

## INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University  
Microfilms  
International**

300 N. Zeeb Road  
Ann Arbor, MI 48106



8314767

Eyob, Ephrem

PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS AND  
ORGANIZATIONAL EFFECTIVENESS

*The University of Oklahoma*

PH.D. 1983

University  
Microfilms  
International 300 N. Zeeb Road, Ann Arbor, MI 48106



THE UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE


PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS  
AND ORGANIZATIONAL EFFECTIVENESS

A DISSERTATION  
SUBMITTED TO THE GRADUATE FACULTY  
in partial fulfillment of the requirements for the  
degree of  
DOCTOR OF PHILOSOPHY

BY  
EPHREM EYOB  
Norman, Oklahoma  
1983

PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS  
AND ORGANIZATIONAL EFFECTIVENESS

APPROVED BY

  
\_\_\_\_\_  
Arthur Vandenberg  
\_\_\_\_\_  
Loy Erickson  
\_\_\_\_\_  
John J. Seaberg  
\_\_\_\_\_  
Herbert R. Hendon

DISSERTATION COMMITTEE

## ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to the many persons who have aided so much in the completion of this dissertation. Particular gratitude is extended to my major professor, Dr. Thomas Wiggins, for his constructive suggestions, patient guidance, and friendly assistance throughout the preparation of this dissertation. I am also thankful to the dissertation committee members, Dr. Arthur Van Gundy, Dr. John J. Seaberg, Dr. Loy Prickett, and Dr. Herbert R. Hengst, for their patience in reading the manuscript and for their valuable comments in this research.

Grateful acknowledgement is due to Dr. Stafford North and Dr. Peter Hackbert for their assistance during the collection of the data. Acknowledgement is also due to Dr. Alan Nicewander and Dr. Joe Rodgers for their suggestions and comments in the statistics used in this research.

Finally, I would like to thank my parents, my wife, and the rest of my family members for their patience, understanding, and support during my graduate studies.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	iii
LIST OF TABLES . . . . .	vi
LIST OF FIGURES . . . . .	viii
 Chapter	
I. INTRODUCTION . . . . .	1
Organizational Effectiveness Dimensions . . . . .	4
Statement of the Problem . . . . .	5
Purpose of the Study . . . . .	5
Significance of the Study . . . . .	6
Limitations of the Study . . . . .	7
Organization of the Study . . . . .	7
II. REVIEW OF LITERATURE . . . . .	9
Introduction . . . . .	9
The Concept of Organizational Effectiveness . . . . .	9
Approaches to Organizational Effectiveness Models . . . . .	11
Selected Related Studies . . . . .	21
Summary of Review of Related Literature . . . . .	26
III. RESEARCH DESIGN . . . . .	28
Theoretical Framework and the Research Model . . . . .	28
Restatement of the Problem . . . . .	30
Definitions of Terms . . . . .	31
Research Design and Presentation of Hypotheses . . . . .	32
Research Problem . . . . .	32
Population and Sampling . . . . .	33
Method of Gathering the Data . . . . .	34
Method of Analyzing the Data . . . . .	38



	Page
IV. RESULTS AND ANALYSIS OF THE DATA . . . . .	43
Introduction . . . . .	43
Presentation of Hypotheses . . . . .	43
Summary . . . . .	69
V. SUMMARY; CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES . . . . .	70
Summary . . . . .	70
Conclusions . . . . .	73
Implications . . . . .	74
Recommendations for Future Research . . . . .	76
APPENDIX A . . . . .	77
SELECTED BIBLIOGRAPHY . . . . .	83

## LIST OF TABLES

Table	Page
1.	Organization Type and Response Rate . . . . . 35
2.	Response Rate by Type of Employee . . . . . 36
3.	Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Organizational Effectiveness Model . . . . . 45
4.	Pearson Correlation Coefficients Between Effectiveness Characteristics and Organizational Effectiveness . . . . . 46
5.	Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for an Institution of Higher Education . . . . . 47
6.	Pearson Correlation Coefficients Between Effectiveness Characteristics and Organizational Effectiveness for an Institution of Higher Education . . . . . 48
7.	Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for a Government Agency . . . . . 49
8.	Pearson Correlation Coefficients Between Effectiveness Characteristics and Organizational Effectiveness for a Government Agency . . . . . 50
9.	Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for a Business Firm . . . . . 51
10.	Pearson Correlation Coefficients Between Effectiveness Characteristics and Organizational Effectiveness for a Business Firm . . . . . 52

