4)

Another aspect of in-service education is on-the-job development. The objective of this type of program is to offer assistance to people in growing on the job and in keeping abreast of changes in their own field of practice.

In considering the significance of an in-service

education program, it is well to remember that the attitudes and the services that a nursing home offers can be expressed only through its staff. Thus the progressive home must be involved with the training of auxiliary workers and non-professional staff members. It must be alert to the importance of keeping the professional staff informed and up-to-date with respect to their specific areas of practice. Through such activities the nursing home generates enthusiasm and wholesome concepts that are reflected in the total quality of service offered to its patients.

Summary

The nursing home organization is made up of three primary departments—nursing, dietary, and housekeeping. Nursing not only provides basic care but also maintains constant vigilance against emergency situations and serves as a channel of communication between the physician and the patient. Nursing can be considered the primary service of a nursing home, since most patients are admitted because of their need for this service. The nursing department is supervised by a director of nursing; under her are registered nurses, licensed practical nurses, and the aides and orderlies.

The dietary department is headed by a food service

supervisor and under her supervision will be a number of cooks and kitchen helpers. Its primary objectives are to promote good nutrition among patients, to increase the emotional well-being of patients, and to meet patients' needs with respect to therapeutic diets.

Housekeeping is directly concerned with providing comfortable and satisfying surroundings for patients. It has a definite responsibility to work cooperatively with the nursing and dietary departments in promoting sanitary conditions that prevent the spread of infection. Housekeeping is supervised by an executive housekeeper and there are several maids and porters under her supervision.

In addition to the three primary departments, there are several small departments that may be considered supportive in nature. These include maintenance, office staff, activities director, and rehabilitation. Their makeup and presence will vary depending on the nursing home. All of the major departments and supportive functions have their own head or director, each of whom reports directly to the administrator, who is the chief executive officer in the nursing home organization. It is the role of the administrator to create an environment in which professionals can practice their professions most adequately and promote

teamwork among the staff. The administrator is ultimately responsible for the nursing home's performance in all areas.

CHAPTER III

ORGANIZATIONAL EFFECTIVENESS

Organizational Effectiveness: Review of the Literature

Organizations occupy a crucial place in modern society. Their importance in today's society is nicely captured by Amitai Etzioni:

> Our society is an organizational society. We are born in organizations, educated by organizations, and most of us spend much of our leisure time paying, playing, and praying in organizations. Most of us will die in an organization, and when the time comes for burial, the largest organization of all—the state—must grant official permission. (Etzioni, 1964, p. 10)

Since organizations occupy such a predominant place in the lives of modern men, study of their effectiveness has emerged as an important area of research. In recent times, a variety of organizations ranging from labor unions to mental hospitals have been analyzed to determine their effectiveness.

But what is an effective organization? What criteria are appropriate for assessing organizational effectiveness? These questions plague both administrators and scholars. The literature abounds with suggested criteria of organizational effectiveness. Katz and Kahn noted:

> Most of what has been written on the meaning of these criteria and on their interrelatedness . . . is judgemental and open to question. What is worse, it is filled with advice that seems sagacious but is tautological and contradictory. (Katz & Kahn, 1966, p. 149)

The administrator or researcher seeking measures of organizational effectiveness faces a bewildering array of potentially relevant criteria. A bibliography concerning evaluation of organizational performance published in 1959 lists over 370 references; the relevant literature probably has tripled since that date (Wasserman, 1959).

During the past few years, the topic of organizational effectiveness has received considerable attention from social scientists. This topic has been the subject of several D.B.A. and Ph.D. dissertations (Yuchtman, 1966; Ghorpade, 1968; Kashefi-Zibragh, 1970; Beukema, 1971; and Osborn, 1971), books (Price, 1968; Ghorpade, 1971; and Mott, 1972), and numerous articles and monographs by scholars from a variety of social science disciplines. (For reviews on major writings pertaining to organizational effectiveness,

see Katz and Kahn, 1966, pp. 149-170; Price, 1968; and Ghorpade, 1970.) Additionally, organizational effectiveness has been a focus of investigation of the staffs of three bureaus of research and was the subject of two sessions of the Executive Study Conference published in book form by the Educational Testing Service in 1969. (On-going research on organizational effectiveness is being sponsored by the Foundation for Research on Human Behavior, University of Michigan; Bureau of Business Research, Ohio State University; and Industrial Relations Center, University of Minnesota.)

The recent spurt of writings and research pertaining to organizational effectiveness has not as yet resulted in the formulation of a universally acceptable scheme or methodology for the assessment of effectiveness of organizations. In fact, the concept of organizational effectiveness is still surrounded by a great deal of controversy and debate. Organization theorists have advocated a perplexing variety of conceptual schemes, analytical points of departure, and models for approaching the study of effectiveness (Ghorpade, 1971, pp. 1-2). Furthermore, the literature abounds with discussions about a multitude of criteria of effectiveness ranging from "hard" productivity and efficiency measures to "soft" behavioral factors such as morale, organizational

flexibility, and internal strain (Katz & Kahn, 1966, p. 149; Ghorpade, 1970; Seashore, 1965).

Many factors account for this state of affairs. A prime factor is the perplexing diversity of organizational forms in modern society. Organizations differ in regard to their societal functions; they vary in terms of size, shape, and structure; and most certainly, they differ in relation to the institutional interrelationships and circumstances in which they operate. In the face of such diversity, criteria that fit some organizations fall short when applied to others. Additionally, differences in interests and values of researchers have contributed to the existing confusion. Because of their importance in modern society, organizations have attracted the attention of diverse social groups such as businessmen, union leaders, and governmental officials. As a result, studies on organizational effectiveness reflect the differences in the values, interests, and concerns of these groups (Price, 1968, pp. 5-7).

The Problem of Criteria

A considerable amount has been written about criteria of organizational effectiveness. The earliest statements on criteria of organizational effectiveness were provided by Caplow (1953), Likert (1958), and Bass (1952). Much

has happened in the field since those statements were published. Concerted attention to the problem of criteria development has been given by scholars at the Universities of Michigan, Minnesota, and Ohio State. Some of the major publications from Michigan are: Bowers and Seashore (1966), Georgopoulos et al. (1960), Georgopoulos and Tannenbaum (1957), and Seashore (1960, 1964, 1965, 1967, 1968). Some of the major publications from the University of Minnesota are Dimick, Weitzel, and Mahoney (1967) and Mahoney (1967a). These publications deal largely with criteria derived from factor analysis of responses to structured questionnaires given by executives participating in the executive development programs at the University of Minnesota. Publications from Ohio State include Peronsky et al. (1965) and Stogdill (1965). In spite of the diversity of writings on this subject, however, theoretical statements on criteria found in the literature fall roughly into two types: "goalistic" and "systemic" (Ghorpade, 1971, p. 85).

Goalistic Criteria

Goalistic criteria are derived from some conceptualizations of goals that the organization is expected to attain. These goals associated with organizational effectiveness have generally been of two kinds: those dealing with some

index of organizational performance, such as profit, cost. rates of productivity, individual output, etc.,[1] and those associated with human resources, such as morale, motivation, mental health, job commitment, cohesiveness, attitudes toward employers or company, etc. Authors suggesting the measurement of organizational performance or effectiveness in terms of the utilization of human assets include: Argyris (1957), Bennis (1966), Etzioni (1960), Georgopoulos and Tannenbaum (1957), Katz (1960), Likert (1961), Georgopoulos, Mahoney, and Jones (1957), McGregor (1960), Selznick (1948), and many others. For a period of time it was believed that these two goals of organizational performance and employee satisfaction were highly related and that "happy" workers were more productive workers. However, this theory was laid to rest by several studies in the late 1950s and early 1960s. (For example, see Brayfield & Crockett, 1955; Fleishman, Harris, & Burtt, 1955; Lopez, 1962; Mann, Indik, & Vroom, 1963; and Sirota, 1958).

Price (1968) surveyed 50 different published studies

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[1]Almost every study evaluating organizational performance since the time of Fredrick Taylor through the Hawthorne Experiments to the present-day investigations in organizational development have employed some "hard core" criteria of organizational effectiveness. The most often used measures are profits, productivity, and scrappage.

of organizational behavior that included some consideration of organizational effectiveness. Price's conceptualization of effectiveness was defined as "the degree of goal achievement." Through a careful comparative analysis of the 50 studies, Price sought to explain the determinants of effective goal achievement. He identified what he termed "intervening variables" that directly affect the organization's ability to achieve its goal and thus become effective. Price identified the following intervening variables: (1) productivity, (2) conformity, (3) morale, (4) adaptiveness, and (5) institutionalization.

Statements of goals may also be derived from conceptualizations of societal missions or functions with which the organization is identified in a social context. Organizational functions in this context refer to contributions made by the organization in the form of tangible or intangible outputs to the society in which it is located, and/or to its members, customers, and other groups related to it in some manner (Ghorpade, 1971, p. 85). Bass (1952), for example, suggests that an organization be evaluated in terms of its worth to the individual worker and the value of the worker and the organization to society. Similar criteria suggested by Davis (1940) include broad social values,

economic values, and personal values. The emphasis is in a reverse direction for Katz and Kahn (1966), who describe organizational effectiveness as referring to the maximization of return to the organization by all means—technological, political, market control, personnel policies, federal subsidies, etc.

Thus, goals can take the form of usable outputs that are consumed as inputs by some other system. Such goals may be derived from notions about characteristics, roles, or missions of various types of organization, from theoretical, ethical, or value considerations, or a combination of all these. (For additional discussions of the use of various types of organizational goals as criteria, see Thompson & McEwen, 1958, and Perrow, 1961.)

Systemic Criteria

Systemic criteria of organizational effectiveness are derived from conceptualizations of "need" experienced by the organization as a living social system. In this context, needs refer to the requirements that organizations have to meet in order to survive and/or to work effectively within a given situation. The effectiveness of organizations is to be studied in terms of their ability to meet the requirements arising from their situations. Conceptualiza-

tion of organizational needs, and the resultant criteria of effectiveness, take many forms.

Georgopoulos and Tannenbaum (1957) in an early model viewed effectiveness within a system's framework and concluded that the idea of effectiveness could best be understood in terms of productivity, flexibility, and the absence of intraorganizational strain. They argued that these criteria were not only "system-relevant" but also applicable across a variety of organizations.

Yuchtman and Seashore (1967) offered a systems resource approach to organizational effectiveness that proposed that the relative success attained by a particular organization in retaining a favorable bargaining position with regard to acquiring scarce resources should be taken as the expression of its overall effectiveness. In conceptualizing the organization as a social system functioning as a subsystem of a larger system or society as a whole, a study of organizational effectiveness has to include an analysis of the environmental conditions and of the organization's orientation to them.

The relationship between the organization and the environment has been investigated by several researchers. For example, Bennis (1964) claimed that bureaucracy is least

likely to cope and survive if unable to adapt to a rapidly changing, turbulent environment. Emery and Trist (1959) stressed that the primary task of managing an enterprise as a whole is to relate the total organizational system to its environment, and not just internal regulation. If the organization is to survive and grow, it must control its boundary conditions—the forms of exchange between the enterprise and the environment. Strother (1963) reversed the direction of this influence process by claiming that one must allow for control of the organization by an outside and changing environment. Pepinsky, Weick, and Riner (1965) observed that the organization must adapt to regulatory control by the environment.

Likert (1961, 1967) argued that effective organizations differ markedly from ineffective organizations along a number of structural dimensions. According to Likert, an effective organization is one that encourages supervisors to "focus their primary attention on endeavoring to build effective work groups with high performance goals" (1961, p. 7). Likert stated that System 1 (Classical Design) organizations are ineffective because they no longer reflect the changing character of the environments within which the organization must operate. Classical design organizations

tend toward status quoism and conservation. The System 4 organization is more adaptable because its structural design encourages greater utilization of the human potential of its members.

Lawrence and Lorsch (1967, 1969) were primarily concerned with the effect of the external environment upon the internal organization. Their research probed the following question: "How are the environmental demands facing various organizations different and how do environmental demands relate to the internal functioning of effective organizations?" (1967, p. 167). On the basis of their studies they reached the conclusion that the more effective organizations were those that were able to recognize environmental conditions and adopt the appropriate organizational designs for their departments and the appropriate methods to integrate their departments.

In a recent study, Osborne and Hunt (1974) investigated the concept of environmental complexity in general and complexity in the task environment of the organization in particular. Environmental complexity was viewed as the interaction between environmental risk, dependency, and interorganizational relationships. Their results showed that neither complexity nor risk is associated with

organizational effectiveness. In addition, their results showed that both task dependency and interorganizational interaction alone and in combination are positively and significantly correlated with effectiveness.

Several investigators viewed effectiveness as a state that organizations strive to attain. Under this conceptualization, once an organization acquires certain defining characteristics (for example, high productivity, low turnover, etc.) it becomes effective.

Mott defined organizational effectiveness as "the ability of an organization to mobilize its centers of power for action—production and adaptation" (1972, p. 17). According to Mott, effective organizations are those that produce more, have a higher quality of output, and adapt more effectively to environmental and internal problems than do other similar organizations.

Employing the methodology developed by Mott, Cohen and Colling (1974) found, in a study of governmental field officers, that internal organization characteristics are more important causes of effectiveness than environmental inputs or characteristics. Their study showed that organizational effectiveness was related to greater staff participation in decision making, an environment in which teamwork

is practiced, a climate that supports and fosters creativity, high satisfaction with work and co-workers, and an administration characterized by consistency and fairness. In addition, the effective field office exhibits adaptability and is able to anticipate stressful problems.

The previous discussion has presented an overview cf two major types of criteria of organizational effectiveness found in the literature. One would expect that those who rely upon the rational model would advocate the use of goals as criteria of effectiveness, while those who utilize the natural or systems model would advocate "systemic" criteria of organizational effectiveness. In addition, Etzioni (1964, p. 8), one of the most ardent advocates of the social systems model, links effectiveness with goal attainment. This scholar's position is consistent with the system logic of the structural-functional theorists. As a point of departure, the organization is viewed as a subsystem of a larger social system or society. Organizational goals are thus synonymous with the primary societal missions or functions performed by the organization that give it its legitimacy and uniqueness. Viewed from the external frame of reference, organizational goals emerge as outputs provided by the organization for the system that contains it.

Judgments of organizational work or effectiveness are to be made in terms of the quality and relevance of the organization's output toward assuring the survival, stability, and growth of some other system, usually the larger system or society. Viewed from the organizational frame of reference, organizational goals or outputs emerge as one of the functional requirements that the organization has to meet in order to assure its own survival, stability, and growth. Thus what appears at first glance as an overt contradiction is really a logical extension of the underlying model.

Friedlander and Pickel (1968) suggested that effectiveness measures must take into account the profitability of the organization, the degree to which it satisfies its members, and the degree to which it is of value to the larger society of which it is a part.

Gibson, Ivencevich, and Donnelly (1973) introduced the concept of systems theory as providing the basis for criteria of organizational effectiveness. In the context of systems theory, the organization is viewed as one element of a number of elements that interact interdependently. The organization is viewed as an input/output process. The organization takes resources (its inputs) from the larger system (its environment), processes these resources, and

returns them in changed form (its output).

Their systems model emphasized two important considerations: (1) the ultimate survival of the organization depends upon its ability to adapt to the demands of its environment and (2) in meeting these demands, the total cycle of input-process-output must be the focus of managerial attention. From these two points they derived two corollaries: (1) organizational effectiveness is a global concept that includes a number of component concepts, and (2) the managerial task is to maintain the optimal balance among these components (Gibson et al., 1973, p. 37).

Management Value and Organizational Effectiveness

The actions of management based on its perceptions of situational and structural constraints will have a great deal to do with the organization's chances for success. For example, Chandler's (1962) longitudinal study of large-scale American business enterprises suggested that organizational performance may be strongly influenced by the strategic choices made by top executives. Child (1972) pointed out that the most influential models of organization seem to ignore the potential impact of the "agency of choice" by the organization's top decision makers. He felt that this

strategic choice influenced decisions regarding organizational structures, the manipulation of environmental features, and the selection of relevant performance standards (or goals).

Likert suggested that an important variable determining the course of developments in a business organization was "its management's philosophy, policy, and values with respect to employees, customers, the public, unions, suppliers, and others" (1967, p. 212). Gibson et al. (1973) maintained that organizational effectiveness was directly related to management's ability to maintain a balance among the input/output components of the organizational system.

Negandhi and Prasad (1971) provided one of the earliest attempts to examine empirically the relationship between the public values of an organization's executives and its structure and performance. They defined the firm's "management philosophy" as the implied and expressed attitudes of the managers toward consumers, employees, stockholders, suppliers, distributors, government, and community (1971, p. 152).

Negandhi and Prasad found that their management philosophy variable was very strongly associated with a number of organizational variables. For example, the more

positive or "progressive" their management philosophies, the more decentralized and more effective (in both financial and behavioral terms) the firms appeared to be. Negandhi and Prasad interpreted their finding as suggesting that a progressive management attitude toward its important public or "task environmental agents" is more likely to result in high organizational effectiveness than is a nonprogressive attitude.

Reiman (1975) in an analysis of manufacturing firm data demonstrated that organizational "competence," defined as "executive ratings of organizational performance and executive turnover," was not strongly related to situational variables like organizational size, structure, and technology. Instead, "competence" or effectiveness was related primarily to management's values regarding the firm's publics, such as customers, suppliers, employees, and government.

Mahoney (1967) employed managerial judgments of organizational effectiveness in his model to identify the basic dimensions viewed by managers in judging subordinate organizations and the relative weights assigned them. On the basis of his findings, Mahoney suggested that evaluative research into managerial practices employ several criteria,

since no single criterion can be identified as appropriate for all situations. He recommended that, in general, criteria of efficient performance, mutual support, personnel utilization, planning performance, initiation, reliability, and development should adequately cover most situations. Managerial practices can be evaluated against all of these criteria and the researcher may select the findings relevant to the criteria he wishes to employ.

It is clear from this brief review that the issue of organizational effectiveness is indeed a complex one. While many of the models discussed have contributed significantly toward a clearer understanding of the basic issues involved, much remains to be done to further develop the concept of organizational effectiveness and its application.

The Criteria of Organizational Effectiveness

Mahoney and Weitzel (1969) in their study emphasizing overall organizational effectiveness suggested that different types of organizations may have different requirements for effectiveness. Nowhere is this proposition more apparent than when attempting to determine organizational effectiveness criteria for a health care institution. The general characteristic of these organizations is that they

provide a service to clients or patients. There is no physically tangible end result variable, unless one wants to consider profit. There is no question that profit would be an inappropriate variable upon which solely to judge organizational effectiveness.

In determining the criteria to be employed in the research model, the works of the following authors were given careful consideration: Georgopoulos and Tannenbaum (1957), Georgopoulos and Mann (1963), Mott (1960, 1972), Price (1968), and Gibson et al. (1973). One of the major tasks facing the researcher is the familiar problem faced by organization theory in general, that of reconciling the rationalistic and systemic properties of organizations. Over-preoccupation with either rationalistic or systemic variables can distort and reduce the usefulness of a study.

One of the best-known criteria selection methods employed to reconcile these two approaches was developed by Georgopoulos and Tannenbaum (1957). They used productivity, flexibility, and internal organization strain as criteria of effectiveness in attempting to combine tangible outputs with general efficiency requirements. Georgopoulos and Tannenbaum claimed that these criteria related to the means-ends dimensions of organizations and could be applied to

most organizations.

In formuating the list of criteria for a research project the list can be as long or as short as one wishes to make it. The longer list would have the advantage of being more specific, yet the more criteria the more difficult it is to understand how they interrelate. A shorter list facilitates understanding of the relationships but has the disadvantage of being less specific. In addition, it is essential to recognize at the outset that criteria that are acceptable from one frame of reference may not be valid from another vantage point. The choice of any criterion or set of criteria needs to reflect the purpose guiding the inquiry.

After giving careful consideration to specific characteristics of the nursing home organization, what methods might be used to evaluate its performance, and the works of the previously mentioned authors, the following criteria were selected.

Subjective criteria: These measures will be based upon employee perceptions relating to three factors: productivity, adaptability, and flexibility.

Job attitudes: These will be measured by employees' overall score on the Job Descriptive Index and turnover.

Profitability: This factor will be measured by gross operating profit divided by total patient days.

Quality of patient care: This will be evaluated by three items: quality of nursing care, quality of overall care, and a comparable measure of patient care. (See Chapter IV.)

These are the criteria by which nursing home effectiveness will be measured. They were selected to reflect the "goalistic" or rational approach and the "systemic" or social systems approach to organizational analysis. The subjective criteria relate to the social systems approach; the profitability data, quality of patient care, and job attitudes relate to the goalistic approach.

The quality of patient care rendered by a nursing home could be considered as its primary objective. Several authors have used the quality of care as the sole criterion of organizational effectiveness in a health care institution. (See Georgopoulos & Mann, 1962, and Mott, 1960.) It is for this reason that it is listed with the criteria measures. However, in developing the research model for this study the quality of care was set up as a separate variable. This was done in order to focus attention on the organizational characteristics of the nursing home, which are directly related to the quality of care it administers. The concept and measurement of the quality of care will be

covered fully in Chapter IV.

Subjective Criteria

The development of the subjective approach to the measurement of organizational effectiveness was pioneered by Georgopoulos and Mann (1962) in a study of 10 community general hospitals in Michigan. Georgopoulos and Mann designed and attempted to validate subjective measures of the quality of patient care, which is a criterion similar to that of productivity. Their strategy was to obtain clinical judgments from professionals—physicians and nurses—and compare then with various hard-criteria measures. Their findings indicated a significant relationship between some hard-core criteria and the rankings of professionals.

This research project employs a substantial amount of the methodology developed by Paul E. Mott. Mott wrote his dissertation under Mann and in a later study (1972) developed questionnaires which, when completed by members of the organization, would enable him to measure organizational effectiveness. He proposed that organizational effectiveness consisted of three factors: (1) productivity, (2) adaptability, and (3) flexibility. His hypothesis was quite simple; it stated that overall effectiveness was directly related to these three factors.

Productivity

Productivity was measured by averaging the responses of organizational members to two questionnaire items. The items ask each respondent to evaluate (1) the quantity, and (2) the efficiency of work done in the organization. (See Appendix B.) This approach to the measure of productivity is quite different from those measures that use "hard" productivity data such as cost and output data. Mott pointed out that such so-called "hard" data can have serious flaws. First, although measures of productivity can reflect the past effectiveness of an organization in adapting to problems and coping with emergencies, they tell us nothing about its viability now or in the future. Second, raw productivity measures may exclude consideration of quality and production efficiency. Even unit cost measures are inadequate because an organization with lower unit cost may actually be devoting inadequate resources to activities that might enhance future effectiveness (Mott, 1972, p. 21).

Warren G. Bennis criticized the use of hard-core or output data in the following statement:

> The present ways of thinking about and measuring organizational effectiveness are seriously inadequate and often misleading. These criteria are insensitive to the important needs of the organization and out of joint with the merging view of contemporary organization that is held by many organizational theorists and practi-

> tioners. The present techniques of evaluation provide static indicators of certain output characteristics (i.e., performance and satisfaction) without illuminating the process by which the organization searches for, adapts to, and solves its changing goals. However, it is these dynamic processes of problem-solving that provide the critical dimensions of organizational health, and without knowledge of them output measures are woefully inadequate. (Bennis, 1962, p. 271)

It is evident that the subjective or perceptual approach to the measurement of productivity would be extremely useful in the analysis and management of organizations such as hospitals, nursing homes, and universities. These organizations, unlike some business firms, do not have clear-cut verifiable outputs that lend themselves to objective measurement.

The validity of Mott's measure is open to some question, that is, it may be that perceptions of productivity do not correlate with more typically used hard-core productivity data. However, his studies of the validity of these measures were reassuring. The subjective assessment of work units by the individuals who participated in them were supported by the assessments from top managers responsible for all the units studied in a particular organization and from people in other units whose work made them familiar with that of the units being assessed (Mott, 1972, pp. 187-205).

Adaptability

One of the most popular books of the 1970s has been Alvin Toffler's Future Shock (1970). The wide appeal of this book rests on its dramatization of change, largely those technological changes that appear to be unhinging our institutions and our psyches. Toffler's hypothesis is that change has come upon us so quickly that we are personally and organizationally unable to adapt to it or cope with it. His point is that organizations will no longer be predicated on permanence. Instead, they will be temporary structures that will come and go depending on the exigencies of the environment (Toffler, 1970, pp. 112-135). One of the main challenges confronting today's organization, whether it is a nursing home or a business enterprise, is that of responding to changing conditions and adapting to external stress. Many authors in the field of organizational behavior reflect this need and interest. (See Bennis, 1966; Shull & McCammon, 1970; Schine, 1965; Price, 1968; Mott, 1960, 1972; Duncan, 1973; Gibson et al., 1973; and Webb, 1974.)

In a 1961 monograph on managing major change in organizations, Mann and Neff stated the issue this way:

> Among the most conspicuous values in American culture of the twentieth century are progress, efficiency, science and rationality, achievement and success.

> These values have helped to produce a highly dynamic society—a society in which the predominant characteristic is change. (Mann & Neff, 1961, p. 1)

Kahn, Mann, and Seashore, when discussing a criterion variable, "the ability of the organization to change appropriately in a response to some objective requirement for change," remarked:

> Although we are convinced of the theoretical importance of this criterion, which we have called organizational flexibility, we have thus far been unable to solve the operational problems involved in its use. (Kahn, Mann, & Seashore, 1956, p. 4)

Mott offered one possible solution to the methodological problems involved in the measurement of organizational adaptability and flexibility.

Adaptability as a measure of effectiveness refers to the extent to which the organization can and does respond to changes either internally or externally induced. If it is highly adaptive, it can respond quickly to changing situations. This criterion refers to the management's ability to sense changes in the environment as well as within the organization itself.

Management must be involved in the adaptive processes because its members are often the only ones with adequate authority and resources to make the decisions or changes required. Also, because of their position they often use a

broader range of criteria for problem solving than do lower-level personnel. Ineffectiveness in achieving productivity, flexibility, and morale can signal the need to adapt managerial practices and policies, or the environments may demand different outputs or provide different inputs, thus necessitating change. To the extent that the organization cannot or does not adapt, its survival is in jeopardy.

In nursing homes, for example, persons in positions of formal authority may discover that inadequate use is being made of the skills of licensed practical nurses. In view of the increasing shortage of registered nurses, the proper use of licensed practical nurses assumes added importance. It is important, therefore, that a new policy that adds new functions to the role of the licensed practical nurse be the object of acceptance and adjustment not only by the practical nurses but also other personnel with whom they work.

The usual measures of adaptiveness for research purposes are provided by response to questionnaires. Unlike the short-run measures of efficiency, there are few, if any, specific and concrete measures of adaptiveness. Adaptability will be measured by asking the respondents three questions, each of which deals with the processes of anticipating

and solving problems. Included in the three questions are two that reflect how quickly people accept new methods and procedures and what proportion of the people accept the change. (See Appendix B.)

Flexibility

Organizations are subjected to a wide variety of stimuli from the environment. Some of these stimuli are severe enough or unpredictable enough to test the organization's ability to cope with them successfully. The ability of organizations to handle these stimuli is called organizational flexibility.

The concept of flexibility refers to an organization's ability to cope with temporarily unpredictable stimuli from the environment that are sufficiently severe as to require some role modification to be handled successfully. Flexibility is conceptually different from adaptability in that organizational changes that result from meeting emergencies are usually temporary; usually the organization returns to its pre-emergency structure. Adaptive changes are likely to be more permanent (Mott, 1972, p. 20).

Flexibility is important to the organization for two reasons. The first reason is that it is an integral part of the organizational objectives to handle a certain amount of

these problems successfully. For example, nursing home personnel may face a large increase in their work load because of bad weather or ice-covered roads that make it impossible for some personnel to come in. In this case, it is necessary that the nursing home display sufficient flexibility to provide for the essential needs of its residents. A second reason why flexibility is important to the organization is survival. Catastrophes such as wars and depressions can destroy organizations. Organizational members must devise ways of coping with these severe problems if they are to survive.

Flexibility will be measured by a question that asked the respondents to evaluate how well the people in the organization adjust to emergency situations, such as fire, heart attack, or work overloads. This concept has appeared in numerous theories and research. (See Lawrence, 1958; Mott, 1961, 1972; Georgopoulos & Tannenbaum, 1957; Schine, 1965.)

Job Attitude Measures

The conceptualization of the organization as a social system requires that some consideration be given to the benefits received by its participants as well as its customers and clients. Morale, satisfaction, and job

attitudes are similar terms that refer to the extent to which the organization satisfies the needs of employees. I have elected to use job attitude measures as the label for this criterion and its measures include job satisfaction and turnover.

One problem with using job attitudes as a criterion measure in evaluating organizational effectiveness is the precise definition of the concepts of "morale," "job satisfaction," or "job attitudes."

The three terms "morale," "job satisfaction," and "job attitudes" cause confusion because many authors use them interchangeably while others draw significant distinctions among them. Victor H. Vroom stated that "job satisfaction" and "job attitudes" are used interchangeably since both refer to the affective orientation of the individual toward the work role he is occupying. Positive attitudes are equated with satisfaction and negative attitudes with dissatisfaction. Introducing the third term, Vroom said that "morale" has been given many meanings, some of which are closely related to the other two concepts (1964, pp. 95-105). David Sirota (1964), in his case study of IBM, operationalized the concept of "morale" by restricting it to the items measuring "satisfaction" with the work environment.

Michael Beer defined "job satisfaction" as "The attitude of workers toward the company, their job, their fellow workers and other psychological objects in the work environment." "Morale" is defined by Beer as a group phenomenon similar to "esprit de corps" or a "group's enthusiasm in the pursuit of a common goal" (Beer, 1964, p. 38).

But the problem of precise definition is even more basic. Defining the single term "job satisfaction" has itself created a problem. Taking parts of definitions from Herzberg, Maslow, and Vroom, two researchers defined "job satisfaction" as "the favorable viewpoint of the worker toward the work role he presently occupies" (Ivancevich & Donnelly, 1968, p. 173). Salinas approached the concept differently and described job satisfaction as the "evaluation of one's job and the employing company as contributing suitably to the attainment of one's personal objectives" (Salinas, 1964, p. 7). Both of these statements attempt to define job satisfaction, yet a single person may be at two very different levels of "satisfaction" as a result of the differences in approach. Future research will depend to a great extent on developing a commonly accepted system of definitions.

For the purpose of this investigation, "job

attitudes" will be defined as the degree to which an individual's motives or needs are gratified in relation to his job (Price, 1968, p. 7). If a high number of needs of a high number of individuals in the group are highly satisfied, job attitudes should be favorable. If a high number of needs of a high number of individuals remain unsatisfied, job attitudes will be unfavorable. Satisfaction will be defined as "a criterion of effectiveness which refers to the organization's ability to gratify needs of its participants" (Gibson et al., 1973, p. 453). In practical terms, satisfaction for the individual worker is usually made up of a mixture of monetary rewards, fulfillment of social needs, and a sense of purpose or accomplishment in his task. If one or more of these is negative, the others must be satisfied to a higher degree to balance out and keep the individual satisfied. However, satisfaction is more than a function of the amount of rewards received. The amount may satisfy one person but not another, and this is true not only of monetary rewards. Also, we know that individual personalities vary in respect to their various need strengths; some, for example, are more dependent on social need satisfaction (Maslow, 1943, 1954). In addition, we must remember that the important thing about rewards is the

perception of their fitness rather than their objective amount. Morale, then, is measurable in terms of attitudes and perceptions of the group members rather than in terms of the organizational policies.

Job satisfaction

Job satisfaction has been studied across and within all levels of the American industrial population. Hundreds of research articles have been published in the past 10 years alone.

The earliest research studies in job satisfaction were attempts to determine the general proportions of satisfied and dissatisfied workers. Then came more sophisticated attempts to correlate certain characteristics such as age (Hoppock, 1960; Saleh & Otis, 1964; Form & Geschwender, 1962), length of employment (Von Harrell, 1960; Ranchman & Kemp, 1964; Alderfer, 1967), performance (Porter & Lawler, 1968; Lawler, 1967; Schwab & Cummings, 1970), salary (Opsahl & Dunnette, 1966; Ivancevich & Donnelly, 1968; Peres, 1967), marital status (Ranchman & Kemp, 1964; Form & Geschwender, 1962), organizational size (Porter, 1963; Beer, 1964), job level (Porter & Mitchell, 1967; Gilmer, 1961), and sex (Hulin & Smith, 1964; Beer, 1964, p. 40; Ranchman & Kemp, 1964, pp. 2-3; Ivancevich & Donnelly, 1968, p. 174) with the

satisfied-dissatisfied dichotomy. Establishing a direction and explanation of causality in these correlations, and thus defining the determinants of job satisfaction, has become a major theme of the most recent research.

With this increase in explanation came a change in focus from factors "extrinsic" to the actual substance of the job, i.e., factors relating to the employee's work environment, to factors more intrinsically related to the job being done (Locke, 1965). The pioneering work in this area was done by Fredrick Herzberg and others beginning in 1957 (Herzberg, Mausner, Peterson, & Capwell, 1957; Herzberg, Mausner, & Snyderman, 1959; Herzberg, 1966). The theory they proposed has subsequently caused a sizable debate among researchers in the field of job satisfaction (see Ewen, Hulin, Smith, & Locke, 1966; Beling, Labovitz, & Kosmo, 1968; Hulin & Smith, 1967).

Another direction of the search for explanation focused on the individual—not just the generalized employee, but "each employee" with his own personality and range of expectations and needs. It was proposed that job satisfaction was a function of the extent to which a worker felt his "needs" were fulfilled by his job (Palola & Larson, 1965). Increasing evidence seems to point to the fact that

individual characteristics such as differences in personality, motivation, and expectation were operating to obscure many of the commonly generalized relationships between satisfaction and general group attitudes (Larsen & Owens, 1965; Glick, 1964).

Finally, there was a synthesis between the analysis of the nature of the work role and that of individual characteristics (Eran, 1966). Satisfaction analysis now required both variables, the man and the job, to be in a state of simultaneous and dynamic interaction. If we include job satisfaction as a criterion of organizational effectiveness, the usual sources of objective information are limited. Some sort of attitudinal survey must be undertaken. In the organizational setting, "attitudes" are thought to be tied to one's personality and motivation.

Social scientists from a variety of fields seem to agree that attitudes can be seen as "a predisposition to respond in a favorable or unfavorable way to objects, persons, concepts, or whatever" (Scott & Mitchell, 1972, p. 94). In other words, one's attitude is formed by the degree to which the attitude object is associated with other pleasant or unpleasant objects (see Rosenberg, 1967). We may like a supervisor because he is friendly, sincere, and honest, or

we might dislike our job because it is boring or tiring. In either case, the evaluations are formed according to the association between the attitude object and other related states, concepts, or objects. Most attitude measurement techniques reflect this idea in the way that they estimate one's attitude.

There are numerous attitudes related to job activity that have interested social scientists. However, the most frequently researched attitudes are those dealing with one's overall feelings toward his job. This attitude typically is called job satisfaction.

Job satisfaction is a multidimensional phenomenon in that a number of different components can be isolated. The nature of these components varies from study to study (see Porter & Lawler, 1968, and Brayfield & Rothe, 1951). However, the dimensions that are isolated most often are satisfaction with pay, company procedures, job-related activities, superiors, and peers. These dimensions have been studied using a wide variety of occupations.

The techniques for measuring job satisfaction are varied in nature, with each having its particular strengths and weaknesses. The choice of which method to use frequently depends upon the investigator's beliefs about

research.

In view of its extensive validation, the Job Descriptive Index (JDI) developed at Cornell University (see Smith, Kendall, & Hulin, 1969) will be used as the measure of job satisfaction. Vroom has called this measure "without doubt the most carefully constructed measure of job satisfaction in existence today" (1964, p. 100).

The JDI measures employee description in relation to five aspects of the job: the work itself, supervision, people, pay, and promotions, and we shall evaluate nursing home employees' satisfaction with each of the five aspects and overall job satisfaction.

The JDI is neither a projective nor a direction-of-perception type instrument; it approaches job satisfaction somewhat indirectly. The instrument asks the respondent to describe his job rather than his feelings about it. It seems quite evident from the numerous studies with the JDI that a person's perception of his job is highly colored by his satisfaction with it. The JDI is a face valid instrument that can be easily administered and scored in a short time (Robinson, Athanasion, & Head, 1969, p. 105). (See Appendix B.)

Employee Turnover

The concept of labor turnover signifies an employee decision to disengage from an organization's activities. Usually, in the management literature, labor turnover is defined as "the number of people hired per unit of time in order to maintain a working force at a given figure" (Negandhi & Prasad, 1971, p. 112). The most frequently used formula to measure labor turnover is: $T = R/F$, where T = turnover rate, R = replacements per unit time, and F = average work force (Nemmers & Jangen, 1959, p. 116).

This formula includes all kinds of labor turnover, i.e., workers leaving the organization because of death, sickness, or dismissal, or for the purpose of joining other organizations.

Of course, voluntary labor turnover is a function of many external as well as internal factors such as economic conditions and available opportunities; sociocultural make-up of employees; legal framework; and working conditions in the organization, including relative wages, opportunities for advancement, and the satisfaction derived from the work. Management might not be able to control the so-called external factors influencing turnover. However, the internal factors mentioned above are in the realm of managerial

influence.

One internal factor that is directly influenced by a manager is his or her leadership style. In considering the leadership dimensions established by the Ohio State University studies, Fleishman and Harris found that degree of "structure"[2] on the part of the foreman was only slightly related to turnover up to a point, but beyond this point turnover increased rapidly with increase in structure (Fleishman & Harris, 1962, p. 50). "Consideration"[3] was found to be inversely related to turnover, although, again, the turnover rate did not decrease with increased consideration above a certain degree of consideration (Fleishman & Harris, 1962, pp. 47-53).

Turnover is often used as a measure of job satisfaction (Herzberg et al., 1957, pp. 105-108). One would expect the relationship between job satisfaction and turnover to be negative, i.e., the greater the satisfaction, the lower the turnover. In general, the results support this hypothesis, with correlations from -.13 to -.42 reported in literature (Vroom, 1964, pp. 175-178). It appears that the strength of

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[2]Structure—"a leader's behavior typified by such acts as assigning task, criticizing deficient work, and establishing deadlines and procedures."

[3]See section on "Rational Trust," Chapter IV.

this relationship is partly dependent on the degree of full employment that exists. There are always going to be some people who leave because of dissatisfaction and some who leave because they have to (change of residence, family crisis, etc.). In times of full employment when numerous job opportunities are available we would expect the percentage of those who leave because of low satisfaction to be greater than when times are hard. Accordingly, the relationship between turnover and satisfaction should be stronger during full employment, and indeed this is what is reported in the literature (Vroom, 1964, p. 178).

Probably the most critical problem facing the administrator of the modern hospital is staffing. Modern hospitals have had a seemingly endemic problem of staffing and labor turnover. In a report entitled Instruments for Predicting Absenteeism and Turnover, Ferrell and Shaw described the turnover at the University of Alabama Hospitals and Clinics. They defined the turnover rate as ". . . the total number of terminations in a period divided by the total number of employees at the beginning of the period" (1967, p. 12). They found that the average annual turnover rates among full-time hospital employees from 1960 through 1965 ranged from 46 percent to 53 percent.

In another report by Grass, Yeracaries, and Grosof (1966) the authors utilized the formula: [(quitter)/(quitter + stable)][1.00]. In hospital "A" the rates for a period of one year were found to be 22 percent for the registered nurses, 31 percent for the licensed practical nurses, and 17 percent for the nurses' aides. In other hospitals, the rates for the registered nurses were 24 percent, 19 percent, and 46 percent; for the licensed practical nurses, 14 percent, 39 percent, and 12 percent; and for the nurses' aides, 14 percent, 33 percent, and 27 percent.

There is a wide range of rates, as was reported by Wright (1957) in his study of three hospitals in New York state. The annual turnover rate for full-time employees was found to be 90 percent.

The fact that nursing homes have similar problems with staffing and labor turnover was made evident during the congressional hearnings before the United States Senate Special Committee on Aging (1964-65) regarding nursing home conditions and problems. In addition, several studies have pointed out the critical nature of this problem in the nation's nursing homes (West & Cooney, 1968; Pecarchik & Mather, 1970).

In a study of Pennsylvania nursing homes by the

Medical Sociology Center of the Pennsylvania State University in 1970, it was found that when nursing home administrators were questioned about problems in running their nursing homes, 36 percent reported that "obtaining and/or keeping qualified help" was the most important problem. This problem was cited more than twice as often as any other problem. In addition, the study showed that the annual turnover rates for the registered nurses were 26 percent; for the licensed practical nurses, 17 percent; and for the nurses' aides, 52 percent (Pecarchik & Mather, 1970, p. 58).

However, one thing we must keep in mind when evaluating labor turnover in a health care institution such as a hospital or nursing home is that they are to a much greater degree a feminine world than are industrial organizations. Because most of these women employees are married, their migration is anchored to that of their husbands. If their husbands move elsewhere, they move too. They are also responsible for the care of their children. For these and other social and biological reasons, the employee turnover and absence rate is probably higher in nursing homes than the national average.

The instability in the nursing home labor force is a

source of great concern in the nursing home industry. Much administrative energy is consumed in advertising, interviewing, and training replacement personnel, not to mention juggling work schedules to suit the needs of personnel who are in short supply.

It appears evident that if nursing homes are to be a possible solution to the problem of long-term health care for the aged, they must be able to deal effectively with the problem of attracting and keeping health care service personnel. Therefore, it would appear that "labor turnover" is an important criterion of organizational effectiveness in the nursing home industry.

Profitability

As was mentioned earlier in this chapter, most behavioral studies employing the before and after approach in organizational behavior have used "hard core" data to demonstrate improved organizational efficiency and effectiveness. For example, studies in organizational development by such authors as Argyris (1964), Blake, Mouton, Barnes, and Greiner (1964) and Huse and Beer (1971) employed such data as profits, increases in productivity, reduction in scrappage or waste, reduction in grievances, absenteeism, and turnover to illustrate improved organizationsl performance during and

after the initiation of an "organizational development" program.

However, when we move into a health care institution such as a nursing home or hospital, employee output becomes difficult to quantify, if it can be determined at all. The primary output of these institutions is the patient care extended, and by its nature patient care is very subjective, because our emphasis shifts from quantity to quality. We are not so much concerned with the number of bed-baths given by a nurse's aide as we are with how clean she is getting the patients. When it comes down to the personal hygiene and care of the patient, quality is of the utmost importance and quality is a relatively subjective factor.

In addition, it would be extremely expensive to attempt to evaluate employee productivity in a nursing home. It would take a team of observers spending several days in a facility to evaluate the productivity of the nursing staff, and even then the observation would be in the form of subjective perceptions. Because this study examines 24 homes located in five states, this approach was not considered because of the obvious cost involved.

However, there have been a number of measures of productivity developed for hospitals. One is "patient

days," the unit of measure that represents facility utilization and services rendered between the census-taking time on two successive days. This measure does not consider ambulatory care, so "adjusted patient days" (APD) are often utilized to measure the total range of services provided per day by the hospital (Hand & Hollingsworth, 1975, p. 46). But this measure does not quantify the actual number of services rendered (bed-baths, medications, treatments, etc.); these are simply estimated. More importantly, this measure reveals nothing about the quality of care administered.

Another traditional measure is the "full-time equivalent employees" (FTE) to patient ratio. In 1970, the national average was 292 FTE per 100 patients in hospitals (Hand & Hollingsworth, 1975, p. 46). In nursing homes the figure would be substantially lower, approximately 30 FTE per 100 patients (HEW, 1970, p. 9). But this measures only the numbers and types of personnel available to administer patient care; it says nothing about the amount and quality of care given.

In attempting to develop an accurate and reliable objective measure of organizational performance, several measures were considered and rejected for various reasons. Having observers on the property to evaluate worker

productivity was rejected on the basis of cost and validity of the observations collected.

Cost data have often been employed to evaluate organizational efficiency and were considered for this study. However, for the purpose of this research it is necessary that the criteria of effectiveness be universally applicable to all participating organizations and not place any one or group of institutions at a disadvantage or advantage. Three cost measures were considered: Cost of Care/Average Patient Days, Cost of Dietary Service/Average Patient Days, and Total Cost/Average Patient Days. However, after extensive evaluation and discussions with company officials, it was determined that because of different relative labor cost and food cost in different areas of the country, cost data were not an appropriate criterion by which to evaluate organizational effectiveness. For example, when examining the comparative cost figures of the 24 nursing homes, those located in Illinois had the highest cost and those located in Texas had the predominantly lower cost all the way around.

The measure that was finally decided upon is: Gross Profit Per Average Patient Day = $\frac{\text{Operating Profit}}{\text{Total Patient Days}}$.[4] The

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[4]Operating Profit = Total Revenue - (Direct Cost of

reason that this measure is acceptable is that the rate nursing homes receive is to some extent set by federal and state governmental agencies. In determining the rates to be paid to nursing homes for various types of patient care, the agencies take the cost of living in various areas into account. Therefore, because revenue is adjusted to coincide with cost, Gross Profit Per Average Patient Day becomes an appropriate measure upon which to compare the profit performance between nursing homes.

Another advantage of this measure is that it puts 100-bed and 200-bed facilities on an equal footing. In addition, Gross Operating Profit considers only variable costs that are directly related to operations. The manner in which the facility was financed or its interest rate on borrowed money is not reflected. The emphasis is totally upon operations data.

Summary

When studying the literature in the area of organizational effectiveness, one very quickly reaches the

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Patient Care + Dietary Service + Laundry and Linen + Plant Operation and Maintenance + Administrative Overhead). Total Patient Days = $\sum_{j=1}^{N} NP_j$. NP_j = Number of patients in nursing home on the j^{th} day of the month. N = number of days in the month.

conclusion that there is more disagreement among researchers than agreement. There are many differing opinions regarding the concept of organizational effectiveness itself and how it should be measured. One group of researchers seems to feel that organizational effectiveness can be measured by the ability of the organization to acquire and keep desired and needed resources. Another group theorizes that "effectiveness" can be determined by evaluating internal organizational relationships and the organization's ability to adapt to environmental changes. Probably the most predominant group claims that organizational performance can be judged only in terms of its end results or its ability to accomplish its objectives. In other words, the schools of thought appear to be broken down between measuring inputs, processes, and outputs.

In attempting to determine which criteria are relevant in evaluating organizational effectiveness in the nursing home, all of the approaches were considered along with the specific characteristics of this organization. After careful consideration and analysis, it was decided not to totally embrace or reject any one specific approach but to combine them to get a better overall perspective.

The ability of the organization to acquire and keep

resources will be directly reflected by the criterion of employee turnover. Internal organizational processes and adaptability will be evaluated by the subjective measures of productivity, adaptability, and flexibility. In attempting to evaluate how well a nursing home is accomplishing its objectives, what better criteria can be employed than quality of patient care, profitability, and employee job satisfaction?

By employing the above criteria this research will attempt to identify those internal organizational characteristics that are common to the more effective nursing homes. This should provide us with some insights into methods of achieving greater organizational effectiveness.

CHAPTER IV

QUALITY OF CARE

Methods of Evaluating the Quality of Patient Care Rendered by Health Care Institutions

Over the past few years considerable attention has been directed toward measuring quality of medical care, particularly in hospital settings and more recently in ambulatory environments as well. However, even with the need for assessing quality of care being central to future government programs and funding, techniques for measuring care are still far from being perfected. Most studies have demonstrated that the American medical system has many deficiencies. Although Medicare has focused attention on the medical problems of the aging, evaluation of the kind of care they receive, like so many other problems related to aging, has been of secondary interest.

It is the purpose of this paper to draw attention to the quality of patient care in nursing homes and its measurement. Another important objective is to identify internal organizational relationships and administrative practices that directly relate to the quality of care.

The quality of care rendered by a health care institution is a very subjective, intangible, and personal item to attempt to measure. There are many obvious and difficult problems to be dealt with, but the development of a means of measuring the quality of care rendered in any given situation is a key step in achieving high quality care. Without such measurements, it is virtually impossible to ascertain quality or to know what improvements are needed (Blumberg & Drew, 1963, p. 72).

Before reviewing the various approaches to the evaluation of the quality of care, we should first define the terms "patient care" and "quality care." De Geyndt (1970) defines "patient care" in the following manner:

> "Patient care" refers to the elements, procedures, and consequences of applying a number of inputs, including labor, capital and materials, knowledge, skills, and judgment, to the care of individual patients by physicians (nursing homes) who have a direct professional responsibility for each patient. (p. 21)

Esselstyn (1958) offers the following definition of "quality care":

> Standards of quality care should be based on the degree to which this care is available, acceptable, comprehensive, continuous, and documented, as well as on the extent to which adequate therapy is based on an accurate diagnosis and not on symptomatology. (p. 21)

By its nature Esselstyn's definition is very broad. He is concerned with the content of care (accurate diagnosis, adequate therapy, documentation) but, in addition, he considers the care process (comprehensiveness and continuity) as well as the structure (availability and acceptability). His definition encompasses the delivery and distribution of medical care and suggests a methodology akin to that used in what have been labeled end-result studies.

There are five fundamental approaches to evaluating the quality of care rendered by a health care institution; they include the assessment of content, assessment of process, assessment of structure, assessment of outcomes, and a combination of the preceding.

Assessment of Content

This approach to the assessment of quality of care attempts to answer the basic question: Is medicine properly practiced? It is mainly applied in hospitals and carried out through a system of committees. The committees have a dual function: to improve the level of care and to educate the medical staff through self-appraisal and

self-discipline. Quality is defined as the degree of conformity with present standards and deals almost exclusively with patient care. Assessment of the content of clinical performance depends upon the development of standards, which in turn depends on professional judgment and professional consensus on the nature of good care. Medical records are reviewed to measure the degree of consensus between how medicine is actually being practiced and how it ought to be practiced, as defined by a panel of experts or by peer judgments.

The term generally used when referring to this approach is the "medical audit" when the subject is physicians and "nursing audit" when nursing care is involved. The basis of the medical audit is a review of hospital recording of such criteria as qualitative judgments of the care given and examination of diagnostic errors (Sheps, 1955, p. 877). The Health Insurance Plan of New York and the famous Asler Peterson Carolina studies of clinical practice (Peterson, Andrews, Spain, & Greenberg, 1956) employed this technique, but they also included independent observations by acknowledged experts of the clinical procedures being evaluated. Other studies in this area include Falk, Schonfeld, Harris, Landau, and Milles (1967), McNerney

(1962), Rosenfeld (1957), and Trussel, Ehrlich, and Morehead (1962), who used a panel of eminent clinicians to study hospitalized members of the Teamsters' Union in New York City to assess the quality of care rendered in various hospitals. Significant variations were found and were related to the hospital in which treatment was given as well as to the number of years of hospital training of the responsible physicians (Trussel et al., 1962).

The "nursing audit" is another technique utilized to evaluate the quality of care. Because the patient care rendered in a nursing home is usually involved with the direct supervision of a registered nurse, this approach has more application to a nursing home setting. The nursing audit is a method for systematic written appraisal of the processes of nursing care, which is made after the discharge of the patient through examination of the patient-care records. The appraisal is retrospective because this permits a view of the completed cycle of care.

Evaluations are based on broad measurement of the extent to which nursing functions are executed. One dependent and six independent functions of nursing are used as the standards.

The functions of nursing are:

1. Application and execution of physician's legal orders
2. Observation of symptoms and reactions
3. Supervision of the patients
4. Supervision of those participating in care
5. Reporting and recording
6. Application of nursing procedures and techniques
7. Promotion of health by direction and teaching. (Phaneuf, 1969, p. 1828)

The audit for each record yields an overall numerical rating computed from the points scored for each function. The score for each function indicates the degree to which that function is executed, i.e., it provides a specific basis for action toward improvement or for satisfaction. The numerical values are stated in ranges and then translated into word judgments: excellent, good, incomplete (care is good as far as it goes but it does not go far enough), poor, or unsafe (Phaneuf, 1969, p. 1828).

The audit report includes a summary of the overall ratings for each case audited, and a summary of each of the seven categorical (function) ratings.

Audits are done by audit committees that include an administrative representative, supervisors, head nurses, and staff whose clinical competence is recognized by the institution or agency in which the committee operates. Additionally, the committee should include nurses unaffiliated with the institution or agency. A nursing home committee

would draw on a hospital or a public health nursing agency for representatives.

Properly used, the audit is a detached critical inquiry into quality. However, there are several objections to its use. First, audits are an extremely costly method of evaluating the quality of care. Second, the level at which standards should be set and who should set them are another important methodological problem. Finally, the question can be raised as to what is being assessed: the adequacy and completeness of the record or the care that was rendered.

Assessment of Process

The process view tends toward the concept of the "whole patient" and evaluates not only the work of the physician but also the contributions of other health workers. The site of service may be the hospital, the doctor's office, the home, the extended care facility, or the nursing home. Coordination of the process becomes important and the enabling role of the administrator is crucial.

Assessment of the process of care instead of the content of care takes into consideration the sequence of events in the delivery of care, the interactions between the patient and the different kinds of health workers, including the physician, as well as the interactions among health

workers. Coordination of the work and cooperation among team members become important. An important assumption underlying the rationale of the process approach is that good coordination of the teamwork and a logical sequence of the various elements in the care process will result in better health of the recipients of care (De Geyndt, 1970, p. 27).

Available studies assessing the process of the delivery of care are very closely related to structure and to outcome. Examples of such studies examining the relationships between process and structure and between process and outcome will therefore be discussed in the next two sections.

Assessment of Structure

The evaluation of structure consists of the appraisal of the instrumentalities of care and of their organization. It includes the properties of facilities, equipment, manpower, and financing. It is the major approach used in drawing specifications for assessment, certification, or accreditation by official and voluntary agencies. It assumes that when certain specified conditions are satisfied, good care is likely to result (Donabedian, 1969, p. 1833).

Klein, Malone, Bennis, and Berkowitz (1961) investigated criteria for judging patient care in the outpatient departments of six metropolitan hospitals. Their findings indicate that social and psychological factors are superior indices of the quality of patient care rendered compared to medical-technical and physical factors. Content and process emerged as more important variables for the quality of care than structure, i.e., equipment, facilities, etc. Georgopoulos and Mann (1962) studied extensively 10 community hospitals in Michigan and attempted to identify, among a large number of independent variables representing different aspects of the hospital structure and its functioning, those that relate significantly to the quality of patient care. In general, better relationships were obtained between quality of patient care and those independent variables that represent either purely social-psychological aspects of the hospital situation or aspects of the composition and distribution of the therapeutic staff than between quality of patient care and the independent variables that relate to size, financial position, physical facilities, or number of personnel per bed. This corroborates the findings of the study by Klein and his associates previously mentioned. Thus, certain structural aspects in a hospital setting,

viz., distribution and interdependent functioning of health professionals, are favorable to a better quality of care while other structural elements, viz., fiscal aspects, number of personnel, physical structure, facilities, and equipment are not significantly related to quality of care.

Assessment of Outcome

The outcome approach, or the study of end result, attempts to find a measurable aspect of the health status of an individual or of a group of individuals and to determine the change that has taken place in this health status as a result of conditions that affect the content, the process, and the structure of health care. It proposes that the ultimate criterion by which to judge the quality of patient care rendered is an alteration of the health status of the recipient of this care.

The outcome or end result that is most readily measurable is death. Several outcome studies have focused on mortality as the criterion for judging quality care, i.e., the number of fatalities provide the information by which to measure quality. Lee, Morrison, and Morris (1957, 1960) used case fatality rates to compare teaching and non-teaching hospitals. Shapiro, Jacobzinar, Dennen, and Weiner (1960) also concentrated on mortality and studied prenatal

mortality rates in addition to prematurity rates. Part of a study by Williams, Shapiro, Yerley, Densen, and Rosner (1966) dealt with changes in mortality rates among public assistance recipients enrolled in medical groups affiliated with the Health Insurance Plan of Greater New York.

Another readily measurable outcome is the removal of a diseased organ in surgery. Appendectomies have been a particularly popular subject. Lee et al. (1957, 1960) used the case fatality rate among patients with peritonitis and compared rates of teaching and nonteaching hospitals, which were 3.3 and 6.6 percent respectively. Lembcke (1953) studied the frequency rate of primary appendectomies in upstate New York hospitals and found a range from 2.9 to 7.1 per 1,000 population.

Other approaches include that of Ellwood (1966), who used the reduction of functional incapacity as a measure of quality of care. A related index for the measurement of self-care functional disability also in the context of rehabilitation has been used by Muller (1961) for aged persons in nursing homes. Sanders (1957) emphasized social dimensions of morbidity and measured the outcome of health care in terms of social functioning. Sullivan (1966) suggested the following measures of morbidity: clinical evidence,

subjective evidence, and behavioral evidence. The latter includes such indicators as loss of time from school or work, institutional confinement, restriction of specified activities, medical expenditures, and bed-disability days. Gruenberg, Brandon, and Kasius (1959) concentrated on measures of gross behavior changes among psychiatric patients in order to estimate the outcome of treatment provided.

Conceptually, this approach is anchored in the belief that the end result is the final criterion that quality care has been rendered and that this is the only evidence by which quality of care can be assessed. In practice, however, the approach has several limitations. Probably the most important deterrent to the outcome approach is the difficulty in finding the appropriate measure of outcome to be used in any given study. A second limitation refers to the temporal aspect of the indicators. Mortality and most morbidity can be assessed in a short time period, but physical and social functioning often cannot be measured at the same time that care is rendered and, consequently, cannot be used as evidence of present quality of health care. A long lead time is necessary in order to document the positive effect of the care provided. A third shortcoming lies in the fact that there does not necessarily exist a cause and

effect relationship between quality of care and outcome (De Geyndt, 1970, p. 32).

Other Classifications

There are several classificatory schemes, different from the ones presented so far, that have been advanced by health researchers and health professionals to describe current methods for assessing the quality of health care. Donabedian (1966) proposed three major approaches to the evaluation of quality and designated them as the assessment of outcome, process of care, and structure. Process includes the content or nature of care with its segmental and episodic aspects as well as the coordination and continuity of care with its emphasis on total management of the patient. A distinction between the content of care and process per se contributes to conceptual clarity and enough research studies using one or the other approach have been carried out to justify the division into two distinct approaches, viz., content and process.

Densen (1965) described two basic methods of assessing the quality of medical care. The end result method evaluates quality according to its effectiveness in decreasing mortality and morbidity and in increasing physical and social functioning. The medical audit method sets standards

of acceptable practices and then proceeds to measure the physician's actions against these pre-established criteria. The medical audit relates directly to the content of care rendered and relies on peer judgments. The meaning of effectiveness in the end result approach will vary with the perspective one takes, i.e., from the standpoint of the health professional, the consumer, or the community at large.

Peterson (1963) grouped studies of quality of medical care into three types: end result studies, direct observations, and record reviews. He emphasized how to study and maintain the quality of medical care rather than what to study. In this sense Peterson's classificatory scheme differs from the two others previously outlined. He also tackled the problem of where to study quality of medical care and proposed that the hospital environment fill the criteria of feasibility, economy, and importance of the problems of critical disease episodes. His proposals as to where to study quality of medical care imply what to study; namely, the content of patient care by the use of the medical audit method.

White (1967) discussed the assessment of the effectiveness of child health services and strongly advocated the use of end results to achieve that purpose. He suggested

five parameters that may be regarded as the end results of the medical care process and the health services system: death, disease, disability, discomfort, and dissatisfaction (the five Ds). Unfortunately, these five indicators are all negative in nature. Haggerty (1967) used five similar and also negative parameters as ultimate criteria in the education of the medical care process, viz., death, disability, disease, distress, and dissatisfaction. These criteria represent the "ultimate" validation of health services and constitute end result measures. In addition, he suggested measurement of the inputs (the independent variable) and of intervening factors. Thus he viewed the medical care process in terms of three sets of variables but agreed with White that the outcome approach represents the final validation of quality of care. Process, however, is the only operational means of arriving at outcome and should be put in greater evidence.

Sheps (1955) delineated four approaches used in the appraisal of the quality of hospital care:

1. Selection of a set of prerequisites for adequate care assuming that improvement of these factors or greater conformity to these standards leads to improved care;
2. The use of indices reflecting one or more elements of performance;
3. The use of indices assumed to measure the effects of quality of care on the health of patients;

4. The use of qualitative clinical evaluations. (p. 878)

The approaches of this section can easily be recognized as combinations of the other four techniques, which were labeled as assessment of content, process, structure, and outcome.

Any of the four approaches to quality involves comparisons, either indirectly through the use of standards or directly. If a specific procedure has an effect on quality, it must be revealed in differences. To find such differences, the institution under study must be compared with something, either with other institutions or with itself before inception of the procedure. When differences exist, it is of paramount importance to isolate differences related to the procedure itself from differences resulting from such other factors as changes in time, economic differences, cultural differences, and so on. Only in this way can we identify those procedures that relate directly to the quality of patient care.

Measuring the Quality of Patient Care in a Nursing Home

Students of long-term care have been recently preoccupied with several public policy-related issues including: What is acceptable patient care in the nursing home

context and how can it be measured? What factors explain variations in the quality and quantity of care among different institutions? Are variations in quality and quantity of care associated with type of ownership? Although many researchers have addressed these questions at the conceptual level, not until recently have attempts been made at the empirical level. Studies include Anderson, Holmberg, and Stone (1967) and Layer and Erickson's (1973) studies of nursing home care in Minnesota and those of Levey, Stotsky, and Magoon (1968) and Levey et al. (1973) in Massachusetts.

In the studies conducted in Massachusetts the opportunity was afforded for documentation of changes in institutional cost and facility compliance with regulatory standards between 1965 and 1969, a period that witnessed the enactment of the historic Medicare/Medicaid legislation. Issues that were investigated include (1) evaluating physical plant and organizational changes in Massachusetts nursing homes between 1965 and 1969 and (2) assessing nursing homes for factors utilized as measures of quality of care and relating them to the cost of providing that care. The quality analysis based on compliance and utilization measures clearly suggests that marked increases in levels of service occurred between 1965 and 1969.

Linn (1974) in studying the quality of care in 40 nursing homes employed the rankings of social workers as measures of the quality of care. Significant correlations were found between ratings of the quality of care and size of the home, staff-to-patient ratios, and cost. In addition, social workers' ratings of the physical plant, meals, administrative policies, and safety were significantly correlated with their ratings of care at the .01 level. The number of staffing hours and turnover rates were not significantly related to estimates of care.

To the knowledge of the researcher little, if any, empirical research has been done investigating internal organizational relationships and administrative practices and their relation to the quality of care. These are the factors that this research attempts to investigate.

Excluding the financial and technological aspects, the quality of patient care rendered in a nursing home is seen to depend upon at least five major factors:

1. The training and skills of the various medical and nonmedical members of the organization.
2. The nature of medical and nursing practices.
3. The nature of administration and supervision.
4. The nature of coordination, communication, and interpersonal relationships among nursing home members and between them and the patients.
5. The structure and character of the total nursing home organizational system.

In turn, each of these factors depends upon a host of more specific variables that will be spelled out in the following chapter.

The specific objective of this investigation is not to appraise the quality of patient care in an absolute sense, but to successfully distinguish the better-care nursing homes in the sample from those where care is of relatively lower quality. For this purpose it is necessary that the measures be such as to permit us to rank-order the nursing homes sampled from "best" to "poorest," although in absolute terms the "poorest-care" nursing home may still be one where patient care is satisfactory from a medical standpoint.

To evaluate the quality of patient care, the method developed by Georgopoulos and Mann (1962) will be employed with some modifications. (For a full description see Chapter VI, section on measuring quality of patient care.) The following three measures were employed to evaluate the quality of care rendered: (1) an overall measure of the quality of care rendered; (2) a measure of the quality of nursing care; and (3) a measure of the quality of total care given to patients in one home in comparison to the total care given to patients in other similar nursing homes, i.e., a

comparative measure of overall care.

The measure of the overall care is basically concerned with the care rendered by the nonprofessional and nonmedical staff, i.e., nurse's aides, orderlies, dietary personnel, housekeepers, etc. This measure of care is concerned with: personal hygiene needs of the patient, adequate and tasteful meals, cleanliness of the facility and individual rooms, planned recreational and diversional activities, and the general attitude of the staff toward the patient.

In evaluating the quality of nursing care we are concerned with how well the nursing staff performs the functions of nursing. In other words, do they properly administer medications and treatment, do they accurately follow physician's orders, are adequate medical records kept for each patient, is the overall care of the patient by nonmedical staff properly supervised, and does the nursing staff provide adequate training for nonprofessionals?

The comparative measure of overall patient care differs in that it is a measure of the quality of overall patient care a nursing home provides in comparison to the quality of overall care other similar nursing homes provide. Frequently, a comparative measure is superior to a

noncomparative one because it furnishes the respondents who provide the data with a frame of reference in terms of which they can appraise a given situation. Of course, a successful comparative evaluation of organizational performance assumes that the members of the respondent group are familiar with situations prevailing in other nursing homes (Georgopoulos & Mann, 1962, p. 250), which is a valid assumption in the writer's opinion.

Summary

There are five fundamental approaches to evaluating the quality of care rendered by a health care institution; these include the assessment of content, assessment of process, assessment of structure, assessment of outcome, and a combination of the preceding.

The assessment of content depends upon the development of standards. Medical records are reviewed to measure the degree of consensus between how medicine is actually being practiced and how it ought to be practiced, as defined by a panel of experts or by peer judgments.

In the assessment of process approach, the important underlying assumption is that good coordination and teamwork among the various elements in the care process will result in better care being delivered. The role of the

administrator becomes crucial.

The assessment of structure involves the appraisal of the instrumentalities of care and of their organization. It includes the properties of facilities, equipment, manpower, and financing. It is the major approach used in drawing specifications for assessment, certification, or accreditation by official and voluntary agencies. It assumes that when certain specified conditions are satisfied, good care is likely to result.

The assessment of outcome proposes that the ultimate criterion by which to judge the quality of patient care rendered lies in an alteration of the health status of the recipient of this care. Outcome or end result measures that have been used include death, removal of a diseased organ in surgery, and the reduction of functional incapacity.

There are several other classificatory schemes for evaluating the quality of patient care rendered by a health care institution that have been developed by such authors as Donabedian, Densen, Peterson, White, and Sheps. These approaches used combinations of the other four approaches to evaluate the quality of care.

In this study peer judgments were employed to determine the actual level of the quality of care in each

nursing home. The following measures were used: (1) an overall measure of the quality of total care; (2) a measure of the quality of nursing care; and (3) a measure of the quality of total care given to patients in one home in comparison to the total care given to patients in other similar nursing homes, i.e., a comparative measure of overall care.

CHAPTER V

CHARACTERISTICS OF EFFECTIVE ORGANIZATIONS

The nursing home organization may be characterized as a social system. It combines the skills and leadership abilities of its professionals with the labor of its non-professionals to provide for the needs of its patients. One of the hypotheses of this research is that in those nursing homes where the social system functions effectively (i.e., low degree of tension, good internal staff communications, and coordination of efforts), there will be a higher quality of care administered. In other words, one approach to increasing the quality of care may be through the improvement of internal staff relations.

In investigating the relationship between internal staff characteristics and quality of care the research will focus on two separate areas—"administrative effectiveness"

and "internal organizational relationships."

Administrative Effectiveness

Administrative effectiveness probes the function of the administrator and how successful he has been in creating an organizational climate that facilitates internal staff cooperation. Have the administrator and department head clearly established objectives, policies, rules, and regulations? Are they perceived as following their own rules? Do they understand the workers' point of view and are they thought to be fair and reasonable? It is predicted that these issues and others will have a direct relation to internal staff relationships and ultimately to organizational effectiveness.

Organizational Planning

Several studies reported in the literature bear out the proposition that: "Managers who engage in forming activities are more effective than managers who do not" (Filley & House, 1969, p. 203). For illustrations of this point, see Hemphill (1964), Comrey, High, and Wilson (1955), Bass and Leavitt (1963), Shure, Rogers, Larson, and Tassone (1962), and Thane (1969).

Planning was shown to be related to objective

measures of organizational effectiveness in a study conducted by Comrey, High, and Wilson (1955). Questionnaires were employed to determine managerial behavior at a division of Lockheed Aircraft Corporation. Behavior patterns were then compared with four measures of organizational effectiveness, i.e., the need for rework, acceptance rates, production rates, and an executive rating of departmental effectiveness. Planning was shown to have a significant, though curvilinear, relationship to rework and acceptance-rate criteria and some relationship to the production rate. None of the questionnaire dimensions, including planning, were related to executive ratings of the departments.

In nursing home organizations, planning of activities should be an important part of organizational life. Much of the planning process involves the establishment and maintenance of objectives, policies, and operational rules and regulations that govern work and work relations in the system. It is in part through the mechanism of these products of planning that coordination can be effected. Negandhi and Prasad emphasize this point in reporting the results of study of multinational companies:

> The firms with clearer statements of their objectives, policies, and procedures, role definition and job classification, and higher educational attainments and training of their executives, are more likely to

> have cooperative interdepartmental relationships than firms with fuzzy statements of their objectives, policies, and procedures, role definition and job classification, and low levels of education and training of their executives. (1971, p. 188)

The actual implementation and efficiency of organizational objectives, rules, and policies will depend on many conditions. These include the definition and clarity of existing objectives, policies, and rules; the extent of organizational members' adherence to rules and regulations; and the skill with which planning is carried out.

> A clear statement of the organizational objective to which an individual is expected to contribute directly improves individual performance and coordinated group action by directing individual contributions and encouraging cooperative efforts. (Filley & House, 1969, p. 148)

Clearly defined objectives let organizational members know their responsibilities and the scope of their authority to initiate independent action. Clearly defined objectives also involve a commitment to achieve those objectives. Fredrick Kappel had this to say: "I think more businesses are learning that by the very act of stating their purposes they greatly encourage their own efforts to achieve them" (1963, p. 1).

A number of studies that support this proposition have been conducted under a variety of conditions. Experiments by Raven and Rietsema (1957) and by Tomekovic (1962)

and surveys by Cohen (1959), Kahn, Wolfe, Quinn, Snock, and Rosenthal (1964), and Likert (1961) are examples.

Likert (1961), basing his findings on a study of questionnaire responses and the production performance of several thousand men, reported that workers with clear perceptions of productivity objectives performed significantly better, and produced more, than workers whose perceptions of productivity objectives were not in agreement with their superiors' perceptions. Similar studies have confirmed these findings among such widely different populations as managers (Rosen, 1961), nurses (Taves, Cordwin, & Haas, 1963), and operative industrial employees (Harrison, 1959; Barrett, 1963).

Another important part of the planning process is the formulation of policies, procedures, rules, and guidelines. Policies are guides to decision making. They reflect and interpret organizational objectives, channel decisions that contribute to these objectives, and establish a framework of the various functional segments of the business. A survey of workers and supervisors conducted by Pfiffner and High (1954) indicated that the most significant factor in effectiveness was formulation of policy.

The role of policy and its relationship to employee

role expectations and performance are explored in studies reviewed by Stogdill (1959) and Bakke (1950), and in studies conducted by Comrey et al. (1954), Pepinsky et al. (1960), Cohen (1959), and Raven and Rietsema (1957). These studies suggest that, within certain limits, policy or its formulation can create a more productive and often a more satisfied work group.

In 1971, Lyons reported a study of registered nurses who worked in a large hospital; the study included measures of both "role clarity" and "need for clarity." He found that role clarity, or lack of it, related positively and significantly to voluntary turnover, tension, and propensity to leave the hospital.

Hammer and Tosi (1974) showed that role ambiguity was negatively and significantly correlated with job satisfaction, and positively and significantly related to "job threat" and anxiety.

These studies and others have shown that role ambiguity is related to role conflict. Kahn, Wolfe, Quinn, Snock, and Rosenthal (1964) described role ambiguity as "a direct function of the discrepancy between the information available to the person and that which is required for adequate performance of this role" (p. 73). Such discrepancy

can result from unclearly defined objectives, policies, and procedures. In addition, role ambiguity contributes to interunit conflict in several ways. Difficulty in assigning credit or blame between two departments increases the likelihood of conflict between units (Walton & Dutton, 1969, p. 77).

Low routinization and uncertainty of means to accomplish goals increase the potential for interunit conflict. This proposition is supported by Zald (1962) in his study of interunit conflict in five correctional institutions. Similarly, ambiguity in the criteria used to evaluate the performance of a unit may also create tension, frustration, and conflict (Kahn et al., 1964). Organization planning, which includes clarity of rule definition, correlated positively with measures of lateral coordination and problem solving in Georgopoulos and Mann's (1962) study.

Another important benefit of clearly defined policies is that they permit individuals in the system to predict how others in it are likely to behave and to know how others expect them to behave. When such predictable behavior is present, individuals in the system perceive freedom to act. This perceived freedom is considered to be greatest at intermediate degrees of structure and formality.

Predictability of behavior, as supported by policy, should lead to an enhancement of both organizational performance and satisfaction. Thus one characteristic of the effective and efficient organization is the presence of a predictable pattern of interpersonal relationships (Stogdill, 1959). However, policy merely creates an environment in which sources of individual and group motivations can act more effectively. Clearly defined policies are a prerequisite to organizational success but they do not automatically ensure that employees will be more productive and motivated. Policies must be skillfully constructed, properly constructed, and adhered to by the members of the organization.

In evaluating organizational planning, nursing home employees will be asked to judge the ability of their supervisor in planning, organizing, and scheduling the work; clearness of goals and objectives toward which to work; clearness of the various rules and regulations of the nursing home; and the extent to which staff members adhere to these rules and regulations.

Administrative Communications and Problem Solving

This section is concerned with the adequacy of communication between the administrator of the nursing home and

staff employees. In addition, we are also concerned with employee perceptions of the administrators' awareness of nursing home problems and their ability to deal with them.

Communication is crucial to organizations; only through information transmission can the efforts of people be coordinated so that the organization can respond effectively to the environment. Price (1968) put forth three propositions relating communication to organizational effectiveness:

> Proposition 6.1. Organizations which have a high degree of communication are more likely to have high degrees of effectiveness than organizations which have a low degree of communication.
> Proposition 6.2. Organizations which have a high degree of vertical communication are more likely to have a high degree of effectiveness than organizations which have a low degree of vertical communication.
> Proposition 6.3. Organizations which have a high degree of horizontal communication are more likely to have a high degree of effectiveness than organizations which have a low degree of horizontal communication. (p. 167)

Price employed the works of Georgopoulos and Mann (1962), Stanton and Schwartz (1954), Belknap (1956), Kaufman (1960), Lawrence (1958), Whyte (1948), and Chandler (1962) to support his propositions.

Georgopoulos and Mann explored the effects of organizational communication in a hospital setting and came to three basic conclusions. First, communication, or lack of

it, can be instrumental in promoting or impeding the development of complementary expectations and mutual understanding among organizational members whose work activities are interrelated. Second, it can be instrumental in increasing or diminishing tensions and conflicts in the organization. Third, it can be instrumental in facilitating or impeding problem awareness and problem solving (Georgopoulos & Mann, 1962, p. 525). In general, the exchange or transmission of adequate and relevant information among different parts of the system is a matter of communication, and factors that make for adequate communication should also facilitate coordination.

Most information flows from the top down, i.e., from superior to subordinate all the way to the bottom level of the organization. Katz and Kahn (1966) see the downward communication system as having five general goals:

1. To give specific task direction about job instructions.
2. To give information about organizational procedures and practices.
3. To provide information about the rationale of the job.
4. To tell subordinates about their performance.
5. To provide ideological-type information to facilitate the indoctrination of goals. (p. 239)

From a behavioral standpoint, a communication system that only gives specific directions about job instructions

and organizational procedures and that fails to provide information about job performance or rationale-ideological information about the job can have a negative impact upon the subordinates. This type of downward orientation promotes an authoritative atmosphere that tends to inhibit the effectiveness of upward and horizontal systems of communication (Luthans, 1973, p. 249). Communicating to personnel the rationale for the job, the ideological relation of the job to the goals of the organization, and information about job performance, if properly handled, can greatly benefit the organization. As Katz and Kahn point out,

> If a man knows the reasons for his assignments, this will often insure his carrying out the job more effectively, and if he has an understanding of what his job is about in relation to his subsystem, he is more likely to identify with organizational goals. (1966, p. 242)

In summarizing their findings, Georgopoulos and Mann said:

> It seems that in those hospitals where channels of communication between superiors and subordinates are relatively more open, people can talk when they see a need for doing so, and problems can be readily identified and their solution can be facilitated through talking about them; this, in turn, is associated with better nursing performance. (1962, p. 529)

For example: the more adequate nurses feel the communication they receive from their superior is, the more likely they are to discuss task-relevant matters, such as ways to

improve patient care or to improve nursing supervision.

Organizational plans that specify what activities need to be performed and how to accomplish the objectives of that organization are seldom, if ever, perfect. Therefore, problems of a coordinative nature are recurrent. These problems require effective solutions if disruptive influences are not to emerge (Jaques, 1952, p. 305). Jaques notes that effective problem solving requires: (1) effective communications between superiors and subordinates; (2) accurate information, and (3) correct decisions (p. 289).

Rothlisberger and Dickson (1947) saw, as one of the vital tasks of supervisors, the process of communicating with subordinates in order to discover the problems they were facing and to solve these problems (p. 583). In other studies, Comrey, and also Kahn and Katz, found evidence that the supervisors are more effective when capable of instructing subordinates in how to do the job and better work methods, and if they can solve technical production problems (see Comrey et al., 1955, p. 54, and Kahn & Katz, 1953, pp. 555-557).

In summarizing the qualities of an effective formal leader or administrator, French lists the following two:

1. Has a higher basic problem solving ability than his subordinates.

2. Is eager to help subordinates to be more effective and works at removing obstacles to achievement. (French, 1970, pp. 124-125)

As we have shown, the administrators' awareness of problems and their ability to deal with them are very important in facilitating the accomplishment of organizational goals or effectiveness. Problem solving also serves organizational effectiveness by its positive effect upon organizational strain and segmentation. Intraorganizational strain has a very destructive effect upon organizational integration; if the problems that give rise to these strains can be solved, they will not disrupt the organization.

The administrator, therefore, is the key figure in organizational integration. He fills the key role in the integration of the whole organization by communicating clearly with his subordinates, discovering their needs and problems, and solving the latter effectively before they disrupt the organization. He should be sitting atop a sensitive hierarchy in that his subordinates, too, communicate with their subordinates, discover their needs and problems, and communicate problems back up the hierarchy for solution (Mott, 1960, p. 144).

Mott discovered that the effectiveness of problem solving tends to relate to adaptation, which is one of our

primary criteria of organizational effectiveness. Adaptation begins when members of organizations become aware of problems (Gore, 1956). People are relatively adaptive if they become aware of problems before they seriously affect the organization. But such awareness does not always develop. Second, even when the necessary awareness exists, little is gained unless appropriate solutions are formulated. This step requires a combination of knowledge of the tools and techniques that can be used to solve the problem and correct decisions on how to use them. The probability of finding the most adequate solution is also a function of the range of proposed solutions and of the ability to choose among them rapidly and well (Mott, 1972, p. 19). Third, even when useful solutions are generated, they are still symbols, not behavior. Symbolic exercise is little more than exercise unless appropriate behavioral adaptation follows (Mott, 1972, p. 19).

The value of an administrator who is aware of problems and effective in solving them is clearly indicated. The administrator can take an interdepartmental view—a view of the organization as a whole—of the problem and solve it in a manner that promotes organizational integration.

In order that we may directly assess the effects of administrative communication and problem solving upon

organizational effectiveness and quality of care, staff members were asked to evaluate their administrator on the following items: ability to communicate, awareness of problems faced by staff members, and his effectiveness at solving these problems.

Rational Trust

The rational trust variable is concerned with employee perceptions of how well management is perceived as following its own rules; understanding workers' points of view, needs, and problems; and being fair and reasonable.

The rational trust leader is believed, first, to be aware of the points of view, needs, and problems of those who work for him and to take them into account (not necessarily to agree with them) when he makes decisions; second, to make fair, rational decisions, usually based on established and known criteria; and third, to conform in his behavior to known standards (Mott, 1972, p. 42).

Kahn and Katz (1953), summarizing a good deal of the early work of the Survey Research Center in the area of leadership, concluded that the extent to which the supervisor tends to be supportive of his subordinates and employee-oriented rather than concerned only with productivity or identified mainly with management—or, in other

words, whether he is concerned with the needs of his subordinates—related consistently to various measures of organizational effectiveness, including measures of productivity and member satisfaction, in several different organizations.

Studies conducted by the Ohio State leadership group (for example, see Stogdill & Coons, 1956, and Stogdill & Shartle, 1956) have resulted in fairly consistent findings concerning several aspects of supportive leadership. The Ohio State group developed a "consideration" questionnaire intended to measure the human-relations-oriented behavior a superior exhibits toward his subordinates. "Consideration" refers to the extent to which the leader or superior is considerate of the feelings, attitudes, and needs of his subordinates, and can be inferred from behaviors that are indicative of friendship, mutual trust, supportiveness, and respect between the leader and his group.

In studies using the Ohio State consideration scale, it has been repeatedly found that, in groups whose leaders are rated high in consideration, subordinate satisfaction is high (Korman, 1966), there is less intragroup stress and more group-member cooperation (Oaklander & Fleishman, 1964), and there are lower turnover and grievance rates (Fleishman & Harris, 1962).

When managers are perceived as fair and reasonable, employees are more likely to develop a sense of identification and esprit de corps with their work groups. On the other hand, when managers are perceived as malevolent, capricious, and insensitive, every order is viewed with suspicion, and few people enjoy working for them.

Every managerial decision or action rewarding or penalizing individuals or groups has the potential for being labeled "fair" or "unfair." This human tendency to evaluate the fairness of events pervades the organization and is a constant challenge in the utilization of human resources. Thus the problem of fairness, or justice, is a major one in the practice of management and is one with which every manager must constantly deal. As Barnard says, "There is no escape from the judicial processes in the exercise of executive functions" (1938, p. 120).

Organizational justice is defined as "a complex flow of events that allocates rewards and penalties to organizational members in some relationship to perceptions of fairness or equity" (French, 1970, p. 130). For employees to feel fairly treated, the transactions between the employer and the employee require some proper alignment of workers' investments, job rewards, and job cost and always in relation

to the alignment for others. For example, if performance standards are higher for one person or group than another, but rewards are the same, the employee or group of whom greater demands are made will feel unfairly treated. Similarly, if work rules do not apply uniformly to similar kinds of jobs, those subject to the more stringent rules may feel they are treated unjustly.

Patchen (1960) investigated the relationship in a Canadian oil refinery between absenteeism and employees' feelings about fair treatment in promotion and pay. He found that men who felt unfairly treated with respect to promotion had a significantly higher rate of absence than those who felt fairly treated. Further, those who felt unfairly treated as to pay had a higher absence rate than those who felt their pay was fair. He concluded as follows:

> When men feel that management is treating them unfairly or, neglecting their interest, they feel relieved of the obligation which they, the employees, have assumed. (p. 350)

Justice or fairness, as it relates to man in organizations, has a very elusive meaning. What is just, or fair, has been and will continue to be a matter of dispute in union-management relations and in the management of human resources. Nevertheless, if we can broaden our understanding of this concept and how it affects organizational

behavior and effectiveness, we will have a better grasp of some of the most critical problems in the administrative process.

In conclusion, it is believed that when managers have a high rational trust status—or, in other words, when managers are considered reasonable, fair, and willing to take the views of others into account—workers will be more willing to accept the changes in routines initiated by those leaders and will be more likely to inform them of organizational problems. Rational trust has the effect of reducing barriers to communication and enables individuals to test their perceptions.

Internal Organizational Relationship

The administration of a high quality of patient care is the ultimate objective of all nursing homes; whether this objective is achieved will depend to a great extent upon the interpersonal relations of the nursing home staff members. Can they work together to coordinate activities between and within departments? Does the staff work together in harmony or is the organization plagued with conflict? Do staff members exchange ideas and information freely and try to avoid creating problems for one another? These and other issues were probed in investigating the internal working relation-

ships of the organization.

Conditions for Negotiating Orders

In every organization there are people engaged in control and coordination, in creating, modifying, and destroying structures. Basically, they set parameters for acceptable human activity by prescribing task and intertask relationships. Sometimes they are too zealous and at other times perhaps not zealous enough in their efforts to specify formal procedures for every contingency; they cannot structure responses for all situations, however.

Sometimes employees themselves are able to recognize the dynamic character of their environment and exhibit a disarming willingness to improvise in new situations. Often within the imposed parameters, workers are able to solve the unanticipated, but often important, problems that arise by informally negotiating new activities and relations among themselves. Anselm Strauss and his colleagues have called these relationships "negotiated orders" (Strauss et al., 1963). James Thompson called this relationship "coordination by mutual adjustment" (1967, p. 56), and said it involved the transmission of new information during the process of action (March and Simon term this coordination by feedback). The more variable and unpredictable the

situation, March and Simon observed, the greater the reliance on coordination by mutual adjustment (Thompson, 1967, p. 56).

A "negotiated order" is a pattern of relationships among people improvised, either individually or collectively, by them in response to problems. To reach collective solutions, people must be able to meet easily to exchange ideas and propose solutions. People solve problems of coordination simply by not creating problems for one another or by staying out of one another's way. These solutions may become fairly permanent, or they may be quite ephemeral, but either way they can help the organization to function more effectively.

For example, the ability of the nursing staff to provide excellent care to the patient depends not only on their skill but also upon a web of relationships among them that facilitates the establishment of shared expectations about their own activities and work relationships and about the day-to-day operations of the facility. Ease of communication among those whose jobs are related should facilitate the development of such a web. This, in turn, should facilitate nursing performance.

Environments pose problems for organizations,

problems to which they must often adjust if they are to remain viable. Many organization theorists (see Lawrence, 1958; Chandler, 1962) contend that adaptability is more difficult for highly structured organizations than for less structured ones. This inability to adapt results because people trained to operate in certain roles and to relate to others in specified ways have difficulty in behaving differently. If an organization is to achieve adaptability it is essential that organizational conditions foster negotiated orders: people should be free to improvise solutions to problems; they should be able to come together easily to exchange ideas and propose solutions, and should unilaterally avoid creating problems for one another (Mott, 1972, p. 21).

The freer the exchange of task-relevant information between superiors and subordinates, or among persons whose jobs are related, the greater the probabilities are for rational planning, efficient articulation of effort, and adequate coordination of activity. Conversely, the more limited the exchange of adequate information, the greater the probabilities are for the development of tensions and conflicts among organizational members. Similarly, the more adequate the communication among work group members, in

terms of amount as well as of quality, the better the possibility for developing shared expectations, consensus about the work, and commitment to the group and its standards. In turn, the higher the consensus about work standards, the more likely it is that the performance of members will consistently conform to such standards.

In some organizations, management attempts to stifle the development of negotiated orders by specifying detailed procedures; in others, the parameters are few, and negotiating orders is the dominant method of solving problems, which is the situation in nursing homes. Both setting parameters and negotiating orders should occur and the ratio of their prevalence in an effective organization is a function of the amenability of task to structuring and vulnerability of task structuring to the environment (Mott, 1972, p. 10).

The negotiated order manifests itself when members avoid creating problems for one another, develop necessary channels of communications to exchange ideas and information, and solve adaptive problems inherent in productive activity.

In order that we may better understand the relationship between conditions for negotiating orders and organizational effectiveness and the quality of care rendered, staff

members' perceptions of how well they exchange ideas and information, handle coordination problems, and avoid creating problems for one another will be analyzed.

Horizontal Integration-Coordination

One of the paramount and most difficult problems faced by complex organizations is the problem of internal coordination—how best to fit things together, gearing resources and facilities to attain the objectives of the organization in the most efficient manner.

Coordination involves articulation of the parts according to some organizing principle. Urwick pointed out:

> The employment of more than one person towards a given end necessarily involves the division of labor. The purpose of organization is to secure that this division works smoothly, there is unity of effort or, in other words, coordination. (1931, p. 21)

Mooney and Reiley, when discussing the principles of organization, selected coordination as the "mother principle" but only because they understood that without it, organizations could not function rationally in the face of continuous specialization (1931, chaps. 1-5). Mooney defined coordination as "the orderly arrangement of group effort, to provide unity of action in the pursuit of a common purpose" (1947, p. 5). To Mooney and Reiley,

"coordination" was a broad principle that contained all the principles of organization:

> This term expresses the principle of organization in total; nothing less. This does not mean that there are no subordinated principles; it simply means that all the others are contained in this one of coordination. The others are simply the principles through which coordination operates and becomes effective. (1931, p. 31)

Two contemporary authors, Lawrence and Lorsch, in their work Organization and Environment: Managing Differentiation and Integration (1969), identify integration and differentiation as the main elements needing reconciliation in organizations. However, these elements reduce to coordination and specialization, respectively.

Georgopoulos and Mann define coordination as "Those organizational processes through which functionally interdependent parts and activities in the system are articulated with one another so as to ensure the system will operate effectively" (1962, p. 270). They then distinguish between effectiveness and coordination:

> Organizational effectiveness says something about how well an organization is doing in achieving its objectives, while coordination says something about the articulation of diverse organizational parts and functions. (p. 271)

Therefore, the concept of organizational coordination should be geared to the overall objectives of the

organization—to the wholeness of the system. As Barnard puts it,

> What is required is a sense of things as a whole, the persistent subordination of parts to the total, the discrimination from the broadest standpoint of the strategic factors from among all types of factors. (1954, p. 256)

What is required is that the main objective or the system-wide objectives of the organization be taken into consideration. In most large-scale organizations, Georgopoulos and Tannenbaum (1957) observed, the main objectives of the system include such things as high output—whether quantitatively, qualitatively, or both; adjustments to endogenous and exogenous changes; and the preservation of human and material resources and facilities. In nursing homes the primary and ultimate objective of the system is to provide adequate patient care, treatment, and living conditions to those persons who enter the system. In their analysis of 10 community hospitals Georgopoulos and Mann (1962) found that quality of patient care was positively related to coordination.

Unlike the industrial organization, the nursing home relies very heavily on the skills, motivations, and behaviors of its members for the attainment and maintenance of adequate coordination. The flow of work is too variable and

irregular to permit coordination through mechanical standardization, and the product of the organization—patient care—is itself individualized rather than uniform or invariant. Because the work is neither mechanized nor uniform nor standard, and because it cannot be planned in advance with the automated precision of an assembly line, the organization must depend a great deal upon its various members to make the day-to-day adjustments that the situation may demand, but which cannot possibly be completely detailed or prescribed by formal organizational rules and regulations.

In all complex organizations where there is detailed division of labor, departmentalization, specialization of functions, and a high degree of interdependence among the different parts and members of the organization, there is also a critical need for coordinating the various roles and activities of the system. Concerted effort, unified action, and orderly organizational functioning depend upon coordination, and coordination itself frequently tends to become one of the most important specialized activities of the organization.

For purposes of this research, the term "integration" will mean that the various parts of the organization—its departments, work groups, and sections—are bound

together by certain normative and functional characteristics into a unified system. In the integrated organization, barriers between parts of the system of a psychological and social nature are low enough to permit unified functioning.

One set of mechanisms of integration might be termed "horizontal" or "general." These mechanisms include interdepartmental problem solving, timing and meshing of activities, intershift cooperation, pressure to perform, and conflict between departments. They are horizontal or general in the sense that they can be discussed in terms of the degree to which they are characteristic of the whole organization.

Each of these characteristics has an integrative effect on the organization. When members of a nursing home staff understand one another's viewpoints about their jobs, they are capable of accurate empathy. Misinterpretation of the behavior of other workers is less likely to occur. The nursing home has an investment in goodwill on which it can draw when problems do arise. Georgopoulos and Mann (1962) also show that understanding of one another's viewpoints is essential to another integrative factor coordination.

The major symptom of failure in formal coordination is interunit conflict. Organizational conflict can be

defined as

> that behavior which results when two parties (persons or groups) are in opposition due to a perceived deprivation of organizational rewards, resources, or interaction with other parties. (Sexton, 1970, p. 325)

Conflict often takes the form of anger or resentment, or it can appear as a disagreement about how to structure interface relations. Problems between different units can lead to this type of conflict unless they are solved promptly and satisfactorily. Problems that recur cause frustration and a tendency to blame the people in the other unit. When frustration at the interface builds up to hostility, which replaces emphasis on problem solving, members of the involved units will go out of their way to create problems for each other, rather than avoiding them. The climate for negotiating order is destroyed, hostility escalates, and productive goals are no longer served (Mott, 1972, p. 41). Therefore, it is paramount that supervisors deal effectively with misunderstandings between staff members.

The prevalence of conflict in organizations is apparent from the literature of organizational studies (see, for example, Argyris, 1952; Gouldner, 1954; Datton, 1959; Blair, 1955). All schools of thought on organizations have recognized that conflict exists, although they have differed in how they looked at it. The writers on classical

organization theory viewed conflict as undesirable and detrimental to the organization (see, for example, Taylor, 1947; Urwick, 1943; Mooney, 1947). Recently a number of authors have reached the conclusion that, within certain bounds, conflict is acceptable and useful (Boulding, 1961; Argyris, 1964).