Table	Page
11. t-test on Three Characteristics of Productivity, Adaptability, Flexibility and Organizational Effectiveness . . . . .	53
12. Percentage of Respondents that Choose Organizational Characteristics as the Most Important in Their Respective Organization . . . . .	54
13. t-test on Mean Scores of Organizational Characteristics Between Supervisors and Non-supervisor Employees of an Institution of Higher Education . . . . .	57
14. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Supervisory Employees of an Institution of Higher Education . . . . .	59
15. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Non-supervisory Employees of an Institution of Higher Education . . . . .	60
16. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Supervisory Employees of a Government Agency . . . . .	61
17. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Non-supervisory Employees of a Government Agency . . . . .	62
18. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Supervisory Employees of a Business Firm . . . . .	63
19. Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for Non-supervisory Employees of a Business Firm . . . . .	64
20. Consolidated Unstandardized Partial Regression Coefficients, t-values, $R^2$ and F-value for the Three Organizations Studied . . . . .	67
21. Consolidated Mean Scores and Standard Deviations for Effectiveness Dimensions of Productivity, Adaptability, Flexibility and Organizational Effectiveness . . . . .	68

LIST OF FIGURES

Figure	Page
1. The research model . . . . .	29
2. Histogram depicting percentage of respondents' preferences of a characteristic considered as the most important in their respective organization . . . . .	58

PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS  
AND ORGANIZATIONAL EFFECTIVENESS

CHAPTER I

INTRODUCTION

The comparative study of organizational effectiveness is much needed, but little understood. The topic of organizational effectiveness closely resembles a number of other domains in the social and behavioral sciences. Its problems, Campbell<sup>1</sup> noted, are the problems of several other fields. According to Etzioni, the development of a comparative study of organizational effectiveness requires, ". . . middle range organizational theory, falling between high level abstractions in general and detailed observation about single cases."<sup>2</sup>

Effectiveness as a major characteristic of an organization has become exceedingly important in understanding the concept and its ramifications to an organization. Researchers have studied

---

<sup>1</sup>John P. Campbell, "On the Nature of Organizational Effectiveness," in Paul S. Goodman and Johannes M. Pennings (eds.) New Perspective On Organizational Effectiveness, (San Francisco: Jossey-Bass Publishing, 1979), p. 14.

<sup>2</sup>Amitai Etzioni, Comparative Analysis of Complex Organizations (New York: Free Press of Glencoe, 1961), p. 9.

organizational effectiveness. There exists a large amount of literature on different aspects of effectiveness, but few attempts have been made to integrate these aspects of effectiveness into a conceptual framework to study organizations.

Normally, in the research on organizational behavior, there are two opposing views of organizations.<sup>1</sup> These views are usually dubbed as "open" and "closed" systems. The open system approach assumes an organization exists in dynamic environments, and can be best understood if its environment is taken into consideration. The closed system view emphasizes the internal working of the organization and the environment has little or no effect upon the organization. According to Mott,<sup>2</sup> the subscription of either view can make a critical difference in the conclusions one makes when analyzing organizations.

A major problem in the study of organizational effectiveness is the level of analysis. The level of analysis can be: (1) on the suprasystem or the external organizational setting, (2) at the supersystem of the organizational level, (3) at the unit level, (4) at the subunit level, or (5) at individual level. Some researchers advocate the level of analysis must be on the suprasystem or the external organizational setting. For example, Katz and Kahn<sup>3</sup> described effectiveness in terms of the ability of the organization to adapt, manipulate or fulfill

---

<sup>1</sup>Etzioni, Comparative Analysis of Complex Organizations, p. 12.

<sup>2</sup>Paul E. Mott, The Characteristics of Effective Organizations (New York: Harper & Row, Publishers, 1972), p. 2.

<sup>3</sup>Daniel Katz and Robert L. Kahn, The Social Psychology of Organizations (New York: Wiley, 1978).

expectations of the external environment. Others such as Scott,<sup>1</sup> suggested that criteria should relate to the organization as a unit, seeing effectiveness related to the goals, processes or characteristics of the organization itself. Penning and Goodman<sup>2</sup> propose an approach to effectiveness which focuses on organization subunits seeing organizational effectiveness as associated with the contributions of, and the coordination among subunits. Argyris<sup>3</sup> and others, focus on individual performance as a criterion of organizational effectiveness, assuming organizational effectiveness to be indicated by individual behavior or satisfaction.