Lewis A. Coser is one of the main architects responsible for building a "positive theory" of conflict. He says:

> Conflict may serve to remove dissociating elements in a relationship and to re-establish unity. Insofar as conflict is the resolution of tension between antagonists it has stabilizing functions and becomes an integrating component of the relationship. However, not all conflicts are positively functional for the relationship. (1956, p. 80)

Cohen et al. argued in a recent text that

> Without conflict among subsystems, the total needs of the organization might be ignored in favor of the highest status subsystem's needs, or pushed aside by the more powerful subgroups. (1976, p. 231)

However, they go on to say that "Where intergroup problems surface as wasteful conflict, they need to be approached in terms of reducing conflict and building cooperation" (p. 232). A majority of organizational theorists would most likely agree that conflict has some functional aspects, such as helping initiate change or getting deep-seated problems out into the open. However, prolonged

conflict between major operating units cannot be considered anything but dysfunctional. Georgopoulos and Mann found that hospitals with a higher level of tension among their various interacting (interdependent) groups and departments were significantly more likely than the lower tension institutions to provide a poorer quality of nursing care (1962, p. 398).

The subject of "conflict resolution" is one that has received a considerable amount of attention in the literature. Litterer (1970) was concerned that modern organizations do not have built into their formal structures the means for resolving inevitable conflict. Therefore, this resolution must occur through the social interaction of the participants aside from the demands of their positions. It is clear that this process of resolution produced a communication and influence circuitry that is unplanned and often unrecognized by top management.

Lawrence and Lorsch (1967) argued that the resolution of conflict is one of the important processes involved in differentiation and integration of organizational functions. The models of conflict resolution tend to be excellent predictors of effective integration in complex organizations. Blake and Mouton have developed a "Managerial

Grid" that emphasizes the long-term effects of avoiding conflicts, compromising conflicts, or confronting conflicts. "Getting conflict into the open constitutes the most valid approach to its management and direct confrontation is advocated" (Blake & Mouton, 1964, pp. 164-165). Argyris (1964) argued that the most efficient way to handle conflict is by confrontation, from the point of view of both the organization's productivity and the worker's mental health.

Because of the human factor the effects of organizational conflict are difficult to determine. One of the objectives of this research is to shed some light upon how conflict between operating units affects organizational effectiveness.

Where supervisors have failed to make their work expectations of subordinates clear to them or where they have done an inadequate job of programming subordinates' roles, a feeling on the part of subordinates of unreasonable pressure to perform can be detected (Georgopoulos & Mann, 1962). As a result, tension will increase and organizational effectiveness will suffer.

It is felt that those nursing homes whose staff experience a higher amount of unreasonable pressure for better performance—pressure over and above what they consider

reasonable—are more likely than other nursing homes to provide a poorer quality of patient care.

Organizational integration in a nursing home could be considered two-dimensional. A given shift may be integrated and all shifts may be more or less integrated with each other. However, there is very little interaction between the shifts in a nursing home as far as pursuit of the day-to-day goals of the nursing home is concerned. The head nurse of each shift can handle all the communication necessary to continue the course of care prescribed for the patients.

Where intershift integration and relationship become important is in an emergency situation. For example, a severe snowstorm may result in only a few members of the day shift arriving at work. A prompt roundup of nearby personnel from other shifts may be necessary. If relations between the shifts are characterized by a minimum of tension, the problem of enlisting aid is simplified. However, if the shifts have built up hostility for each other by leaving work for each other or making it difficult for one shift to take over from the other, then they are less likely to respond to requests made by the other shift when an emergency arises.

It can be concluded that interdepartmental tension and poor intershift cooperation are both causes and effects of organizational segmentation. Georgopoulos and Mann (1962) found that interdepartmental tension was negatively related to both the adequacy of coordination and organizational effectiveness. Whyte's study of tension in restaurants demonstrated that careful articulation of action patterns between categories of restaurant personnel is instrumental in the reduction of tension between these personnel (1948, pp. 62-63).

To determine how the factors considered under the label of "Horizontal Integration" actually affect organizational performance and the quality of care, staff members' perceptions of the following factors were measured: extent to which routine activities are well meshed and timed; handling of interdepartmental problems; the degree of conflict and tension between departments; amount of pressure placed on staff members for performance; and the extent to which different shifts cooperate with one another.

Cultural and Social Psychological Integration

"Cultural and social-psychological integration" in this sense refers to the employee's identification with the

organization and its goals, his/her occupation, and his or her work group. Organizational identification, or the process by which individuals identify with their employing organization, has been the subject of an increasing number of behavioral studies (see Brown, 1969; Hall & Schneider, 1972; Hall et al., 1970; Lee, 1971; Patchen, 1970; and Rotandi, 1972, 1975). It has been asserted that identified employees provide organizations with a number of important benefits (see Likert, 1967; McGregor, 1964; and Watson, 1963), including goal commitment and goal achievement. The basic belief is that the greater the degree of identification, the better the overall performance, resulting in a more effective organization.

It is also the purpose of this section to investigate the extent to which people from different departments see one another's points of view about mutual work relationships. The hypothesis is that the greater understanding, the greater the level of organizational integration.

In formal organizations, not only is the individual member working in the presence of others, he is often working with them on a common task. Individual identification with the group goals becomes important. We shall refer to this phenomenon, which has long been recognized as an

important determinant of group behavior, as group identity or group loyalty. Berkowitz and Levy (1956), Berkowitz, Levy, and Harvey (1957), Pryer and Bass (1959), Hall (1957), and Zander and Wolfe (1964) have all studied the effects of different kinds of feedback patterns on individual performance, interpersonal orientations (such as feelings of trust, openness), worker satisfactions, and group cohesiveness. It was found that emphasizing group loyalty and group goals (i.e., only providing feedback of how the group was doing) increased group identity and led to improved performance, less concern about personal rewards, more mutual trust, and less strain on interpersonal relations (Litwin & Stringer, 1968). De-emphasizing group goals (giving only individual feedback) led to more withdrawal from interpersonal interaction, less desire to achieve a good score, and less mutual trust. When both personal and group goals were emphasized (when there was feedback of how the group was doing and how individuals were doing), there was the greatest increase in personal performance, interpersonal sensitivity was increased, and task organization (division of labor) was prevalent (Zander & Wolfe, 1964, pp. 67-68). These results reflect some of the different motivational effects that group identity and group loyalty may have on organization

behavior.

A crucial factor in any work group is the degree to which members turn out to like each other and the group. A group that is close, tight, and unified will behave differently, for better or worse, than one that is distant and fragmented. Cohen et al. (1976) put forth a number of interrelated propositions concerning why groups form and why they become cohesive. They begin with the proposition that "The greater the opportunity requirements for interaction, the greater the likelihood of interaction occurring" (p. 53). That leads directly to the next proposition, which is fundamental to all human relationships: "The greater the interaction among people, the greater the likelihood of their developing positive feelings for one another" (p. 54) and in turn, "The greater the positive feelings among people, the more frequently they will interact" (p. 54). In other words, if you like someone, you will probably choose to spend more time with him/her than with someone you do not like.

The previous propositions suggest that once there is a work reason for people to interact, they will begin to do it more often and will develop some liking for one another beyond the original task reason for their interaction.

Thus, "the greater the interaction required by the job, the more likely that social relationships and behavior will develop along with task relationships and behavior" (Zander & Wolfe, 1964, p. 54).

When members of a group begin to like one another and like being in the group, then the group will have attraction for the members and acceptance from the group will be seen as desirable by them. In other words, "The more attractive the group, the more cohesive will be its members" (Zander & Wolfe, 1964, p. 54). As the emerging social relationships form, the group will develop norms-ideas about what behavior is expected of group members. "The more cohesive the group, the more eager individuals will be for membership, and thus the more likely they will be to conform to the group's norms" (p. 55). Another way of saying this is that "The more cohesive the group, the more influence it has on its members" (p. 55). Conversely, "The less certain and clear a group's norms and standards are, the less control it will have over its members" (p. 55). Therefore, a group can best reach its goals when it has everyone's allegiance and willingness to sacrifice personal desires on behalf of the group.

Horwitz (1956) suggested that the power of groups to

get members to accept group goals and to perform group functions depends largely on the degree to which members are attracted to membership in the group.

A study by Seashore (1954) indicated that the members of a very cohesive group would nearly conform to the standards set by the group whether the standards were high or low, but the group that lacked cohesiveness tended to have considerable variation in productivity among members. A high degree of cohesiveness seemed to lead to high productivity when the attitudes of the group toward the company were favorable. If there were good relationships among management, union, and employees, the cohesive group would set high standards of performance. If not, a cohesive group tended to have a much lower than average level of productivity.

Likert's (1961) organizational studies emphasized the importance of building group loyalty, and many of the studies of "participative management" rest their case on the positive effects of developing strong group loyalties and group identity. Gellerman's (1963) discussion of leadership revolved largely around the effective utilization of group loyalties. We can appreciate some of the assumptions that underlie Gellerman's argument:

> The effective leader also benefits from group loyalties. These operate to enhance productivity, rather than restrict it, because his men achieve their productivity by themselves and therefore take pride in it . . . a good production record is a very flattering form of feedback for men who can build their egos by working well together. (p. 223)

Barnett supported the view that those who identify with a social system are more likely to accept its innovations (1953, p. 40). With reference to nursing homes, this school of thought would undoubtedly predict that adaptation, and as a result, effectiveness, would be highest in those nursing homes where the highest proportions of personnel identify with the nursing home and its goals. However, there is an important flaw in this reasoning that militates against such a finding. Simon, in his book Administration Behavior (1951, p. 206), pointed out that a person may well identify with the organization and its goals and still have reason for resisting the demands of formal authorities. He may identify with the goal of giving good patient care and still see the administrator as obstructing that purpose. He may identify very strongly with the goal and disagree with the means of achieving it.

The nature of members' expectations is very important to organizational functioning. By expectations, we mean the anticipations that organization members have with respect to

how other organizational members with whom they interact will act or think under given circumstances. When the mutual expectations of different members show a poor fit, adequate organizational coordination becomes difficult to attain and maintain.

Vollmer (1960) felt that cooperative endeavors among human beings were very important to effective organizational functioning for the accomplishment of objectives:

> Cooperative endeavor among human beings depends upon (1) the articulation of reciprocal behavior patterns so that each party in relation performs a task or series of tasks which contributes effectively to a common objective, (2) mutuality of reciprocal expectations so that each party has a clear idea of what the other party is supposed to do and how he is supposed to do it, and (3) the observance of these role expectations so that each party actually behaves in a manner which confirms the expectations of the other party. Conversely, where role requirements are ineffectively interrelated, where they are not mutually held or clearly understood by either party, or where they are not deserved in actual behavior, conflict is likely to occur. (p. 63)

By promoting organizational integration, adequate expectation systems also promote organizational effectiveness by increasing adaptability. When personnel understand each other's viewpoints, needs, and problems with reference to their mutual work, they are capable of interpreting more accurately relevant communication from a sender because they can grasp his frame of reference. Suspicion and distrust of

the sender can be minimized. His messages can appear more rational even if they are contrary to the personal interests of the receiver. Thus, messages from the formal authority in nursing homes prescribing changes in routines will appear more reasonable to the recipient and more likely to engender compliance from him because he understands the particular problem or need confronting formal authorities that precipitated the decision to make the change. Obviously, these messages invoking new rules, policies, or procedures must be clear if the personnel are to adapt to them. They must be able to interpret the messages accurately and translate them into the action steps desired by the policy maker.

Therefore, when members of a nursing home staff understand everyone's viewpoint about their jobs from the administrator on down, they are more capable of accurate emphasizing. Misinterpretation of the behavior of other workers is less likely to occur.

In probing the relationship outlined in this section, staff members' identification with the nursing home and its goals, their work group, and their occupation was measured. Also their feelings regarding the extent to which people from different departments see the other person's viewpoint in connection with their mutual working relation-

ship were measured.

Summary

In summary, this chapter concerns itself with two groupings of factors that are hypothesized to have a direct relationship to "organizational effectiveness" and "quality of care" in the nursing home organization. First, "administrative effectiveness" is a direct probe into administrative management practices of the nursing home. The intent is to affirm or disaffirm the relationship between nursing home performance and the quality of administration. Is the quality of patient care influenced by the administrator's ability to establish objectives and communicate clearly the policies, rules, and procedures? Do employees have greater job satisfaction when they feel that department heads and the administrator understand their needs and problems? In general, can the administrator facilitate the internal relationship among staff members by the processes he controls?

Second, "internal organizational relationships" investigates the social-psychological aspects of the nursing home organization. The purpose is to establish the effects of social interaction patterns upon organizational performance. Most of the studies of organizational effectiveness in the health care industry relate effectiveness to physical

facilities, and the number and skill levels of its staff members. It is the hypothesis of this research that the extent to which nursing home personnel interrelate with one another in the performance of their work activities will be just as important as physical facilities and skill in relation to the staff's ability to provide quality care. In other words, there will be a discernible relationship between the quality of patient care and the extent to which staff members exchange ideas and information and coordinate their activities.

This section of the research and its hypothesis are intended to focus attention on the importance of administrative practices and internal social functioning to the effective performance of the nursing home organization and the quality of care it provides.

CHAPTER VI

RESEARCH METHODS

Research Design

The purpose of this investigation is an attempt to discern those factors that are necessary for effective organizational performance and quality care in a nursing home setting. The theoretical framework for this study is based primarily upon the works of Georgopoulos and Mann (1962) and Mott (1960, 1972). As indicated in Chapter I, the three basic sets of variables explored in this study are: (1) characteristics of effective organizations, (2) organizational effectiveness, and (3) quality of patient care administered.

Because this study will be conducted in actual operating organizations, it will not be possible to control variables. Accordingly, we must measure conditions as they

exist in their present state. In addition, randomization will not be possible because it is very difficult to secure the cooperation of individual nursing home administrators in any type of investigative study. This is because they are constantly being inspected and investigated by various governmental and private agencies. Therefore, the research design can be classified as an ex post facto field study. Ex post facto research may be defined as:

> That research in which the independent variable or variables have already occurred and in which the researcher starts with the observations of a dependent variable or variables. He then studies the independent variable or variables. (Kerlinger, 1964, p. 130)

Field studies are generally classified as ex post facto scientific inquiries aimed at discovering the relations and interactions among sociological, psychological, and educational variables in real social structures or organizations. Festinger and Katz (1958) have divided field studies into two broad types: exploratory and hypothesis-testing. The exploratory type, they say, seeks what is, rather than predicting relations to be found (pp. 75-83).

The second subtype of field study, under which this study is classified, is the hypothesis-testing variety. Hypothesis testing, though important in all research, is particularly important in ex post facto studies, because it

is one of the only ways to "control" the variables. Kerlinger points out that:

> Lacking the possibility of randomization and manipulation, ex post facto research, perhaps more so than experimentalist, must be very sensitive to alternative hypothesis-testing possibilities. (1964, p. 371)

It could be concluded by some that ex post facto research is more important to the behavioral sciences than experimental research, primarily because the most important social scientific research problems do not lend themselves to experimentation, although many of them do lend themselves to controlled inquiry of the ex post facto kind. Kerlinger says that:

> If a tally of sound and important studies in psychology, sociology and education were made, it is likely that ex post facto studies would outnumber and outrank experimental studies. (1964, p. 373)

Selection of Sample

Because of a tremendous amount of governmental regulation and continuous inspections by federal, state, and county agencies, the nursing home industry is not one that encourages investigations by outsiders. Another problem faced by the researcher is that the majority of nursing homes are owned and operated by individuals for a profit. It would take the cooperation of many owners and administrators to obtain enough homes to constitute an adequate sample.

To secure this cooperation would be a long and involved process and it is extremely doubtful that profitability data, so valuable to this research, could be obtained.

Therefore, acting upon the advice and personal recommendation of Dr. Joe Rogers, Executive Director of the Oklahoma State Nursing Home Association, the operational management team of Alpha Corporation was contacted.

Alpha Corporation owns and operates 26 nursing homes in a five-state area (Colorado, New Mexico, Illinois, Oklahoma, and Texas). Alpha Corporation is managed by a group of executives who are interested in and encourage research in the area of nursing home administration. In accordance with this interest, they permitted the researcher to use the employees of these skilled nursing homes as subjects. Moreover, they offered to assist the researcher in collecting the questionnaire data and make all of their operational data available. In return, the researcher agreed to supply them with the results and conclusions, and their implications for improved organization performance and quality of care.

In order to achieve the broadest, most inclusive study possible within this organization, an effort was made to collect data in all 26 nursing homes, and all but two

cooperated. An additional advantage of a larger N (sample) is that it enhances the chances of obtaining significant findings.

All 24 nursing homes are identical in the following characteristics: (1) their size ranges from 100 to 200 beds, (2) they employ from 70 to 130 employees, (3) each has a licensed administrator, (4) they are located in cities of 30,000 or more, (5) they are privately owned and operated for a profit, and (6) they are all classified as skilled or intermediate by the Department of Health, Education, and Welfare.

Alpha Corporation employs a decentralized philosophy of management and permits its nursing home administrator to establish his or her own policies and procedures. In addition, the management team assured me I would find homes scoring all along the continuum on measures of organizational effectiveness. This is partially attributable to the fact that the current management took over the organization approximately three years ago in receivership and has succeeded in reversing prior unsatisfactory financial deficiencies. As a result, there are numerous nursing homes in various stages of development regarding profitability and performance. For these reasons, Alpha Corporation makes an

excellent subject for this study.

Pilot Study

In order to pretest the research instrument, a pilot study was undertaken at Northwest Nursing Center in Oklahoma City, Oklahoma during the last week in June 1975. A total of 46 questionnaires was passed out to nursing home personnel and 18 were recovered for a response rate of 39 percent.

The nursing home personnel were given specific, face-to-face instruction by the researcher to place a question mark "?" next to any questions they did not understand. Out of the 18 questionnaires received, there was a total of only three question marks. This should be an indication that the instrument was readable and understandable to nursing home staff members. On the basis of interviews with the staff and the executives of Alpha Corporation it was decided to rewrite several questions to make them even more readable and understandable. Alpha Corporation then retested the revised instrument on several of its staff to see if they could comprehend it, and approved use of the questionnaire.

In addition, two questions were dropped from the pretest instrument because further evaluation showed them as heavily overlapping and measuring the same things as other questions.

Collection of Data

There are approximately 2,500 people employed in Alpha's 26 nursing homes. The majority of these individuals would be classified as nonprofessionals (aides, orderlies, housekeepers, kitchen helpers, labor-grades, etc.). Previous studies have suggested that a lower than normal response rate can be anticipated in these labor grades. To obtain an adequate sample from each nursing home a total sample of all nonsupervisory personnel was attempted.

Individual respondents from each nursing home were asked to provide data concerning their own personal feelings, beliefs, and actions, but also, and more importantly, to provide data containing their observations about different aspects of nursing home functioning and about the attitudes and behavior of other people in the nursing home with whom they work or interact.

The members of the respondent group in each nursing home were asked to complete identical research instruments to ensure comparability of the data across nursing homes. The questionnaire forms are of the paper-and-pencil type, consisting of multiple-choice or check-list questions with fixed response alternatives following each question. The main purpose of using questions of this type is standardiza-

tion; every individual belonging to a particular group of respondents is exposed to the same stimulus. (See Appendix B.)

After discussing the collection of data with the top management team it was decided that the director of training and development would coordinate the collection of data through the training coordinator in each facility. The questionnaires and blank white envelopes to seal them in were placed in a box and shipped to each home. The training director was responsible for distributing and collecting the individual questionnaires and then shipping them back to the researcher. All respondents were instructed to fill out the questionnaire on their own time, place the completed questionnaire in the envelope provided, and return it to the training director. All respondents were promised complete anonymity and strict confidentiality for their answers.

The training coordinators were instructed to distribute questionnaires to all staff members with the exception of the administrator, director of nursing, executive housekeeper, and food service director. In distributing the questionnaires, the suggestion was made to let individual staff members select their own, rather than having them passed out. This was done to help eliminate any suspicions

on the part of the respondents.

In order to provide the staff members with complete anonymity and strict confidentiality for their answers, the training coordinators were instructed to collect the questionnaires in the following manner:

> Provide a "collection box" for the staff members to deposit their completed surveys in. Use the box the surveys came in or a bigger one if handy. Write "Deposit Surveys Here" on the side of it and cut a slit in the top. Then place it in an area where all staff members will have access to it. (Example: employees' lounge, main lobby, or the time clock.) (See Appendix A.)

After approximately one to two weeks the training coordinators packed the completed questionnaires in a box and shipped them back to the researcher.

Close to 2,300 questionnaires were shipped to the 26 nursing homes and nearly 1,850 were placed in the hands of nursing home personnel. Out of these, approximately 860 questionnaires were recovered for an overall response rate of 46 percent. Because of the nature of the personnel surveyed, this appears to be a very good response rate (see Table 1).

Individual nursing home response rates ranged all the way from 11 percent to 72 percent. Only five homes had response rates below 30 percent. Surplus survey forms were not returned from five nursing homes so that their response

TABLE 1

SUMMARY OF QUESTIONNAIRE DATA COLLECTION

Nursing Home	No. of Questionnaires Sent	No. of[1] Blanks Returned	No. Distributed to N.H. Staff	No. of Responses Returned	Response Rate %
1	75	12	63	35	55
2	135	32	103	52	48
3	135	26	109	64	63
4	130	19	111	25	22
5	132	23	109	45	41
6	130	44	86	44	51
7	104	1	103	68	66
8	80	26	54	29	53
9	75	24	51	25	49
10	65	23	42	36	85
11	68	24	44	29	65
12	75	15	60	26	43
13	75	43	32	23	71
14	65	19	46	34	79
15	110	54	56	36	64
16	75	--	75	16	21
17*	135	--	135	15	11
18	Dropped from Survey				
19	104	41	63	31	49
20*	110	--	110	28	25
21*	77	--	77	29	42
22	Dropped from Survey				
23	121	3	118	29	24
24*	104	--	104	75	72
25	70	23	47	33	68
26	70	26	44	24	54
Totals	2,320	478	1,842	852	46

[1]Number of unmarked questionnaires returned from each nursing home.

*No unmarked questionnaires were received from these nursing homes so response rates were approximated.

rates were approximated (NH #16, 17, 20, 21, 24).

Respondent Job Classification

Respondents were asked to designate their job classification if in the nursing department or indicate which of the other nursing home departments they were members of. In all, the respondents were divided into seven categories: Nurse (RN & LPN), Nurse's aide and orderly, Nurse other, Dietary, Housekeeping, Administrative, and Maintenance. And as could be expected, several respondents failed to designate their job classification or department—approximately 2.5 percent or 20 respondents.

As expected, the largest number of respondents came from the nurse's aide category with almost 50 percent of the total. Next came the professional nurses with 18.6 percent of the total. The divisions of Housekeeping, Dietary, and Administration were very close in their proportion of respondents, being 10.6 percent, 9.1 percent, and 7.6 percent respectively. Nursing other and Maintenance had relatively small proportions of 3 percent and 1.6 percent respectively (see Table 2).

Because the proportion of respondents in each of the categories is different in all 24 nursing homes, the question arises as to whether this could have a significant influence

TABLE 2

NUMBER AND PROPORTION OF RESPONDENTS
BY JOB CLASSIFICATION

Nursing Home	Nurse RN or LPN	Nurse Aide	Nurse Other	Dietary	House-keeping	Admin.	Maint.	Unclassified
1	7*	16	0	5	1	4	0	1
	21.1**	48.5	0.0	15.2	3.0	12.1	0.0	0
2	8	22	3	3	11	2	2	
	15.7	43.1	5.9	5.9	21.6	3.9	3.9	
3	15	29	5	5	1	6	0	3
	24.6	47.5	8.2	8.2	1.6	9.8	0.0	
4	6	10	1	2	3	2	0	1
	25.0	47.5	4.2	8.3	12.5	8.3	0.0	
5	7	24	0	3	9	1	0	1
	15.5	54.5	0.0	6.8	20.5	2.3	0.0	
6	10	24	1	1	5	0	0	1
	24.4	58.5	2.4	2.4	12.2	0.0	0.0	
7	11	32	1	6	7	7	2	2
	16.7	48.5	1.5	9.1	10.6	10.6	3.0	
8	5	12	0	3	5	3	0	1
	17.9	42.9	0.0	10.7	17.9	10.7	0	
9	2	15	0	2	4	0	1	1
	8.3	62.5	0.0	8.3	16.7	0.0	4.2	
10	5	21	0	2	5	2	0	1
	14.3	60.0	0.0	5.7	14.3	5.7	0.0	
11	4	17	0	1	3	2	1	1
	14.3	60.7	0.0	3.6	10.7	7.1	3.6	
12	6	11	1	2	3	2	1	0
	23.1	42.3	3.8	7.7	11.5	7.7	3.8	
13	4	12	0	2	3	2	0	0
	17.4	52.2	0.0	8.7	13.0	8.7	0.0	
14	7	13	0	5	2	5	1	1
	21.2	39.4	0.0	15.2	6.1	15.2	3.0	

TABLE 2 (CONTINUED)

Nursing Home	Nurse RN or LPN	Nurse Aide	Nurse Other	Dietary	Housekeeping	Admin.	Maint.	Unclassified
15	4	23	3	0	3	3	0	0
	11.1	63.9	8.3	0.0	8.3	8.3	8.3	
16	4	8	1	0	0	3	0	0
	25.0	50.0	6.3	0.0	0.0	18.7	0.0	
17	2	9	0	2	2	0	0	0
	13.3	60.0	0.0	13.3	13.3	0.0	0.0	
19	2	26	0	0	1	2	0	0
	6.5	83.9	0.0	0.0	3.2	6.5	0.0	
20	5	6	2	8	1	4	1	1
	18.5	22.2	7.4	29.6	3.7	14.8	3.7	
21	6	14	2	4	1	2	0	1
	20.7	48.3	6.9	13.8	3.4	6.9	0.0	
23	8	10	1	0	5	3	2	0
	27.6	34.5	3.4	0.0	17.2	10.3	6.9	
24	14	32	3	13	9	4	1	1
	18.4	42.1	3.9	17.1	11.8	5.3	1.3	
25	7	18	0	3	3	1	1	0
	21.2	54.5	0.0	9.1	9.1	3.0	3.0	
26	6	8	1	4	1	3	0	1
	26.1	34.8	4.3	17.4	4.3	13.0	0.0	
Total	155	412	25	76	88	63	13	20
	18.6	49.5	3.0	9.1	10.6	7.6	1.6	

*Number of Respondents--Per Nursing Home.

**Proportion of Respondents--Per Nursing Center.

upon the variance between variable scores. To address this problem, the respondents from each nursing home were grouped into two classifications—professional and nonprofessional. The reason for choosing these classifications is primarily that the personnel in a nursing home are divided into two basic types. The professional classification is composed of the registered nurses and the licensed practical nurses. Both have received degrees in nursing from a recognized school of nursing and are licensed by the state in which they practice.

The nonprofessional classification is made up primarily of unskilled labor. This category includes nurse's aides and orderlies, kitchen helpers, maids, porters, and maintenance men. No licenses or formal training are required for these jobs; most of the training occurs on the job or through inservice programs.

After discussing the matter with nursing home administrators and executives, it was concluded that, if there were differences in the perceptions of nursing home staff members, it would occur between these two classifications.

The first step in analyzing the effect that differences in the proportions of professional and nonprofessional staff members might have on the variable mean scores was to

determine if there was a significant difference in the proportions between the 24 nursing homes. Therefore, the following null hypothesis was tested.

Hypothesis: Each nursing home will have identical proportional relationships between the number of professional and nonprofessional respondents.

In statistically testing this hypothesis the CROSSTABS subprogram of the Statistical Package for the Social Sciences was used (Nie et al., 1975, p. 216). The SPSS subprogram CROSSTABS produced a two-dimensional table. The data in the table represent a tabulation of respondents by professional-nonprofessional classification and by nursing home (see Table 3). The chi-square test of statistical significance was used to determine whether there was a significant difference in the proportional relationships between nursing homes (see Statistical Analysis, p. 223 below).

A chi square value of 14.75 was computed and with 23 degrees of freedom, the probabilility of occurrence is .9031, or not significant. Therefore, based upon the statistical data, we cannot reject the null hypothesis. Therefore, based upon the data, we can conclude that even if the perceptions of professional and nonprofessional are significantly different, it will not significantly influence the various means because the proportional relationships of the

TABLE 4

NUMBER AND PROPORTION OF PROFESSIONAL AND NON-PROFESSIONAL RESPONDENTS PER NURSING HOME

Nursing Home	Professional	Non-Professional	Unclassified
1	7*	26	2
	21.1**	78.8	
2	8	44	0
	15.4	84.6	
3	15	46	2
	24.6	75.4	
4	6	19	0
	24.0	76.0	
5	7	38	0
	15.6	84.4	
6	10	31	3
	24.4	75.6	
7	11	56	1
	16.4	83.6	
8	5	24	0
	17.2	82.4	
9	2	23	0
	8.0	92.0	
10	5	30	1
	14.3	85.7	
11	4	24	1
	14.3	85.7	
12	6	20	0
	23.1	76.9	
13	4	19	0
	17.4	82.6	
14	7	26	1
	21.2	78.8	

TABLE 3 (CONTINUED)

Nursing Home	Professional	Non-Professional	Unclassified
15	4 11.1	32 88.9	1
16	4 25.0	12 25.0	0
17	2 13.3	13 86.7	0
19	2 6.5	29 93.5	0
20	5 18.5	22 81.5	1
21	6 20.7	23 79.3	0
23	8 27.6	21 72.4	0
24	14 18.4	62 81.6	0
25	7 21.2	26 78.8	0
26	6 26.1	17 73.9	1
Total	155 18.5	683 81.5	14

*Number of Respondents--Per Nursing Center.

**Proportion of Respondents--Per Nursing Center.

DF = 23

P = .9031

nursing homes are approximately identical.

Scoring Questionnaires

All questionnaires used in this study have been used and validated by previous research. It is not the purpose of this investigation to develop new methods of measuring internal organizational functioning and effectiveness or any other organizational behavioral variables.

Subjective Measures of Effectiveness

The questionnaire items developed by Mott (1972, pp. 25-26) used here as "Subjective Measures of Organizational Effectiveness" will be scored in the following manner. In computing the score for productivity each respondent's answers to questions 1 and 2 were scored according to the numbers next to the options he selected. These numbers were added, and the sum divided by two to give a productivity score ranging between 1.00 and 5.00 for each respondent. When a respondent did not answer one or more of the component items, no score was constructed for him or her (this same procedure was applied to the index of adaptability).

$$P_d = \frac{\sum_{j-1}^{N} O_j}{N}$$

P_d = Individual productivity score

O_j = Option selected on the j^{th} question

N = Number of questions (N = 2)

In constructing the productivity score for each nursing home, the mean productivity score for each respondent in that nursing home was summed; the total was then divided by the number of respondents in that nursing home. The formula is as follows:

$$NHA\text{-}P_d = \frac{\sum_{j=1}^{N} P_dj}{N}$$

P_dj = Productivity score for the j^{th} respondent in nursing home "A"

N = Number of respondents in nursing home "A"

$NHA\text{-}P_d$ = Productivity score for nursing home "A"

The adaptability index was constructed the same way, using questions 3, 4, and 5 on the questionnaire. (See Appendix B.)

The flexibility score will be much simpler to derive because only one score is obtained for each respondent, thereby making the computation of a mean for each respondent unnecessary. The perceived flexibility of the nursing home was measured by the respondent's answer to question 6. Each

respondent's answer was scored according to the number next to the opinion that he or she selected. In determining the nursing home's score for flexibility, all the respondents' scores will be summed and then divided by the total number of respondents in that nursing home using the following formula:

$$\text{NHA-Flex} = \frac{\sum_{i=1}^{N} O_i}{N}$$

NHA-Flex = Nursing home "A" score for flexibility

O_i = Option selected by respondent i

N = Number of respondents in nursing home "A"

In order to determine the basic distributional characteristics of each of the 35 variables in the study, descriptive statistics were computed. This provided the researcher with information on the distribution, variability, and central tendencies of the variables. (See section on Descriptive Statistics, p. 214 below.)

Table 4 shows that the majority of the nursing homes score in the mid-ranges on the variables of productivity and adaptability. The variable productivity closely approaches the normal distribution; since it is somewhat skewed to the left, we would expect that only 5 percent of the nursing

homes would score as high as four or above and the majority would score between three and four. The same would be true for adaptability and the scores would be distributed more evently. The scores for flexibility were somewhat higher, with the probability being that 45 percent would score above four; however, this percentage might be increased because of the distribution's skewedness to the right.

TABLE 4

DESCRIPTIVE STATISTICS FOR THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Productivity	3.628	.23	.228	.11	1.04
Adaptability	3.54	.27	.048	-.729	.98
Flexibility	3.88	.299	-.636	-.329	1.10

N = 24

Quality of Patient Care

To evaluate the quality of patient care, the methods developed by Georgopoulos and Mann (1962, pp. 200-225) will be employed with some modifications.

The response alternative offered by the questions form a seven-point scale that makes it possible to obtain

the answer of any group of respondents and then to compute the arithmetic mean, or average of all answers. Georgopoulos and Mann (1962) felt that seven response alternatives were necessary for the following reasons: (1) to permit as much discrimination among as many different degrees of quality of care as might reasonably be expected for hospitals of the kind studied; (2) to allow the respondents relatively great freedom of choice in their answers; and (3) the results of their pretest and research demonstrated that the majority of respondents mostly tend to check alternatives toward the favorable end of the scale, thus making it necessary to design a scale permitting rather fine distinctions, especially on the favorable side.

In their study The Community General Hospital, Georgopoulos and Mann (1962) not only designed these subjective measures of the quality of patient care but also attempted to validate them. Each measure of patient care was validated using a different set of data for this purpose. The nursing care measure was validated by comparing it against (1) data from hospital records regarding the composition of the nursing staff in the various hospitals, (2) questionnaire data on how good a job the nursing staff does for the hospital and on how well the nursing department is

doing in relation to what it should be accomplishing, and (3) volunteered comments by different respondents from each participating hospital about nursing care and the nursing staff (Georgopoulos & Mann, 1962, p. 261).

The overall care measure was similarly validated by comparing it against (1) data on how well patients speak of the hospital, according to medical and nonmedical respondents from each institution; (2) data about the reputation each hospital enjoys in its community, in the view of medical and nonmedical respondents; and (3) free qualitative comments by various respondents about patient care in each hospital. Finally, the comparative measure of the quality of overall patient care was validated by comparing it with each of the other measures of patient care developed in their study, and against certain data demonstrating that the medical respondents who rated overall care comparatively had a realistic frame of reference in terms of which to perform such a rating (Georgopoulos & Mann, 1962, p. 262).

The primary reasoning behind the Georgopoulos and Mann approach was that members of the hospital staff would serve as rather inexpensive but accurate assessors of hospital functioning and they discovered that the judgments of hospital employees were significantly related to those of

the physicians. This finding suggests that other groups in the hospital were capable of making evaluations by essentially the same criteria as those used by physicians (Mott, 1972, p. 190).

In order to minimize a change relationship, it is essential that patient care be evaluated along more than one dimension. Therefore, the following three measures were employed: (1) an overall measure of the quality of care, (2) a measure of the quality of nursing care, and (3) a measure of the quality of total care given to patients in one home in comparison to the total care given to patients in other similar nursing homes, i.e., a comparative measure of overall care.

These dimensions were combined to obtain an overall mean score for each nursing home for the quality of care. In determining the score for quality of care, each respondent's answers to questions 29, 30, and 31 were scored according to the numbers next to the options he selected. These numbers were added and then divided by the number of observations checked to determine a quality of care score for each respondent. For purposes of convenience, the numerical values next to the options selected were reversed. If a respondent left a question blank it was then omitted in

computing his score. The formula is as follows:

$$QC_j = \frac{\sum_{i=1}^{N} O_i}{NQ}$$

QC_j = Quality of care score for the j^{th} respondent

O_i = Option selected on the i^{th} question

NQ = Number of questions selected

To determine the quality of care score for each nursing home, the mean quality of care score for each respondent will be summed and then divided by the total number of respondents in that nursing home as follows:

$$OCNHA = \frac{\sum_{j=1}^{N} QC_j}{N}$$

OCHNA = Quality of care score for nursing home "A"

QC_j = Quality of care score for the j^{th} respondent

N = Number of respondents

The main difference in the methods used to determine the scores for productivity and quality of care is that in computing quality of care, if a respondent failed to check all three measures the score was not thrown out. The reason for this is that question 31, the comparative measure, was optional. It assumes that the respondent has worked in other nursing homes or has some knowledge of the quality of

care administered in them. If the respondent does not have such knowledge, he was instructed to omit the question. (See Appendix B.)

TABLE 5

DESCRIPTIVE STATISTICS FOR THE QUALITY OF CARE

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Quality of Care*	4.479	.596	.379	-.276	2.20

N = 24

* = 7 point scale

The distribution of the quality of care mean scores is moderately flat and skewed to the left. Based on the normal distribution we can say that approximately 68.26 percent or 16 of the nursing homes score between 3.856 and 5.04—a rating of good. In addition, 31 percent or seven nursing homes achieved a rating of very good or better. The maximum score was 5.7 and the minimum score was 3.5. The lowest scoring nursing home would score midway in the fair to good category.

The Characteristics of Effective Organizations

The research questions employed in this section of the research were taken from the works of Paul E. Mott,

"Sources of Adaptability and Flexibility in Large Organizations" (1960) and The Characteristics of Effective Organizations (1972). The only exception is the measure relating to the planning ability of the supervisor, which was taken directly from Georgopoulos and Mann's The Community General Hospital (1962). However, several questions were employed in both the works of Mott and Georgopoulos and Mann.

Administrative Effectiveness

To evaluate the effectiveness of nursing home administration and its relationship to "organizational effectiveness" and the "quality of care," three areas of administration were selected for study—organizational planning, administrative communication and problem solving, and rational trust of administration.

Organizational Planning

To measure "organizational planning," nursing home staff members were asked to evaluate the ability of their supervisor in planning, organizing, and scheduling the work (question 7); clearness of goals and objectives toward which to work (question 8); clearness of the various rules and regulations of the nursing home (question 9); and the extent to which the staff members obey these rules and regulations

(question 10). (See Appendix B.)

In order to facilitate statistical analysis, the numerical values next to the options for all four questions were reversed. The nursing home mean scores for the four "measures of organizational planning" were determined by the same method that was utilized to compute flexibility. (See Subjective measures of effectiveness, p. 183 above).

TABLE 6

DESCRIPTIVE STATISTICS FOR ORGANIZATIONAL PLANNING

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
*Plan Abl of Sup.	5.083	.512	.049	-1.294	1.565
Clarity of Objectives	3.832	.312	.15	- .871	1.11
Clarity of Rules, Reg.	3.96	.317	-.28	- .395	1.25
Adhere to Rules	3.18	.262	.29	.779	1.15

N = 24

* Seven point scale

Nursing home personnel rate the planning ability of their supervisor as fair to good. This distribution would

be considered to be very platykurtic (flat). The maximum value was 5.9 and the minimum was 4.375. Staff members seem to feel that objectives, rules, and policies are defined almost as clearly as they should be. Both of these distributions would be considered to be platykurtic. A majority of the personnel within the nursing center are perceived to follow the rules and regulations. This distribution is characterized as being lyrtokurtic (peaked). It says primarily that most of the scores cluster close to the mean.

Administration Communication and Problem Solving

In order to probe the effects of administrative communication and problem solving upon "organizational effectiveness" and "quality of care," staff members were asked to evaluate their administrator on the following items: ability to communicate (question 24), awareness of problems faced by staff members (question 25), and his/her effectiveness at solving these problems (question 26).

To facilitate statistical analysis, the numerical values next to the options were reversed and to determine the scores for each nursing home, the same formula and procedure were used as to compute flexibility.

TABLE 7

DESCRIPTIVE STATISTICS FOR ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING

Variables	Mean	Std. Dev.	Skewness	Kurtosis	Range
Adm. Comm.	3.315	.453	.38	-.867	1.59
Aware of Prob.	3.486	.368	.23	-.503	1.29
Abil. to Solve Prob.	3.415	.421	.34	.253	1.79

N = 24

The scores would seem to indicate that there is room for improvement in administrative communications and problem solving. Administrative communication was perceived to be only fairly adequate on the whole; approximately 94 percent of the scores fell below four and the distribution would have to be described as platykurtic. The awareness of and ability to deal effectively with problems was given only fair to good ratings. Only 8 percent of the distribution would exceed a rating of very good.

Rational Trust

The section on "rational trust" is concerned with employee perceptions of how well management is perceived as

following its own rules (question 15); understanding workers' points of view, needs, and problems (question 16); and being fair and reasonable (question 17).

The same procedure was employed in computing the rational trust scores as was used in determining flexibility, with the exception that the numerical values were reversed.

TABLE 8

DESCRIPTIVE STATISTIC FOR RATIONAL TRUST

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Adm. Fol. Rul. & Reg.	3.447	.378	-.238	-.436	1.433
Und Wks Needs	3.17	.395	.462	-.493	1.46
Adm. Fair Reason	3.462	.3	.517	-.622	1.06

N = 24

Administration was rated only fair to moderately good on all three measures in three platykurtic distributions. Understanding workers' needs and problems is the area in greatest need of improvement, with a mean of only 3.17 and only one nursing home scoring above four.

Internal Organizational Relationships

The objective of this part of the research is to probe the internal working relationships of the nursing home organization and establish its connection to "organizational effectiveness" and the "quality of care." To accomplish this objective three areas of internal organizational relationships were selected for study—conditions for negotiating orders, horizontal integration-coordination, and cultural and social-psychological integration.

Conditions for Negotiating Orders

In order to establish the relationship between "conditions for negotiating orders" and "organizational effectiveness" and the "quality of care," staff members perceptions of how well they exchange ideas and information (question 12), handle coordination problems (question 14), and avoid creating problems for one another (question 13) were analyzed.

Scores were determined in the same manner that all other variable scores have been determined in this section.

As could be expected, 68 percent of all the nursing homes scored between three and four on all three variables.

Personnel in all 24 nursing homes rated themselves and their co-workers above three on exchanging ideas and information. The minimum score was 3.03 and the maximum was an amazing 4.56 out of a possible 5.00; as far as handling coordination problems, the great majority was rated little better than fair.

TABLE 9

DESCRIPTIVE STATISTICS CONDITIONS FOR NEGOTIATING ORDER

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Exc. Idea Inf.	3.574	.41	.791	-.053	1.53
Avoid Creat. Problems	3.467	.332	.553	-.06	1.28
Hand. Cord. Problems	3.372	.285	.12	-.457	1.14

N = 24

Horizontal Integration-Coordination

To determine how the factors considered under the labels of "horizontal integration-coordination" actually affect organizational performance and the quality of care, staff members' perceptions of the following factors were

measured: extent to which routine activities are well meshed (question 11) and timed (question 18); handling of interdepartmental problems (question 19); the degree of conflict and tension between departments (question 20); amount of pressure placed on staff members for performance (question 21); and the extent to which different shifts cooperate with one another (questions 22 and 23).

To facilitate statistical analysis numerical values were reversed for all questions with the exception of questions 11, 20, and 21, because for these three questions the more favorable the option selected by the respondent the greater its numerical value and it is very convenient to have the larger numerical values correspond to the more favorable options. The mean scores for the measures of timing activities, meshing of activities, handling of interdepartmental problems, and the amount of pressure placed on staff members for performance were determined by employing the same methods and procedures used on the other variables in this section.

The nursing home's mean score for conflict was computed in much the same way as the mean score for quality of care. This was done by summing the numerical values next to the options selected. If option number six was selected, it

was counted as a missing value and not included in the N for that respondent. Second, the respondent means were summed and divided by the number of respondents to give us the conflict score for that nursing home.

The mean for intershift cooperation was determined in the same manner as the means for productivity and adaptability (see pp. 183-186 above).

TABLE 10

DESCRIPTIVE STATISTICS FOR HORIZONTAL INTEGRATION

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Meshing of Jobs	3.279	.379	.014	.203	1.59
Act Well Timed	3.283	.418	-.107	-.979	1.45
Hand Int. Dept. Prob.	3.35	.289	-.712	.749	1.24
Conflict	3.52	.256	.544	-.266	.98
Pres. for Perform	3.236	.337	.361	.161	1.39
Int. Shift Coop.	2.975	.362	.485	-.761	1.20

N = 24

The meshing and timing of activities within the nursing home were perceived as being only fair. The handling

of interdepartmental problems would also achieve only a fair rating. From the degrees of skewness and kurtosis we would describe this distribution as peaked and skewed to the right. The maximum value was only 3.8. Based upon the score for handling interdepartmental problems and the meshing and timing of activities it is surprising that the conflict score is as low as it is. The nursing homes' staffs perceived only some to a little tension between departments. The minimum score was 3.17, which would indicate only some tension. Also the staff members felt that they were under some pressure to perform and saw different shifts as working only fairly well together.

Cultural and Social-Psychological Integration

To evaluate the effects of "cultural and social-psychological integration" upon nursing home performance and the quality of care, staff members' identification with the nursing home and its goals (question 27-B), their work group (question 27-A), and their occupation (question 27-C) was measured. In addition, their feelings about the extent to which people from different departments see the other person's viewpoint in connection with their mutual working relationship were measured (question 28). The scores for

these variables were determined in the same manner that flexibility was determined.

TABLE 11

DESCRIPTIVE STATISTICS FOR CULTURAL AND SOCIAL PSYCHOLOGICAL INTEGRATION

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Identify With					
Work Group	3.998	.229	-1.129	1.634	1.00
N.H. Objective	3.724	.292	-.116	-.585	1.09
Profess	3.994	.42	-1.881	4.958	2.00
Abl See Oth View	3.08	.333	-.044	1.809	1.730

N = 24

The frequency distributions for cultural and social-psychological integration deviate significantly from normal. Staff members would have to be described as identifying strongly with all three factors. Based on the high degree of skewness to the right (.881) and the high value for kurtosis (4.958) for the factor of identification with profession, the conclusion could be reached that personnel are more identified with this factor. In addition, this

distribution for identification with work group is heavily skewed to the left and the kurtosis measure indicates a peaked distribution. Last, in a distribution that would be described as very peaked, employees rated their co-workers as able to see the other person's viewpoint to only a fair degree.

Job Satisfaction

In view of its extensive validation, the Job Descriptive Index (JDI) developed at Cornell University will be used as the measure of job satisfaction. There are several characteristics of the JDI that recommend its use in this application. First, the technique generates a satisfaction score for five job areas as well as an overall score. This information helps the investigator in using the tool as a diagnostic device. He can determine with what area people are more or less satisfied. Another strong point is the scale's ease of administration. An additional advantage that makes it applicable to this research is that the verbal level of the items is quite low and does not require the respondent to understand complicated or vague abstractions (Robinson, Athanasiou, & Head, 1969, p. 105).

In addition, there are extensive normative data available for the JDI. Thousands of employees have filled

out this scale in many different types of organizations across the country. It is possible, therefore, not only to make comparisons between job aspects in the same organization but also in some cases to compare different organizations on the same job aspect.

The questionnaire consists of 72 items—18 in each of the work, supervision, and people subscales and nine each in pay and promotion. Each grouping consists of a list of adjectives or descriptive phrases. The respondent is asked to check "yes" if he feels it describes his pay (promotion, etc.), "no" if it does not, and "?" if he cannot decide. "Positive" answers are scored 3, "negative" answers 0, and "?" answers 1 point (Robinson et al., 1969, p. 105).

In determining the scores for job satisfaction, a major problem was encountered in that many respondents failed to complete all five sections of the JDI. Therefore, to omit all the respondents who did not complete the JDI would mean discarding a substantial amount of data. In order to utilize as many of the data as possible, it was determined to compute a score for each respondent on each one of the job aspects that he completed. From the respondent scores, on the five job aspects, a mean score was computed for the nursing home. To determine the nursing home's

score for overall job satisfaction the mean scores for the five job aspects were summed and divided by five.

The following formula was used to compute the mean scores for each nursing home on the five job aspects (job, supervision, co-workers, pay, and promotion).

$$NHA\text{-}JA_j = \frac{\sum_{1=i}^{N} RS_i}{N}$$

$NHA\text{-}JA_j$ = Nursing home "A" score on job aspect "j"

RS_i = Respondent score for the i^{th} respondent

N = Number of respondents in nursing home "A" completing the responses relating to job aspect "j"

To determine the score for each nursing home on overall job satisfaction, the following procedure was used:

$$\text{NHA-Job SAT} = \Sigma\frac{(\bar{X}\text{Job}) + (\bar{X}\text{SUP}) + (\bar{X}\text{COWKS}) + (\bar{X}\text{PAY}) + (\bar{X}\text{PROM})}{5}$$

NHA-Job SAT = Nursing home "A" score on overall job satisfaction

$\bar{X}$ Job = Nursing home "A" score on the aspect of job

$\bar{X}$ SUP = Nursing home "A" score on the aspect of supervision

$\bar{X}$ COWKS = Nursing home "A" score on the aspect of co-workers

$\bar{X}$ PAY = Nursing home "A" score on the aspect of pay

$\bar{X}$ PROM = Nursing home "A" score on the aspect of promotion

TABLE 12

DESCRIPTIVE STATISTICS FOR JOB SATISFACTION

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Job	32.372	2.967	.047	-1.074	9.788
Sup	39.871	3.77	-.263	- .102	14.977
Cowrs	39.211	3.438	.49	- .176	12.789
Pay	16.276	2.822	-1.196	.92	10.813
Prom	20.615	4.936	.459	- .252	18.925
Overall	29.669	2.788	.25	- .163	12.016

N = 24

In order to analyze the mean scores for job satisfaction to determine the relative amounts of satisfaction or dissatisfaction within a nursing home, it was necessary to use comparative data. The comparative measures chosen were taken from Smith, Kendall, and Hulin, The Measurement of Satisfaction in Work and Retirement (1969, p. 106). Because the nursing home is predominantly a female world, the nursing home mean scores were compared with relative scores of other females on a national sample.

The mean score for satisfaction with work or job of 32.372 lies on the 35th percentile. In other words, nursing home personnel are more satisfied than 35 percent of the

sample and less satisfied than 65 percent. If we move one standard deviation to the right to 35.339, this puts the score in the 45th percentile. Continuing to the 50th percentile or 37.000, we are 1.55 standard deviations from the mean. This can be interpreted to mean that 94 percent of the nursing homes fall below the 50th percentile on satisfaction with the job itself.

Personnel were more satisfied with supervision. The mean (39.871) falls approximately on the 40th percentile, and we have to move out only .56 standard deviation to reach the 50th percentile. Therefore, approximately 28 percent of the nursing homes would score above the 50th percentile. The maximum score was 46.138, which is on the 60th percentile.

The satisfaction of nursing home personnel with their co-workers would have to be described as low. The mean (39.211) falls close to the 32nd percentile and more than 90 percent of the nursing home scores would fall below the 50th percentile.

Satisfaction with pay is the lowest of all factors. The mean of 16.276 falls on the 25th percentile and the maximum score of 20.5 falls on approximately the 32nd percentile.

However, one very surprising factor is the level of nursing home staff members' satisfaction with their opportunity for promotion. The mean of 20.615 falls between the 65th and 75th percentile and furthermore, the minimum value of 12.718 is above the 45th percentile. One reason for this could be that Alpha Corporation was, at the time of data collection, considering a personnel development program. The program would allow staff members to receive vocational training while working for the nursing homes.

Overall, nursing home staffs would have to be considered as scoring low on comparative measures of job satisfaction. The large majority of nursing home mean scores would fall below the 50th percentile. These findings are consistent with a study by Woolf (1970) that discovered nursing home personnel to have a lower overall level of job satisfaction than hospital personnel performing approximately the same jobs in the same organization. However, in a recent conversation, Dr. Patricia C. Smith stated that job satisfaction scores have dropped and the norms reported in 1969 may be overstated.[1]

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[1]Recent scores on the JDI have been markedly lower than those issued to compute published norms, according to Patricia C. Smith in a telephone conversation with Donald A. Woolf in August 1976.

Turnover

The rate of labor turnover in Alpha Corporation's 26 nursing homes was computed for each of the three months prior to data collection. The formula used to determine monthly turnover rate is as follows:

$$\text{Monthly Turnover Rate} = \frac{\text{Terminations}}{\text{Average Labor Force}}$$

The researcher was provided with the average labor force in each nursing center for the month of data collection (August). In addition, the number of terminations and new hires for May, June, and July was also provided. To determine the average labor force for July and the preceding months, the following formula was used:

$$\begin{aligned}\text{Average Labor Force (July)} = {} & (\text{Average Labor Force (August)} \\ & + \text{Terminations (July)}) \\ & - (\text{New Hires (July)})\end{aligned}$$

In establishing the turnover rate for July, the average labor force was divided into the number of terminations in accordance with the formula above, and the procedure was repeated for May and June. Each nursing home's turnover rate was determined by summing the turnover rates for May, June, and July.

The three months preceding data collection were chosen as the basis to measure turnover because these months

should reflect current attitudes and feelings within the nursing home.

TABLE 13

DESCRIPTIVE STATISTICS FOR TURNOVER RATES

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
Turnover	46.269*%	17.448	.979	1.494	79.53%

N = 26

*Three months: May, June and July, 1975

It is readily apparent that nursing homes have a high rate of staff turnover. This could be expected based upon the level of job satisfaction. The mean of 46.269 percent indicates that the average nursing home loses approximately half of its employees every three months. The lowest score was 17.12 percent, but this is a quarterly rate; the annual rate would approach 70 percent. The maximum turnover rate for the three months was a staggering 96.65 percent.

Profitability

Almost all studies evaluating organizational performance have employed some form of what has been called "hard criteria." The hard criterion employed by this study is called "Gross Profit per Average Patient Day." It is

roughly the amount of profit made per patient per day in the nursing home. Gross profit per average patient day has the attribute of an all-encompassing measure of performance because it reflects revenues, cost, and occupancy rate. In addition, the revenues received by the nursing homes are adjusted upward or downward by governmental agencies to reflect the cost of living in different areas of the country. This has the advantage, for our purpose, of placing the nursing homes on a more equal footing.

The method by which gross profit per average patient day is determined is as follows:

Operating Profit = TR - (DCPC + DS + LL + POM + AO)

TR = Total Revenue

DCPC = Direct Cost of Patient Care

DS = Cost of Dietary Service

LL = Laundry and Linen

POM = Plant Operations and Maintenance

AO = Administrative Overhead

$$\text{Total Patient Days} = \sum_{i=1}^{N} NP_i$$

NP_i = Number of patients in the nursing home on the "i" day of the month

N = Number of days in the month

$$\text{Gross Profit per Average Patient Day} = \frac{\text{Operating Profit}}{\text{Total Patient Days}}$$

In incorporating this measure into the study, the gross profit per average patient day was computed for each nursing home for the seven months prior to the collection of questionnaire data. It is the researcher's opinion that at least a seven-month period is necessary to achieve an accurate gauge of profit performance. The seven-month period was chosen for profitability in an attempt to balance out temporary fluctuations in patient loads.

These data were readily available from Alpha Corporation's home office and were collected with a minimum amount of effort.

TABLE 14

DESCRIPTIVE STATISTICS FOR PROFITABILITY

Variable	Mean	Std. Dev.	Skewness	Kurtosis	Range
*Profit	$26.408	8.493	.534	-0.131	$35.25

N = 26

*Seven months: January-July, 1975.

Because these data were collected directly from Alpha's home offices, the researcher was able to obtain profitability data for all 26 nursing homes. Profitability

data showed a large range ($35.25) of scores that are moderately skewed toward the smaller numbers.

Statistical Analysis

The main purpose of the statistical analysis is to show how and to what extent the concepts and variables (or their corresponding measures) with which the study deals are interrelated. For each pair of variables studied, we first want to know whether the variables are related, i.e., whether they are associated or independent of each other. For example, is coordination related to the quality of patient care in the various nursing homes? Second, if two variables are found to be interrelated we want to know the degree (high or low) of the relationship between them or how closely they are related. Third, we want to know the direction of the relationship. Is the relationship between the two variables a positive one or a negative one? Fourth, how much confidence can we place in the obtained relationship?

It is not the objective of this research to prove causality between the variables; therefore, variables have not been classified as dependent or independent.

Once the mean scores for all of the variables had been determined for every nursing home, four separate statistical approaches were taken in analyzing the data.

Initially, descriptive statistics were computed; second, rank order correlations were determined; third, chi-square test was applied to the proportions of professionals and nonprofessionals; and fourth, the coefficient of concordance was determined for three sets of variables.

Descriptive Statistics

The first task of the data analysis was to determine the basic distributional characteristics of each of the variables included in the study. When dealing with more or less continuous variables at an interval level of measurement, various summary statistics can be relied upon to reveal the underlying distributional characteristics. The mean provides a measure of central tendency, standard deviation indicates the digree of dispersion around the mean, and measures such as skewness and kurtosis enable the researcher to define more precisely the shape of the variable's distribution. The SPSS (Nie et al., 1975, chap. 14) subprogram CONDESCRIPTIVE provides the researcher with these and other statistics for the variables in the study.

The mean is the most common measure of central tendency for variables measured at the interval level. Often referred to as the "average," it is merely the sum of the individual values for each case divided by the number of

cases (Nie et al., 1975, pp. 183-184).

The standard deviation is a measure of dispersion about the mean of an interval level variable. Very simply, it is the square root of the variance. The variance is the average squared deviation from the mean (Nie et al., 1975, p. 184).

Skewness is a statistic needed to determine the degree to which a distribution of cases approximates the normal curve, since it measures deviations from symmetry. The measure of skewness is sometimes called the "third moment" and will take on a value of zero when the distribution is a completely symmetrical bell-shaped curve. A positive value indicates that the cases are clustered more to the left of the mean with most of the extreme values to the right. A negative value indicates clustering to the right. It is applicable for interval-level variables (Nie et al., 1975, pp. 184-185).

Kurtosis is a measure of the relative peakedness or flatness of the curve defined by the distribution of cases. A normal distribution will have a kurtosis of zero. If the kurtosis is positive, then the distribution is more peaked (narrow) than would be true for a normal distribution, while a negative value means that it is flatter. Kurtosis is

sometimes called the "fourth moment" and assumes interval-level data (Nie et al., 1975, p. 185).

The other statistic used was the "range," which is simply the difference between the maximum and minimum values.

Rank-Order Correlations

Bivariate correlation provides a simple number that summarizes the relationship between two variables. The correlation coefficients indicate the degree to which variation (or change) in one variable is related to variation (change) in another. A correlation coefficient not only summarizes the strength of association between a pair of variables, but also provides an easy means for comparing the strength of relationship between one pair of variables and a different pair.

To investigate the relationship between the variables selected for this study, the rank-order correlation technique was selected. The conventional rank-order correlation is the most appropriate technique for a number of reasons: (1) the rank-order correlation makes fewer statistical-mathematical assumptions about the nature of available data than the product-moment correlation. Because of the ordinal nature of many of our questionnaire measures, a non-parametric correlation technique such as the rank-order

correlation should be used. (2) Since the unit of analysis in this study is the nursing home and not the individual respondents, the number of cases with which we are dealing is relatively small, namely, 24 nursing homes; and for an N of 24 the rank-order correlation is more suitable than the product-moment correlation. (3) The rank-order correlation is simpler, more familiar, more preferable, and generally more appropriate for our purposes than other correlation techniques available.

Of all the statistics based on ranks, the Spearman rank correlation coefficient was selected. It was the earliest to be developed and is perhaps the best known today. It is a measure of association that requires that both variables be measured in at least an ordinal scale so that the objects or individuals under study may be ranked in two ordered series. This statistic is referred to as rho (Rs) (Siegel, 1956, pp. 202-213).

Spearman's rho is one of the nonparametric correlations computed by the NONPARACORR subprogram and the SPSS package (Nie et al., 1975, pp. 288-292). Spearman's Rs is defined as the sum of the squared differences in the paired ranks for two variables over all cases, divided by a quantity that can perhaps best be described as follows: it is

what the sum of the squared differences in ranks would have been had the two sets of rankings been totally independent. This quotient is then subtracted from 1 to produce the standardized coefficient (Nie et al., 1975, p. 289). Spearman Rs is formally defined as:

$$Rs = 1 - 6 \frac{\sum_{i=1} di^2}{N^3 - N}$$

For computational purposes and particularly to correct for the occurrence of tied ranks, Spearman's Rs can be redefined as:

$$Rs = \frac{Tx + Ty - \sum_{i=1}^{n} di^2}{2\ (Tx\ Ty)\ 1/2}$$

Where di is the difference between the ranks of the two variables for case "i," and where Tx or Ty is to be defined by the quantity.

$$\frac{N\ (N^2 - 1) - \Sigma\ R(R^2 - 1)}{12}$$

Where R is the number of ties at a given rank for X or Y, respectively. The significance on any Rs coefficient can be determined by comparing the quantity

$$Rs\ \left(\frac{N-2}{1-Rs^2}\right)^{1/2}$$

with the student's T distribution with N-2 degrees of

freedom (Nie et al., 1975, p. 290).

The efficiency of the Spearman rank correlation when compared with the most powerful parametric correlation, the Pearson, is about 91 percent (Hotelling & Pabst, 1936). That is, when Rs is used with a sample to test for the existence of an association in the population, and when the assumptions and requirements underlying the proper use of the Pearson R are met, that is, when the population has a bivariate normal distribution and measurement is in the sense of at least an interval scale, then Rs is 91 percent as efficient as R in rejecting H0 (Null Hypothesis).[2] If a correlation exists between X and Y in that population, with 100 cases Rs will reveal that correlation at the same level of significance that R attains with 91 cases (Siegel, 1956, p. 213). For additional references on Spearman rank-order correlation see Hotelling and Pabst (1936, pp. 29-43), Kendall (1948a, 1948b), and Olds (1949, pp. 117-118).

The procedure of computing the rank-order

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[2]In order to resolve the controversy over the use of Spearman Rs versus the Pearson R in analyzing the data, Pearson R was computed for all the major relationships in the study using the PEARSON CORR subroutine of the SPSS package. The Pearson R correlation coefficients are displayed in Appendix D. It is the researcher's opinion that the primary findings will remain the same regardless of which set of statistics is employed to analyze the data.

correlations between two variables, e.g., between an item of organizational coordination and the quality of patient care in the participating nursing homes, is relatively simple. First, means are determined for each nursing home from the data as measures of the variables involved. In the example cited here, one set of nursing home means is required to measure the variable item under coordination, and another set of 24 means is required to measure the variable quality of care. Then the nursing homes are rank-ordered, from 1 through 24, according to the magnitude of their respective means, on (1) the variable item under coordination, and (2) the variable of quality of care. Having rank-ordered the 24 nursing homes with respect to the coordination variable and the quality of care variables, the rank-order correlations between the two variables using the conventional rank-order-correlation formula can be computed. The same procedure will be applied to all other pairs of variables.

The end result of computing the correlation between two variables is expressed in numerical form and is referred to as the coefficient of correlation or simply as correlation. Correlation coefficients vary in size from a minimum of 0.00 to a maximum of $\pm$ 1.00. A correlation of zero simply means that the two variables are not related. A

correlation of ± 1.00, which in practice occurs very rarely, means that the two variables are perfectly related.

The vast majority of correlations obtained in this study, or any other study for that matter, are neither zero nor perfect, i.e., ± 1.00; they fall between these two extremes. The more closely a particular correlation approaches the maximum value of ± 1.00, the higher, or the greater the relationship that it signifies. Conversely, the more closely a correlation approaches zero, the smaller the relationship between the variables involved. The question then arises as to how high a particular correlation coefficient has to be in order that we may be confident that it is likely to represent a relationship attributable to mere chance or coincidence rather than to the nature of the variables involved.

Assuming an N of 24, which is equal to the number of nursing homes participating in the study, we can then say that for a correlation to be significant (or significantly different from zero) at the .05 level it must be as great as ± .35 (Siegel, 1956, p. 284) (actually ± .343) or higher, and to be statistically significant at the .01 level it must be as great as ± .49 (Siegel, 1956, p. 284) (actually ± .485) or greater. What matters here is the size of the correlation, not its sign—whether the correlation is

positive or negative is irrelevant from the point of statistical significance. The values of $\pm$ .35, for the .05 level of confidence, and $\pm$ .49, for the .01 level of confidence, are known as the critical values of the rank-order correlation coefficient and are computed on the basis of statistical mathematical considerations rather than arbitrarily. However, these critical values remain the same as long as we are dealing with rank-order correlations based on an N of 24 cases.

But what do we actually mean when we say that a correlation coefficient of $\pm$ .35 is significant at the .05 level? It means that a correlation of this particular size, or of higher size, could be due to chance only 5 percent of the time. In other words, we can be confident that in 95 instances out of 100, a correlation as large as $\pm$ .35 could not be the result of chance and consequently, the probability is high that the variables involved are actually correlated. Similarly, saying that a correlation of $\pm$ .49 is statistically significant at the .01 level means that a correlation of this particular size, or of greater size, could be attributed to chance only 1 percent of the time, or once in every 100 instances.

In the case where a correlation approaches $\pm$ .35

rather closely (greater than $\pm$ .30 and less than $\pm$ .35) we shall call it suggestive rather than significant. When a correlation is not close to $\pm$ .35 (less than $\pm$ .30) we shall call it nonsignificant.

Because of the low response rate in five nursing homes (Nursing Homes Nos. 4, 16, 17, 20, & 23) a great deal of consideration was given to dropping them from the study. To settle this dilemma, correlation coefficients were computed using an N or both 19 and 24. The results were approximately the same. Therefore, it was decided to use all the data.

Contingency Tables

Subprogram CROSSTABS of the SPSS (Nie et al., 1975, chap. 16, pp. 218-248) computes and displays two-way to N-way cross-tabulation tables for any discrete variables, either numeric or alphanumeric. A cross-tabulation is a joint frequency distribution of cases according to two or more classificatory variables. The display of the distribution of cases by their position on two or more variables is the chief component of contingency table analysis and is indeed the most commonly used analytic method in the social sciences. These joint frequency distributions can be statistically analyzed by certain tests of significance, e.g.,

the chi-square statistic, to determine whether the variables are statistically independent.

To determine whether the proportion of the respondents classified as professional or nonprofessional is identical for all nursing homes or significantly different between nursing homes, the chi-square test of statistical significance was employed. Chi-square helps us to determine whether a systematic relationship exists between two variables. This is done by computing the cell frequencies that would be expected if no relationship is present between the variables given the existing row and column total (marginals). The expected cell frequencies are then computed to the actual values found in the table according to the following formula:

$$X^2 = \sum_i \frac{(E_o^i - F_e^1)^2}{F_e^i}$$

where F_o^1 equals the observed frequency in each cell, and F_e^k equals the expected frequency calculated as

$$F_e^i = \frac{(C_i R_i)}{N}$$

where C_i is the frequency in a respective column marginal, R_i is the frequency in respective row marginal, and N stands

for total number of valid cases (Nie et al., 1975, p. 223).

As can be seen, the greater the discrepancies between the expected and actual frequencies, the larger chi-square becomes. Therefore, we would interpret a small value of chi-squares to indicate that the proportions of responding staff members were approximately the same for all nursing homes, because if the proportional relationships are approximately the same for all nursing homes, the observed frequencies and expected frequencies will also be approximately the same.

In order to determine whether a statistically significant relationship does exist between the proportions of staff members, it is necessary to ascertain the probability of obtaining a value of chi-square as large as or larger than the one calculated from the sample, when in fact the variables are actually independent. This depends in part upon the degree of freedom. The degree of freedom varies with the numbers of rows and columns in the table, and it is important because the probability of obtaining a specific chi-square value depends on the number of cells in the table. For the researcher's convenience, the SPSS subprogram CROSSTABS computes the exact probability.

Coefficient of Concordance

In the section "Rank-Order Correlation," we were concerned with measures of the correlation between two sets of rankings of 24 nursing homes. Now we shall consider a measure of the relation among several rankings of the 24 nursing homes.

When we have K sets of rankings, we may determine the association among them by using the Kendall coefficient of concordance W (Siegel, 1956, p. 229). Whereas Spearman's rho expressed the degree of association between two variables measured in, or transformed to, ranks, W expresses the degree of association among K such variables. Such a measure may be particularly useful in studies of interjudge reliability, and also has application in studies of clusters of variables. For the purposes of this research the variables were clustered into three groups: measures of organizational effectiveness (K=12), measures of the characteristics of effective organizations (K=23), and all variables (K=35), and W was computed for each one. The following null hypotheses were tested:

Hypothesis (H0-1): There is no relation among the variable measures of "organizational effectiveness." (Including the quality of care.)

Hypothesis (H0-2): There is no relation among the variable measures of characteristics of effective organizations.

Hypothesis (H0-3): When considered as a whole, there is no relation among all the variables in the study.

To compute W, we first find the sum of ranks, Rj, in each column of a K x N table. Then we sum the Rj and divide that sum by N to obtain the mean value of the Rj. Each of the Rj may then be expressed as a deviation from the mean value. Finally, S, the sum of squares of these deviations, is found. Knowing these values, we may compute the value of W (Siegel, 1956, p. 231):

$$W = \frac{S}{1/12\ K^2\ (N^3 - N)}$$

where S = sum of squares of the observed deviations from the mean of Rj

$$S = \Sigma(Rj - \frac{\Sigma\ Rj}{N})^2$$

K = number of sets of rankings

N = number of entities (nursing homes) ranked

$1/12\ K^2\ (N^3 - N)$ = maximum possible sum of the squared deviations, i.e., the sums that would occur with perfect agreement among K rankings

We may test significance of any observed value of W

when N is larger than seven by employing the chi-square distribution with (Siegel, 1956, p. 236):

$$dF = N - 1$$

$$X^2 = K(N-1)W$$

That is, the probability associated with the occurrence under H0 of any value as large as an observed W may be determined by finding X^2 by the above formula and then determining the probability associated with so large a value of X^2 by referring to a standard chi-square table (Siegel, 1956, p. 249).

TABLE 15

COEFFICIENTS OF CONCORDANCE

Variable Clusters	W	X^2	dF	Sig
Organizational Effectiveness	.3999	110.37	23	.001
Characteristics of Effective Organizations	.4895	258.95	23	.001
All Variables	.4246	341.80	23	.001

N = 23

Based upon the W coefficients the null hypotheses

can all be rejected. We can conclude that rankings of the variables measures of organizational effectiveness are related. This means that there is a significant degree of similarity between the rankings of each nursing home on the variables that measure organizational effectiveness. The same conclusions hold true for the variable cluster of characteristics of effective organizations.

In fact, we can say the similarity between the rankings of the nursing home on all 35 variables is statistically significant.

Limitations of Research Methods

Ex post facto research has three major limitations, two of which have already been discussed: (1) the inability to manipulate variables, (2) the lack of power to randomize, and (3) the risk of improper interpretation. In other words, ex post facto research lacks control; this lack is the basis of the third weakness, the risk of improper interpretation.

The most common method employed to interject some form of "control" of the variables in ex post facto research is the careful construction of research hypotheses. The researcher has attempted to develop a research model that will enable us to predict and, it is hoped, establish the

relationships between the major variables in the study.

Perhaps the most serious limitation is the deliberate restriction of the population of nursing homes studied. Restricting the population means that the results cannot be extrapolated and generalized with confidence to all nursing homes in the nation on a statistical basis. In the strictest sense possible, and from a purely statistical standpoint, the obtained findings will apply only to the group of nursing homes that was actually studied.

Another limitation stems from the fact that patients will not be included in the study as respondents. They will not be included because it is doubtful whether they could provide valid data even with reference to patient care. In a nursing home a substantial percentage of the patients are mentally incompetent. It is conceded that there would be several patients in each home who could provide adequate perceptions of the quality of care they were receiving. However, the determination of which patients could and which patients could not give accurate reflections of patient care is a matter with which this researcher did not want to contend.

Some individuals may question the validity of using nursing home employees' perceptions of the quality of care

rather than those of physicians. Physicians were not used for several reasons. First, the collection of physician ratings of the quality of care rendered in the various nursing homes would be extremely difficult. It is doubtful that enough responses could be obtained for each participating nursing home to draw any kind of statistical significance. Second, in most cases, the physician rarely visits the nursing home. The patient is either brought to his office or he gives his orders to the nurse over the phone. Therefore, it is doubtful that physicians could evaluate the day-to-day care that patients receive. Finally, it has been found in previous hospital studies that the judgments of hospital employees who were not physicians were significantly related to those of physicians (Mott, 1972, p. 190). This finding suggests that other groups in the hospital were capable of making evaluations by essentially the same criteria as those used by physicians.

The validity of Mott's subjective measures of effectiveness has been open to some question. However, the studies of validity of these measures are reassuring (Mott, 1972, Appendix A, pp. 189-200). The subjective assessments of work units by the individuals who participated in them were supported by the assessments of top managers responsible for

all units studied in a particular organization and of people in other units whose work made them familiar with that of units being assessed (Mott, 1972, p. 21).

While it is not possible to gauge the net effect of the above-mentioned limitations upon particular findings to be obtained in the study, it is my belief that the nature of specific results and conclusions of the study would not be substantially altered upon removal of the limitations in question.

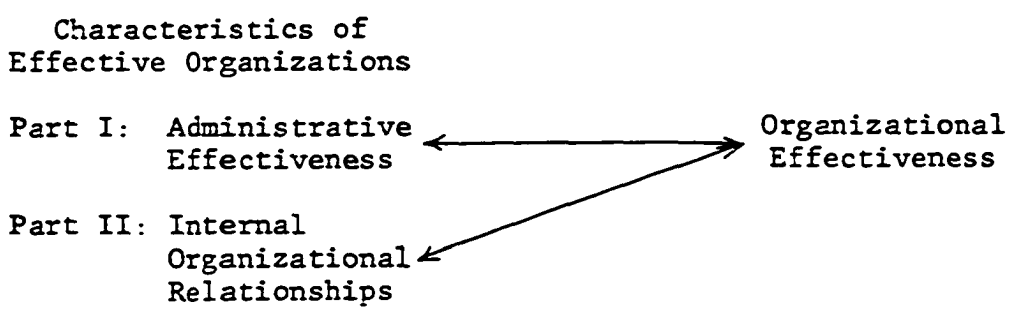
In order to test the research hypotheses set forth by the researcher, the data will now be analyzed employing the statistical methods described in the preceding chapter.

CHAPTER VII

ANALYSIS OF THE RELATIONSHIP BETWEEN THE CHARACTERISTICS OF EFFECTIVE ORGANIZATIONS AND ORGANIZATIONAL EFFECTIVENESS

PART I: ADMINISTRATIVE EFFECTIVENESS AND ORGANIZATIONAL EFFECTIVENESS

Having stated the major theoretical and methodological considerations of this study, the purpose of the next two chapters is to analyze the research findings regarding the section of the research model that relates the characteristics of effective organizations to organizational effectiveness.



Because the variable grouping characteristics of effective organizations can be divided into two distinctive parts—Administrative Effectiveness and Internal Organizational Relationships—and the analysis of each is rather lengthy, this section of the study is divided into two parts. Part I will investigate the relationship between administrative effectiveness and organizational effectiveness. Part II will probe the relationship between internal organizational relationships and organizational effectiveness.

In Part I: Administrative Effectiveness and Organizational Effectiveness, the following hypothesis will be tested:

Hypothesis 1: There will be a direct and significant relationship between administrative effectiveness and organizational effectiveness.

The role and function of nursing home administration have been described as creating an environment in which professional people can practice their professions most adequately (Baumgartner, 1969). This involves the organization of the staff so that each member of each profession or department can perform his job in the most effective manner, with the conclusion being that the more organized and better operated the nursing home, the greater the degree of

organizational effectiveness. In other words, effective administration will bring about more satisfied employees who will be willing to work harder, accept change readily, and identify with the nursing home and its goals. Selected comments written on the backs of questionnaires by nursing home personnel support this conclusion.

> I feel that . . . is the best nursing home I have ever worked in. It is more organized and things run smoother here than anywhere else. (NH 25, Resp. 7, Nurse's Aide)
>
> I think . . . Nursing Home is a wonderful place for our elderly—its operation is great. I have worked as LVN only 4 months and I love it. (NH 21, Resp. 4, LVN)
>
> On the whole, I think we have a very nice, very well run nursing center. I am happy with my job, enjoy my work and am proud to be connected with this Nursing Center. (NH 20, Resp. 19, Nurse's Aide)

Far from proving the hypothesis, these comments do, however, illustrate the connection between the overall administration of the facility and employee attitudes and feelings toward their job and the nursing home itself. The reverse is also true. When employees view administration as ineffective and unconcerned with the welfare of the residents and employees, they had unfavorable attitudes toward their jobs, co-workers, and the nursing home in general.

To analyze the data from the study that probe the relationship between administrative effectiveness and organizational effectiveness, the area of administrative

effectiveness was subdivided into three areas: (1) Organizational Planning, (2) Administrative Communication and Problem Solving, and (3) Rational Trust of Administration. This was done in an attempt to determine which aspects of administration have the greatest relationship to organizational effectiveness.

Organizational Planning

Many studies have confirmed the proposition that managers who engage in planning activities are more successful than managers who do not (see Chapter V, section on "Occupational Planning"). Planning activities should be an important function of the nursing home administrator and department heads. The planning process in the nursing home organization is concerned primarily with the scheduling of work and the establishment and maintenance of objectives, policies, and operational rules and regulations that govern work and work regulations in the system.

Clearly defined objectives, policies, rules, and regulations let organizational members know their responsibilities and the scope of their authority to initiate independent action. In addition, they permit individuals in the nursing home organization to predict how others in it are likely to behave and to know how others expect them to

behave. It is in part through the mechanism of these products of planning that coordination can be effected.

However, the actual implementation and efficiency of organizational objectives, rules, and policies will depend upon the effectiveness of organizational planning. The aspects of organizational planning measured by this study include the definition and clarity of existing objectives, rules, and regulations; the extent of organizational members' adherence to rules and regulations; and the skill with which planning is carried out.

The data support a conclusion that nursing home staff members perceive a direct relationship between organizational planning and productivity. The highest level of significance was achieved by the planning ability of the supervisor (Rs = .47). This is appropriate because the ability of the immediate supervisor in planning, organizing, and scheduling the work would have the most direct effect upon everyday work routines and should be foremost in the minds of staff members.

The findings also support the proposition that workers will put forth more effort when goals and objectives have been clearly defined and they understand the rules and regulations of the organizations. Nursing home employees, it

TABLE 16

RELATIONSHIP BETWEEN ORGANIZATIONAL PLANNING AND THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

	Subjective Measures of Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Organizational Planning[1]			
Planning ability of supervisor	.47*[b]	.69[a]	.62[a]
Clarity of goals and objectives	.38[c]	.71[a]	.38[c]
Clarity of rules and regulations	.36[c]	.70[a]	.37[c]
Adherence to rules and regulations	.42[c]	.52[b]	.43[c]

N = 24

* = Spearman rank-order correlations were used

a = Rs significant at the .001 level
b = Rs significant at the .01 level
c = Rs significant at the .05 level

[1]See Mott (1972).

would seem, feel that a certain amount of structuring of activities is necessary in order for the people in their department to produce. Or, in other words, when roles have been clearly defined, workers perceive their work groups to be more productive.

The index of adaptability is strongly related to all the factors of organizational planning. When employees have confidence in the planning ability of their supervisor they will be more willing to accept changes in procedures. In addition, the existence of a clear set of objectives fosters adaptation for two reasons. First, objectives can provide direction for problem solving so that adaptation can be geared to collective purpose. Second, clear, viable objectives help individuals to understand the organization in which they work. They can interpret managerial behavior in the light of these objectives, and thus their environment becomes more rational and certain. They are more likely to exhibit greater sensitivity and concern for assisting the unit to achieve its objectives. The results also indicate that rules and regulations that are generally adhered to facilitate this relationship.

Mott (1960; 1972, pp. 66-70) hypothesized that flexibility would not be related to the variable items of

organizational planning. The findings from his studies give mixed results but they are mostly supportive of his hypothesis. His theory is basically that the manner in which everyday work tasks are planned and the extent to which policies, rules, and regulations are clearly defined will have no effect in emergency situations. On the other hand, the contention could be made that when unexpected situations have been adequately planned for, the organizations will be more effective in dealing with them. Furthermore, this is what the findings indicate.

Findings indicate a direct and significant relationship between flexibility and the variable items under organizational planning. To explain why flexibility relates to organizational planning one must analyze the interrelationships of the subjective measures of organizational effectiveness and their relationship to job satisfaction (see Tables 17 and 18).

Flexibility was greatest in those nursing homes that had the highest levels of productivity. Theoretically these nursing homes would have the most workable procedures. They can handle overloads of work well because of their procedures and because they keep sufficiently abreast of their regular work to permit their turning attention from it to

TABLE 17

INTERRELATIONSHIPS AMONG THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS[1]

	Productivity	Adaptability
Adaptability	.68*[a]	
Flexibility	.64[a]	.64[a]

N = 24
* = Spearman rank-order correlations were used
a = Rs significant at the .001 level
[1]Mott (1972).

TABLE 18

RELATIONSHIP BETWEEN THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS AND JOB SATISFACTION

	Subjective Measures of Effectiveness		
	Productivity	Adaptability	Flexibility
Job Satisfaction[2] (overall)	.67*[a]	.71[a]	.43[c]

N = 24
* = Spearman rank-order correlations were used
a = Rs significant at the .001 level
c = Rs significant at the .05 level
[1]Mott (1972).

[2]Smith, Kendall, and Hulin (1969).

handle emergencies. One reason why flexibility is significantly related to organizational planning is that it is through clearly defined objectives, rules, and regulations that workable procedures are established.

Another explanation for these findings is that flexibility and adaptability depend to a great extent on employee attitudes toward their job, their supervisor, and the nursing home. In other words, staff members are more willing to accept changes in routines, equipment, or assignments and pitch in and help in times of emergency when they have favorable attitudes toward their jobs. This is evidenced by the significant positive correlations between job satisfaction and adaptability and flexibility. Therefore, it can be concluded that those nursing homes that are high in adaptability and flexibility will be those nursing homes with higher overall job satisfaction (see Table 18).

It was suggested earlier by the comments of nursing home staff members that there is a relationship between the job satisfaction of employees and the quality of administration. If this is the case, it can be concluded that effective administration leads to favorable employee attitudes that are necessary for adaptability and flexibility, and this is precisely what the findings in Table 19 indicate.

TABLE 19

RELATIONSHIP BETWEEN ORGANIZATIONAL PLANNING AND MEASURES OF JOB ATTITUDE

Organizational Planning[1]	Job Satisfaction[2] (Overall)	Areas of Job Satisfaction					
		Job Itself[2]	Super-vision[2]	Co-workers[2]	Pay[2]	Pro-motion[2]	Turn-over[2]
Planning Ability of Supervisor	.52*[b]	.41[c]	.75[a]	.35[c]	.30[d]	.27[d]	-.39[c]
Clarity of Goals and Objectives	.65[a]	.39[c]	.76[a]	.49[b]	.27[d]	.48[b]	-.35[c]
Clarity of Rules and Regulations	.68[a]	.46[b]	.49[b]	.47[b]	.52[b]	.55[b]	-.32[d]
Adherence to Rules and Regulations	.48[c]	.36[c]	.32[d]	.35[c]	.37[c]	.40[c]	-.07

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Smith et al. (1969).

The data show strong relationships between all the variable items of organizational planning and overall job satisfaction. This is consistent with other studies that have shown that role ambiguity was negatively and significantly related to job satisfaction (see Chapter V, section on "Organizational Planning"). Therefore, it could be expected that role clarity would be positively and significantly related to job satisfaction. It is interesting to note that the largest correlations occur under the area of supervision. In other words, nursing home employees prefer a supervisor who is good at planning, organizing, and scheduling the work and clearly defines objectives, rules, and regulations. Satisfaction with pay, low as it is, and promotion, hopeless as it may seem to many nursing home personnel, is higher in those nursing homes where rules and regulations have been clearly defined and promotion is also strongly related to clarity of objectives. In addition, staff members' satisfaction with the job itself was related to all aspects of organizational planning. These findings seem to point to a central theme that job satisfaction is dependent upon role clarity.

Additional supporting evidence for this theme comes from analyzing the connection between organizational

planning and turnover. Turnover was found to relate negatively and significantly to the planning ability of the supervisor (Rs = -.39), clarity of goals and objectives (Rs = -.35), and clarity of rules and regulations (Rs = -.32, sig. .06). Therefore, the conclusion can be drawn that lack of confidence in the ability of the supervisor to plan effectively and clarify roles is directly associated with employee turnover.

In reviewing literature regarding organizational planning, the observation was made that role ambiguity is associated with role conflict. Because it is through organizational planning that roles are clarified and organizational environments made more rational and certain, it could be assumed that organizational planning will be inversely related to interdepartmental tension and conflict.

By the strict statistical standards the only significant relationship exists between conflict and clarity of rules and regulations. However, the relationship between conflict and clarity of goals and objectives is significant at the .06 level, so it is very likely that these two variables are related. The other two items, planning ability of supervisor and adherence to rules and regulations, did not obtain strong enough measures from which to draw conclusions.

TABLE 20

RELATIONSHIP BETWEEN ORGANIZATIONAL PLANNING AND INTERDEPARTMENTAL TENSION AND CONFLICT

	Planning Ability of Supervisor[1]	Clarity of Goals and Objectives[1]	Clarity of Rules and Regulations[1]	Adherence to Rules and Regulations
Interdepartmental Tension and Conflict[2]	-.27*d	-.32[d]	-.39[c]	-.23

N = 24
* = Spearman rank-order correlations were used.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.
[1]Mott (1972).
[2]Mott (1960).

TABLE 21

RELATIONSHIP BETWEEN ORGANIZATIONAL PLANNING AND PROFITABILITY

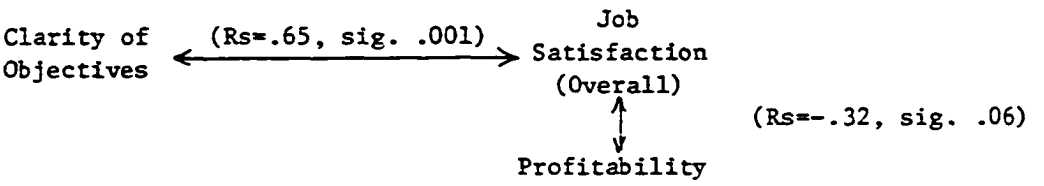
	Planning Ability of Supervisor[1]	Clarity of Goals and Objectives[1]	Clarity of Rules and Regulations[1]	Adherence to Rules and Regulations[1]
Profitability	-.01*	-.48[b]	-.22	-.19

N = 24
* = Spearman rank-order correlations were used.
b = Rs significant at the .01 level.
[1]Mott (1972).

Accordingly, those nursing homes where objectives, rules, and regulations have been clearly defined will be those nursing homes with the lower amounts of tension and conflict between departments.

A researcher in the field of administration would naturally predict that the relationship between organizational planning and profitability would be positive and significant. Those organizations that have the more capable planners and clearly defined objectives would also be the more profitable organizations. However, the results of this study do not bear out this conclusion. In fact, the results, though somewhat inconclusive, are just the opposite. Instead of positive relationships, only negative ones were discovered. The only significant relationship was between the clarity of goals and objectives and profitability.

The inverse relationship between profitability and clarity of objectives is somewhat difficult to explain. Consider the following relationship:



Clarity of objectives is significantly related to job satisfaction and job satisfaction is inversely related to

profitability. Job satisfaction now becomes the central issue. But why is it negatively related to profitability? Large numbers of the respondents in the open-ended section of the questionnaire complained bitterly that the nursing homes were understaffed and ill-equipped, making it very difficult for them to perform their duties adequately. This made their workload that much heavier and more difficult, resulting in their being dissatisfied with their job. Through the design of this study there is no way to substantiate this relationship, but it is one explanation of the inverse relationship between probability and job satisfaction. Because labor is such a large expense in nursing homes, those homes that are understaffed and ill-equipped may have a tendency to show higher profits. Therefore, the variable of job satisfaction could be the key to interpreting the inverse association between the clarity of objectives and profitability.

In summary, the organizational planning relates directly and significantly to all the subjective measures of organizational effectiveness, job satisfaction, and turnover, the only exception being that adherence to rules and regulations did not correlate with turnover. Profitability was another matter entirely. The correlations were the

opposite of what was expected and presented a difficult problem to resolve. The central theme of this section is role clarity. When staff members understand the objectives of the nursing home and its rules and procedures have been clearly explained to them, they perceive their co-workers to be more productive, are more willing to accept changes in routines and assignments, and are more apt to pitch in and help in times of emergencies. In addition, they have a better attitude toward their jobs and are less likely to leave the nursing home.

In conclusion, it appears that, with the notable exception of profitability, organizational effectiveness is significantly related to organizational planning.

Administrative Communication and Problem Solving

> The biggest problem at this center is the failure to communicate. (NH 12, Resp. 1, Nurse Other)

Communication is crucial to organizations because only through the transmission and understanding of information is the coordination of efforts achieved that is so necessary for effective functioning. Administrative communication in a nursing home setting can be instrumental in promoting the development of complementary expectation and

mutual understanding between the administrator and nursing home personnel that is so necessary for adaptability and flexibility. Personnel are more willing to adjust and adapt to procedures when they have a clear understanding of the problems involved. In the previous section, we established a direct connection between role clarity and adaptability and flexibility. It is through the transmission and understanding of relevant information that nursing home personnel gain an insight into nursing home problems and, in addition, it helps clarify their roles.

If role clarity and mutual understanding can be achieved through the excellent use of administrative communication, then tensions and conflicts should be reduced within the nursing home. When nursing home personnel clearly understand their duties, conflicts between shifts and departments over who is supposed to do what are less likely to occur.

Adequate communication from the administrator should enhance production because inadequate communication leads to role ambiguity, dissatisfaction, and general overall confusion, as can be seen in the following examples:

> My only comment is that there seems to be a lack of communication between the administrator and we, the workers. Our immediate supervisor will tell us what

> the administrator said, and the administrator will tell us something entirely different on the same subject. It seems to me that either the administrator or our supervisor is trying to make him or herself look good in our eyes. I fell for it for a while but after so many lies, I have lost faith in both of them. Our present supervisor is learning and maybe this will end the problem; I certainly hope so because we need some guidance. (NH 3, Resp. 25, Dietary)

> Administrator should get together with boss and inspectors. One says one thing and other people say something else. This way nobody knows what's happening or what to do. At least to get it done right. (NH 7, Resp. 39, Housekeeping)

Consequently, it can be projected that in those nursing homes where channels of communication between the administrator and staff members are relatively more open, problems can be more readily identified and their solution can be facilitated by discussing them; this in turn should lead to more effective organizational performance and greater overall job satisfaction.

The value of adequate communication to the nursing home administrator is clearly apparent. Adequate performance in this area related significantly to all the subjective measures of organizational effectiveness, and it had a particularly strong correlation with adaptability. Because the nursing home is a relatively small organization with few layers of supervision, it could be expected that the adequacy of administrative communication would be directly

TABLE 22

RELATIONSHIP BETWEEN ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING AND THE SUBJECTIVE MEASURE OF ORGANIZATIONAL EFFECTIVENESS

	Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Adm. Comm. and Problem Solving[2]			
Adequacy of Adm. Comm.	.45*c	.64a	.34c
Awareness of Problems	.30d	.46b	.21
Ability to Solve Problems	.50b	.63a	.45c

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

connected with productivity and the data support this observation. When duties have been clearly defined and adequately communicated, then staff members are rated more effective in their performance.

In the last section entitled "Organizational Planning" the data showed adaptability and flexibility to be related to role clarity and it is through the process of administrative communications that roles are defined. Therefore, there should be a significant relationship between the adequacy of administrative communication, the clarity of goals and objectives, and the clarity of rules and regulations. The results showed communications to be correlated with:

Planning ability of supervisor (Rs = .42, sig. .02)
Clarity of goals and objectives (Rs = .56, sig. .002)
Clarity of rules and regulations (Rs = .89, sig. .001)
Adherence to rules and regulations (Rs = .65, sig. .001)

Based on these data, communication appears to be associated with role clarity or, for that matter, with all of the items of organizational planning. Because communication can be seen as clarifying roles and contributing to complementary expectations and mutual understandings, it is only natural that it is directly and significantly related to adaptability and flexibility.

An additional value of adequate administrative communication is that it is through this process that the administrator becomes aware of and effectively deals with organizational problems. If administrative communication is inadequate, it will become difficult for the administrator to become aware of existing problems within the facility and difficult to discern the proper solutions. In addition, even though the proper solutions have been derived, they will never be implemented unless properly communicated. Therefore, a strong relationship between the adequacy of the administrator's communication and his awareness of problems and ability to solve them could be predicted. Communication was correlated with:

Awareness of problems by administrator (Rs = .70, sig. .001)
Ability of administrator to solve problems (Rs = .91, sig. .001)

The data bear out this expectation quite impressively. Those nursing homes in which staff members rated administrative communications favorably were approximately the same nursing homes in which the administrator's awareness of and ability to deal with problems was also highly rated.

Additional analysis of the findings in Table 22 regarding problem awareness indicates that simply being aware

of problems does not relate to the measures of effectiveness with the exception of adaptability. But the adaptation process begins when staff members become aware of problems and if they have confidence in the communication process they will view administrative awareness of problems as the first step in the adaptation process. Consequently, they can make the connection between adaptability and problem awareness. This will be especially true if they have confidence in the administrator's problem-solving ability.

The awareness of problems has little to do with flexibility. This is because the awareness of organizational problems is a long-range concept, whereas flexibility relates primarily to the ability of the organization to handle emergencies or unexpected events. It is possible that the organizational problems may create the emergencies, but in either case, we would not expect organizational flexibility to be related to the administrator's awareness of problems.

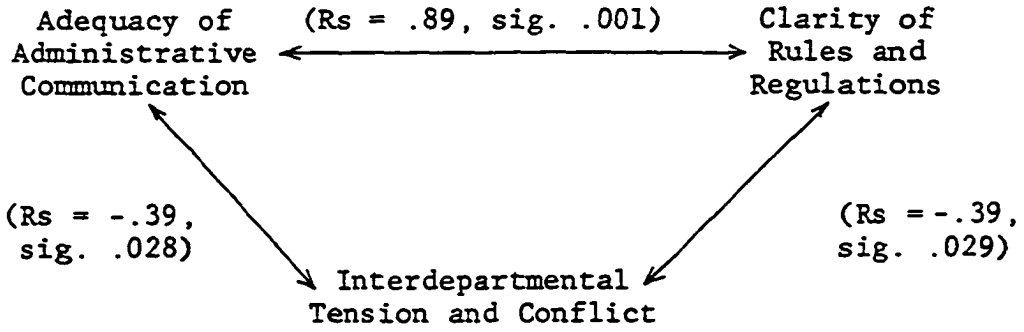
The awareness of problems by the administrator came close to but did not achieve a significant correlation with productivity (Rs = .30, sig. .071). The inference here would seem to be that more is required for productivity than merely being aware of organizational problems. Their

effective resolution is required. This is reinforced by the significant relationship between productivity and the administrator's ability to solve problems effectively (see Table 22). Accordingly, the same conclusion applies to flexibility, because it is also significantly related to the ability of the administrator to solve problems effectively but is not significantly related to his awareness of problems. Mott found in his studies (1960, 1972) that for the most part problem solving had little relationship to productivity and flexibility, but his studies were conducted in large organizations. In contrast, the nursing home organization is relatively small, employing between 70 and 135 people. When operational problems arise or emergencies occur, the administrator is much closer to the situation. Consequently, his skill in dealing with these situations will have a more direct effect upon their overall outcome and thus on organizational performance.

Effectiveness of problem solving is directly related to adaptability. Having an administrator who is aware of problems and effective in solving them is clearly associated with the organization's ability to adapt. The administrator can take an interdepartmental view of the problem and solve it in a manner that promotes organizational integration. He

can enhance organizational integration by communicating clearly with his subordinates, discovering their needs and problems, and solving the latter effectively before they create internal organizational strain, which can segment the organization. A segmented organization can be characterized as having a high degree of friction among work groups, shifts, or departments. In other words, the various elements of the organization do not work together as a team. Therefore, by preventing segmentation, the administrator becomes the key figure in promoting organization integration. Hence, a direct relationship between interdepartmental tension and conflict and administrative communication and problem solving would be expected.

Once again, the value of administrative communication is clearly demonstrated. In those nursing homes in which the administrator is perceived as communicating effectively, interdepartmental tension and conflict are lower. By clearly defining objectives, rules, and regulations and adequately communicating them to their personnel, some nursing home administrators seem to have achieved low levels of interdepartmental tension and conflict. Consider the following interrelationship:



In addition, the ability of the administrator to deal with problems effectively is directly connected to conflict. When the administrator does not deal skillfully with problems when they arise, the organization can become segmented. Segmentation results because when the administrator fails to resolve problems between work groups, the groups are left no other alternative but to band together against one another for their own common cause. Naturally, when this situation occurs, the outcome will be increased tension and conflict within the organization.

The awareness of problems by the administrator was not related to tension and conflict. Once again, we see that simply being aware of problems is not enough; they must be effectively dealt with.

In earlier sections, it has been suggested that nursing home employees prefer working in nursing homes they perceive to be well run. Consequently, job satisfaction

should be higher and turnover lower in those nursing homes where administrative communication and problem solving are skillfully performed.

TABLE 23

THE RELATIONSHIP BETWEEN ADMINISTRATIVE COMMUNICATION PROBLEM SOLVING AND INTERDEPARTMENTAL TENSION AND CONFLICT

	Adequacy of Administrative Communication[1]	Awareness of Problems by Administrator[1]	Ability of Administrator to Solve Problems[1]
Interdepartmental Tension and Conflict[2]	-.39*c	-.12	-.34c

N = 24
* = Spearman rank-order correlations were used.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
[1]Mott (1972).
[2]Mott (1960).

The value of administrative communication and problem solving is further demonstrated by its large and very significant correlations with overall job satisfaction. The data in Table 24 imply that nursing home personnel are more satisfied with all aspects of their jobs when they perceive the communication they receive from the administrator to be

TABLE 24

RELATIONSHIP BETWEEN ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING AND MEASURES OF JOB ATTITUDES

Administrative Communication and Problem Solving[1]	Areas of Job Satisfaction						
	Job Satisfaction[2] (Overall)	Job Itself[2]	Super-vision[2]	Co-Worker[2]	Pay[2]	Pro-motion[2]	Turn-over
Adequacy of Administrative Communication	.76*[a]	.52[b]	.45[c]	.58[a]	.65[a]	.65[a]	-.23
Awareness of Problems by Administrator	.68[a]	.70[a]	.33[d]	.47[b]	.52[b]	.54[b]	.00
Ability of Administrator to Solve Problems	.80[a]	.68[a]	.55[b]	.58[a]	.71[a]	.61[a]	-.19

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Smith et al. (1969).

adequate and have confidence in his ability to become aware of problems and solve them effectively. This is further support for the thesis that staff members' attitudes are directly associated with the quality of nursing home administration.

It is interesting to note that the only correlation coefficient that could be considered too low to be statistically significant is between the awareness of problems and the variable supervision (Rs = .33, sig. .055), but it is very close. Also, in all the measures of job satisfaction but one (the job itself) the correlation coefficients are smaller for the variable awareness of problems. This would seem to indicate further support for our observation that problem awareness on the part of the administrator is not enough in itself but must be directly connected to the effective solution of problems to enhance organizational performance and employee attitudes.

No significant relations were found between administrative communication and problem solving, and employee turnover. The correlation coefficients were in the projected direction (negative) but were not strong enough to provide a solid basis for conclusions.

TABLE 25

RELATIONSHIP BETWEEN ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING AND PROFITABILITY

	Adequacy of Administrative Communication[1]	Awareness of Problems by Administrator[1]	Ability of Administrator to Solve Problems
Profitability	-.14*	-.23	-.17

N = 24
* = Spearman rank-order correlations were used.
[1]Mott (1960).

The data indicate no significant relationship between administrative communication and problem solving and profitability. It is interesting to note that the correlation coefficients are negative when positive ones were expected. This is probably due to the interrelationship between administrative communications and problem solving, job satisfaction, and profitability.

In summary, the adequacy of administrative communication was significantly related to all the subjective measures of organizational effectiveness, the items of organizational planning, and all aspects of job satisfaction and had an inverse relation to tension and conflict between departments within the organization. Consequently, administrative

communication is directly associated with effective organizational functioning. The awareness of problems by the administrator was significantly related only to adaptability and job satisfaction. Of the three factors, it was found to have the lowest relationships. The ability of the administrator to solve problems was significantly related to each of the subjective measures of organizational effectiveness and all aspects of job satisfaction and was found to have an inverse relationship to interdepartmental tension and conflict. This section reinforces the conclusion of the previous section, which emphasized the association of role clarity to organizational performance and variable employee attitudes, because it is through proper communications that roles are clarified. In addition, this section brings to light and emphasizes the importance of administrative problem solving.

Rational Trust

This section investigates nursing home staff members' perceptions of how well the administrator and the department heads are observed to follow their own rules and regulations; whether they understand the staff members' needs and problems; and if they are thought to be fair and

reasonable in their decisions that affect the nursing home staff.

The rational trust leader can be characterized as one who is aware of the needs and problems of those who work for him and takes them into account when decisions are made. In addition, his decisions are judged to be fair and reasonable based upon established and known criteria and he is seen to abide by self-imposed rules and regulations. In their comments, nursing home staff members seem to be describing just such a leader:

> I think we have one of the finest nursing homes in . . . City, I have worked here 7 years. The Nursing Supervisor is one of the finest people I have ever worked under. She sees both sides of every issue with patients and her aides. (NH 12, Resp. 6, Nurse's Aide)

> As far as working with my administrator, I find it a great pleasure. I want to do a good job for her because she is a good person. (NH 13, Resp. 4, Administrative)

> I have enjoyed working at . . . and think I get along well with most everyone or at least make an effort to do so. I have found the administrator to be fair to me as far as complaints. (NH 6, Resp. 18, Nurse's Aide)

> I respect my supervisor, because she is very constant in her thinking and her attitude toward her nurses aides is excellent. (NH 24, Resp. 13, Nurse's Aide)

Consequently, when the administrator and department heads are viewed as fair and reasonable, employees are more

likely to develop a sense of identification with the nursing home and esprit with their work groups, which should facilitate job satisfaction and organizational performance. But when they are perceived as unfair, unreasonable, and as having a poor attitude toward employees, every order is viewed with suspicion, and few people enjoy working for them. Supervisors viewed in this light are described by the following comments:

> Some of the professional nurses treat the aides as if they were inferior to them and the aides are human just like them, even though they don't have an important title in front of their name. (NH 23, Resp. 19, Nurse's Aide)

> I feel that the administrator is not fair in a lot of his decisions, and this makes for a very uncomfortable working situation. He will not supply enough equipment. (NH 14, Resp. 7, Nurse)

> Most of the staff have to pay for lunches. But the administrator, Director and Assistant Director of Nursing do not—they also get better quality meals—Is that fair? (NH 5, Resp. 11, Nurse's Aide)

> There is great lack of understanding between the Director of nursing and the nurses and nurses aides. If she could just be in our shoes for a couple of days, she might understand us for a change. (NH 2, Resp. 26, Nurse's Aide)

Accordingly, if the administrator and department heads are evaluated favorably according to the rational trust variables, employees will perceive their co-workers as working harder and more efficiently, and they will be more

willing to accept changes in routines and assist in times of emergency. In addition, nursing home staff members will identify more closely with the organization and their work group; they will be more satisfied with their job; barriers to communications will be reduced, and so will interdepartmental tension and conflict.

TABLE 26

RELATIONSHIP BETWEEN RATIONAL TRUST AND THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

	Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Rational Trust:[1]			
Admin. and Dept. Heads:			
Perceived as following rules	.44*[c]	.70[a]	.33[c]
Perceived as understanding workers' needs	.48[b]	.57[b]	.38[c]
Seen as fair and reasonable	.58[a]	.55[b]	.47[b]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
[1]Mott (1972).

The data show that a rational trust atmosphere is directly connected to productivity; when nursing home personnel perceive the administrator and department heads as fair and reasonable, they will more readily accept production objectives set by these leaders. Without this atmosphere, there is no reason to assume that employees with high morale and team spirit will translate them into productive behavior. A cohesive informal work group will strive to achieve the goals of the organization if it accepts the goals and identifies with the organization (Cohen, 1976, p. 57), and it is through a rational trust atmosphere that nursing home management can facilitate this relationship.

The findings show that the rational trust status of nursing home leaders is significantly related to the organization's ability to adapt in a changing environment. When the administrator and department heads have a high rational trust status, organizational adaptation is greater. When the nursing home's leaders are considered reasonable, fair, and willing to take the views of others into account, nursing home staff members are more willing to accept the changes in routines initiated by these leaders and more likely to inform them of organizational problems.

Flexibility in the nursing home requires of its

staff service above and beyond the call of duty. When emergencies arise, the staff may be required to do an extra heavy workload, work extra shifts, or come in on their days off. Accordingly, there should be a direct relationship between flexibility and the attitudes of staff members toward the nursing home in general and its leadership. A relationship between flexibility and job satisfaction, planning ability of supervisor, role clarity, and administrative communication and problem solving has already been established. Consequently, anything that enhances the employees' identification with and attitude toward the nursing home should relate to flexibility, and the findings show all of the rational trust items but one relating significantly to flexibility. (Administrator and Department Heads perceived as following rules Rs = .34, sig. .055.) But in order for this explanation regarding flexibility to be valid, the relationship between rational trust and the employees' identification with the nursing home must be established.

According to the correlation data, it can be concluded that a direct relationship exists between the rational trust status of nursing home leaders and the identification of nursing home personnel with the nursing home, their co-workers, and occupation. All correlations were

TABLE 27

RELATION BETWEEN RATIONAL TRUST AND THE NURSING HOME STAFF MEMBERS IDENTIFICATION WITH THEIR WORK GROUP, THEIR NURSING HOME AND THEIR PROFESSION

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Nursing Home Staff Members' Identification with:[2]			
Immediate Work Group	.34*c	.41c	.46c
Nursing Home and Its Goals	.57b	.63a	.63a
Profession	.49b	.58a	.59a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
[1]Mott (1972).
[2]Mott (1960).

significant at the .05 level. The rational trust status of the administrators and department heads seems to have had a greater impact upon employees' identification with the nursing home and their job than upon their identification with their work groups. In all cases, the lower correlations occur with employee identification with their work group. It is only natural that the actions of the nursing home's leadership would have more influence upon employee attitudes toward the nursing home and their jobs than upon their attitudes toward their co-workers. However, by the creation of a rational trust environment, nursing home administration can create conditions that may facilitate cooperation among employees and lead to their identification with their work group.

Because a rational trust atmosphere is significantly related to employees' identification with the organization, it would also appear to enhance the rapport between the staff members and the administration. This leads to the development of complementary expectations and mutual understanding between the nursing home staff and administration, which in turn should have the effect of reducing the barriers to communication. Reduced barriers to communication should increase the exchange or transmission of relevant

TABLE 28

RELATIONSHIP BETWEEN RATIONAL TRUST AND ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Administrative Communication & Problem Solving[2]			
Adequacy of Administrative Communication	.83*a	.70a	.67a
Awareness of Problem by Administrator	.73a	.58a	.64a
Ability of Administrative to Solve Problems	.86a	.69a	.77a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
[1]Mott (1972).
[2]Mott (1960).

information among the different parts of the nursing home, which in turn can be instrumental in facilitating problem awareness and effective problem solving. In the previous section, an inverse relationship between the ability of the administrator to solve problems and interdepartmental tension and conflict was established. Therefore, to support the preceding conclusions, a direct relationship between rational trust and administrative communication and problem solving and an inverse relationship between rational trust and organizational conflict are predicted.

All of the correlation coefficients between the rational trust items and the factors of administrative communication and problem solving are significant at the .001 level. Therefore, it can be concluded that these two variable groupings are mutually supportive. From the study, it cannot be determined whether rational trust augments communication and problem solving or vice versa, but the two variables exist simultaneously in the nursing homes investigated, and more than likely one facilitates the other.

The data support expectations that high levels of rational trust and low levels of tension and conflict exist simultaneously in the nursing homes surveyed. However, the findings must be qualified to a degree; a significant

TABLE 29

RELATIONSHIP BETWEEN RATIONAL TRUST AND INTERDEPARTMENTAL TENSION AND CONFLICT

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Interdepartmental Tension and Conflict[2]	-.29*d	-.59[a]	-.52[b]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

relationship, at the .05 level, was not found between conflict and the degree to which administrators and department heads are perceived as following their own rules. But the measure was close (Rs = .29, sig. .083) and would certainly be considered to suggest that such a relationship may exist. In summary, those nursing homes where the administrators and department heads are observed to understand staff members' needs and problems and are judged to be fair and reasonable in the decisions they make will be the same nursing homes that are perceived to have less tension and conflict between departments.

On the basis of all findings thus far with regard to the rational trust status of nursing home leaders, we would naturally expect rational trust to have a significant positive relationship to job satisfaction and an inverse relationship to turnover.

Findings indicate a direct and very significant connection between rational trust and overall job satisfaction. It appears that nursing home employees have favorable attitudes toward their jobs in those nursing homes where the administration has been successful in creating a rational trust atmosphere. The desire for a rational and fair environment is easy to understand. Most human beings thrive

TABLE 30

RELATIONSHIP BETWEEN RATIONAL TRUST AND THE MEASURES OF JOB SATISFACTION

	Areas of Job Satisfaction						
	Job Satisfaction[1] (Overall)	Job Itself[1]	Super-vision[1]	Co-Workers[1]	Pay	Pro-motion[1]	Turn-over
Rational Trust[2]							
Adm. and Dept. Heads Perceived as Following Rules	.71*a	.57b	.48b	.41b	.59a	.62a	-.15
Adm. and Dept. Heads Perceived as Understanding Workers' Needs	.68a	.64a	.52b	.34c	.46b	.70a	-.23
Adm. and Dept. Heads Seen as Fair and Reasonable	.66a	.64a	.53b	.30d	.60a	.59a	-.19

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1] Smith et al. (1969).

[2] Mott (1972).

under conditions of fairness and rationality, as was demonstrated by the comments at the beginning of this section. Children do not like caprice, irrationality, and unfairness in their parents, and adults do not like these qualities in their supervisors. These qualities reduce the predictability of behavior and complicate the calculation of one's own future. In this light, it is interesting to note that out of the five areas of job satisfaction, only in the area of promotion are all three correlation coefficients significant at the .001 level. Accordingly, it appears that nursing home personnel are more satisfied with their opportunities for promotion, meager as they are, under an administration that is fair and reasonable. They will feel that promotions are more likely to be based upon merit and performance than upon favoritism.

Another interesting discovery is that out of all the five areas of job satisfaction and their relationship with rational trust, the only one in which all three correlation coefficients cannot be considered statistically significant is co-workers. This would seem to lend support to the earlier discovery that rational trust is not significantly related to nursing home employees' identification with their work group. However, it must be pointed out that in all

cases, the correlations achieved the .10 level of significance and two were extremely close to the .05 level. It is not intended to suggest that there is no relationship between these two factors, because under that conclusion the probability of a type II error would be very high; it is just that in two attempts we have been unable to establish it statistically. In conclusion, it could be inferred that rational trust does have some association with group cohesiveness, although its relationship is not as strong as it is to other variables.

TABLE 31

RELATIONSHIP BETWEEN RATIONAL TRUST AND PROFITABILITY

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Profitability	-.02*	-.30[d]	-.25

N = 24
* = Spearman rank-order correlations were used.
d = Rs significant at the .10 level.
[1]Mott (1972).

Findings do not support the expectation that rational trust is significantly related to turnover. The correlations are negative as expected, but they are not strong enough to establish any mutual relationship.

Again the relationship of profitability was discovered to be the opposite of what was expected. The only explanation for the negative correlations between profitability and rational trust is that rational trust is significantly related to job satisfaction and job satisfaction is inversely related to profitability.

In summary, in this section it has been discovered that those nursing homes where the administrator and department heads are perceived as following their own rules and regulations, understanding the employees' needs and problems, and being fair and reasonable in the decisions they make affecting the nursing home staff are approximately the same nursing homes where the following conditions exist:

1. Nursing home personnel perceive their co-workers as working harder and more efficiently.
2. Personnel are more willing to accept changes in routines and assignments.
3. Personnel are more willing to pitch in and help in times of emergency.
4. There is a strong identification with the nursing home and its goals on the part of staff members.

5. Personnel identify more strongly with their profession.

6. Administrative communication is seen as more adequate.

7. Administrators are judged to have a greater awareness of problems and to be more effective in dealing with them.

8. A low degree of internal tension and conflict exists among departments.

9. Nursing home staff members exhibit higher overall job satisfaction.

it is not an intention of this study to imply that a rational trust atmosphere will cause all these conditions to exist, but that they exist simultaneously within nursing homes. More than likely they are mutually supportive of one another.

Summary

The objective of this chapter was to determine if a relationship existed between the administrative practices within the nursing homes and overall organizational performance. The various measures of organizational performance were selected to cover all aspects of organizational functioning (for full details, see Chapter III). The measures of performance fall into three categories: (1) subjective measures of organizational effectiveness, (2) measures of job satisfaction, and (3) profitability.

To evaluate the relationship of administrative practice to organizational effectiveness, three areas of administration were selected for investigation: (1) organizational planning, (2) administrative communication and problem solving, and (3) rational trust. In addition, other factors were brought into the analysis when it was felt necessary to further explain variable relationships.

The subjective measures of organizational effectiveness consist of three variables: productivity, adaptability, and flexibility. The variable of productivity was concerned with how nursing home personnel evaluate their co-workers in relation to how much they produce and how efficiently they work with the resources they have available. Adaptability pertains to employees' judgments of how good a job their co-workers do in anticipating problems that may come up and preventing them or reducing their bad effects; how quickly they accept and adjust to changes in routines, equipment, and assignments; and how many people adjust to these changes. Flexibility measures how work groups are able to handle emergency situations. In general, the subjective measures of effectiveness were discovered to be rated higher in those nursing homes in which the following conditions were present:

1. Superior is highly rated at planning, organizing, and scheduling the work.

2. Goals and objectives, and rules and regulations are clearly defined, and the nursing home staff members are seen as adhering to rules and regulations.

3. Nursing home personnel evaluate the communications they receive from the administrator as adequate.

4. The administrator is observed to be aware of organizational problems and effective in dealing with them.

5. Nursing home administrator and department heads are perceived as being aware of the needs and problems of the nursing home staff and are seen as fair and reasonable in the decisions they make affecting work routines.

6. The nursing home administrator and department heads are seen as following their own rules and regulations.

7. Greater overall job satisfaction exists among the nursing home staff.

The only exceptions were that productivity and flexibility were not significantly related to the awareness of the administrator of organizational problems and flexibility was not significantly related to the extent to which administrators were perceived as following their own rules and regulations. But all other relationships were statistically significant. In addition, all three of the subjective measures of effectiveness were found to be interrelated. In

other words, they all correlated significantly with one another.

The measures of job satisfaction were divided into two categories: Overall Job Satisfaction and Turnover. Overall job satisfaction is obtained by measuring an employee's attitudes regarding five areas of his/her job: the job itself, supervision, co-workers, pay, and promotion. Overall job satisfaction was found to relate significantly to all the preceding items that the subjective measures of effectiveness were related to, only with no exceptions. The same is true for employee satisfaction with the job itself. Satisfaction with the area of supervision was related significantly to all items with the exception of:

1. The extent to which nursing home staff members are perceived as adhering to rules and regulations.

2. The extent to which the nursing home administrator is perceived to be aware of problems within the nursing home.

Staff members' satisfaction with their co-workers was significantly related to all items with the exception of:

1. Nursing home administrator and department heads are perceived as being aware of the needs and problems of the nursing home staff and are seen as fair and reasonable in the decisions they make affecting work routines.

Satisfaction with pay was significantly related to

all items with the exception of:

1. The ability of the supervisor at planning, organizing, and scheduling the work.

2. The extent to which goals and objectives have been clearly defined.

Nursing home staff members' satisfaction with their opportunity for promotion was significantly related to all items with the exception of the planning ability of the supervisor. Consequently, job satisfaction directly associated to all of the previously mentioned items. Out of 60 correlations, only seven were not significant at the .05 level, but all seven achieved at least the .10 level.

Employee turnover was observed to be the lowest in those nursing homes where:

1. The supervisor is highly rated at planning, organizing, and scheduling the work.

2. Goals and objectives have been clearly defined.

Turnover was also observed as being almost significantly related to:

1. The extent to which rules and regulations have been clearly defined.

The only factor that significantly relates to the turnover appears to be the need for role clarity or a rational, predictable environment.

In evaluating organizational performance, many

researchers feel some form of quantitative data should be employed, thus, the reason for the selection of profitability as a criterion of organizational effectiveness. The findings in relation to profitability were disappointing. Only one significant relationship was found and it was in the opposite direction from the prediction. Profitability was inversely related to the extent to which goals and objectives are clearly defined. An attempt was made to explain this relationship by using job satisfaction as an intervening variable. More in-depth analysis of this relationship is required.

In analyzing the major relationship the study was designed to investigate, it became necessary to explore the interrelationships among additional variables when it was determined they would lend support to our hypothesis. This process provided a deeper insight into the nursing home as a functioning social system and brought forth the discovery of many significant findings, which will be added to in the next chapter.

Among these additional findings is the discovery that interdepartmental tension and conflict were lower in those organizations where:

1. Rules and regulations have been clearly defined.

2. Nursing home personnel evaluate the communication they receive from the administrator as adequate.

3. The administrator is observed as effectively solving nursing home problems.

4. Nursing home administrator and department heads are perceived as being aware of the needs and problems of the nursing home staff and are seen as fair and reasonable in the decisions they make affecting work routines.

Another important discovery was that in the nursing homes where the administrator and department heads have been successful in creating a rational trust atmosphere as evidenced by the nursing home personnel's favorable rating, the following conditions existed simultaneously:

1. Nursing home personnel identify with the nursing home and its goals, their occupation, and their co-workers.

2. Nursing home personnel evaluate the communication they receive from the administrator as adequate.

3. The administrator is observed to be aware of organizational problems and effective in dealing with them.

4. Interdepartmental tension and conflict are lower.

In addition, administrative communication was observed to relate significantly to all the items of organizational planning, thus establishing a strong, mutually supportive association between these two clusters of variables.

It was the objective of this chapter to investigate the following hypothesis:

Hypothesis 1: There will be a direct and significant relationship between administrative effectiveness and organizational effectiveness.

Again and again throughout this chapter, the importance and central role of the administrator is demonstrated. This study indicates that the key functions of the nursing home administrator are his ability to communicate and to solve problems. It is through the communication process that the administrator clearly defines the nursing home's objectives and rules and regulations, which in turn clarifies roles and makes the environment more rational and certain. In addition, it is through the process of communications between the nursing home's administrative staff and its personnel that a rational trust atmosphere can be created. When adequate lines of communication have been established, the administrator will be more aware of organizational problems and have a better understanding of employees' personal needs and problems. Accordingly, the employees will have a greater appreciation for the administrator's position and therefore will be more able to understand his decisions and the rationale behind them. Consequently, decisions are more apt to be viewed as fair and reasonable

when this shared frame of reference exists between employees and administration. Another benefit of these open lines of communication and shared frames of reference is that the administrator and staff members are more likely to discuss organizational problems openly. Therefore, the administrator should be more aware of all the factors involved, enabling him to deal with them more effectively. When organizational problems are effectively resolved, the organization will become more integrated and tension and conflict will be reduced.

All of these factors—role clarity, administrative communications and problem solving, and rational trust—have been observed to relate significantly to our organizational effectiveness measures of productivity, adaptability, flexibility, and overall job satisfaction. Turnover was related to some items; in other cases, however, its correlations were not strong enough to permit conclusions to be drawn. Profitability was inversely related to one item. But in the large majority of cases, significant associations between the measures of effectiveness and the measures of administration have been established.

Therefore, based upon the number of significant correlations between the measures of organizational effec-

tiveness and the measures of administrative effectiveness and the discovery of the importance of the administrative role in the nursing home, the conclusion can be drawn that there is an association between the effectiveness of administrative practice and organizational effectiveness. Hypothesis 1, therefore, appears to be confirmed.

CHAPTER VIII

ANALYSIS OF THE RELATIONSHIP BETWEEN THE CHARACTERISTICS OF EFFECTIVE ORGANIZATIONS AND ORGANIZATIONAL EFFECTIVENESS

PART II: INTERNAL ORGANIZATIONAL RELATIONSHIPS AND ORGANIZATIONAL EFFECTIVENESS

The purpose of this part of the study is to determine the effects of the interrelationships among the nursing home's staff members upon organizational performance. The objective is to determine how important it is to effective nursing home functioning for the personnel to work together as an integrated unit. We would expect that in those nursing homes where the staff members exchange ideas and information freely, cooperate with one another to coordinate their activities, are able to avoid creating problems for one another, and deal effectively with problems when they

arise, these nursing homes will be rated more favorably in accordance with our measures of organizational effectiveness. In order to analyze these relationships more closely, the following hypothesis will be tested:

> Hypothesis 2: There will be a direct and significant relationship between the effectiveness of internal organizational relationships and organizational effectiveness.

The importance of internal relationships within the nursing home to its staff and their influence upon individual attitudes is evidenced by their comments:

> This is a wonderful center. I love my work here and have been here since the opening of the center in February, 1970. It's hard work, but so rewarding. My co-workers cooperate very well which makes the work very pleasant. (NH 17, Resp. 6, Nurse's Aide)

> . . . the only problem is that we cannot get cooperation from the nursing department. If you would have been around here, you'd know what I am talking about. (NH 14, Resp. 33, Dietary)

> The work between the professional nurse and the nurse's aide are [sic] not organized and cooperating together. The supervisor seems not to really take interest in her work. (NH 23, Resp. 19, Nurse's Aide)

> Tension between shifts and floors. . . . It appears each shift looks for work, another shift leaves. Will not accept that we are running jobs on a 24-hour basis. (NH 20, Resp. 18, Nurse)

In order to obtain a deeper insight into the specific effects of internal relationships upon organizational effectiveness, this section of the study was subdivided into

three parts: (1) Conditions for Negotiating Orders, (2) Horizontal Integration, and (3) Cultural and Social-Psychological Integration. The research findings in each area will now be considered.

Conditions for Negotiating Orders

A "negotiated order" is a pattern of relationships among people improvised either individually or collectively by them in response to problems. For collective solutions people must be able to meet easily and feel free to exchange ideas and information and propose solutions. The free flow of ideas and information among persons whose jobs are related will enhance the development of shared frames of reference and mutual understanding, which are so important for adequate coordination of efforts. In addition, personnel can solve coordination problems by simply learning to stay out of each other's way or avoid creating problems for one another.

The importance of "conditions for negotiating orders" in the nursing home setting is pointed out by the following unsolicited comments from nursing home staff members:

> I feel we all get along with each other very well. We learn a lot from one another, even the residents. I enjoy my job and my fellow employees. I wouldn't ever give up this job I have because I love to work

> with people and help them. (NH 3, Resp. 21, Nurse's Aide)
>
> I love my job. I like working at . . . I have been with them 6 years. I have the utmost respect for the administrator and my supervisor. For the most part the nurses all work together and help where needed. (NH 12, Resp. 19, Nurse)
>
> Ideas are not passed from one shift to another. Heads of departments do not carry ideas from one shift to the next shift. (NH 2, Resp. 43, Housekeeping)
>
> I think all of the employees could be a bit more considerate towards each other and their job . . . be more kind to others, work better with the bad as well as the good . . . very poor communication between department heads. Some afraid they will do more than others. (NH 14, Resp. 23, Administrative)

The negotiated order manifests itself when members avoid creating problems for one another, develop necessary channels of communication to exchange ideas and information, and solve coordinating problems inherent in productive activity. Under these conditions we would project a more effective organization.

The data reveal that a significant relationship exists between conditions for negotiating orders and all three subjective measures of effectiveness. The efficiency the nursing staff is able to achieve in the performance of their duties relates significantly to conditions for negotiating orders. When the environment exists within a nursing home that enables the staff to exchange ideas and information

TABLE 32

THE RELATIONSHIP BETWEEN CONDITIONS FOR NEGOTIATING ORDERS AND THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

	Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Conditions for Negotiating Orders[1]			
Ease of Exchanging Ideas and Information	.76*[a]	.79[a]	.50[b]
Avoid Creating Problems for One Another	.66[a]	.75[a]	.43[c]
Handling Coordination Problems	.66[a]	.59[a]	.40[c]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.

[1]Mott (1972).

freely and, therefore, to resolve problems of coordinating their activities more effectively, employees are perceived as producing more. Also, when staff members are seen as not interfering with one another, productivity is rated higher.

When conditions for negotiating orders exist in a nursing home, the staff is perceived as more willing to accept changes in routine, equipment, and assignments and able to anticipate problems and prevent them from occurring or reduce their ill effects. The free flow of communication among organizational members has been seen to enhance mutual understanding and shared frames of reference (Georgopoulos & Mann, 1962, pp. 294-295). Under these conditions personnel are more apt to understand the position and problems of their co-workers and be more willing to accept changes that will be to everyone's advantage. Consequently, when the conditions of negotiated orders exist in a nursing home, it will also be more adaptable, according to the measures.

Flexibility—how the nursing home handles emergency situations—was also discovered to relate significantly to conditions for negotiating orders. If through the process of communication, problem solving, and working together, staff members become aware of one another's capabilities and general attitude, they will know better what to expect

in times of emergency. Supervisors and co-workers will know who is capable of performing what duties and who can be relied upon.

In addition, if through the process of negotiating orders, nursing home personnel have developed mutual understandings and shared frames of reference, they should more closely identify with the nursing home and its goals and their co-workers. This being the case, they should be more willing to lend their support in times of crisis. To attempt to further support this argument, the relationship between conditions for negotiating orders and employees' identification with the nursing home, their co-workers, and their occupation was investigated.

The data in Table 33 would seem to give strong support to the postulate that an association exists between the employees' identification with the nursing home and its goals and their immediate work group and conditions for negotiating orders. All the coefficients of correlation were statistically significant. In addition, a particularly strong relationship exists between negotiated orders and staff member identification with the nursing home and its goals. Apparently staff members associate negotiating orders more with the total organization.

TABLE 33

THE RELATIONSHIP BETWEEN THE CONDITIONS FOR NEGOTIATING ORDERS AND THE NURSING HOME STAFF MEMBERS' IDENTIFICATION WITH THEIR CO-WORKERS, THE NURSING HOME AND THEIR OCCUPATION

	Conditions for Negotiating Orders[1]		
	Ease of Exchanging Ideas and Information	Avoid Creating Problems for One Another	Handling Coordination Problems
Nursing Home Staff Members' Identification With:			
Immediate Work Group	.59*[a]	.54[b]	.57[b]
Nursing Home and Its Goals[2]	.77[a]	.70[a]	.83[a]
Occupation[2]	.57[b]	.44[c]	.74[a]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.

[1] Mott (1972).

[2] Mott (1960).

In the last section of this chapter flexibility will be shown to relate significantly to staff members' identification with the nursing home and its goals (Rs = .52, sig. .004) and their immediate work group (Rs = .58, sig. .001). Consequently, it can be surmised that one explanation for the significant association of flexibility with conditions for negotiating orders is its association with staff members' identification with the nursing home and their co-workers. Because conditions for negotiating orders may increase employees' identification, they may also enhance flexibility. This relationship will be examined further in the last section of this chapter.

If conditions exist within the nursing home that facilitate and encourage staff members to negotiate orders to handle problems of coordination and avoid creating problems for one another, and because of the open communications to become better acquainted with and better understand their co-workers, greater overall job satisfaction among personnel would be anticipated.

The results of the study indicate a strong relationship between the conditions for negotiating orders and job satisfaction. All the correlations for overall job satisfaction were significant at the .001 level and all

TABLE 34

THE RELATIONSHIP BETWEEN CONDITIONS FOR NEGOTIATING ORDERS AND MEASURES OF JOB ATTITUDES

	Areas of Job Satisfaction						
	Job Satisfaction[1] (Overall)	Job Itself[1]	Super-vision[1]	Co-Workers[1]	Pay[1]	Pro-motion[1]	Turn-over
Conditions for Negotiating Orders[2]							
Ease of Exchanging Ideas and Information	.76*[a]	.61[a]	.65[a]	.60[a]	.68[a]	.39[c]	-.26
Avoid Creating Problems for One Another	.76[a]	.51[b]	.61[a]	.78[a]	.47[b]	.40[c]	-.03
Handling Coordination Problems	.84[a]	.77[a]	.70[a]	.56[b]	.54[b]	.66[a]	-.29[d]

N = 24
* = Spearman rank-order correlations
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1] Smith et al. (1969).

[2] Mott (1972).

the correlation coefficients pertaining to the five areas of job satisfaction were significant at the .05 level. Consequently, high levels of job satisfaction and favorable conditions for negotiating orders exist simultaneously in the nursing homes studied.

An interesting observation is that the strongest relationship with regards to nursing home personnel's satisfaction with their co-workers is the extent to which they avoid creating problems for one another.

The results with regards to turnover did not produce any significant findings. However, the ability of co-workers to handle coordination problems with their work was related to turnover (Rs = .29, sig. .079), which is very close to significance.

TABLE 35

THE RELATIONSHIP BETWEEN THE CONDITIONS FOR NEGOTIATING ORDERS AND PROFITABILITY

	Conditions for Negotiating Orders[1]		
	Ease of Exchanging Ideas and Information	Avoid Creating Problems for One Another	Handling Coordination Problems
Profitability	-.04*	-.03	-.23

N = 24
* = Spearman rank-order correlations were used.
[1]Mott (1972).

In accordance with the findings in Table 35 it can be concluded, at least in the nursing homes surveyed, that no relationship exists between the conditions for negotiating orders and profitability.

In summary, when the nursing home staff avoids creating problems for one another, have developed the necessary channels of communication to exchange ideas and information, and are able to solve adaptive problems inherent in productive activity, the following conditions were found to exist simultaneously in the nursing home:

1. Staff members judged the individuals in their department to work efficiently with the resources at hand and produce more.

2. Staff members saw the majority of people in their department as readily accepting and adjusting to changes in routines, equipment, or assignments. In addition, they are seen as anticipating problems and preventing them from happening or in reducing their ill effects.

3. Work groups are perceived to be able to deal effectively with emergency situations. In other words, employees are more willing to help in times of emergency.

4. Nursing home staff members identify with the nursing home and its goals, their immediate work groups, and their occupation.

5. Overall job satisfaction among nursing home personnel is higher.

Our intention is not to suggest that conditions for negotiating orders cause these conditions to exist but only that they coincide with one another. Some additional relationships to negotiated orders will be investigated in the next section.

Horizontal Integration-Coordination

Georgopoulos and Mann define coordination as

> The organizational processes through which functionally interdependent parts and activities in the system are articulated with one another so as to ensure the system will operate effectively. (1962, p. 270)

The problem of coordination as it applies to the nursing home organization is basically how to get the various work units and departments to utilize the organization's resources efficiently and to integrate their activities to achieve the goals and objectives of the nursing home.

Organizational effectiveness would seem to be maximized when the various elements of the nursing home are integrated and the degree of integration is largely associated with the role of the administrator. The administrator fills the key role in the integration of the nursing home by clearly defining objectives, rules, and regulations and communicating them to his staff. When open communications are established between the administrator and his staff, he is more able to discover their needs and problems and by effectively solving problems before they segment the organization, he can help integrate the organization.

In an integrated organization where all work groups, shifts, and departments are bound together into a unified

system, organizational effectiveness would be expected to be maximized. If the organization is unified, then communications should be free flowing, facilitating the free exchange of ideas and information among staff members, thus enabling them effectively to solve problems of timing and blending jobs. Also, open communications should help in the handling of interdepartmental problems. Given this kind of atmosphere and the great amount of interaction between departments, tension and conflict between departments should be minimized and, furthermore, we would expect the staff members of a highly integrated organization to have a better overall attitude toward their jobs.

The importance of coordination and cooperation within the nursing home to its staff is evidenced by some of the employees' comments:

> Most of the time the work load is enough to keep one busy (running from the time one gets on to time to get off) but when crises arise such as critical patients, roof leaking, elevator emergency, and false fire alarms, it can be mind shattering. The help we have acquired the past few months have been most helpful and thoughtful in giving a hand without being told or asked. (NH 4, Resp. 22, Nurse)

> One thing needed in this nursing center is more cooperation between workers on all three shifts, along with cooperation consideration coincide also [sic]. (NH 2, Resp. 3, Nurse's Aide)

> This nursing home could use a little more cooperation

between departments and shifts. The cooperation now is terrible!!! (NH 10, Resp. 2, Housekeeping)

I think a supervisor should have a better background in dietary before being hired, there is too much friction between nurses and the dietary supervisor, and this causes tension between kitchen employees when it is serving time. It's like a game between the nurses and the dietary supervisor which isn't fair to the girls who are in the middle of this—its very childish and poor characteristic. (NH 4, Resp. 5, Dietary)

Have to wait for others to complete work before completing mine. Dietary slow in preparing food. Food cold, also tasteless. General lack of concern for patients, or job. Maintenance crew very slow in repairing leaky faucets, burned-out lights, air conditioners, etc. Usually stand around and talk. (NH 19, Resp. 24, Administrative)

There is great pressure upon aides and orderlies if the laundry proves unsatisfactory to patients and families. Rarely are there sufficient linens to make beds and bathe patients in the morning. This causes delays in routines by numerous trips to the laundry for needed items. (NH 8, Resp. 15, Nurse's Aide)

I haven't worked here long but for the length of time that I have, I've noticed that the different shifts seem to resent the other two shifts and show conflict which I don't think is good. They always complain about something that may happen to be done on their shift but blame the other shift. (NH 11, Resp. 21, Nurse's Aide)

These comments are excellent examples of how coordination and cooperation among the nursing home staff facilitate effective performance of duties or, on the other hand, can be very disruptive.

We shall begin our analysis of the factors that associate with organizational coordination and how

coordination relates to organizational effectiveness. For purposes of clarity, coordination is divided into two categories, programmed and improvised.

Programmed coordination was considered in the first section of Chapter VII under the heading of "Organizational Planning." Programmed coordination is primarily defined as integration of the various elements of the organization by clearly defining objectives, rules and procedures, and skill with which planning is carried out, and the extent of organizational members' adherence to rules and regulations. Programmed coordination was found to relate significantly to our organization effectiveness measures of productivity, adaptability, flexibility, and overall job satisfaction, and the majority related in some degree to employee turnover.

Improvised coordination is that integration that takes place when staff members can come together and freely exchange ideas and information and cooperate with one another to coordinate their activities to everyone's mutual advantage. The negotiated order is an excellent example of improvised coordination, and in the last section entitled "Conditions for Negotiating Orders" we saw that the extent to which personnel freely exchange ideas and information, avoid creating problems for one another, and effectively

handle coordination problems is significantly related to productivity, adaptability, flexibility, and all areas of job satisfaction.

In this section, before we probe the empirical data regarding improvised coordination and organizational effectiveness, we shall investigate those factors that relate directly to improvised coordination and the interrelationship among the items of improvised coordination themselves.

In those nursing homes where objectives, rules, and regulations have been skillfully determined and adequately communicated to personnel, the personnel will have a better idea of the objectives to be accomplished and the boundaries of their behavior in accomplishing them. Consequently, programmed coordination may relate to improvised coordination. When the administrator is aware of and effectively solves problems before they segment the organization, improvised coordination should be maximized and tension and conflict minimized. In addition, staff members will feel freer to make suggestions and bring problems to the attention of their supervisors when a rational trust atmosphere exists within the nursing home. Therefore, it is expected that direct and significant relationships will exist between improvised coordination and organizational planning,

administrative communication, problem solving, and rational trust.

We began the investigation of the factors relating to improvised coordination by analyzing the relationship between conditions for negotiating orders and organizational planning (see Table 36). The empirical data indicate a strong association between these two variable groupings. In other words, when nursing home personnel have confidence in the planning ability of their supervisor and roles have been clearly defined, they perceive themselves as exchanging ideas and information freely, effectively handling coordination problems, and able to avoid creating problems for one another.

The empirical findings in Table 37 are merely an extension of Table 36 and provide a clear demonstration of the importance of organizational planning in relation to improvised coordination. Organizational planning establishes the framework under which organizational tasks are performed and when this framework is properly established, organizational activities can be more effectively blended and timed to accomplish objectives. When problems arise between departments the staff or supervisor can attempt to solve them within the prescribed limits. In support of this

TABLE 36

RELATIONSHIP BETWEEN THE CONDITIONS FOR NEGOTIATING ORDERS AND ORGANIZATIONAL PLANNING

	Conditions for Negotiating Orders[1]		
	Ease of Exchanging Ideas and Information	Avoid Creating Problems for One Another	Handling Coordination Problems
Organizational Planning[1]			
Planning Ability of Supervisor	.61*a	.42c	.62a
Clarity of Goals and Objectives	.60a	.48b	.61a
Clarity of Rules and Regulations	.59a	.54b	.60a
Adherence to Rules and Regulations	.35c	.43c	.51b

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
[1]Mott (1972).

TABLE 37

RELATIONSHIP BETWEEN COORDINATION AND ORGANIZATIONAL PLANNING

	Organizational Planning[1]			
	Planning Ability of Supervisor	Clarity of Goals and Objectives	Clarity of Rules and Regulations	Adherence to Rules and Regulations
Coordination:[2]				
Blending Together of Activities to Achieve Objectives	.61*a	.57b	.64a	.57b
Activities Well Timed . . .	.73a	.61a	.68a	.50b
Handling Problems between Departments . . .	.50b	.57b	.56b	.43c
Tension and Conflict between Departments . . .	-.27**d	-.32**d	-.39**c	-.23**
Pressure to Perform	-.35c	-.44c	-.30d	-.19
Inter-shift Cooperation	.43c	.25	.42c	.48b

N = 24
* = Spearman rank-order correlations were used.
** = Correlation previously reported in Table 20.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

explanation, all of the items of organizational planning were discovered to relate significantly to the blending of activities, timing of activities, and effective handling of problems between departments.

The relationship of organizational planning to interdepartmental tension and conflict was dealt with in the first section of Chapter VII and will not be repeated here. It was determined that role clarity and interdepartmental conflict appear to be inversely related. The data relating organizational planning to what might be termed the effects of coordination do not indicate an overall significant correlation between variable clusters, but are selective. The pressure for reasonable performance is viewed as lower in those nursing homes where personnel have confidence in the planning skills of their supervisor and goals and objectives have been clearly defined. In addition, nursing home personnel perceived the different shifts as cooperating better in those nursing homes in which the staff has confidence in the planning ability of the supervisor, rules and regulations have been clearly defined, and personnel are seen as adhering to the rules and regulations. From the empirical data presented, the association between organizational planning and improvised coordination is an important one for

effective nursing home functioning, because when roles have been clearly determined, there will be less room for disagreement between staff members. Everyone will know what he is responsible for and, therefore, where his responsibilities end and other employees' responsibilities begin. Individuals will understand each other's jobs and will know what they can expect from one another in coordinating activities.

The empirical findings reported in Tables 38 and 39 support our contentions of an important relationship between the adequacy of administrative communication and improvised coordination. In the nursing homes where the administrator is seen as communicating adequately with the staff, the staff members perceive a free exchange of ideas and information among themselves. Coordination problems of blending and timing of activities are also seen as well handled together with problems between departments. Furthermore, the adequacy of administrative communication is inversely related to tension and conflict between departments and pressure for performance and directly related to cooperation between shifts. It is through the process of administrative communication that the organizational framework developed in the planning process becomes established with and understood by organizational personnel. Staff members' roles can be

TABLE 38

THE RELATIONSHIP BETWEEN CONDITIONS FOR NEGOTIATING ORDERS AND ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING

	Administrative Communications and Problem Solving[1]		
	Adequacy of Administrative Communication	Awareness of Problems by Administrator	Ability of Administrator to Solve Problems
Conditions for Negotiating Orders:[2]			
Ease of Exchanging Ideas and Information	.58*a	.44c	.58a
Avoid Creating Problems for One Another	.59a	.56b	.55b
Handling Coordination Problems	.68a	.62a	.75a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.

[1] Mott (1960).

[2] Mott (1972).

TABLE 39

THE RELATIONSHIP BETWEEN COORDINATION AND ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING

	Administrative Communications and Problem Solving[1]		
	Adequacy of Administrative Communication	Awareness of Problems by Administrator	Ability of Administrator to Solve Problems
Coordination:[1]			
Blending Together of Activities to Achieve Objectives	.74*a	.51b	.81a
Activities Well Timed...	.64a	.38c	.68a
Handling of Problems Between Departments	.54b	.66a	.63a
Tension and Conflict Between Departments	-.59**a	-.12**	-.34**c
Pressure to Perform	-.34c	-.33d	-.37c
Intershift Cooperation	.51b	.50b	.63a

N = 24
* = Spearman rank-order correlations were used.
** = Reported earlier in Table 33.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1] Mott (1960).

clearly defined and mutual expectations and shared frames of reference developed, creating the conditions and establishing the boundaries within which personnel can interrelate their activities and solve problems. Consequently, the relationship between administrative communication and coordination has been demonstrated to be an important one.

Problems that remain unsolved or undetected may create tension in the nursing home and contribute to poor coordination. Therefore, as we pointed out earlier, the administrator becomes the key figure in organization integration. The extent to which the administrator is aware of and effectively deals with problems within the organization was significantly related to all the elements of negotiated orders, and the variables of blending activities together to achieve objectives, the extent to which activities are well timed, and how well problems between departments are handled. Therefore, it appears that when the administrator is perceived as being aware of and effectively solving problems, the nursing home staff will also perceive a high degree of improvised coordination to exist in the facility.

Inasmuch as problem solving is related to coordination within the nursing home, we would assume that in the nursing homes where problems are effectively resolved,

tension and conflict between departments and the pressure for performance beyond what is reasonable will be seen by personnel to be at a minimum. Additionally, intershift cooperation will be at a maximum. The empirical data support these assumptions.

It would appear that by becoming aware of and effectively resolving organizational problems before they segment the organization and turn work groups, shifts, and departments against one another, the administrator makes a substantial contribution to improvised coordination.

The data in Tables 40 and 41 denote the coexistence within the nursing homes surveyed of a rational trust atmosphere and the feeling on the part of the nursing home staff that the activities and routines within the nursing home are well coordinated. When the administrator and department heads are rated high according to the rational trust items, it appears to create an organizational environment that encourages open communication and personnel feel freer to attempt to mutually resolve the problems that arise in interrelating their various work activities.

All correlations were significant between the variable cluster of rational trust and conditions for negotiating orders (see Table 40). Furthermore, rational trust was

TABLE 40

RELATIONSHIP BETWEEN CONDITIONS FOR NEGOTIATING ORDERS AND RATIONAL TRUST

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Conditions for Negotiating Orders:[1]			
Ease of Exchanging Ideas and Information	.57*b	.52b	.54b
Avoid Creating Problems for One Another	.53b	.37c	.38c
Handling Coordination Problems	.68a	.72a	.70a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
[1]Mott (1972).

TABLE 41

RELATIONSHIP BETWEEN COORDINATION AND RATIONAL TRUST

	Rational Trust[1]		
	Adm. and Dept. Heads Perceived as Following Rules	Adm. and Dept. Heads Perceived as Understanding Workers' Needs	Adm. and Dept. Heads Seen as Fair and Reasonable
Coordination:[2]			
Blending Together of Activities to Achieve Objectives	.69*a	.80a	.74a
Activities Well Timed	.57a	.74a	.75a
Handling of Problems Between Departments	.57a	.76a	.78a
Tension and Conflict Between Departments	-.29**d	-.59**a	-.52**b
Pressure to Perform	-.33d	-.48b	-.53b
Intershift Cooperation	.62a	.41c	.45c

N = 24
* = Spearman rank-order correlation was used.
** = Data previously reported in Table 29.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

significantly related to blending of activities, timing of activities, and handling of problems between departments (see Table 41). There is little doubt that when nursing home personnel see themselves as cooperating with one another in coordinating activities, the administrative staff is more likely to be rated high according to the rational trust items.

In Chapter VII, we discussed the strong inverse relationship between rational trust and interdepartmental tension and conflict. Furthermore, the same relationships exist with employees' perception of unreasonable pressure to perform and the extent to which the different shifts cooperate with one another. Also, the degree to which administrator and department heads were seen as following their own rules was very strongly related to intershift cooperation. The preceding data would seem to indicate that high levels of coordination and cooperation along with low levels of tension and conflict exist among the staff when a rational trust atmosphere exists within the nursing home.

In summary, the degree of improvised coordination existing within the nursing homes surveyed is significantly related to all the variables under the categories of organizational planning, administrative communication and problem

solving, and rational trust. This would appear to further demonstrate the importance of the role of the administrator to organizational performance. The administrator, by his ability to clarify roles, communicate them, and gain the trust and respect of his employees, creates the conditions under which the nursing home staff can come together and coordinate their activities.

Continuing our investigation into coordination within the nursing home organization, we evaluate the interrelationship of the variables of conditions for negotiating orders and coordination among themselves and between each other (see Table 42). The empirical data show that all of the items of improvised coordination are significantly interrelated with one another with the exception of the timing of activities and the extent to which personnel avoid creating problems for one another (Rs = .33, sig. .056), and this relationship is extremely close to being considered statistically significant. The items referred to as improvised coordination include the variables of negotiated orders and the variables of coordination, blending of activities, timing of activities, and handling of interdepartmental problems. The fact that these items are all associated and coexist simultaneously within the nursing homes is, more

TABLE 42

THE INTERRELATIONSHIP AMONG THE VARIABLES ITEMS OF CONDITIONS FOR NEGOTIATING ORDERS AND COORDINATION

	Negotiated Order[1]			Coordination[2]					
	Exchanging Information	Avoid Creating Problems	Handling Coordination	Blending Activities	Timing Activities	Inter-Dept. Problems	Tension and Conflict	Pressure	Inter-Shift Cooperation
Negotiated Order:[1]									
Exchange Infor.	1.00*	.72[a]	.68[a]	.67[a]	.57[b]	.41[c]	-.15	-.66[a]	.52[b]
Avoid Problems	.72[a]	1.00	.63[a]	.52[b]	.33[d]	.42[c]	-.05	-.45[c]	.56[b]
Coordination Problems	.68[a]	.63[a]	1.00	.80[a]	.57[a]	.71[a]	-.30[d]	-.59[a]	.69[a]
Coordination:[2]									
Blending Activities	.67[a]	.52[b]	.80[a]	1.00	.65[a]	-.54[b]	-.43[c]	-.39[c]	.61[a]
Timing Activities	.57[b]	.33[d]	.57[a]	.65[a]	1.00	.70[a]	-.57[b]	-.51[b]	.48[b]
Interdepartment Problems	.41[c]	.42[c]	.71[a]	.54[b]	.70[a]	1.00	-.47[b]	-.47[b]	.45[c]
Tension and Conflict	-.15	.05	-.30[d]	-.43[c]	-.57[b]	-.47[b]	1.00	-.18	-.23
Pressure	-.66[a]	-.45[c]	-.59[a]	-.39[c]	-.54[b]	-.47[b]	-.18	1.00	-.35[c]
Intershift Cooperation	.52[b]	.56[b]	.69[a]	.61[a]	.48[b]	.45[c]	-.23	-.35[c]	1.00

N = 24
* = Spearman rank-order correlations used.
[1]Mott (1972).
[2]Mott (1960).

a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

than likely, an indication that they are mutually supportive of one another. For example, the nursing home staff is more able to coordinate activities and solve routine problems because of open communication within the nursing center. On the other hand, because problems are effectively dealt with and activities are well coordinated, the organization does not become segmented, which enables open communication to exist among its personnel.

Pressure for performance beyond what is considered reasonable was viewed to be low and intershift cooperation was perceived as high in the facilities where improvised coordination existed among the staff. Furthermore, tension and conflicts between departments were viewed as less when activities were perceived to be well timed and blended together to accomplish objectives and when problems between departments were effectively handled. These conditions would certainly seem to reduce the possibilities for friction between departments. However, one disappointing result was the lack of any significant relationships between conditions for negotiating orders and tension and conflict between departments. One possible explanation for this is that the conditions for negotiating orders related more directly to the immediate work group and not the organization

as a whole. Therefore, nursing home personnel could view their own work group as exchanging ideas and information and solving coordination problems among themselves and still perceive a lack of cooperation from other departments.

It was not surprising to discover the lack of any connection between unreasonable pressure to perform and departmental conflict, because personnel would connect pressure for performance with their supervisor or the administrator and would relate departmental conflict to the other departments in the nursing home. Accordingly, we would predict that cooperation between shifts and interdepartmental conflict were unrelated, which they were. However, a significant association between pressure for performance and intershift cooperation was discussed. In the comments at the beginning of this section, it was demonstrated that when one shift does not perform its duties adequately, it puts pressure on the other shift.

In summary, the items of improvised coordination were found to be significantly interrelated to one another, which probably is an indication that they are mutually supportive. Furthermore, it can be concluded that when sufficient levels of improvised coordination exist within the nursing home, departmental conflict and pressure to perform

will be minimized and intershift cooperation will be maximized.

Now that the factors that associated significantly with coordination within the nursing home have been analyzed, we begin our study of the relationship of coordination and organizational effectiveness. In the first section of this chapter, the conditions for negotiating orders were found to relate significantly to the subjective measures of organizational effectiveness and job satisfaction, but no relation was established with turnover or profitability.

Research results do not permit the drawing of general conclusions regarding the relationship between coordination and the subjective measures of organizational effectiveness. Accordingly, it is necessary to be more specific in determining which factors are related to the measures of effectiveness used.

The production of co-workers and the efficient utilization of resources by the staff will be rated higher in those nursing homes where (1) activities are well timed and blended together to accomplish objectives, (2) members of the nursing staff perceive little pressure to perform over and above what is considered reasonable, and (3) cooperation between the shifts is high (see Table 43). The connection

TABLE 43

RELATIONSHIP BETWEEN COORDINATION AND THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

	Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Coordination:[2]			
Blending Together Activities to Achieve Objectives	.69*[a]	.72[a]	.62[a]
Activities Well Timed	.40[c]	.61[a]	.43[c]
Handling Problems between Departments	.27[d]	.41[c]	.30[d]
Tension and Conflict Between Departments	-.09	-.15	-.25
Pressure to Perform	-.55[b]	-.42[c]	-.11
Intershift Cooperation	.52[b]	.44[c]	.35[c]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

between these factors and employee judgment of co-worker productivity should be readily apparent. However, what is not readily apparent is the lack of a relationship between productivity and interdepartmental conflict and problem solving. One possible explanation for this lack of relationship is that the index of productivity is based upon staff members' judgments of how well their co-workers work together. Interdepartmental conflict and problem solving are based upon staff members' judgments of how well the elements within the organization work together. Therefore, these variables need not be related.

The extent to which staff members adhere to and accept changes in routines, assignments, and equipment was observed to relate significantly to all the variable items, with the exception of tension and conflict between departments (see Table 43). Therefore, it could be assumed that friction between departments is detrimental to adaptability. However, some recent authors have argued that tension and conflict within the organization may enhance adaptability. In any event, the data do not allow us to project any connections.

Staff members view the willingness to accept internal changes in direct relation to the improvised coordination

within the organization. In other words, when the staff members view themselves as capable of resolving coordination and interdepartmental problems without delay and as able to interrelate their activities to accomplish objectives, they also see themselves as more adaptable. Furthermore, unreasonable pressure to perform will be viewed as low and shifts will be observed to work cooperatively with one another.

If the nursing home staff members have developed among themselves the methods and procedures for coordinating their everyday activities, when emergencies arise they will be more capable of dealing with them. Accordingly, a significant relationship between coordination and flexibility would be expected, which is what the empirical findings indicate, with one exception. Flexibility is not significantly related to interdepartmental problem solving, but it is close to significance (Rs = .30, sig. .07).

Employee attitudes were stated earlier to be very important for flexibility, and this contention is supported by the findings. Flexibility and intershift cooperation are significantly related. If the shifts have built up hostility for each other by leaving work for each other or making it difficult for each to take over from the other, then they

are less likely to respond to requests from other shifts when an emergency arises, thereby reducing the nursing home's capacity to respond in cases of emergency.

It is difficult to summarize briefly each of the factors relating to subjective measures of effectiveness because they are all different. In very general terms, some association was observed to exist between the subjective measures of effectiveness and improvised coordination, pressure to perform, and intershift cooperation.

It appears that in those nursing homes where the staff members established patterns for the effective coordination of activities, shifts cooperate with one another, and tension between departments is viewed as low along with unreasonable pressure to perform, there will be higher levels of job satisfaction and lower rates of employee turnover.

The empirical data shown in Table 44 generally support our contention of an association between coordination and job satisfaction. Overall job satisfaction was observed to be higher when activities are blended together and well-timed to achieve objectives, problems between departments are handled without delay, there is little or no pressure for performance beyond what is considered reasonable, and

TABLE 44

THE RELATIONSHIP BETWEEN COORDINATION AND THE MEASURES OF JOB ATTITUDES

	Job Satisfaction[1] (Overall)	Areas of Job Satisfaction					
		Job Itself[1]	Super-vision[1]	Co-Workers[1]	Pay[1]	Pro-motion[1]	Turn-over[1]
Coordination:[2]							
Blending Together of Activities	.71*b	.76a	.69c	.54b	.66a	.58a	-.12
Activities Well Timed	.53b	.48b	.55b	.26	.44c	.45c	-.35c
Handling Problems between Departments	.59a	.60a	.46c	.27	.39c	.57c	-.34c
Tension and Conflict between Departments	-.18	-.03	-.12	.22	-.25	-.32d	.33d
Pressure to Perform	-.49b	-.41c	-.49b	-.34c	-.32d	-.36c	.22
Intershift Cooperation	.54b	.50b	.33d	.28	.57b	.35c	.05

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Smith et al. (1969).

[2]Mott (1960).

cooperation among the shifts is high. The outstanding exception is that none of the measures of job satisfaction had significant correlations with tension and conflict between departments. A simple explanation for this discovery is that the attitudes of nursing home personnel toward their job are not greatly influenced by bickering between individuals in different departments. The determinants of job satisfaction within the nursing home are apparently related to the factors immediately surrounding the job. If there is conflict between the administrator and dietary, that is their problem. The reader may recall that tension and conflict between departments was determined by averaging nursing home staff members' judgments regarding the amount of conflict between five major departmental interfaces. Consequently, personnel could see high levels of conflict elsewhere in the nursing home but not as relating to their particular work situation.

Further analysis disclosed that the extent to which activities are well timed and the handling of interdepartmental problems were related to worker satisfaction with supervision but not to satisfaction with co-workers. This could be interpreted to signify that the employees look to their supervisor or administrator to perform these functions.

In summary, it can be concluded that with the exception of friction between departments, there is an association between our items of coordination and overall job satisfaction.

Employee turnover was lower in those nursing homes where the staff perceived activities to be effectively blended together to achieve objectives and problems are effectively resolved. It is interesting that these are the same factors that were associated with employees' satisfaction with supervision and not with co-workers. However, they are also correlated with all of the other measures of job satisfaction. Furthermore, tension and conflict between departments and turnover (Rs = .35, sig. .055) were very close to being significant. Because the study did not show job satisfaction and turnover to be significantly related (Rs = -.08), it is very possible that friction between departments may cause some individuals to leave and not affect the satisfaction of others.

The investigation of the correlations between coordination and profitability is consistent with our other finding regarding profitability in that the majority of the correlations are in the opposite direction from what would be expected. One possible explanation is that there are so

TABLE 45

THE RELATIONSHIP BETWEEN COORDINATION AND PROFITABILITY

	Coordination[1]					
	Blending Together of Activities to Achieve Objectives	Activities Well Timed	Handling Problems Between Departments	Tension and Conflict Between Departments	Pressure to Perform	Intershift Cooperation
Profitability	-.18*	-.14	-.30[d]	+.34[c]	.23	-.13

N = 24
* = Spearman rank-order correlations were used.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.
[1]Mott (1960).

many factors that influence the profitability of a nursing home (government policy, prices of supplies, occupancy rate, etc.) that it is difficult to relate it to any one factor, and there is the too obvious conclusion that coordination does not relate to profitability.

In summary, improvised coordination was discovered to relate significantly to organizational planning, administrative communications and problem solving, and rational trust. These factors were also shown to be mutually interrelated to one another. Moreover, with only a few exceptions, improvised coordination correlated significantly with productivity, adaptability, flexibility, and overall job satisfaction. In addition, the previous findings regarding tension and conflict between departments were found to relate to how well activities are timed and blended together to achieve objectives and how effectively interdepartmental problems are handled.

Unreasonable pressure to perform was found to be lower when (1) staff members had confidence in the planning skills of their supervisor and goals and objectives had been clearly stated; (2) there are sufficient communications from the administrator and he is perceived as solving problems effectively; (3) the administrator and department heads are

perceived as understanding employees' needs and problems and are seen as fair and reasonable in the decisions they make that affect work routines; (4) high levels of improvised coordination exist within the nursing home; and (5) cooperation exists between the shifts. Furthermore, unreasonable pressure to perform was related to the subjective measures of effectiveness and overall job satisfaction.

The extent to which the different shifts cooperate with one another was revealed to relate with few exceptions to organizational planning, administrative communication and problem solving, rational trust, and improvised coordination. In addition, this cooperation was acknowledged to relate to the subjective measures of effectiveness and overall job satisfaction.

Even though all of the factors of coordination did not relate significantly to all of the criterion measures of organizational effectiveness, the majority of them did, enough to allow the conclusion that a significant association exists between coordination and organizational effectiveness.

Cultural and Social-Psychological Integration

Cultural and social-psychological integration for purposes of this study refers to nursing home worker

identification with the nursing home and its goals, immediate work group, and occupation. It is assumed that employees who identify with the nursing home provide it with a number of important benefits including goal commitment and goal achievement. It further appears that the greater the degree of identification that nursing home personnel have with the nursing home, their co-workers, and their occupation, the better overall performance will be and these conditions will result in a more effective organization.

Also it is the objective of this section to investigate the extent to which people from different departments see one another's point of view about mutual work relationships. The expectation is that the greater the understanding, the greater the level of organizational coordination.

It is evident from the comments of nursing home personnel that the lack of identification with the nursing home, co-workers, or occupation could very well be detrimental to organizational performance and identification can be beneficial.

> I also find some of the other aides fighting with people from the same shift and I feel if we are all here to do a job, let's do it right and get it done well, people are different and one person's way of doing something may well be different from another's but that's not reason to be better than someone else. (NH 3, Resp. 31, Nurse's Aide)

I love this job but this job is getting to be a hassle instead of fun because of the co-workers. I have worked in a [number of] homes, and have never seen more lazier [sic] workers than here—and they seem to get away with it. Workers like this make it bad for the ones that want to work. (NH 13, Resp. 7, Nurse's Aide)

I like my job and the opportunity it is giving me to make a living for myself and be independent. My supervisors are very good people and easy to get along with. My co-workers are somewhat difficult to get to know and work properly with. I find my greatest enjoyment in life is caring for those who are unable to care for themselves. It is a very rewarding profession. (NH 19, Resp. 21, Nurse's Aide)

In our job we get paid for our work. The work is hard—the hours are long—money is a must for everyone. But if you do not have the love of people within your heart then the nursing profession is not for you. In nursing more than any other profession the golden rule must be applied. Our job is not to add years to life but life to years. (NH 13, Resp. 1, Nurse)

I have worked in nursing homes for nine years and to be truly honest, I have never enjoyed working as much as I do now since I've started at this . . . I feel I'm needed the minute I begin my 7-3 shift, through the eight hours, and I even feel needed when I'm not there. But mostly, I feel the love from all personnel, and how this love is shared with the residents. "To feel belonged," to me, is a great feeling. Well, I know, and can honestly say; any human being to walk in this Nursing Center can't help but to feel the warmth of security, and warmth of belonging, but mostly, they will know, and see how very much we care because we have the "warmth of love" and what could be any greater than this "warmth of caring"? (NH 13, Resp. 11, Nurse's Aide)

The last comment would have to be considered the epitome of identification with all three factors. It is

easy to see that if all the personnel in a nursing home had this kind of attitude toward the nursing home, their fellow workers, and their job, organizational performance would be enhanced.

In analyzing the variable items under cultural and social-psychological integration and their relationship to the internal relationships within the nursing home and organizational performance we shall first investigate their relationship to administrative effectiveness. In Chapter VII all the variable items under rational trust were found to correlate significantly with all three items of identification (see Table 27). However, in order to obtain a better overall perspective of the association between cultural and social-psychological integration and administrative effectiveness, the rational trust data will be redisplayed along with the data from organizational planning, administrative communications, and problem solving.

All throughout the analysis of the empirical findings of this study there has been the underlying assumption that nursing home employees' attitudes toward and identification with the nursing home, its goals, and their job were directly associated with administrative practice. It is impressive to observe that the correlations are significant

between these two items and all 10 of the various categorical measures of administrative effectiveness. This leads to the conclusion that there is a direct association between the quality of administration in a nursing home and employee attitudes toward it and its objectives (see Table 46).

Staff members' identification with their immediate work group was not significant across the board. The factors that associated most strongly with employees' identification with their co-workers were primarily the planning skill of the supervisor; the ability of the administrator to communicate, become aware of, and effectively solve problems; and the extent to which the administrative staff is perceived as understanding workers' needs and problems and as being fair and reasonable in the decisions they make. Even though all of the items of administrative effectiveness were not correlated to employee identification with the work group, there were enough to show a relationship between the quality of administration and group cohesiveness.

The ability to see the other person's point of view was related to the extent to which rules and regulations have been clearly defined and are adhered to by the nursing home staff. Further, all the items of administrative communication and problem solving and rational trust are also

TABLE 46

THE RELATIONSHIP BETWEEN CULTURAL AND SOCIAL PSYCHOLOGICAL INTEGRATION AND ADMINISTRATIVE EFFECTIVENESS

	Organizational Planning[2]				Adm. Comm. and Prob. Sol.[2]			Rational Trust[1]		
	Sup. Plan Ability	Clear Goals	Clear Rules	Adher. Rules	Adm. Comm.	Aware Prob.	Solve Problem	Adm. Staff Follow Rules	Adm. Staff Under-stand Needs	Adm. Staff Fair and Reason-able
Identification with:										
Immediate Work Group[2]	.35*c	.22	.30d	.26	.45c	.44c	.55b	.34c	.41c	.46c
Nursing Home and Its Goals[2]	.59a	.47b	.48b	.48b	.54b	.58a	.66a	.57b	.63a	.63a
Occupation[2]	.49b	.53b	.43c	.39c	.39c	.53b	.57b	.49b	.58a	.59a
Ability to See the Other Person's Point of View[2]	.32d	.23	.43c	.66a	.57b	.55b	.64a	.54b	.65a	.64a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).
[2]Mott (1960).

significantly correlated with it.

Consequently, the environment within the nursing home, which is directly influenced by administration, can create the conditions under which staff members can interact and achieve a mutual understanding. The administration can help create these conditions by clarifying roles, encouraging open communications, establishing an atmosphere of trust, and solving problems before they segment the organization.

If, through the skillful use of administrative principles, an environment has been created that enhances employees' identification with all three items, we would expect to find high levels of improvised coordination, a high degree of cooperation between shifts, and low levels of tension and conflict between departments. When individuals identify with the organization and its goals, their job and group cohesiveness is high and it is only natural to expect them to be more willing to cooperate with one another to achieve objectives.

When the atmosphere exists within a nursing home that allows the personnel to come together and exchange ideas and information, this enables them to establish shared frames of reference and mutual understanding, which in turn

may lead to a closer identification with their work group. As evidenced by the impressive correlation between these two factors (Rs = .59, sig. .001), when employees are able to communicate they are able to avoid creating problems for each other, interact to blend their activities, and solve problems of coordination between one another. Furthermore, all these factors relate significantly with the staff members' identification with their work group.

It is interesting to note that the items of timing of activities and solving problems between departments did not relate to staff members' satisfaction with their co-workers or with their identification with their immediate work group. But these items relate significantly to their satisfaction with the job itself and supervision, and also relate to their identification with the nursing home and their jobs. This would seem to be further evidence that nursing home personnel view the timing of activities and solving interdepartmental problems as administrative functions.

As was predicted, improvised coordination was highest in those nursing homes where employees identify with the nursing home, its goals, and their occupation. As evidenced by some of the comments of nursing home personnel,

TABLE 47

THE RELATIONSHIP BETWEEN CULTURAL AND SOCIAL PSYCHOLOGICAL INTEGRATION AND COORDINATION

	Coordination[1]					
	Blending Activities	Timing Activities	Inter Dept. Problems	Tension and Conflict	Pressure to Perform	Inter-shift Cooperation
Identification with:						
Immediate Work Group[2]	.62*a	.31d	.25	+.14	-.37c	.46c
Nursing Home and Its Goals[2]	.76a	.57b	.64a	-.14	-.65a	.65a
Occupation[2]	.60a	.49b	.65a	-.12	-.40c	.43c
Ability to See the Other Person's Point of View[2]	.59a	.53b	.57b	—.35c	-.41c	.77a

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1960).

when there exists strong devotion to the patients, employees are more anxious and willing to coordinate their activities for the patients' benefit.

Tension and conflict between departments did not relate to employee identification with any of our three items. This is not surprising in view of the lack of any relationship between job satisfaction and tension and conflict between departments (see Table 44).

Furthermore, when employee identification with the nursing home, co-workers, and their job is high, unreasonable pressure to perform is judged to be low and cooperation between the shifts is seen to be high.

When nursing personnel have achieved mutual understanding and shared frames of reference they are more able to see the other person's point of view, which should help them to interrelate and coordinate their activities, as evidenced by the fact that the ability to see the other person's point of view was significantly related to all the items of conditions for negotiating orders.

Ease of exchanging ideas and information (Rs = .42, sig. .019)
Avoid creating problems for one another (Rs = .46, sig. .011)
Handling coordination problems (Rs = .65, sig. .001)

In addition, it was significantly related to the

blending and timing of activities and the solving of problems between departments (see Table 47). Furthermore, when the nursing staff see themselves as understanding one another's points of view, then they also perceive a lower amount of tension and conflict between departments, less unreasonable pressure to perform, and high levels of cooperation between shifts.

Therefore, it can be inferred that when nursing home workers are committed to the nursing home and its goals, when group cohesiveness is high, and when they identify with their jobs and are able to see one another's point of view, then organizational performance will be greater. Nursing home personnel will be more productive, willing to accept change and to help out during crises, and more satisfied with their jobs.

An examination of the findings in Table 48 shows that employees' degree of identification with the nursing home, co-workers, and their occupations correlates significantly with the subjective measures of effectiveness. The only exception is the correlation of flexibility and identification with occupation, which is not significant at the .05 level.

In nursing homes where the staff pictures itself as

TABLE 48

THE RELATIONSHIP BETWEEN CULTURAL AND SOCIAL INTEGRATION AND THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

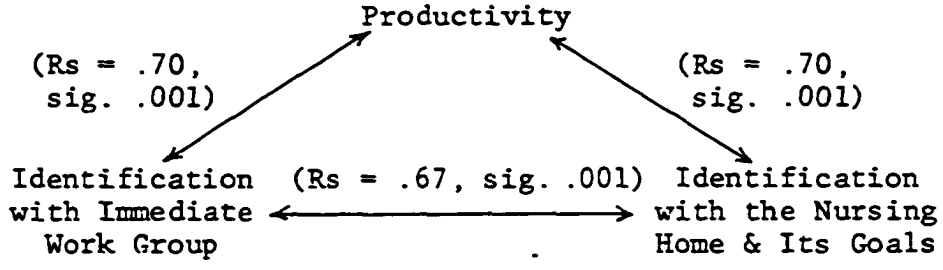
	Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Identification with:			
Immediate Work Group[2]	.70*[a]	.50[b]	.58[b]
Nursing Home and Its Goals[2]	.70[a]	.64[a]	.58[b]
Occupation[2]	.47[b]	.40[c]	.31[d]
Ability to See the Other Person's Point of View[2]	.52[b]	.36[c]	.34[c]

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Mott (1972).

[2]Mott (1960).

efficiently utilizing resources and accomplishing a lot, it is not surprising to discover that the staff members identify with the nursing home, their co-workers, and their occupation. Many studies of group behavior have shown that when group cohesiveness is high and the group identifies with organizational goals, then the group will work to accomplish them. Consider the following interrelationships:



Because of the impressive correlations, the data would tend to support our contention. Inasmuch as employee identification and productivity are related, it would appear that when personnel are committed to the nursing home, its goals, and their co-workers, they would be more willing to accept and adhere to changes in routine, assignments, and equipment and more apt to come to the aid of a beleaguered colleague in times of crisis. In fact, this is what the findings seem to indicate (see Table 48).

The ability to see the other person's point of view was also related to the subjective measures of effectiveness.

When individuals understand one another and are able to see each other's points of view, it follows that they would work better together, accept changes more readily, and help out in times of emergencies. Adaptability is greater because workers will better understand the need for changes. The nursing home's ability to adjust in emergencies is helped because when workers are able to see the other person's point of view, they are more likely to identify with their immediate work group, and therefore help each other during times of stress (Rs = .48, sig. .008).

In summary, the extent to which nursing home personnel identify with the nursing home and its goals, their immediate work group, and their occupation associates significantly with the subjective measures of organizational effectiveness and so does their ability to see each other's points of view.

In studying employee attitudes toward their job and the organization, identification and satisfaction would appear to be very closely related, because the variables they attempt to measure are very closely related. In addition, it is assumed that when identification with any of the three factors is high, turnover will be low.

Inasmuch as all the correlations between overall job

satisfaction and the three measures of employee identification are significant at the .001 level, it follows that a relation exists between these variables (see Table 49). Consequently, when a nursing home's employees are committed to its goals and objectives, group cohesiveness is high, and employees are identified with their job, then that nursing home will more than likely experience a high level of overall job satisfaction.

The extent to which nursing home personnel are able to see each other's points of view was significantly related to overall job satisfaction. However, and very surprisingly, it was not related to staff members' satisfaction with supervision or co-workers. We would expect that the more the members of a work group are able to understand other points of view, the more satisfied they would be with their co-workers. One possible explanation for this lack of association could be that in their unsolicited comments, nursing home personnel expressed deep displeasure with their co-workers for being lazy. It is possible they could be dissatisfied with their lazy co-workers but still describe themselves as understanding their viewpoints.

The correlations regarding employee turnover were in the direction predicted, but were not strong enough to allow

TABLE 49

THE RELATIONSHIP BETWEEN CULTURAL AND SOCIAL-PSYCHOLOGICAL INTEGRATION AND THE MEASURES OF JOB ATTITUDES

	Job Satisfaction[1] (Overall)	Areas of Job Satisfaction					
		Job Itself[1]	Super-vision[1]	Co-Workers[1]	Pay[1]	Pro-motion[1]	Turn over[1]
Identification with:							
Immediate Work Group[2]	.64*a	.71a	.58a	.63a	.52b	.26	-.06
Nursing Homes and Its Goals[2]	.82a	.82a	.68a	.63a	.61a	.41c	-.16
Occupation[2]	.79a	.90a	.62a	.54b	.38c	.65a	-.11
Ability to See the Other Person's Point of View[2]	.51b	.52b	.26	.25	.47b	.54b	-.05

N = 24
* = Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.
d = Rs significant at the .10 level.

[1]Smith et al. (1969).

[2]Mott (1960).

us to draw any conclusion except that employee identification with the nursing home and its goals, their immediate work group, or their occupation does not relate to their decision to stay with or leave the nursing home.

The finding regarding profitability would seem to indicate that if you want to increase the profitability of a nursing home, employ individuals who do not identify with their occupation. Naturally, this is nonsense. One possible reason for this inverse relationship between employee identification with profession and profitability is that a nursing home employee who identifies with his profession will more than likely be very devoted to the patients and thus more willing to utilize more of the nursing home's resources (linens, medicine, blue pads, etc.) on their behalf, consequently reducing profits. (See Table 50.)

In summary, the empirical findings of our study show that the degree to which nursing home employees identify with the nursing home, its goals, and their occupation relates significantly to all of the items measured under the subheadings of organizational planning, administrative communication and problem solving, and rational trust (see Chapter VII). Improvised coordination and cooperation between shifts was judged to be greater and perceived

unreasonable pressure to perform lower when the nursing staff identified with the nursing home, its goals, and their co-workers. Furthermore, identification with these factors was directly related to the subjective measures of effectiveness and all areas of job satisfaction. Identification with occupation was observed to have a very puzzling inverse relationship to profitability.

TABLE 50

THE RELATIONSHIPS BETWEEN CULTURAL AND SOCIAL-PSYCHOLOGICAL INTEGRATION AND PROFITABILITY

	Identification with			
	Immediate Work Group[1]	Nursing Home and Its Goals[1]	Occupation[1]	Ability to See the Other Person's Point of View[1]
Profitability	-.14	-.40[c]		-.11

N = 24
* = Spearman rank-order correlations were used.
c = Rs significant at the .05 level.
[1]Mott (1960).

Group cohesiveness within the nursing home was measured by employee identification with their immediate work group. Direct relationships were discovered between cohesiveness and all the factors of administrative communication and problem solving and rational trust, and the planning

skill of the supervisor was the only item under organizational planning that was significant. When the nursing home was characterized by the exchange of ideas and information among employees and their ability to handle problems of coordination of employee activities to avoid creating problems for others, then employees had a high level of identification with their immediate work group. Also, when nursing home employees identified with their co-workers, unreasonable pressure for performance was felt to be lower and cooperation between shifts was regarded as higher. Furthermore, staff members' identification with their immediate work group related significantly to all three of the subjective measures of effectiveness and all the measures of job satisfaction with the exception of pay. However, no statistically significant relationship was found to exist with turnover and profitability.

The extent to which nursing home employees perceive themselves as able to see the other person's point of view was significantly related to all the component measures of administrative communication and problem solving and rational trust and the component measures of organizational planning and clarity of and adherence to rules and policies. Staff member ability to see the other person's point of view

was observed to relate to high levels of improvised coordination and intershift cooperation and low levels of unreasonable pressure to perform and tension and conflict between departments. In addition, it related to each one of the subjective measures of effectiveness, overall job satisfaction, and the areas of job satisfaction of job itself, pay, and promotion. No significant relationship was found with turnover or profitability.

The findings of this section would appear to indicate that through the practice of skillful administration, nursing home employees' identification with organizational goals, their co-workers, and their occupation can be increased. This will lead to greater coordination and cooperation within the nursing home and ultimately to greater job satisfaction and organizational effectiveness. So it would be concluded that some form of relationship exists between the components of cultural and social-psychological integration and organizational effectiveness.

Summary

The objective of this chapter was to determine the relationship between internal organizational relationships and organizational effectiveness. The central issue of internal organizational relationship is coordination. It

was demonstrated in the last chapter that the administrator plays a key role in the integration of the organization by skillful employment of the functions of planning, communications, and problem solving. Therefore, in order to more fully understand how the process of coordination works within a nursing home, it was necessary to study its relationship to the component measures of administrative effectiveness.

To more fully understand the effects of coordination, several measures were combined to form a new variable cluster of improvised coordination, which refers to the day-to-day activities of the nursing home that are coordinated by the staff members themselves or their supervisor. In reality, "organizational planning" should establish the boundaries and guidelines under which improvised coordination can be carried out. The components that make up improvised coordination include the three components of conditions for negotiating orders, viz., the extent to which staff members exchange ideas and information, avoid creating problems for one another, and are able to handle coordination problems. Also included are three items from coordination: the blending of activities to achieve objectives, the timing of activities, and handling of interdepartmental

problems. The other three items of coordination—tension and conflict between departments, unreasonable pressure to perform, and cooperation between the shifts—are considered separately.

When the nursing home staff observed a high level of improvised coordination within the nursing home, the following conditions were discovered to exist.

1. Superior is highly rated at planning, organizing, and scheduling the work.

2. Goals and objectives and rules and regulations have been clearly defined, and the nursing home staff members are seen as adhering to rules and regulations.

3. Nursing home personnel evaluate the communication they receive from the administrator as adequate.

4. The administrator is observed to be aware of organizational problems and effective in dealing with them.

5. Nursing home administrator and department heads are perceived as understanding the needs and problems of the nursing home staff and are seen as fair and reasonable in the decisions they make affecting work routines.

6. The nursing home administrator and department heads are seen as following their own rules and regulations.

7. Pressure for performance over and above what is considered reasonable will be seen as low.

8. A high level of cooperation exists among the various shifts.

9. Nursing home employees have a high level of identification with the nursing home, its goals, and their occupation.

10. Nursing home employees see themselves as having the ability to see the other person's point of view.

The extent to which nursing home personnel identify with the immediate work group was the only major variable that did not correlate significantly with all the components of improvised coordination. Because of the sheer number of significant correlations between the components of improvised coordination and administrative effectiveness, we would have to assume a strong association between these two variable clusters, and this conclusion gives a tremendous amount of support to our underlying theme of the importance of the administrator.

But even if effective administration relates to improvised coordination, does a high degree of improvised coordination relate to organizational effectiveness? With only two minor exceptions, the component elements of improvised coordination relate to all three of the subjective measures of effectiveness—productivity, adaptability, and flexibility. With the exception that nursing home employee satisfaction with co-workers did not relate significantly to the timing of activities to achieve objectives (Rs = .26,

sig. .107) and the handling of interdepartmental problems (Rs = .27, sig. .10), the components of improvised coordination were significantly correlated with overall job satisfaction and each one of the five areas of job satisfaction. This is a convincing indication of the mutual existence of improvised coordination and high levels of job satisfaction in the same nursing homes. In addition, turnover was found to relate significantly to the timing of activities and the handling of interdepartmental problems.

At the beginning of this chapter, it was stated that the objective was to test the following hypothesis:

> Hypothesis 2: There will be a direct and significant relationship between the effectiveness of internal organizational relationships and organizational effectiveness.

Because improvised coordination is the central issue in the effectiveness of internal organizational relationships, the data presented thus far constitute a solid case for confirmation of Hypothesis 2. Although significant correlations were not obtained for all the measures, they were obtained in a great majority of cases. Therefore, we can conclude that those nursing homes that have a high level of improvised coordination will be considered more effective in accordance with our criterion measures of organizational effectiveness.

In addition to the main theme of this chapter, several additional effects of organizational coordination were considered and a brief summary of these findings should give further support to our hypothesis. Nursing home personnel were asked to evaluate the amount of tension and conflict between five major departmental interfaces. From this, an index measure was determined (see Chapter VI). The empirical data from our investigation indicate a lower amount of tension and conflict exists in those nursing homes that are rated superior in the following:

1. The extent to which rules and regulations have been clearly defined.
2. Communications from the administrator.
3. Ability of the administrator to solve problems.
4. Nursing home administrator and department heads are perceived as understanding the needs and problems of the nursing home staff and are seen as fair and reasonable in the decisions they make affecting work routines.
5. The blending and timing of activities to achieve objectives and the extent to which interdepartmental problems are well handled.
6. Nursing home staff members are perceived as having the ability to see the other person's point of view.

Although tension and conflict did not relate significantly to any of our measures of organizational effectiveness, they still should be considered an important factor in

the operation of the nursing home facility. Additionally, these relationships demonstrate the central position of the administrator in resolving conflicts.

Nursing home personnel perceived little pressure to perform beyond what was considered reasonable when the following conditions exist:

1. Organizational goals and objectives have been clearly defined.
2. Communication from administrator is seen as adequate.
3. The administrator solves problems effectively.
4. Nursing home administrators and department heads are seen as understanding the needs and problems of the nursing home staff and are perceived as fair and reasonable in the decisions they make affecting work routines.
5. There is a high level of improvised coordination within the nursing home.
6. Low levels of tension and conflict exist among shifts.
7. Nursing home personnel are more identified with the nursing home and its goals, their immediate work group, and their occupation.
8. Nursing home staff members perceive themselves as able to see the other person's point of view.

In addition, unreasonable pressure to perform had a significant inverse relationship to productivity, adaptability, and all the components of job satisfaction with the exception of pay. Consequently, unreasonable pressure for

performance is associated with the areas of administrative effectiveness, improvised coordination, and organizational effectiveness.

The amount of cooperation between shifts was shown to correlate significantly with the component measures of administrative effectiveness except for clarity of goals and objectives under the subheading "organizational planning." Furthermore, intershift cooperation related significantly to all the elements of improvised coordination and was inversely related to tension and conflict between departments. It also related significantly to all the measures of cultural and social-psychological integration. In addition, cooperation between shifts related to the subjective measures of effectiveness, overall job satisfaction, and the individual areas of job satisfaction with the exception of supervision. Therefore, intershift cooperation can be seen as an important variable in nursing home functioning.

In attempting to study the factor of how group cohesiveness related to the internal functioning of the nursing home, employees were asked how strongly they identified with their immediate work group. The findings showed all the component measures of administrative communication and problem solving, rational trust, and the planning skill of the

superior under "organizational planning," related significantly to employee identification with their immediate work group. In addition, when group cohesiveness was viewed as high, nursing home employees saw themselves as exchanging ideas and information freely, avoiding the creation of problems for one another, blending their activities together, and handling coordination problems effectively. Also, unreasonable pressure to perform was judged to be low when a high degree of cooperation existed between shifts. Furthermore, the extent to which employees identify with their immediate work group was related to all the subjective measures of effectiveness and all areas of job satisfaction with the exception of pay. Inasmuch as group cohesiveness has been discovered to interrelate with administrative effectiveness, interorganizational relationships, and organizational effectiveness, it has been clearly demonstrated to be a viable force in the nursing home.

The degree of employee identification with the nursing home, its goals, and their occupation was discovered to have more significance, and, in the majority of cases, stronger correlations than employee identification with the immediate work group. Employee identification with the nursing home, its goals, and their occupation was

significantly related to all the component measures of organizational planning, administrative communication and problem solving, rational trust, and improvised coordination. Furthermore, this form of identification was related to the subjective measures of effectiveness with only one exception and to all the areas of job satisfaction, by establishing itself as an important factor in nursing home functioning.

In summarizing our additional findings, we have found further support for the contention that internal organizational relationships are influenced by, and strongly associated with, administrative effectiveness. This is evidenced by tension and conflict between departments, unreasonable pressure to perform, intershift cooperation, and employee identification with the nursing home and its goals, their immediate work group, and their occupation all being related in some form to administrative effectiveness. Furthermore, all of these factors, with the exception of tension and conflict between departments, were related to organizational effectiveness, which lends further support to Hypothesis 2.

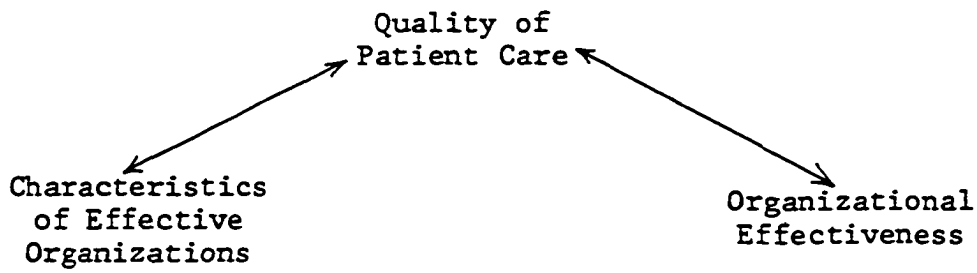
The next chapter will investigate the relationships between internal organizational relationships and administrative effectiveness and the quality of patient care

rendered by a nursing home, with the contention that effective administration will create effective internal organizational relationships that will lead to a high quality of care being provided. Moreover, the relationship between organizational effectiveness and the quality of patient care will be probed, with the contention that a more effective organization (nursing home) will provide a higher quality of care to its patients.

CHAPTER IX

FACTORS RELATING TO THE QUALITY OF CARE

Several times throughout this paper we have referred to the quality of patient care rendered by a nursing home as the central and most important issue in this study because it is the end result or ultimate social purpose of the organization's existence. All the other component measures of the characteristics of effective organizations and organizational effectiveness become important only insofar as they enhance or contribute to the quality of care. Therefore, this chapter will consider the following interrelationships of the research model:



In addition, three hypotheses will be tested. In general, we hypothesize that those nursing homes that render a higher quality of patient care will also rate high on our criterion measures of organizational effectiveness.

And, as in previous chapters, the characteristics of effective organizations will be divided into two categories —administrative effectiveness and internal organizational relationships—in order to gain a deeper insight into the factors affecting or relating to the quality of care. Accordingly, we would expect that when a nursing home is characterized as having skillful administration and effective internal relationships, it will also be judged to provide its residents with a higher quality of care.

The evaluation of the quality of care delivered by any health care institution is very subjective in nature. By what standards does one determine whether good or poor quality patient care exists within an institution? This study employs the perceptive judgments of nursing home personnel to evaluate the quality of care within the facility in which they are employed. By their comments it appears that nursing home personnel have good insight into the kind of care given in their facilities.

> Nurse's aides don't give complete care. Their main interest is in getting the people fed and back in bed. Many residents go to bed without going to the toilet, having their hands and faces washed, their dentures cleaned, etc. These are basic needs—everyday needs that are never or seldom ever done. . . . Each wing is extremely understaffed. If the work load was lighter then more complete care could be given. (NH 6, Resp. 25, Nurse)

> I feel this home does an inadequate job of taking care of its residents. Due to the fact that it is understaffed in the Nursing Department. (NH 2, Resp. 27, Nurse's Aide)

> As a whole we try to improve nursing care and make our people feel wanted. We try to keep our residents and their families as happy as possible. (NH 24, Resp. 55, Nurse)

> I feel we have an excellent nursing home as well as staff, though as everything and everyone else we are not perfect and there is always room for improvement. But, I feel on the whole we are open to objective criticism and are always striving for the best nursing care we can possibly provide. (NH 10, Resp. 11, Administrative)

These are just a few of many comments by staff members regarding the quality of care. Generally when staff members chose to make written comments relating to the quality of care they were either very favorable or unfavorable, and the large majority would be considered to be favorable.

The Characteristics of Effective Organizations and the Quality of Patient Care

The objective of this portion of the study is to investigate this section of the research model:

In order to determine if a significant relationship exists between how the social system functions within the nursing home and the quality of care it provides its residents, two important aspects of the social system were isolated for study: (1) the utilization of administrative principles and policy, and (2) the internal interactions between the employees. For the purpose of this study these two aspects were entitled (1) Administrative Effectiveness and (2) Internal Organizational Relationships; they will be considered as separate sections.

Administrative Effectiveness

It is the purpose of this section to test the following hypothesis:

Hypothesis 3: There will be a direct and significant relationship between administrative effectiveness and the quality of patient care.

In other words, we are attempting to determine if the administrator, department heads, and supervisors through their supervisory methods and application of administrative principles can influence the quality of care. However, the strictest interpretation of our empirical data only allows

us to state that some form of mutual association exists between these factors.

In the last two chapters (VII and VIII) the importance of effective administration to organizational integration and effectiveness was clearly demonstrated. The administrator was seen to have a very significant and key role. The administrator, by encouraging open communications within the facility, clearly defining roles and objectives, and effectively solving problems, was seen as an integrative force within the nursing home organization contributing to organizational effectiveness. Consequently, it could be hypothesized that administrative effectiveness would be directly associated with providing good patient care. Selected comments from the nursing home staff would seem to support our hypothesis:

> The nurses are forced to assume so much responsibility for not only our professions but that of other departments that it is impossible to give quality nursing care. . . . I really believe that our present Director of Nurses could improve conditions and problem areas in nursing. However, much of her time is monopolized by the administrator. He/she is not given the chance to supervise due to repeated coffee breaks, lunches, and meetings with the administrator. This unfortunately results in ill-feelings, delayed patient care, frustrations in nursing services, lack of communications between departments and co-workers, and dissatisfied patients, families, and doctors. (NH 26, Resp. 20, Nurse)

> I have no confidence in the Director of Nurses. She has no tact, very rude, does not keep up with changes in patients and does not listen to suggestions by the staff. (NH 6, Resp. 12, Nurse)

> I've worked at different centers and this is the best in nursing care, the people here are wonderful to work for, and great to work with. If we have any problems with anything they help us work them out. (NH 13, Resp. 2, Nurse's Aide)

> My comment is that our nursing center is dedicated to the love of the residents. My stand there is considered important. I first thank God for giving me a job to open my eyes and understand these people (old). The administrator or supervisors are good—extremely good in their duties. Everyone tries to their best ability to help and care for these residents. (NH 27, Resp. 7, Nurse's Aide)

The empirical data reported in Table 51 give impressive support to Hypothesis 3 and seem to bear out the comments of the nursing home staff members. And as they clearly stated through their comments and responses to questionnaire items, staff members saw a definite connection between the ability of the supervisor or administrator—administrative and otherwise—and the quality of care provided. All coefficients of correlation between the quality of care and the component measures of administrative effectiveness are significant at at least the .01 level.

Nursing home personnel, not unlike many workers elsewhere, have the need for a rational and predictable environment. This is probably due to the fact that the

TABLE 51

THE RELATIONSHIP BETWEEN ADMINISTRATIVE EFFECTIVENESS AND THE QUALITY OF CARE

	Administrative Effectiveness									
	Organizational Planning[1]				Adm Comm & Prob Sol[2]			Rational Trust[1]		
	Plan Abil. of Sup.	Clear Goals	Clear Rules	Adhe. Rules	Adm. Comm.	Aware of Prob.	Sol. Prob.	Adm. Staff Fol. Rules	Adm. Staff Unawk Needs	Admst. Fair & Reasr.
Quality of Care[3]	.59*[a]	.61[a]	.58[a]	.55[b]	.59[a]	.57[b]	.78[a]	.68[a]	.74[a]	.67[a]

N = 24
*Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.

[1]Mott (1972).

[2]Mott (1960).

[3]Georgopoulos and Mann (1962).

educational level of the average nursing home employee is low and the tasks, on the whole, are relatively routine. If, through the administrative process, the goals and objectives of the nursing home and of each work unit have been clearly established and the nursing home rules and regulations are clearly set forth and communicated with understanding to the staff, then staff members will know what their duties and responsibilities are and will be more likely to accomplish them. In addition, when duties and responsibilities have been clearly explained and assigned there is less chance of misunderstandings and conflicts among staff members. When misunderstandings do occur, if they are quickly and effectively resolved, then segmentation of the organization can be prevented. Moreover, when these conditions have been created by effective administration, work routines and activities proceed more smoothly and thus the staff will perceive that a high quality of care exists.

Inasmuch as the rational trust of administration has been discovered to relate to job satisfaction and employee identification with the nursing home and its goals, it could be inferred that it would also be related to the quality of care, because the quality of care might be concerned as an attitudinal measure. If a staff member has a favorable

attitude toward the nursing home in general, he/she will more than likely view the facility as rendering quality care and, it is hoped, work to maintain this standard. The administrative staff, by the creation of a rational trust atmosphere, creates an environment in which the nursing home staff members feel they will be understood and fairly treated, thereby creating a feeling of trust on the part of the staff toward the administration.

When employees trust the administrative staff they will perceive their environment to be more rational and certain. Roles will be seen as more clearly defined, as evidenced by the correlations between rational trust and (1) clarity of goals and objectives and (2) clarity of rules and objectives.

> Administrators and department heads perceived as following their own rules (1 Rs = .62, sig. .001) (2 Rs = .87, sig. .001).
>
> Administrators and department heads perceived as understanding workers' needs (1 Rs = .51, sig. .005) (2 Rs = .59, sig. .001).
>
> Administrators and department heads perceived as fair and reasonable in the decisions they make affecting work routines (1 Rs = .52, sig. .004) (2 Rs = .61, sig. .001).

Consequently, the staff has more confidence in the objectives and procedures. Inasmuch as the staff feels it is

fairly treated and roles have been clearly established, they will more than likely be committed to the organization and its objectives, making the existence of quality care more probable.

In summary, a high rating regarding the quality of care by a nursing home staff was found to exist simultaneously with the staff's high rating of the following items:

1. The planning skill of their superior.
2. The extent to which goals and objectives and rules and regulations have been clearly defined.
3. The extent to which nursing home staff members are seen as adhering to rules and regulations.
4. The quality of communication the staff receives from the administrator.
5. The ability of the administrator to make himself aware of organizational problems and deal with them effectively.
6. The nursing home administrator and department heads are perceived as being aware of the needs and problems of the nursing home staff and are judged to be fair and reasonable in the decisions they make affecting work routines.
7. The nursing home administrator and department heads are seen as following their own rules and regulations.

In other words, all of the component measures of administrative effectiveness correlate significantly with the quality of care. Therefore, on the basis of these

convincing findings we conclude that there is very definitely a connection between the effectiveness of administration within a nursing home and the quality of patient care it is able to provide. Hypothesis 3 is, therefore, confirmed.

Internal Organizational Relationships

It is the purpose of this section to test the following hypothesis:

Hypothesis 4: There will be a direct and significant relationship between the effectiveness of internal organizational relationships and the quality of care.

The nursing home organization can be characterized as a viable functioning social system. In providing for the patients' needs, personnel must interact as individuals and within groups. Furthermore, we find groups interrelating within a department and interacting between departments, all to accomplish objectives. The major theme of this section of the research is that the greater the degree of harmony, cooperation, and coordination that exists among the various elements of the nursing home organization, the higher the quality of care that will be administered to its patients. When nursing home staff members see themselves as communicating openly and freely with one another and their

supervisor or administrator to exchange ideas and information that help them to interrelate their efforts in caring for the patients, it is predicted that they will see a higher quality of care being given in the facility.

If the blending and timing of activities is effectively handled within the nursing home, the work will go more smoothly and more will be accomplished. The more work that is accomplished, the more the patients' needs have been fulfilled, thus resulting in a higher quality of care. But this applies mainly to physical needs; when duties are performed in a well-coordinated and orderly manner there should be more time to devote to the personal or psychological needs of the patients.

By and large, when the administration has created an environment that encourages improvised coordination within the nursing home, we would postulate that the perceived quality of care would be higher.

In order to lay the foundation for the hypothesis of a connection between the effectiveness of internal organizational relationships and the quality of care, we review some of the comments of nursing home personnel.

> I have worked at . . . since it began. I can truthfully say I have never worked with a more cooperative group who seem to consider their work not only as just

a job, but work to the betterment of our home, and to keep our residents comfortable and happy.

Our only problem it seems is very high tension between the administrator and nursing supervisor. Personally, I have no complaints of either, other than it does cause some pressure on working conditions. I don't know the cause or trouble between them but I do know it would be better for all concerned if it could be solved. I do hear comments among employees of the administrator not being more closely related. (NH 21, Resp. 29, Nurse)

I feel there is an overall inefficiency on my shift (graveyard). This is due partly to the fact that we feel overworked. The other shifts give us extra work like sterilizing. This takes time and cuts down on time to care for residents. Our shift shouldn't be a catch-all. (NH 8, Resp. 10, Nurse's Aide)

People here are very concerned with the proper care of the residents. Every department seems to be working for a goal—to see that a good day's work is done—everything kept up to date—and mainly that everything can be done to see that the residents are cared for, stimulated, and especially happy. (NH 4, Resp. 1, Administrative)

It is difficult to carry through successful treatments and retraining of the people because there is no cooperation between shifts and little between folks of the same shift. (NH 3, Resp. 5, Nurse's Aide)

We have a good working relationship. Most problems come from the dietary staff. The help in the kitchen refuses many times to cooperate in matters to the betterment of the patient. (NH 25, Resp. 36, Nurse)

Communications between nurses and aides is [sic] poor and individual patient care requires an aide to seek out the nurse and ask questions. (NH 23, Resp. 21, Nurse's Aide)

The empirical data presented in Tables 52, 53, and 54 appear to give convincing support to the comments of the

TABLE 52

THE RELATIONSHIP BETWEEN THE CONDITIONS FOR NEGOTIATING ORDERS AND THE QUALITY OF CARE

	Conditions for Negotiating Orders[1]		
	Ease of Exchanging Ideas and Information	Avoid Creating Problems for One Another	Handling Coordination Problems
Quality of Care[2]	.71[a]	.52[b]	.77[a]

N = 24
*Spearman rank order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
[1]Mott (1972).
[2]Georgopoulos and Mann (1962).

TABLE 53

THE RELATIONSHIP BETWEEN COORDINATION AND THE QUALITY OF CARE

	The Blending of Activities to Achieve Objectives[1]	The Timing of Activities[1]	Handling of Interdepartmental Problems[1]	Tension and Conflict Between Departments[1]	Pressure to Perform[1]	Intershift Cooperation[1]
Quality of Care[2]	.85*[a]	.67[a]	.63[a]	-.28[b]	-.52[b]	.68[a]

N = 24
* Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
[1]Mott (1960).
[2]Georgopoulos and Mann (1962).

TABLE 54

THE RELATIONSHIP BETWEEN CULTURAL AND SOCIAL-PSYCHOLOGICAL INTEGRATION AND THE QUALITY OF CARE

	Cultural and Social-Psychological Integration[1]			
	Identification with Immediate Work Group	Nursing Home and Its Goals	Occupation	Ability to See the Other Person's Point of View
Quality of Care[2]	.53*[b]	.82[a]	.65[a]	.57[b]

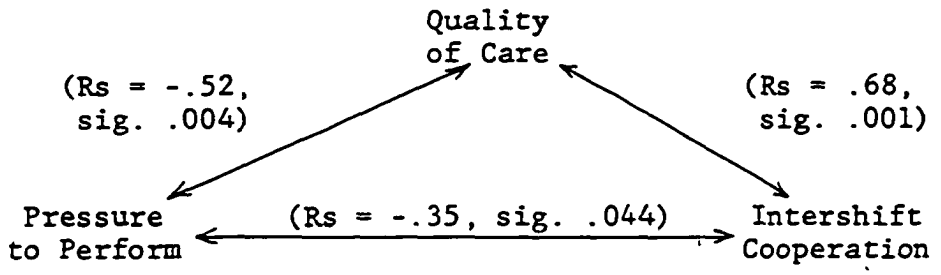
N = 24
* Spearman rank order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
[1] Mott (1960).
[2] Georgopoulos and Mann (1962).

nursing home employees and our hypothesis. The data and comments point to a direct relationship between the functioning of the social system and the quality of care within a nursing home.

Significant correlations were discovered between the component measures of internal organizational relationships and the quality of care in every case but one. The correlation between tension and conflict between departments and the quality of care was not considered strong enough to support any definite conclusions (Rs = 0.28, sig. .092). The first comment in this section from a nursing home staff member is an excellent example of how and why there may not be any connection between the staff members' judgments regarding the quality of care and their perceptions of tension and conflict between departments. Staff members may perceive a moderate amount of squabbling over unimportant matters in other departments, but this will not be seen as affecting the manner in which they or their co-workers provide for their patients' needs. Friction between departments would appear to be an organizational concept affecting the quality of care in a very indirect manner, if at all.

Nursing home personnel might have failed to make a connection between cooperation between departments and the

quality of care, but they did not fail to connect intershift cooperation to quality care. When a shift fails to perform all its assigned duties or simply creates work for the other shifts through its neglect or untidiness, it puts added pressure upon the other shifts and makes it difficult for them to give the patients the care and attention they need. Consider the following interrelationships:



We have an inverse significant relationship between intershift cooperation and pressure to perform and a significant relationship between pressure to perform and the quality of care. This gives considerable support to our contention that poor cooperation between shifts creates pressure for performance that may lower the quality of care.

We find all of our component measures of improvised coordination to be impressively correlated with the quality of care. It would seem natural to expect that when the personnel of a nursing home can come together and freely exchange ideas and information, they would be more able to

coordinate their activities to avoid creating problems for one another and be in a position to more effectively resolve coordination problems that exist among themselves and between departments so that a higher quality of care can be provided for patients. In other words, when a high level of improvised coordination exists within a nursing home, the staff should function as a unit to accomplish the tasks necessary to provide for the patients' needs. This is the reason for a significant relationship between improvised coordination and the quality of care.

The data in Table 54 show that the stronger the identification of staff members with the nursing home and its goals, their immediate work group, and their occupation, the higher the quality of care they see the nursing home as providing. The statistics do not permit the conclusion that high identification means high quality care. Alternatively, it could easily be the opposite—high standards of care may lead to high identification. However, the indication will be made that when a nursing home's staff members are committed to its goals and objectives and they have a high level of identification with their jobs and co-workers, they will be more likely to provide a higher quality of care than when the opposite conditions are present.

In addition, a significant relationship was discovered between the quality of care and the degree to which nursing home staff members see themselves as being able to understand the other person's point of view. When staff members perceive themselves as being able to understand the other person's viewpoint, they are more able to coordinate their efforts in caring for the patients.

In summary, in those nursing homes where the staff perceived the existence of high quality patient care, the following conditions were also found to be present:

1. Staff members exchange ideas and information freely.
2. The personnel in each department make an effort to avoid creating problems for or interfering with one another's duties and responsibilities.
3. Employees regard coordination problems within their department as well handled.
4. Different jobs and work activities are well coordinated to meet the objectives of the department.
5. Activities are well timed in the everyday routine of the nursing home.
6. When problems arise between departments they are quickly and effectively resolved.
7. Unreasonable pressure for performance is regarded as low.
8. Cooperation exists between the shifts.
9. Nursing home staff members have a high degree of

identification with the nursing home and its goals, their immediate work groups, and their occupation.

10. Employees feel that they have the ability to see one another's points of view.

Inasmuch as the preceding conditions have been found to exist within the nursing homes which were judged by their staffs to be providing a high quality of care, we can conclude that a relationship exists between the effectiveness of internal organizational relationships and the quality of care, thus confirming Hypothesis 4.

Organizational Effectiveness and the Quality of Care

It is the purpose of this section of the study to investigate this portion of the research model:

Quality of Patient Care ⟷ Organizational Effectiveness

which tests the following hypothesis:

Hypothesis 5: There will be a direct and significant relationship between organizational effectiveness and the quality of patient care.

When evaluating any health care delivery system one would expect to find the more effective organizations providing the higher quality of care. Some researchers may argue that as far as health care institutions are concerned,

organizational effectiveness and the quality of care provided are one and the same. There is a great deal of merit in this argument; could a health care system be considered truly effective if it did not provide an adequate quality of care?

For the purpose of this study, organizational effectiveness and the quality of care are considered as separate measures. (See Chapters III and IV.) The component measures of organizational effectiveness were selected because it was felt that they were necessary conditions for quality patient care. In other words, when the nursing home staff is viewed as being more productive, willing to accept changes, and help out in times of emergencies, they will also provide a higher quality of patient care. Furthermore, we would contend that in this type of work an employee who is satisfied with her job will have more concern for the needs and well-being of the patients than an employee who is dissatisfied with her job. And because of the unsettling effects of turnover and the tremendous amount of time that must be spent continuously training new staff members, turnover should be inversely related to he quality of care.

The only possible exception is profitability. We would hope that profitability would be consistent with

quality care, i.e., that the same effective administration that created the environment that led to quality care would also provide profitability. However, it may very well be that profitability and quality care are inconsistent with one another.

The comparison of our measures of organizational effectiveness to the quality of care can be thought of as a validity test. Those measures that relate significantly to the quality of care could be seen as valid criteria by which to evaluate organizational effectiveness in the nursing home organization. The measures that are not significantly related would have to be considered suspect or be an indication that further research is necessary to validate them.

TABLE 55

THE RELATIONSHIP BETWEEN THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS AND THE QUALITY OF PATIENT CARE

	The Subjective Measures of Organizational Effectiveness[1]		
	Productivity	Adaptability	Flexibility
Quality of Care[2]	.64*[a]	.69[a]	.58[a]

N = 24
*Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
[1]Mott (1972).
[2]Georgopoulos and Mann (1962).

From the data in Table 55 we see that our subjective measures of effectiveness are impressively correlated with the quality of patient care. All measures achieved the .001 level of significance. When nursing home personnel are judged to be more productive, staff members are able to provide for more of the patients' needs. In effect, when staff members are rating the productivity of their co-workers, in most cases they are evaluating how many of the patients' needs are being taken care of. Therefore, we would expect these two variables to be correlated.

If nursing home staff members see the people in their department as anticipating problems and eliminating them or reducing their bad effects, as readily adjusting to changes in routines, assignments, and equipment, then coordinating their activities to provide for the residents' needs will be easier. When adaptability is high, personnel are more willing to accept directives from their supervisor. If the supervisors are capable, then activities should be well related and the quality of care enhanced. On the other hand, if adaptability is low, when adjustments are necessary in everyday routines personnel will be unwilling to change and patients' needs may be neglected.

Mott (1960, pp. 156-159) found flexibility to be

unrelated to the quality of care. The concept of flexibility is not related to the day-to-day care administered by the nursing home but attempts to measure how the facility responds in time of crisis. Flexibility is really a measure of the staff's ability to improvise in emergency situations and the staff's willingness to perform tasks above and beyond the call of duty. The reason flexibility is significantly related to quality of care is, more than likely, because if a nursing home is to be flexible, it must have a devoted staff, and devoted staffs justifiably regard themselves as rendering a higher quality of patient care.

In reviewing the coefficients of correlation between job satisfaction and the quality of care there is a definite indication of a significant association between the two variables. However, it is impossible to determine whether satisfied workers provide a higher quality of care or workers in nursing homes that provide quality care are more satisfied. In actuality, the variables are more likely mutually supportive.

If through effective administration the conditions have been created within the nursing home that allow the staff to interrelate effectively to accomplish the task of providing quality care to the patients, then the staff will

be satisfied with their jobs and a high quality of care will exist. This is because the fact that staff members are providing quality care can influence their attitudes toward their job. As demonstrated by their comments, many nursing home personnel are very devoted to their patients and receive a great deal of satisfaction from the fact that they are associated with a facility that provides its patients with the best of care. If conditions were to change and their attempts to fulfill their patients' needs were thwarted by a short-sighted supervisor, they would probably become dissatisfied and leave. In addition, if employees are dissatisfied with their job because of low pay, overwork, poor supervision, etc., they will have little interest in their job and may become negligent in caring for patients.

The data show that significant relationships exist between overall job satisfaction and among all five areas of job satisfaction. Thus it can be concluded that a relationship exists between the quality of patient care and job satisfaction.

Once again the correlation regarding turnover is not strong enough to draw any conclusions from. Because of the magnitude of the turnover rates within all the nursing

TABLE 56

THE RELATIONSHIP BETWEEN THE MEASURES OF JOB SATISFACTION AND QUALITY OF PATIENT CARE

	Job Satisfaction Overall	Areas of Job Satisfaction[1]					
		Job Itself	Supervision	Co-Workers	Pay	Promotion	Turnover
Quality of Care[2]	.75*[a]	.69[a]	.67[a]	.48[b]	.69[a]	.40[c]	-.17

N = 24
*Spearman rank-order correlations were used.
a = Rs significant at the .001 level.
b = Rs significant at the .01 level.
c = Rs significant at the .05 level.

[1]Smith et al. (1969).

[2]Georgopoulos and Mann (1962).

homes it is difficult to obtain a significant correlation. The turnover rate in all nursing homes would be considered high. Consequently, there are no nursing homes with favorable turnover rates to compare with high quality care.

Profitability was not observed to be consistent or inconsistent with the quality of patient care (Rs = -.12). A small inverse correlation was obtained. The conclusion would have to be that our study failed to establish any relationship between these two variables.

In summary, when nursing home personnel perceive a high quality of patient care within a facility, the facility will also be rated high on the following criteria:

1. Staff members are seen as productive and utilizing resources efficiently.
2. Co-workers are regarded as anticipating problems and preventing them or reducing their bad effects, and as readily accepting and adhering to changes in routines, assignments, and equipment.
3. Work groups are pictured as able to handle emergency situations.
4. Job satisfaction is high.

Even though two of our chosen criteria of organizational effectiveness—turnover and profitability—did not correlate significantly with the quality of patient care, the majority did. Significant correlations were found to

exist between the quality of care and productivity, adaptability, flexibility, and all the areas of job satisfaction. Moreover, we must concede that some association exists between our measures of organizational effectiveness and the quality of patient care. Therefore, Hypothesis 5 is for the most part confirmed.

Summary

The empirical findings analyzed in this chapter allow us to draw the following conclusion: in those nursing homes where the staff rated highly the quality of patient care provided, they also gave favorable rating to the following factors:

1. The planning skill of their supervisor.
2. The extent to which goals and objectives and rules and regulations have been clearly defined.
3. The extent to which nursing home staff members are seen as adhering to rules and regulations.
4. The quality of communications the staff receives from the administrator.
5. The ability of the administrator to make himself aware of and deal with organizational problems.
6. The nursing home administrator and department heads are perceived as aware of the needs and problems of the nursing home staff and are judged to be fair and reasonable in the decisions they make affecting work routines.

7. The nursing home administrator and department heads are seen as following their own rules and regulations.

8. Staff members exchange ideas and information freely.

9. Personnel in each department make an effort to avoid creating problems or interfering with one another's duties and responsibilities.

10. Employees regard coordination problems within their department as well handled.

11. Different jobs and work activities are well coordinated to meet the objectives of the department.

12. Activities are well timed in the everyday routine of the nursing home.

13. When problems arise between departments they are quickly and effectively resolved.

14. Unreasonable pressure for performance is regarded as low.

15. Cooperation exists between shifts.

16. Nursing home staff members have a high degree of identification with the nursing home and its goals, their immediate work group, and their occupation.

17. Employees feel that they have the ability to see one another's point of view.

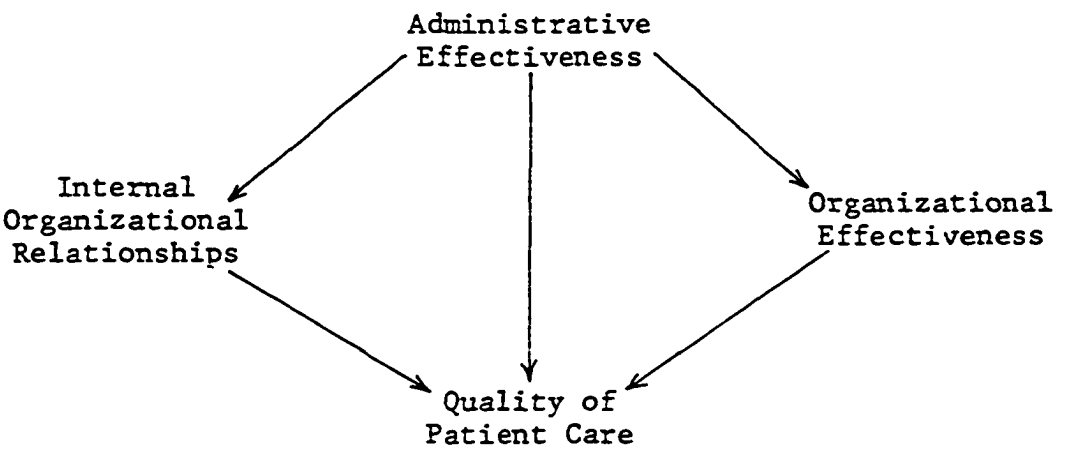
18. Staff members are seen as productive and as utilizing resources efficiently.

19. Co-workers are regarded as anticipating problems and preventing them or reducing their bad effects, and as readily accepting and adhering to changes in routines, assignments, and equipment.

20. Work groups are pictured as able to handle emergency situations.

21. Job satisfaction is high.

The findings of this chapter clearly and convincingly establish a connection between the quality of patient care and the quality of administration as seen and judged by nursing home personnel. It appears that the administrator directly influences the quality of care by the creation of an environment in which personnel can effectively interrelate their activities to provide for the needs of the patients. In support of this contention, we found direct associations between administrative effectiveness, the effectiveness of internal organizational relationships and organizational effectiveness, and the quality of patient care. (See diagram.)



And both the effectiveness of internal organizational

relationships and organizational effectiveness have been found to relate to administrative effectiveness. Therefore, it would seem that the key to quality care is quality administration.

CHAPTER X

SUMMARY AND CONCLUSIONS

Description of Variables and the Research Model

Because of the increasing importance of the nursing home organization as a modern health care delivery system and the apparent lack of behavioral research pertaining to this organization, nursing home employees were chosen as the subjects for this study. The major purpose of this study is the investigation of the administrative processes and internal social functioning within the nursing home and their ultimate effect upon the performance of the organization and the quality of care provided to patients. In order to facilitate the investigation of these factors, a triangular research model was used so that all the major interrelationships among the three variable factor groupings in the study could be analyzed.

The three variable grouping includes (1) Quality of Patient Care, (2) Characteristics of Effective Organizations, and (3) Organizational Effectiveness. First, the quality of patient care was viewed as the ultimate criterion measure of organizational performance in the nursing home industry, because the care administered to patients is the end result of all its processes. Furthermore, by developing the means for evaluating the quality of care delivered by a nursing home and analyzing those factors that relate to it, the study hoped to discover methods that would contribute to its improvement.

Second, the characteristics of effective organizations were subdivided into two major categories: (1) administrative effectiveness and (2) internal organizational relationships. The category of administrative effectiveness attempted to measure the application and practice of good administrative principles within the nursing home and was subdivided into three variable groupings: (1) organizational planning, (2) administrative communication and problem solving, and (3) rational trust.

The variable grouping of organizational planning was designed to measure nursing home employees' evaluations of the planning ability of their supervisor, the extent to

which goals and objectives have been clearly defined, the extent to which rules and regulations have been clearly defined, and the degree to which employees adhere to rules and regulations. Administrative communication and problem solving attempts to evaluate the adequacy of the administrator's communication with the staff members, whether or not the administrator is viewed as being aware of problems within the nursing home, and his ability to deal with them effectively. Rational trust was designed to measure the degree to which the administrator and department heads are seen as following their own rules and regulations, understanding workers' needs and problems, and being fair and reasonable in the decisions they make affecting work routines. The three variable groupings under administrative effectiveness are generally intended to evaluate the effects of the role of administration upon the nursing home organization.

The category of internal organizational relationships is intended to investigate the behavioral interrelationships among the nursing home staff members and their resulting effect upon organizational effectiveness and the quality of patient care. The category of internal organizational relationships is subdivided into three variable

clusters: (1) conditions for negotiating orders, (2) horizontal integration-coordination, and (3) cultural and social-psychological integration. The first cluster was created to measure nursing home employees' perceptions of their ability to interact among themselves to exchange ideas and information, avoid creating problems for each other, and handle everyday coordination problems. Horizontal integration-coordination was designed to measure staff members' perceptions of the extent to which activities are well timed and coordinated to achieve objectives, how well problems are handled between departments and the amount of tension and conflict between departments, the amount of pressure to perform beyond what is considered reasonable, and the extent to which shifts cooperate with one another.

Cultural and social-psychological integration was an attempt to discover the effects of employee identification with the nursing home and its goals, their immediate work group, and their occupation upon the performance of the facility. Also included under cultural and social-psychological integration was the measurement of the ability of the employees to understand the other person's point of view. In addition, a fourth category, entitled improvised coordination, was created by combining all the variables

under conditions for negotiating orders and the items of the blending and timing of activities to achieve objectives, and the handling of interdepartmental problems from the variable cluster horizontal integration-coordination. The objective of this additional variable cluster was to study more closely the everyday coordination of activities within the organization.

The objective of the category of organizational effectiveness was to evaluate the overall performance of the nursing home organization. The measures of effectiveness were grouped into three categories: (1) subjective measures of organizational effectiveness, (2) job attitude measures, and (3) profitability.

The subjective measures of organizational effectiveness were composed of three separate measures: (1) productivity, (2) adaptability, and (3) flexibility. Productivity measured nursing home employees' perceptions of the amount of work their co-workers do and how efficiently they utilize the resources at their disposal. Adaptability attempts to measure employee judgments relating to how good a job their co-workers do in anticipating problems that may come up and preventing them or reducing their ill effects; how quickly they accept and adjust to changes in routines, equipment,

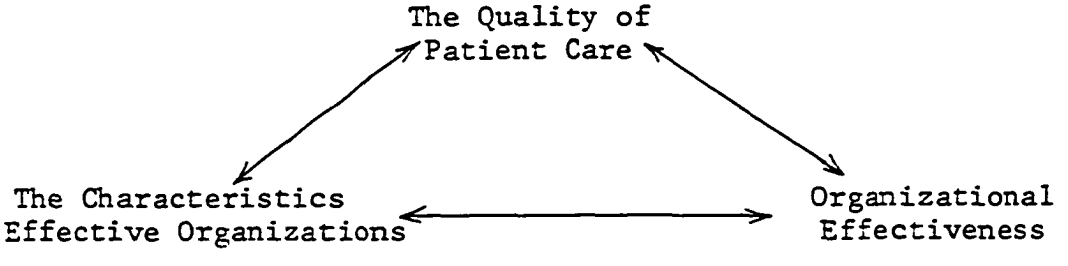
and assignments, and how many people adjust to these changes. Flexibility measured how work groups are able to handle emergency situations.

The measures of job attitudes were divided into two subgroups: (1) overall job satisfaction and (2) turnover. Overall job satisfaction was measured by employee attitudes regarding five areas of the job: (1) the job itself, (2) supervision, (3) co-workers, (4) pay, and (5) promotion. Furthermore, each one of the five areas was also evaluated. In addition, turnover was included as a direct measure of job attitudes.

Profitability was included as a measure of organizational effectiveness in an attempt to interject some hard criterion measures into the evaluation of organizational effectiveness.

The research model demonstrates the manner in which the interrelations among the three basic variable groupings were analyzed (see diagram).

RESEARCH MODEL



The summary will be continued by discussing the study's basic findings with regard to all of these major interrelationships.

Analysis of the Relationship between the Characteristics of Effective Organizations and Organizational Effectiveness

Part I: Administrative Effectiveness and Organizational Effectiveness

The objective of this section was to determine the extent of the relationship between administrative practice within the nursing home and organizational effectiveness. With all but a few minor exceptions, significant correlations were discovered to exist between all the variables that make up administrative effectiveness and the variable components of the subjective measures of effectiveness and overall job satisfaction. The findings with regard to turnover and profitability require specific analysis and will be dealt with in a later section.

The most significant finding of this section of the research is the importance and the central role of the administrator to nursing home functioning. The findings of this study would appear to indicate that the most important function of the administrator is communication and problem

solving. To support this contention, the variable items of administrative communication and problem solving correlated significantly with all the variable items of both organizational planning and rational trust. It appears that through the process of communication the administrator clearly defines the nursing home's objectives, rules, and regulations, which in turn clarifies roles and makes the environment within the nursing home more rational and predictable. The importance of a rational, predictable environment to nursing home employees is demonstrated by the significant correlations of both clarity of goals and objectives and clarity of rules and regulations to all the factors of administrative communication and problem solving, rational trust, the subjective measures of organizational effectiveness, all the measures of job satisfaction, and turnover.

Furthermore, it is through the communication process that a rational trust atmosphere can be created. When adequate lines of communication have been established by the exchange of information with employees, the administrator will become more aware of organizational problems and have a better understanding of employees' personal needs and problems. Accordingly, the employees will have a greater

appreciation for the administrator's position and, therefore, will be able to understand his decisions and the rationale behind them. Consequently, decisions are more apt to be viewed as fair and reasonable when this shared frame of reference exists. Another benefit of these open lines of communication and shared frames of reference is that the administrator and staff members are more likely to discuss organizational problems openly. Therefore, the administrator should be more aware of all the factors involved so that he can deal with them more effectively. This contention is supported by the significant correlations among all the interrelationships of the variables—adequacy of administration, communication, administrator's awareness of problems, and ability of the administrator to deal with problems effectively.

In this section we discovered the importance of the administrative role within the nursing home organization. This conclusion was based upon the many significant correlations between the variable items of administrative effectiveness and measures of organizational effectiveness. On the basis of these findings, it was concluded that there was a significant relationship between administrative effectiveness and organizational effectiveness.

Part II: Internal Organizational Relationships and Organizational Effectiveness

The purpose of this section of the study was to investigate the effects of the behavioral interrelationships among the nursing home staff members upon organizational performance. However, because of the demonstrated importance of the role of the administrator to the effective functioning of the nursing home it was decided first to explore the relationship between administrative effectiveness and internal organizational relationships. The findings showed that significant correlations existed between all six of the variable items of improvised coordination and the 10 variable items of administrative effectiveness or 60 correlations in all.

The importance of the role of the administrator in clearly defining objectives, rules, and regulations and communicating them to staff members was seen in the last section. If employees' roles have been clearly defined and understood, when problems arise between departments solutions can be formulated within the prescribed limits. Furthermore, when employees understand each other's duties and responsibilities they will feel freer to interact among themselves and thus facilitate the establishment of shared

frames of reference. Under these conditions employees will feel free to exchange ideas and information, which should help them in coordinating their activities in order to accomplish objectives. Moreover, the exchange of information should help the nursing home staff to avoid creating problems for one another and help them to solve coordination problems within their immediate work group and between departments. Furthermore, when the administrator and department heads are rated high according to the rational trust items, it appears to create an organizational environment that encourages open communication and personnel feel freer to attempt to mutually resolve the problems that arise in interrelating their various work activities. Therefore, the effectiveness of administration would appear to directly influence improvised coordination within the nursing home.

Another very important and key function of the administrator is his ability to deal effectively with organizational problems. Problems that remain unsolved may create tension and conflict within the nursing home. This, in turn, may create segmentation within the organization. Therefore, the administrator becomes a key figure in the integration of the organization by solving problems effectively before they create friction among work units and

departments.

In addition, all the items of administrative effectiveness were significantly related to the extent to which nursing home employees identify with the nursing home and its goals and their occupation. In other words, when the employees of a nursing home perceive the administrator as effectively performing the functions of administration, they identify more with the organization and its goals.

The nursing home administrator, by effectively performing the functions of planning, communications, problem solving, and the creation of an atmosphere of fairness and trust, appears to have a profound effect upon internal organizational relationships.

The empirical findings of the study demonstrate that the internal behavioral relationships appear to have a direct influence upon organizational performance. With only two minor exceptions, the component elements of improvised coordination relate to all three of the subjective measures of effectiveness and overall job satisfaction. In other words, when employees are able to interact with one another effectively to improvise solutions to the everyday problems of coordinating their activities, they will view their co-workers as producing more, readily adapting to change, and

able to contend with unexpected situations, and they will be more satisfied with their jobs.

It could be concluded that the most significant finding in this section is the importance of the role of the administrator to improvised coordination and overall organizational integration and the importance of improvised coordination to effective organizational performance.

Factors Affecting the Quality of Care

The measurement and improvement of the quality of patient care rendered by a nursing home were the most important purposes underlying this research study. The findings indicate a direct association between administrative effectiveness and the quality of care. When nursing home employees have confidence in the ability of the administrator to plan, clarify roles, communicate, and solve problems, they view the organization as operating more efficiently and providing patients with a higher quality of care. In support of this conclusion the quality of care correlated significantly with all the variable items of administrative effectiveness.

Furthermore, the findings indicate that the greater the degree of harmony, cooperation, and coordination that exists among the various elements of the nursing home

organization, the higher the quality of care that will be administered to its patients. It was also discovered that the more closely the nursing home employees identified with the nursing home and its goals, their immediate work group, and their co-workers, the higher the quality of care they perceived as being given.

The quality of patient care was also discovered to relate significantly to all the subjective measures of organizational effectiveness and all of the measures of job satisfaction. In other words, when the nursing home staff is viewed as being more productive, willing to accept changes and help out in times of emergency, they will also provide a higher quality of patient care. Moreover, a direct association was found between the level of job satisfaction of nursing home employees and the quality of patient care.

Special Issues

This section will focus attention on some of the important discoveries that were not part of the main hypothesis.

Profitability

Many times in empirical research the most significant discoveries come not from what you were able to prove

but from what you were not able to prove. One of the more significant findings of this study is the lack of a direct relationship between profitability and administrative effectiveness or internal organizational relationships. Not only did the study fail to connect profitability with organizational performance and the quality of administration, but in the majority of cases the correlations were in the opposite direction from what would have been predicted. For example, profitability was inversely related to the extent to which goals and objectives are clearly defined, the degree to which the administrator and department heads are seen as understanding workers' needs and problems, the extent to which nursing home employees identify with the nursing home and its goals, and overall job satisfaction. Profitability was directly related to tension and conflict between departments.

The reason for these unexpected findings regarding profitability will more than likely require additional research to determine. However, there are three possible explanations. One, profitability within the nursing home is not consistent with employees' judgments regarding the quality of administration or care. In other words, those practices that are necessary to make a nursing home profitable

are not consistent with favorable employee attitudes. Second, there are too many external environmental factors that affect a nursing home's profitability that make it impossible to relate it to administration and performance. And third, the research design was inappropriate for profitability. In any event, the study was unable to draw any conclusions based on the investigation of profitability.

Turnover

Employee turnover was found to be extremely high in the nursing home organization. The average nursing home in the survey was seen as replacing its entire staff approximately two times a year. On the whole, the findings with regard to turnover were somewhat disappointing. Turnover was not discovered to have broad correlations across many variable clusters but was very specific in the variables it correlated with.

Turnover was lower in those nursing homes in which roles have been clearly defined, coordination problems are well handled, and tension and conflict between departments are seen as low. The reason turnover is related to these variables and unrelated to many similar variables is unknown. Further research and more in-depth analysis are required.

However, it can be concluded that turnover appears to be lower when employees understand their duties and responsibilities and see their activities as effectively interrelated.

Job Satisfaction

Compared to national norms, job satisfaction within the nursing home organization is relatively low on the average. This could be expected in view of the high rate of employee turnover. However, the variables of overall job satisfaction and turnover were not significantly related.

The overall findings with regard to job satisfaction showed employee attitudes regarding their jobs to be directly related to their evaluations of the quality of administration within the nursing home and the effectiveness of internal relationships. This would appear to indicate that employees are more satisfied working in a well-organized nursing home that operates efficiently and provides a high quality of patient care. The findings do not indicate whether a well-run nursing home creates job satisfaction or job satisfaction makes for a well-run nursing home, but the two conditions exist simultaneously and probably are mutually supportive.

Recommendations

Even though the findings from the study do not permit the formulation of any specific recommendations to nursing home administrators with regard to profitability, there were many significant discoveries relating to the role of the administrator. The findings seem to emphasize the importance of the role of the administrator to organizational effectiveness and the quality of care.

The findings indicate that nursing home employees want their jobs clearly defined. Each employee's duties and responsibilities should be clearly explained to him/her. In addition, employees should understand the duties and responsibilities of the individuals with whom they work and interrelate. This can be accomplished by providing employees with a brief job description that is easy to read and understand. Employees should also be provided with a policy manual outlining briefly all the major rules and regulations that affect their jobs. Furthermore, when employees have questions regarding nursing home policy they should be given direct access to someone who can answer their questions.

Employees should be given direction in relation to their jobs. Goals and objectives should be established for the nursing home as a whole and the work units within it.

Objectives should, as much as possible, be clear and measurable in order that progress toward them can be evaluated.

Communication within the nursing home from the administrator and between staff members is a critically important issue. The administrators should not barricade themselves behind a door and a secretary but should interact frequently with nursing home employees and patients, because it is through this interaction that they may become aware of problems within the nursing home that may cause friction among staff members. In addition, by mutually discussing nursing home problems with employees, they will gain a better understanding of the administrator's position and the reasons behind his decisions.

Other means of increasing communication could be through a system of committees; for example, one committee made up of the administrator and all department heads and another one composed of the administrator and elected members from the main departments. Effectively used, this system could be very helpful in promoting communications. Other means of increasing communications could be through the use of a suggestion system, a bulletin board, and employee news letters; properly employed, these can all prove beneficial.

Another important function of the administrator emphasized by the study is his ability to deal with organizational problems. The only recommendation that can be made is that problems be dealt with immediately and effectively resolved. Furthermore, when solutions directly affect the work routines, the employees should be made aware of the reasons behind them.

Nursing home employees want to feel that they are justly and fairly treated. The administrator can create this feeling of fairness on the part of employees by adhering to the rules and regulations he has established and uniformly applying all rules and regulations to all nursing home employees. If exceptions are made, the reason for the exception should be made known to all.

Actually, what nursing home employees require is very simple—let them know what their duties and the regulations of their job are, and treat them with dignity and fairness.

Implications for Further Research

Behavioral studies relating to the nursing home organization are very few in number; in fact, the surface has yet to be scratched. This study directly points out the need to know more about the factors that contribute to

nursing home performance. Because of the limited sample size of this study and the number of relationships that were compared, it is quite possible that a limited number of spurious correlations may exist.

To check for possible spurious correlations, the data were split and checked against the original correlations for inconsistencies. In the large majority of cases the major conclusions of the study were confirmed. However, there did appear to be some inconsistencies among various isolated variable groupings. Because of the inconsistencies among split correlations, the following relationships give an indication of the need for further research.

1. Productivity as it relates to the conditions for negotiating orders (Table 32), handling interdepartmental problems and intershift cooperation (Table 43), administrative communication (Table 22), and cultural and social-psychological integration (Table 48).

2. Flexibility as it relates to adaptability (Table 17), overall job satisfaction (Table 18), clarity of goals and objectives and clarity of rules and regulations (Table 16), the conditions for negotiating orders (Table 32), and administrative communication (Table 22).

3. The job satisfaction aspect of promotion as it relates to the quality of patient care (Table 56) and the factors of pressure to perform and intershift cooperation (Table 44).

4. Pressure to perform as it relates to all the aspects of job satisfaction (Table 44), the

handling of interdepartmental problems and cooperation between shifts (Table 43), and social-psychological integration (Table 47).

5. Intershift cooperation as it relates to the job satisfaction aspect of pay and promotion (Table 44) and the conditions for negotiating orders (Table 42).

6. The awareness of problems by the administrator in relation to coordination (Table 39).

7. Nursing home employees' identification with their immediate work group as it relates to organizational planning (Table 46), conditions for negotiating orders (Table 33), and coordination (Table 47).

8. The ability of nursing home employees to see one another's points of view as it relates to all the aspects of job satisfaction (Table 49) and coordination (Table 47).

Because of the large amount of inconsistencies and nonsignificant correlations, the following variables should be retested across all relationships set forth by this study. These include: the job satisfaction aspect of pay, turnover, profitability, and tension and conflict between departments. It is believed that if any spurious correlations exist in the findings, they will be in the above-mentioned areas and further research should be aimed in this direction.

In general, more research is needed on the nursing home organization to confirm this study's findings. Furthermore, we need to determine which type of organizational

structure is optimal for this organization and what style of leadership is most appropriate for its administrators. All of these questions remain to be answered.

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APPENDICES

APPENDIX A

INSTRUCTIONS TO TRAINING COORDINATORS

INSTRUCTIONS TO TRAINING COORDINATORS

You will have one week to collect the data. One week from the day you started pack the completed surveys back in the box they came in and ship them back to me. Discard any extras you may have.

Distributing the Surveys

Each staff member, with the exception of the Administrator, Director of Nursing, Head of Housekeeping and Head of Dietary, will be asked to fill out a survey. We realize some individuals will be missed due to work scheduling, vacations, illness and other reasons.

Begin distributing the surveys as soon as you can. Check with department heads to determine the best times. Tell the staff members to read the enclosed letter and instructions; fill out the survey; place back in the envelope; seal it; and deposit it in the "collection box" to be provided by you. They will have approximately one week. Let them know when the deadline will be. If staff members have questions regarding the questions on the survey, answer them to the best of your ability, using the sheet I have provided. If they still cannot understand, tell them to place a "?" and move on to the next question.

Collecting the Survey

Provide a "collection box" for the staff members to deposit their completed surveys in. Use the box the surveys came in or a bigger one if handy. Write "Deposit Surveys Here" on the side of it and cut a slit in the top. Then place it in an area where all staff members will have access to it. (Example: Employee's Lounge, Main Lobby, or by the Time Clock).

Two or three days after the staff members have received their questionnaires begin asking them if they have finished. If they have not, ask them to "please" do so and remind them of the deadline. A day or two before the deadline, again remind all staff members who have not done so to please complete their surveys. We do not want you to put pressure on the staff to complete the surveys, but simply use a gentle pleas and reminders.

One week from the day you started pack the completed surveys in the box they came in and call the shipping line indicated on the enclosed list. They will pick up the box of surveys and return them to me. I will pay the shipping charges. In addition, please indicate on a piece of paper the number of surveys you passed out and the number of surveys you received back. This is Very Important. Next make sure my correct address is on the box:

Ray Millinix
6000 N. Brookline, Apt. 11-So.
Oklahoma City, Oklahoma 73112

The Role of the Administrator and Department Heads

It is vital to the success of this research project that staff members understand that under no circumstances will individual surveys be shown to anyone in the administration of the nursing center, or the Four Seasons Organization. They will only be given summary data from a large number of surveys.

The administrator and department heads should cooperate with you by letting the staff members know you have their support. They should also work with you to arrange times for the distribution and collection of surveys. But, under no circumstances should they actually participate in the actual distribution or collection of surveys. Should they interfere, or be uncooperative in any way, enclose a note to this effect in the box or write me direct.

Final Note: When distributing the surveys, let the staff members select their own from a stack or a box. Please do not hand them out individually, if you can keep from it.

THANK YOU VERY MUCH

TRAINING COORDINATORS GUIDE TO SURVEY QUESTIONS

Note: We hope this additional explanation and examples of the survey questions will enable you to answer any question staff members may have.

1. We want to know how hard the staff members think the other personnel in their department work. Do they accomplish a lot or do they mess around and leave residents needs neglected? Does work pile up, left undone?

2. Example: Do they utilize supplies well, or are they wasteful? Is equipment taken care of properly? Is the staff utilized properly or are some given a heavy load while others loaf? In general, how well utilized are the supplies, equipment, and staff of the nursing center?

3. Some work groups are able to foresee problems before they occur and take action to ward them off. Other work groups seem to cause problems for themselves. For Example: Some supervisors know which individuals work well together and which individuals have personality conflicts. This is one way they keep problems from occuring.

4-5. Example: When new procedures are introduced, do the staff members catch on quickly or slowly, or just refuse to change? When resident assignments are changed or new residents come into the center do staff members catch on to their needs quickly or slowly? Do staff members accept changes good naturedly or do they complain?

6. Example: In the event of a crisis, does everyone pitch in and help? Would off duty staff members be willing to come in and help in the case of extreme emergency? If a resident suddenly became seriously ill and tied up several staff members for a long period of time, would the others pitch in and help them with their work, or do it for them?

7. Does everyone know specifically what their duties are? Do you know what you are supposed to do and by when it is supposed to be done? Does your supervisor make work assignments so that everything gets done in an orderly fashion, and everyone has an equal work load?

8. Example: Does your supervisor set up specific things for you to accomplish? Does the nursing center have specific standards to be maintained in relation to providing services to its residents?

9. Has anyone ever taken the time to explain the rules and regulations of the nursing center to you? Do you understand these rules and regulations? Do you understand the regulations regarding raises, days off, vacations, work scheduling, sick leave, etc.?

10. How many of the people in the nursing center follow the rules and regulations?

11. Do the various individual work assignments in your department compliment each other in order to provide the necessary services to residents, or do individuals work in a state of confusion accomplishing very little and leave residents needs neglected? (Does the right hand work with the left hand?)

12. Example: When someone discovers a new and better way to perform a task, do they share it with their co-workers or keep it to themselves? During lunch periods, breaks, or slack periods, does the staff ever discuss ways of improving the services in the nursing center? Have you received any ideas or suggestions from your co-workers that helped you perform your duties?

13. Example: Do staff members tend to their assigned residents needs so that the resident will not have to call on other staff members? Does one group "hog" all the wheel chairs, shower chairs, linens, blue pads, etc. making it difficult for others to do their job?

14. Example: Should several staff members not come to work, could the people in your department adjust their duties to get all the work done? When there is a program given for the residents, can your co-workers adjust their duties to see that everyone gets there on time?

15. Example: Does the Director of Nursing abide by the dress code she sets for everyone else? Does the administrator or a department head make a rule that staff members have thirty minutes for lunch, then take an hour themselves? Basically, do they follow the rules and regulations they make for the staff members?

16. Does the administrator or your department head know what is really important to you? Do they know or care about all the problems you are faced with in doing your job? Do they know which aspects of your job you like and dislike?

17. Example: Naturally, there are some jobs which are easier and more preferable than others, when conflict arises over work assignments, are they settled fairly? Does the admistrator and department heads treat all staff members the same or do they show favoritism?

18. Example: When a program is planned for the residents, are they all dressed and ready on time? When a resident must be prepared for a treatment, is the treatment given promptly so that staff members will not be tied up any longer than necessary? If consideration given to the amount of work scheduled, on a shift, so that it will be completed in the alloted time? Are meals served on time?

19. Example: Often times problems can arise between nursing and dietary with relation to when trays should be served and who should pick them up; how are these problems handled? An issue which often times causes conflict between nursing and housekeeping is; who is responsible for what in keeping the patients room neat and clean? When "squabbles" occur, are they settled fairly and to everyone's satisfaction?

20. What we are interested in here is, how do the departments in question get along? For Example: Are personnel in nursing and dietary always bickering with one another, or do they get along fine? We want to know where the areas of conflict in the nursing center are.

21. Are supervisors placing too much pressure on staff members? Do you have the feeling that someone is always looking over your shoulder to see that you do everything just right? If your supervisor always asking you to do more?

22-23. Example: Are staff members always complaining that the previous shift did not do everything it was supposed to and left their work for them? Does each shift clean up its own messes or leave it for the next shift?

.24. Does the administrator let everyone know what is going on? When new rules and regulations are made or existing ones changed, does he or she let you know? Does he or she tell you about things which effect the nursing center in general? (Example: Change in government regulations, when inspection will be, etc.)

25. Is the administrator aware of the problems within the nursing center? For Example: Which staff members and departments do not get along, equipment or supplies that are needed, maintenance or repairs that are needed, etc.

26. Does he or she take care of these things or let them go? When conflicts occur between departments does the administrator handle it fairly so that all are satisfied? When something breaks down does he or she get right on it, or do you have to keep reminding them?

27. A. How well do you like the people you work with, are they your friends on as well as off the job?

B. The primary goal of any nursing center is to provide a high quality of care for its residents. How hard are you willing to work to see this goal fulfilled?

C. Do you like your present job, and do you identify with your co-workers in the same occupation?

28. Example: Do the personnel in dietary know and understand all the problems and mess the nursing personnel must undergo before residents are ready for meals? On the other hand, do the nursing personnel know what is involved in preparing meals and the problems that dietary personnel face? Do the people in the other departments understand the problems you face in your job?

29. Do the nurses do a good job of looking after the residents medical needs? How good or bad is the quality of care they provide?

30. How would you rate the quality of care given to the residents by the aids and orderlies? Do the aides and orderlies perform their duties in a "top notch" fashion or "half heartedly"?

31. Assuming you have worked in another nursing center or have a close friend or relative who does, how would you compare the two?

APPENDIX B

QUESTIONNAIRE

The University of Oklahoma 307 West Brooks, Room 103 Norman, Oklahoma 73069

College of Business Administration
Division of Management

Dear Employees, Four Seasons
Nursing Centers:

We are asking for your help in a research study aimed at determining how nursing center staffs work together. The study will be directed by J. Ray Mullinix, A Doctoral Candidate at the University of Oklahoma, under the supervision of Dr. Donald A. Woolf, chairman of the Doctoral Committee.

It is our belief that this study will produce findings which can be used to make a nursing center a better place in which to work and that it will also result in a better quality of care for its residents.

You are asked to complete a survey related to how you feel about your job, your co-workers, and your supervisors. Please read each question carefully, and check the answer which comes closest to your personal feelings. For this study to be successful, it is Very Important that you express your true feelings.

Of course individual responses to the survey will be held in the strictest confidence. Only the primary researcher--who is not connected in any way with Four Seasons Nursing Centers--will see your responses. Only summary data for large groups of staff members will ever be made available to interested parties.

We ask for your cooperation in this research. Your participation in the study is vital if we are to obtain an accurate picture of how nursing center staff members feel about their job, co-workers and supervisors.

This research study has the full approval and support of the Four Seasons management. They join us in wishing to obtain a confidential and truly representative understanding of your feelings. We want to express our sincere appreciation for your time, effort, and cooperation. Thank You.

INSTRUCTIONS

Read each question carefully. Then check the answer which most accurately expresses your true feelings. If you do not understand the question or do not have an answer, place an "?" beside it and move on to the next question or ask your center's training coordinator. Do Not discuss your answers with any of your co-workers. Finally, place your survey in the envelope provided, seal it, and deposit it in the box provided by the Training Coordinator. Do Not write your name on the survey or the envelope.

CHECK YOUR DEPARTMENT:

_____(1) Nursing
_____(2) Dietary
_____(3) Housekeeping, Janitorial, Laundry
_____(4) Administrative and Activities
_____(5) Maintenance

If Nursing: CHECK ONE

_____(1) Nurse (RN or LPN)
_____(2) Aid or Orderly
_____(3) Other

Every worker produces something in his or her work. It may be a "product" or it may be a "service". Sometimes it is very difficult to identify the product or service. Listed below are some of the services provided by various departments in a nursing center.

Bathing Residents	Feeding Residents	Preparing Meals
Giving Medications	Washing Dishes	Administering Treatments
Walking Residents	Cleaning Rest Rooms	Dressing Residents
Making Beds	Dusting	Mopping Floors

These are just a few of the services being offered in your nursing center.

1. Thinking now of the various things done by the people you know in your department, how much are they producing?
CHECK ONE.

_____(1) Their production is very low
_____(2) It is fairly low
_____(3) It is neither high or low
_____(4) It is fairly high
_____(5) It is very high

Go on to the next page...

2. Do the people in your department seem to work efficiently with the resources (supplies, personnel, equipment, etc.) they have available? How efficiently do they do their work?
CHECK ONE.

_____(1) They do not work efficiently at all
_____(2) Not too efficient
_____(3) Fairly efficient
_____(4) They are very efficient
_____(5) They are extremely efficient

3. How good a job is done by the people in your department in anticipating problems that may come up in the future and of preventing them from happening or reducing their bad effects.
CHECK ONE.

_____(1) They do a poor job of anticipating problems
_____(2) Not too good a job
_____(3) A fair job
_____(4) They do a very good job
_____(5) They do an excellent job of anticipating problems

4. When changes are made in your department's routines, equipment, or assignments, how quickly do your co-workers accept and adjust to these changes?
CHECK ONE.

_____(1) Most people accept and adjust to change very slowly
_____(2) Rather slowly
_____(3) Fairly quickly
_____(4) They adjust quickly, but not immediately
_____(5) Most people accept and adjust to change immediately

5. How many people in your department readily accept and adjust to change?
CHECK ONE.

_____(1) Considerably less than half of the people accept and adjust to change
_____(2) Slightly less than half do
_____(3) The majority adjust to change
_____(4) Considerably more than half do
_____(5) Practically everyone accepts and adjust to change

Go on to the next page...

6. From time to time emergencies arise, such as the arrival of a large number of new residents, or the unexpected shortage of workers. When these emergencies occur, they can cause work overloads for many people. Some work groups are able to handle these emergencies more readily and successfully than others. How good a job do the people in your department do at handling these situations.
CHECK ONE.

_____(1) They do a poor job of handling emergency situations
_____(2) They do not do very well
_____(3) They do a fair job
_____(4) They do a good job
_____(5) They do an excellent job of handling of these situations

7. How good is your superior at planning, organizing and scheduling the work?
CHECK ONE.

_____(1) Excellent in planning, organizing and scheduling the work
_____(2) Very good
_____(3) Good
_____(4) Fair
_____(5) Rather poor
_____(6) Poor
_____(7) Very poor in planning, organizing, and scheduling the work

8. How clearly do you understand the goals and objectives toward which your department is working? (Does your supervisor define specific goals to be accomplished such as reducing the number of residents with bed sores, or answering lights within a specified time, cleaning a specific number of rooms, etc.?)
CHECK ONE.

_____(1) They are defined as clearly as they should be defined
_____(2) They are defined almost as clearly as they should be defined
_____(3) They should be defined somewhat more clearly
_____(4) They should be defined much more clearly
_____(5) They are not defined at all

9. How clearly defined are the various rules and regulations of the nursing home that effect your job?
CHECK ONE.

_____(1) They are defined as clearly as they should be defined
_____(2) They are defined almost as clearly as they should be defined
_____(3) They should be defined somewhat more clearly
_____(4) They should be defined much more clearly
_____(5) They are not defined at all

Go on to the next page...

10. In general, to what extent do people in the different jobs and departments follow the various rules and regulations set up by the nursing home?
CHECK ONE.

_____(1) Everyone, without exception, follows the rules and regulations of the nursing home
_____(2) Almost everyone does
_____(3) The large majority of the people do
_____(4) A little over half of the people do
_____(5) Less than half of the people follow the rules and regulations of the nursing home

11. How well are the different jobs and work activities in your department blended together to meet the objectives of the department?
CHECK ONE.

_____(1) The jobs and activities are not at all well blended together
_____(2) Not so well
_____(3) Fairly well
_____(4) Very well
_____(5) The jobs and activities are blended together almost perfectly

12. To what extent do the people within your department exchange helpful information and ideas?
CHECK ONE.

_____(1) We exchange helpful ideas and information to a great extent
_____(2) A considerable extent
_____(3) A fair extent
_____(4) A small extent
_____(5) We do not exchange helpful ideas and information at all

13. To what extent do the people you work with in your department make an effort to avoid creating problems or interference with each other's duties and responsibilities?
CHECK ONE.

_____(1) They try to avoid interfering with each other to a very great extent
_____(2) To a great extent
_____(3) To a fair extent
_____(4) To a small extent
_____(5) They try to avoid interfering with each other to a very small extent

Go on to the next page...

14. From time to time, problems of coordinating the work of people who must work together arise. When they arise in your department how well are these problems handled?
CHECK ONE.

_____(1) These problems are extremely well handled
_____(2) Very well handled
_____(3) Fairly well handled
_____(4) Not very well handled
_____(5) They are not handled well at all

15. How closely do the department heads and administrator follow the rules and regulations they establish that effect your work as well as theirs?
CHECK ONE.

_____(1) They follow their own policies extremely closely
_____(2) They follow them very closely
_____(3) They follow them fairly closely
_____(4) They do not follow them too closely
_____(5) They do not follow them at all

16. How well do the department heads and administrator understand your needs and problems in your work?
CHECK ONE.

_____(1) They understand my needs and problems perfectly
_____(2) They understand them very well
_____(3) Fairly well
_____(4) Not too well
_____(5) They do not understand my needs and problems well at all

17. To what extent are the department heads and administrator fair and reasonable in the decisions that affect your work, regardless of whether those decisions are favorable to you or not?
CHECK ONE.

_____(1) They are extremely fair and reasonable
_____(2) They are very fair and reasonable
_____(3) They are somewhat fair and reasonable
_____(4) They are not too fair and reasonable
_____(5) They are not at all fair and reasonable

18. To what extent are all related things and activities well timed in the everyday routine of the nursing home? (For example: are residents dressed and ready for meals at the alloted time, and are meals served promptly and on schedule?)
CHECK ONE.

_____(1) All related things and activities in the everyday routine are perfectly timed
_____(2) They are very well timed
_____(3) They are fairly well timed
_____(4) They are not so well timed
_____(5) They are rather poorly timed

Go on to the next page...

19. When people from different departments have to work together in order to provide the residents with the necessary services, problems can arise. How well do the individuals, in the various departments, handle the problems that arise between them?
CHECK ONE.

_____(1) These problems are extremely well handled
_____(2) Very well handled
_____(3) Fairly well handled
_____(4) Not very well handled
_____(5) They are not handled well at all

20. On the whole, would you say that in this nursing center there is some tension or conflict (friction) between the two groups in each of the following pairs?
CHECK ONE FOR EVERY PAIR OF GROUPS.

Between:	(1) A Very Great Deal of Tension	(2) A Great Deal of Tension	(3) Some Tension	(4) A Little Tension	(5) No Tension At All	(6) ?
(a) Administrative and Nursing	_____	____	____	____	____	____
(b) Administrative and Housekeeping	_____	____	____	____	____	____
(c) Administrative and Dietary	_____	____	____	____	____	____
(d) Nursing and Housekeeping	_____	____	____	____	____	____
(e) Nursing and Dietary	_____	____	____	____	____	____

21. On the job, do you feel any pressure for better performance over and above what you think is reasonable?
CHECK ONE.

_____(1) I feel a great deal of pressure over and above what is reasonable
_____(2) Considerable pressure
_____(3) Some pressure
_____(4) A little pressure
_____(5) A very little pressure
_____(6) I feel no pressure at all over and above what is reasonable

Go on to the next page...

22. How well do you feel the different shifts work together?
CHECK ONE.

_____(1) Extremely well
_____(2) Very well
_____(3) Fairly well
_____(4) Not so well
_____(5) Not well at all

23. How easy is it for one shift to take over without confusion from where the previous shift left off?
CHECK ONE.

_____(1) It is extremely easy
_____(2) It is very easy
_____(3) It is fairly easy
_____(4) It is not so easy
_____(5) It is hard or difficult

24. In general, how do you feel about the kind of communications you receive from your administrator? (How well does he or she keep employees informed on things affecting their jobs.)
CHECK ONE.

_____(1) The kind of communication I receive from the administrator is completely adequate
_____(2) Very adequate
_____(3) Fairly adequate
_____(4) Rather inadequate
_____(5) The kind of communication I receive from the administrator is inadequate

25. Check the extent to which each of the following statements fits your administrator: He or she is aware of problems faced by staff members of the nursing home.
CHECK ONE.

_____(1) Very fully
_____(2) To a great extent
_____(3) To some extent
_____(4) To a small extent
_____(5) Not at all

26. He or she effectively solves problems that arise in the nursing home.
CHECK ONE.

_____(1) Very fully
_____(2) To a great extent
_____(3) To some extent
_____(4) To a small extent
_____(5) Not at all

Go on to the next page...

27. How strongly identified do you feel (that is, how much do you feel that you <u>really</u> <u>belong</u>) with each of the following?

A. My immediate work group.
CHECK ONE.

_____(1) Very strongly
_____(2) Quite strongly
_____(3) Fairly strongly
_____(4) A little
_____(5) Not at all

B. This nursing home and its goals:
CHECK ONE.

_____(1) Very strongly
_____(2) Quite strongly
_____(3) Fairly strongly
_____(4) A little
_____(5) Not at all

C. My profession or occupation.
CHECK ONE.

_____(1) Very strongly
_____(2) Quite strongly
_____(3) Fairly strongly
_____(4) A little
_____(5) Not at all

28. To what degree do people from different departments see the other persons view point in connection with their work?
CHECK ONE.

_____(1) To a very great degree
_____(2) To a considerable degree
_____(3) To a fair degree
_____(4) To a small degree
_____(5) To a very small degree

Go on to the next page...

29. How would you rate the quality of nursing care given to residents by the professional nurses (RN's and LPN's) in this nursing center? (Some examples of nursing care would include: Do nurses administer medication properly and on time? Do they follow doctors' orders? Are they quick to see about residents needs when called? Do they keep proper records? Do they administer treatments properly when necessary? Do they show a general concern for the residents?)
CHECK ONE.

_____(1) Nursing care in this nursing center is outstanding
_____(2) Excellent
_____(3) Very good
_____(4) Good
_____(5) Fair
_____(6) Rather poor
_____(7) Nursing care in this nursing home is poor

30 How would you rate the quality of overall care that the residents generally receive from the aids and orderlies in this nursing center. (Some examples of overall resident care would include: Are the residents kept clean? Are lights answered promptly? Does the staff have a cheerful attitude toward the residents? Are residents rooms and beds kept neat and clean?)
CHECK ONE.

_____(1) Overall resident care in this nursing center is outstanding
_____(2) Excellent
_____(3) Very good
_____(4) Good
_____(5) Fair
_____(6) Rather poor
_____(7) Overall resident care in this nursing center is poor

31. How would you rate the quality of nursing care and overall resident care in this nursing center as compared to competing nursing centers? (This question assumes that you have some knowledge of conditions existing in other nursing centers. If you do not, then please leave this question blank.)
CHECK ONE.

_____(1) The resident care in this nursing center is outstanding compared to most other nursing centers of this kind
_____(2) Much better
_____(3) Generally better
_____(4) About the same
_____(5) Somewhat poorer
_____(6) Generally poorer
_____(7) The resident care in this nursing center is much poorer than in most other nursing centers

Now think of your impressions about your job. How well do the following words describe your job as you see it? On the blanks beside each phrase below, put an "X" in the column:

For "Yes" if it describes your job as you see it.

For "No" if it does not describe it.

For "?" if you cannot decide.

1. MY JOB

		YES	?	NO
1-01	Fascinating	___	___	___
1-02	Routine	___	___	___
1-03	Satisfying	___	___	___
1-04	Boring	___	___	___
1-05	Good	___	___	___
1-06	Creative	___	___	___
1-07	Respected	___	___	___
1-08	Hot	___	___	___
1-09	Pleasant	___	___	___
1-10	Useful	___	___	___
1-11	Tiresome	___	___	___
1-12	Healthful	___	___	___
1-13	Challenging	___	___	___
1-14	On Your Feet	___	___	___
1-15	Frustrating	___	___	___
1-16	Simple	___	___	___
1-17	Endless	___	___	___
1-18	Gives sense of accomplishment	___	___	___

Go on to the next page...

Now think of your impressions about your supervisor. How well do the following words describe your supervisor as you see them? On the blank beside each phrase below, put an "X" in the column:

For "Yes" if it describes your supervisor as you see them.

For "No" if it doesn't describe them.

For "?" if you cannot decide.

11. MY SUPERVISOR

		YES	?	NO
2-01	Asks my advice	___	___	___
2-02	Hard to please	___	___	___
2-03	Impolite	___	___	___
2-04	Praises good work	___	___	___
2-05	Tactful	___	___	___
2-06	Influential	___	___	___
2-07	Up-to-date	___	___	___
2-08	Doesn't supervise enough	___	___	___
2-09	Quick tempered	___	___	___
2-10	Tells me where I stand	___	___	___
2-11	Annoying	___	___	___
2-12	Stubborn	___	___	___
2-13	Knows job well	___	___	___
2-14	Bad	___	___	___
2-15	Intelligent	___	___	___
2-16	Leaves me on my own	___	___	___
2-17	Lazy	___	___	___
2-18	Around when needed	___	___	___

Go on to the next page...

Now think of your impressions about your co-workers. How well do the following words describe your co-workers as you see them? On the blanks beside each phrase below, put an "X" in the appropriate column.

For "Yes" if it describes your co-workers as you see them.

For "No" if it doesn't describe them.

For "?" if you cannot decide.

III. MY CO-WORKERS

		YES	?	NO
3-01	Stimulating	___	___	___
3-02	Boring	___	___	___
3-03	Slow	___	___	___
3-04	Ambitious	___	___	___
3-05	Stupid	___	___	___
3-06	Responsible	___	___	___
3-07	Fast	___	___	___
3-08	Intelligent	___	___	___
3-09	Easy to make enemies	___	___	___
3-10	Talk too much	___	___	___
3-11	Smart	___	___	___
3-12	Lazy	___	___	___
3-13	Unpleasant	___	___	___
3-14	No privacy	___	___	___
3-15	Active	___	___	___
3-16	Narrow interest	___	___	___
3-17	Loyal	___	___	___
3-18	Hard to meet	___	___	___

Go on to the next page...

Now think of your impressions about your pay. How well do the following words describe your pay as you see it? On the blanks beside each phrase below, put an "X" in the column:

For "Yes" if it describes your pay as you see it.

For "No" if it doesn't describe it.

For "?" if you cannot decide.

IV. MY PAY

		YES	?	NO
4-01	Income adequate for normal expenses	___	___	___
4-02	Satisfactory profit sharing	___	___	___
4-03	Barely live on income	___	___	___
4-04	Bad	___	___	___
4-05	Income provides luxuries	___	___	___
4-06	Insecure	___	___	___
4-07	Less than I deserve	___	___	___
4-08	Highly paid	___	___	___
4-09	Underpaid	___	___	___

Go on to the next page...

Now think of your impressions about your chances for promotion. How well do the following words describe your chances for promotion as you see them? On the blanks beside each phrase below, put an "X" in the column.

For "Yes" if it describes your chances for promotion as you see them.

For "No" if it doesn't describe them.

For "?" if you cannot decide.

V. MY CHANCE FOR PROMOTION

		YES	?	NO
5-01	Good opportunity for advancement	___	___	___
5-02	Opportunity somewhat limited	___	___	___
5-03	Promotion on ability	___	___	___
5-04	Dead-end job	___	___	___
5-05	Good chance for promotions	___	___	___
5-06	Unfair promotion policy	___	___	___
5-07	Infrequent promotion	___	___	___
5-08	Regular promotions	___	___	___
5-09	Fairly good chance for promotion	___	___	___

Go on to the next page...

COMMENTS

If you can think of anything relating to your job, your nursing center, your supervisor, or this survey that you would like to comment on, please write your remarks below:

APPENDIX C

NURSING HOME RANKS AND MEANS FOR ALL VARIABLE MEASURES

TABLE 57

RANKS AND MEANS FOR THE SUBJECTIVE MEASURES OF ORGANIZATIONAL EFFECTIVENESS

Nursing Home	Productivity		Adaptability		Flexibility	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	3.92	3	3.85	1	4.28
2	19	3.48	19	3.34	20	3.58
3	5	3.81	5	3.82	8	4.02
4	16	3.52	18	3.38	12	3.96
5	14	3.59	12	3.55	11	4.04
6	11	3.61	22	3.18	10	4.05
7	9	3.75	6	3.79	9	4.07
8	8	3.78	9	3.65	16	3.78
9	24	3.14	23	3.11	23	3.40
10	10	3.64	14	3.53	13	3.94
11	13	3.60	7	3.71	2	4.26
12	20	3.45	13	3.54	14	3.84
13	7	3.79	4	3.83	4	4.21
14	6	3.81	11	3.57	6	4.14
15	22	3.35	24	3.09	22	3.52
16	4	3.83	21	3.22	19	3.68
17	12	3.6	8	3.69	24	3.17
19	21	3.4	10	3.62	18	3.7
20	15	3.54	12	3.4	5	4.19
21	1	3.18	2	3.97	7	4.1
23	22	3.3	20	3.22	21	3.55
24	17	3.51	15	3.48	17	3.73
25	2	3.97	1	3.07	3	4.23
26	18	3.5	16	3.41	15	3.82

TABLE 58

NURSING HOME MEAN SCORES AND RANKS FOR JOB SATISFACTION

Nursing Home	Job Satisfaction (Overall)		Job Itself		Super-vision		Co-Workers		Pay		Promotion	
	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank	$\bar{X}$	Rank
1	33.61	3	36.90	2	45.13	3	46.3	2	19.10	3	20.62	11
2	27.52	17	28.45	23	34.18	23	39.82	11	17.29	9	17.87	16
3	31.45	7	33.88	8	41.11	10	43.08	4	18.72	5	20.47	12
4	27.10	19	28.64	22	34.5	22	38.95	13	16.91	13	16.5	20
5	26.91	21	30.27	17	37.95	20	35.02	22	17.12	10	14.16	22
6	26.64	23	28.90	20	38.26	18	36.23	19	17.10	12	12.71	24
7	28.81	15	31.65	16	43.00	5	36.92	9	15.93	16	13.55	23
8	24.47	18	28.87	21	38.64	15	33.64	24	15.85	17	20.31	13
9	26.90	22	29.09	19	37.95	19	35.77	21	10.19	22	21.48	10
10	30.34	10	31.65	15	41.40	9	38.43	14	17.10	11	23.13	7
11	28.16	16	29.65	18	42.65	6	37.42	18	15.62	18	15.50	21
12	29.25	13	33.58	10	38.58	16	37.58	17	19.25	2	17.25	18
13	32.03	4	33.24	11	41.80	8	37.80	15	17.33	8	30.00	2
14	30.31	11	33.97	7	46.14	2	40.37	7	14.07	21	17.00	19
15	24.02	24	27.54	24	31.16	24	34.18	23	9.68	24	17.50	17
16	31.50	6	36.43	3	39.07	13	39.71	12	17.43	7	24.86	5
17	31.75	5	34.67	6	39.83	11	41.75	5	16.67	14	25.82	4
19	31.30	8	31.73	14	44.07	4	41.37	6	15.47	20	23.87	6
20	31.04	9	36.41	4	39.67	12	37.63	16	18.54	8	22.92	9
21	33.78	2	37.33	1	42.50	7	43.96	3	18.77	14	26.35	3
23	26.94	20	33.63	10	35.68	21	35.79	20	10.16	23	19.42	14
24	30.24	12	32.95	12	38.98	14	39.98	8	16.28	15	23.08	8
25	36.03	1	35.45	5	46.14	1	46.42	11	20.50	1	31.64	1
26	28.94	14	32.00	13	38.58	17	39.89	10	15.47	19	18.74	15

TABLE 59

RANKS AND MEANS FOR TURNOVER, PROFITABILITY AND THE QUALITY OF PATIENT CARE

Nursing Home	Turnover (3 mo.)		Profitability (7 mo.)		Quality of Care (12)	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	16	41.24%	19	$19.08	3	5.4
2	8	48.98	4	37.03	24	3.5
3	9	48.34	6	32.23	8	4.82
4	17	37.81	5	33.01	20	4.05
5	19	36.67	1	43.77	9	4.66
6	13	43.62	2	39.14	22	3.62
7	15	42.43	9	31.08	5	4.93
8	7	52.18	3	37.08	15	4.31
9	20	28.78	18	19.14	19	4.05
10	24	17.12	24	12.52	13	4.37
11	10	45.28	21	17.92	12	4.41
12	18	36.91	8	31.43	6	4.92
13	4	62.32	16	22.61	10	4.46
14	14	43.23	13	25.37	17	4.17
15	5	61.89	22	16.75	23	3.55
16	1	96.65	20	18.98	4	4.94
17	22	26.86	14	24.39	16	4.26
19	12	44.23	17	22.35	11	4.46
20	21	27.68	10	30.84	7	4.9
21	23	20.94	12	27.42	2	5.63
23	3	66.06	7	31.83	21	3.95
24	11	45.06	11	29.52	14	4.34
25	6	53.02	15	23.81	1	5.7
26	2	80.50	23	16.68	18	4.09

TABLE 60

RANKS AND MEANS FOR ORGANIZATIONAL PLANNING

Nursing Home	Plan Abil. of Sup. (13)		Clear Obj. (14)		Clear Rules (15)		Adher. Rules (16)	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	6	5.57	7	4.02	2	4.45	4	3.42
2	21	4.42	23	3.44	18	3.67	24	2.71
3	16	4.85	11	3.87	13	4.01	9	3.25
4	20	4.44	21	3.48	16	3.92	11	3.24
5	10	5.33	18	3.55	19	3.62	12	3.22
6	19	4.47	22	3.47	24	3.25	23	2.72
7	8	5.48	6	4.02	11	4.05	7	3.29
8	9	5.44	17	3.68	10	4.06	10	3.24
9	17	4.8	12	3.84	15	3.92	17	3.08
10	12	5.13	3	4.3	6	4.16	15	3.16
11	13	5.03	10	3.9	17	3.83	20	3.03
12	11	5.26	9	3.96	5	4.19	19	3.03
13	7	5.52	5	4.17	3	4.39	6	3.3
14	1	5.94	13	3.79	21	3.58	21	2.91
15	18	4.72	16	3.72	22	3.58	8	3.25
16	24	4.37	20	3.5	23	3.56	18	3.06
17	15	4.86	8	4	7	4.13	13	3.2
19	5	5.61	1	4.38	12	4.03	16	3.09
20	4	5.64	15	3.75	9	4.07	2	3.6
21	3	5.7	2	4.33	1	4.5	3	3.43
23	22	4.37	24	3.27	20	3.62	22	2.79
24	14	4.91	19	3.5	14	4.01	14	3.13
25	2	5.75	4	4.27	4	4.33	1	3.86
26	23	4.37	14	3.75	8	4.08	5	3.37

TABLE 61

RANKS AND MEANS FOR CONDITIONS FOR NEGOTIATING ORDERS

Nursing Home	Ease of Exchanging Ideas and Information		Avoid Creating Problems for One Another		Handling Coordination Problems	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	4.25	2	4.14	3	3.71
2	14	3.44	12	3.42	22	3.00
3	4	4.03	7	3.67	12	3.32
4	19	3.24	5	3.80	16	3.28
5	10	3.57	21	3.22	19	3.17
6	23	3.04	23	2.95	24	2.86
7	13	3.48	9	3.46	9	3.46
8	12	3.55	13	5.37	13	3.31
9	21	3.20	24	2.92	20	3.04
10	9	3.63	19	3.25	6	3.63
11	15	3.43	14	3.36	18	3.26
12	6	3.92	15	3.34	14	3.30
13	8	3.65	6	3.73	8	3.52
14	5	4.00	8	3.64	11	3.44
15	22	3.08	22	3.05	21	3.02
16	11	3.56	11	3.43	4	3.68
17	7	3.66	4	3.80	7	3.60
19	16	3.38	10	3.45	10	3.45
20	17	3.32	18	3.28	2	3.71
21	1	4.56	1	4.20	1	4.00
23	24	3.03	20	3.24	17	3.27
24	18	3.30	17	3.29	15	3.29
25	3	4.25	3	3.86	5	3.66
26	20	3.20	16	3.33	23	2.95

TABLE 62

RANKS AND MEANS FOR RATIONAL TRUST OF ADMINISTRATION

Nursing Home	Adm. and Dept. Heads Perceived as Following Rules		Adm. and Dept. Heads Perceived as Understanding Workers' Needs		Adm. and Dept. Heads Seen as Fair and Reasonable	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	4	3.88	3	3.71	2	4.02
2	23	2.84	23	2.63	23	3.12
3	10	3.60	13	3.12	10	3.53
4	18	3.24	21	2.72	21	3.16
5	16	3.26	12	3.15	15	3.35
6	19	3.20	24	2.56	18	3.20
7	11	3.57	16	3.05	12	3.47
8	7	3.68	15	3.06	14	3.37
9	20	3.16	11	3.16	7	3.64
10	12	3.50	9	3.19	11	3.47
11	21	3.13	8	3.20	9	3.53
12	6	3.73	8	3.00	13	3.42
13	1	4.08	4	3.69	3	3.87
14	24	2.64	20	2.79	22	3.11
15	22	2.86	19	2.80	24	3.02
16	17	3.25	10	3.19	6	3.69
17	5	3.73	6	3.60	8	3.53
19	9	3.61	17	3.00	20	3.16
20	8	3.64	5	3.64	5	3.75
21	3	3.96	2	3.80	4	3.87
23	15	3.27	14	3.10	17	3.24
24	13	3.48	7	3.25	16	3.32
25	2	4.05	1	4.02	1	4.08
26	14	3.37	22	2.66	19	3.17

TABLE 63

RANKS AND MEANS FOR COORDINATION--PART I

Nursing Home	Blending of Jobs to Achieve Objectives		Timing of Activities		Handling of Interde-partmental Problems	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	3.82	1	4.05	7	3.60
2	19	2.97	22	2.65	23	2.94
3	9	3.37	17	3.06	21	3.06
4	21	2.91	24	2.60	13	3.32
5	13	3.33	13	3.33	16	3.27
6	22	2.85	20	2.84	24	2.56
7	10	3.36	10	3.47	12	3.35
8	14	3.29	9	3.48	20	3.10
9	23	2.62	5	3.72	6	3.60
10	7	3.38	16	3.08	15	3.27
11	11	3.35	12	3.33	10	3.43
12	15	3.26	6	3.65	9	3.50
13	4	3.63	4	3.73	4	3.65
14	17	3.15	14	3.17	17	3.26
15	24	2.47	19	2.88	19	3.25
16	8	3.37	18	3.00	8	3.50
17	16	3.20	11	3.46	5	3.60
19	12	3.33	15	3.16	11	3.35
20	5	3.56	7	3.64	2	3.78
21	1	4.06	2	3.83	1	3.80
23	20	2.96	23	2.62	14	3.31
24	6	3.40	8	3.50	18	3.25
25	2	3.97	3	3.75	3	3.66
26	8	3.09	21	2.79	22	3.00

TABLE 64

RANKS AND MEANS FOR COORDINATION--PART II

Nursing Home	Tension and Conflict Between Departments		Pressure to Perform		Intershift Cooperation	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	4	3.93	4	3.60	1	3.67
2	19	3.40	20	2.95	18	2.73
3	20	3.37	14	3.20	9	3.00
4	14	3.50	16	3.17	11	2.96
5	12	3.56	11	3.22	17	2.77
6	18	3.40	23	2.70	21	2.53
7	21	3.35	5	3.46	8	3.08
8	9	3.65	12	3.22	5	3.48
9	6	3.77	8	3.36	23	2.52
10	3	3.97	7	3.37	20	2.58
11	2	4.02	18	3.05	22	2.53
12	10	3.61	10	3.22	6	3.21
13	1	4.15	9	3.32	4	3.50
14	23	3.21	6	3.45	16	2.83
15	11	3.57	17	3.15	14	2.08
16	13	3.55	1	4.00	3	3.53
17	15	3.49	2	3.88	19	2.70
19	16	3.45	19	3.00	12	2.95
20	5	3.80	21	2.88	7	3.19
21	8	3.65	13	3.2	2	3.56
23	24	3.17	22	2.82	15	2.87
24	7	3.65	15	3.19	13	2.89
25	17	3.45	3	3.65	10	2.97
26	22	3.27	24	2.61	24	2.47

TABLE 65

RANKS AND MEANS FOR ADMINISTRATIVE COMMUNICATION AND PROBLEM SOLVING

Nursing Home	Adequacy of Administrative Communication		Awareness of Problems by Administrator		Ability of Administrator to Solve Problems	
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.17	1	4.17	1	4.42
2	13	3.17	20	3.11	20	2.98
3	9	3.40	12	3.53	7	3.56
4	15	3.04	11	3.56	17	3.32
5	22	2.76	22	3.00	22	2.93
6	23	2.75	24	2.88	21	2.97
7	11	3.35	13	3.46	8	3.08
8	12	3.31	18	3.27	5	3.34
9	19	3.00	19	3.12	16	3.32
10	8	3.52	14	3.44	10	3.47
11	18	3.00	15	3.43	18	3.20
12	10	3.38	4	3.76	6	3.61
13	4	3.86	7	3.69	5	3.78
14	24	2.58	23	2.94	23	2.73
15	21	2.86	21	3.05	14	2.63
16	17	3.00	8	3.69	12	3.44
17	5	3.80	3	4.13	11	3.46
19	16	3.03	16	3.32	14	3.35
20	6	3.78	9	3.64	4	3.82
21	3	4.00	6	3.70	3	4.00
23	20	2.93	5	3.72	19	3.13
24	7	3.64	17	3.29	9	3.48
25	2	4.08	2	4.16	2	4.11
26	14	3.16	10	3.58	13	3.41

TABLE 66

RANKS AND MEANS FOR CULTURAL AND SOCIAL-PSYCHOLOGICAL INTEGRATION

Nursing Home	Identification With:						Ability to See the Other Person's Point of View	
	Immediate Work Group		Nursing Home and Its Goals		Occupation			
	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	3.32	1	4.20	5	4.37	3	3.42
2	13	3.03	21	3.40	24	2.50	23	2.76
3	4	3.25	12	3.73	10	4.17	7	3.23
4	19	2.88	15	3.64	23	3.56	9	3.20
5	20	2.87	10	3.80	16	3.88	19	2.91
6	14	3.00	24	3.11	22	3.65	24	2.20
7	6	3.16	9	3.82	19	3.82	14	2.97
8	21	2.83	19	3.44	21	3.68	8	3.20
9	22	2.66	22	3.36	13	4.00	12	3.08
10	12	3.03	16	3.64	14	3.94	16	2.94
11	18	2.90	17	3.63	18	3.83	20	2.86
12	15	2.97	11	3.76	12	4.07	15	2.96
13	7	3.14	6	3.95	8	4.21	4	3.39
14	2	3.28	5	4.02	4	4.38	17	2.94
15	24	2.42	23	3.33	20	3.71	10	3.11
16	8	3.13	2	4.19	2	4.44	5	3.31
17	17	2.93	8	3.86	9	4.20	18	2.93
19	23	2.64	14	3.70	7	4.32	22	2.80
20	11	3.04	7	3.89	3	4.39	6	3.28
21	5	3.20	4	4.10	1	4.50	1	3.93
23	9	3.08	20	3.41	15	3.89	13	3.06
24	10	3.07	13	3.72	17	3.85	11	3.08
25	3	3.27	3	4.13	6	4.36	2	3.58
26	16	2.96	18	3.54	11	4.08	21	2.83

APPENDIX D

PEARSON CORRELATION COEFFICIENTS

TABLE 67

PEARSON CORRELATION COEFFICIENTS

Variable	Variable											
	1	2	3	4	5	6	7	8	9	10	11	12
1	X											
2	.75	X										
3	.61	.55	X									
4	.57	.49	.28	X								
5	.62	.75	.57	.58	X							
6	.62	.66	.30	.66	.64	X						
7	.66	.63	.55	.49	.46	.58	X					
8	.35	.42	-.03	.57	.36	.47	.28	X				
9	.70	.75	.39	.83	.77	.84	.67	.75	X			
10	-.63	-.22	-.15	.05	-.15	-.05	-.11	-.04	-.08	X		
11	.00	-.02	.08	-.20	-.26	-.25	.21	-.40	-.28	-.18	X	
12	.70	.74	.53	.76	.67	.64	.65	.46	.80	-.17	-.08	X
13	.51	.69	.54	.41	.74	.32	.35	.30	.55	-.42	-.01	.62
14	.41	.69	.29	.35	.68	.50	.34	.52	.64	-.29	-.48	.57
15	.43	.73	.27	.51	.49	.55	.48	.61	.69	-.17	-.31	.67
16	.45	.57	.39	.45	.37	.45	.42	.53	.58	-.12	-.22	.69
17	.79	.84	.61	.74	.73	.66	.75	.56	.87	-.17	-.05	.88
18	.80	.79	.45	.65	.66	.71	.62	.42	.77	-.25	-.07	.78

TABLE 67—Continued

Variable	Variable											
	1	2	3	4	5	6	7	8	9	10	11	12
19	.75	.77	.37	.61	.52	.79	.56	.46	.74	-.14	-.10	.63
20	.67	.62	.32	.81	.60	.58	.49	.63	.80	-.31	-.26	.78
21	.48	.70	.29	.56	.47	.46	.59	.64	.71	-.14	-.06	.72
22	.52	.65	.28	.70	.53	.50	.42	.75	.77	-.33	-.22	.76
23	.58	.50	.42	.67	.56	.52	.52	.64	.75	-.22	-.24	.80
24	.41	.60	.33	.50	.59	.34	.37	.44	.58	-.37	-.13	.71
25	.24	.40	.11	.61	.37	.32	.16	.61	.56	-.25	-.36	.65
26	.12	.21	.30	.05	.16	-.07	.21	.31	.19	-.36	-.35	.23
27	.42	.33	-.08	.41	.36	.39	.22	.43	.48	-.19	-.28	.46
28	.59	.41	.30	.55	.24	.28	.40	.38	.49	-.02	.04	.61
29	.52	.67	.26	.62	.41	.62	.59	.68	.76	-.24	-.21	.67
30	.38	.54	.10	.70	.35	.62	.46	.59	.70	.07	-.31	.64
31	.53	.65	.40	.70	.54	.67	.64	.60	.80	-.12	-.23	.81
32	.69	.56	.55	.68	.60	.63	.60	.24	.67	.04	.10	.56
33	.70	.65	.43	.82	.66	.68	.57	.52	.82	-.04	-.21	.82
34	.40	.40	.28	.75	.62	.40	.19	.50	.64	.02	-.40	.66
35	.56	.51	.26	.60	.27	.44	.26	.64	.59	-.15	-.22	.71

TABLE 67—Continued

Variable	Variable											
	13	14	15	16	17	18	19	20	21	22	23	24
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13	X											
14	.67	X										
15	.53	.73	X									
16	.50	.51	.69	X								
17	.65	.57	.70	.61	X							
18	.63	.59	.62	.44	.77	X						

TABLE 67—Continued

Variable	Variable											
	13	14	15	16	17	18	19	20	21	22	23	24
19	.43	.46	.65	.46	.71	.79	X					
20	.60	.58	.63	.54	.80	.69	.70	X				
21	.46	.61	.83	.65	.75	.52	.54	.62	X			
22	.56	.55	.71	.69	.78	.60	.57	.78	.76	X		
23	.46	.51	.67	.64	.76	.63	.53	.70	.73	.90	X	
24	.73	.59	.70	.57	.65	.60	.39	.56	.66	.78	.78	X
25	.51	.50	.63	.58	.53	.46	.47	.75	.51	.81	.71	.69
26	.28	.38	.45	.27	.33	.14	.08	.31	.37	.48	.53	.55
27	.26	.30	.26	.27	.32	.49	.43	.57	.24	.49	.51	.43
28	.43	.21	.47	.37	.59	.53	.57	.64	.55	.49	.53	.49
29	.42	.55	.87	.69	.75	.59	.64	.68	.84	.82	.78	.68
30	.16	.39	.69	.50	.60	.48	.66	.64	.72	.71	.68	.42
31	.42	.55	.85	.68	.80	.61	.65	.69	.86	.70	.85	.69
32	.29	.12	.32	.18	.67	.61	.58	.51	.36	.40	.52	.27
33	.58	.46	.54	.56	.79	.75	.74	.84	.49	.69	.68	.57
34	.57	.52	.42	.52	.53	.48	.37	.65	.49	.60	.55	.53
35	.42	.38	.66	.69	.63	.63	.66	.73	.55	.74	.59	.53

TABLE 67—Continued

Variable	Variable										
	25	26	27	28	29	30	31	32	33	34	35
19											
20											
21											
22											
23											
24											
25	X										
26	.46	X									
27	.51	.18	X								
28	.48	.28	.38	X							
29	.58	.44	.33	.51	X						
30	.62	.17	.44	.44	.76	X					
31	.61	.41	.32	.58	.90	.80	X				
32	.15	.05	.26	.35	.46	.44	.54	X			
33	.69	.20	.66	.61	.56	.61	.64	.61	X		
34	.61	.15	.38	.39	.35	.47	.51	.28	.67	X	
35	.74	.29	.42	.70	.64	.57	.65	.32	.67	.51	X

N = 24
R > .58 p = .001
R > .48 p = .01
R > .34 p = .05
R > .27 p = .10

LIST OF VARIABLES USED IN

PEARSON CORRELATIONS

Variable No.	Variable Description
001	Productivity (Sum of Questions 1 & 2)
002	Adaptability (Sum of Questions 3, 4, & 5)
003	Flexibility (Question 6)
004	Job Satisfaction: Job (Sum of items on page 10)
005	Job Satisfaction: Supervision (Sum of items on page 11)
006	Job Satisfaction: Co-workers (Sum of items on page 12)
007	Job Satisfaction: Pay (Sum of items on page 13)
008	Job Satisfaction: Promotion (Sum of items on page 14)
009	Job Satisfaction: Overall (Sum of items on pages 10-14)
010	Turnover (Company data)

Variable No.	Variable Description
011	Profitability (Company data)
012	Quality of Patient Care (Sum of Questions 29, 30, & 31)
013	Planning Ability of Supervisor (Question 7)
014	Clarity of Goals and Objectives (Question 8)
015	Clarity of Rules, Policies, etc. (Question 9)
016	Adherence to Rules, Policies, etc. (Question 10)
017	Meshing of Jobs to Achieve Objectives (Question 11)
018	Ease of Exchanging Ideas and Information (Question 12)
019	Avoid Creating Problems for One Another (Question 13)
020	Handling Coordination Problems (Question 14)
021	Department Heads and Administrators Perceived as Following Rules (Question 15)
022	Department Heads and Administrators Perceived as Understanding Workers' Needs (Question 16)
023	Department Heads and Administrators Seen as Fair and Reasonable (Question 17)
024	Activities Are Well Timed (Question 18)

Variable No.	Variable Description
025	Handling of Interdepartmental Problems (Question 19)
026	Tension and Conflict between Departments (Sum of items in Question 20)
027	Pressure to Perform (Question 21)
028	Intershift Cooperation (Sum of Questions 22 & 23)
029	Adequacy of Administrative Communication (Question 24)
030	Awareness of Problems by Administrator (Question 25)
031	Ability of Administrator to Solve Problems (Question 26)
032	Identification with Immediate Work Group [Question 27A]
033	Identification with Nursing Home and Its Goals [Question 27B]
034	Identification with Profession [Question 27C]
035	Ability to See the Other Person's Point of View [Question 28]
036	Proportion of Nurses (Data from nursing homes)
037	Proportion of Nonprofessionals (Data from nursing homes)
038	Extent to Which Nonprofessionals Exceed Nurses (Data from nursing homes)

Variable No.	Variable Description
039	Number of Nurses per Unit of Patient Care (Data from nursing homes)
040	Number of Nonprofessionals per Unit of Patient Care (Data from nursing homes)
041	Total Nursing Personnel per Unit of Patient Care (Data from nursing homes)
042	Length of Administrator's Service (Data from nursing homes)