Cameron, on discussing the lack of theoretical and methodological development in the studies of organizational effectiveness, correctly pointed out, "the tendency of researchers to do a fine-grained analysis of causes but a course-grained analysis of effects."<sup>4</sup>

An improved conceptual framework, according to Mott,<sup>5</sup> would be to consider the concept of effectiveness as multidimensional. Mott and

---

<sup>1</sup>Richard W. Scott, "Effectiveness of Organizational Effectiveness Studies," in Paul S. Goodman and Johannes Pennings (eds.), New Perspectives on Organizational Effectiveness (San Francisco: Jossey-Bass, 1977), pp. 63-95.

<sup>2</sup>Johannes M. Pennings and Paul S. Goodman, "Toward a Workable Framework," in Paul S. Goodman and Johannes M. Pennings (eds.), New Perspectives on Organizational Effectiveness (San Francisco: Jossey Bass, 1977), pp. 146-184

<sup>3</sup>Chris Argyris, Interpersonal Competence and Organization Effectiveness (Homewood, Illinois: Irwin, 1962).

<sup>4</sup>Kim Cameron, "Measuring Organizational Effectiveness in Institutions of Higher Education," Administrative Science Quarterly, 23 (December 1978), p. 625.

<sup>5</sup>P. E. Mott, The Characteristics of Effective Organizations, p. 2.

co-workers, after borrowing heavily from Georgopoulos and Tannenbaum,<sup>1</sup> suggested that the concept of effectiveness is multidimensional. Three effectiveness variables were selected in his various studies to compare effectiveness across organizations, regardless of the type of the organizations. The three effectiveness characteristics were:

(1) productivity--quantity and quality of work done in the organization, (2) adaptability--the organization's ability to adapt to changing conditions, both internal and external, and (3) flexibility--the organization's ability to cope with temporary, unpredictable emergencies. These three variables and their relationship to overall organizational effectiveness were the thrust of this study.

#### Organizational Effectiveness Dimensions

Organizational researchers have studied effectiveness from different points of view. The majority of these researchers derive the effectiveness dimensions through questionnaires and interviews. For example, Cameron<sup>2</sup> identified nine effectiveness dimensions for colleges and universities in East and Midwest parts of the United States. The nine dimensions were: (1) student educational satisfaction, (2) student academic development, (3) student career development, (4) student personal development, (5) faculty and administrator employment satisfaction, (6) professional development and quality of the faculty,

---

<sup>1</sup>Basil S. Georgopoulos and Arnold S. Tannenbaum, "A Study of Organizational Effectiveness," American Sociological Review, 22 (1957), p. 535.

<sup>2</sup>Cameron, "Measuring Organizational Effectiveness in Institutions of Higher Education," pp. 604-629.



(7) system openness and community interaction, (8) ability to acquire resources, and (9) organizational health.

These dimensions were intercorrelated to determine effectiveness. Other researchers similarly have derived their own dimensions and inevitably did correlational analyses to determine effectiveness. This study followed the path of correlational studies to determine effectiveness based on the initial studies of Georgopoulos and Tannenbaum (later modified by Mott) to incorporate another dimension of flexibility in addition to productivity and adaptability.

#### Statement of the Problem

The problem for this research was: What is the relationship between selected organizational characteristics and organizational effectiveness in formal organizations?

This research proposed to investigate whether the organizational characteristics of productivity, adaptability and flexibility are related to organizational effectiveness. It is further proposed to investigate whether there were differences in perceptions of these characteristics between supervisory and nonsupervisory members of three types of formal organizations, and whether there were differences in the emphases of importance of these characteristics in the three organizations.

#### Purpose of the Study

The purpose of this study can be summarized as: (1) to identify the concept of effectiveness in formal organizations and develop a better understanding of the conceptual and empirical domain of the organizational

effectiveness construct, and (2) to test the relationship between three selected variables of organizational effectiveness: productivity, adaptability and flexibility, and (3) to test the overall organizational effectiveness of three types of organizations--an institution of higher education, a government agency, and a business organization.

Georgopoulos and Tannenbaum's<sup>1</sup> model of effectiveness was the major conceptual framework guiding this study. The variables of productivity, adaptability and flexibility were studied by Mott<sup>2</sup> in various organizational settings. This study was a hybrid of Georgopoulos and Tannenbaum's model and that of Mott's approach.

#### Significance of the Study

Lack of research on the phenomenon of effectiveness in organizations, particularly educational organizations, is obvious. Any study that contributes to the development and understanding of techniques of analyzing an institution of higher education within the broader context of organizations of education is of a potential value to the contribution of knowledge about life in organizations. It is under this assumption that this study pursued the concept of organizational effectiveness, and in the final analysis, may furnish an empirical basis for decision makers in organizations including institutions of higher education. Further, the study should add to needed research effort into the applicability of the concept of effectiveness to both business firms as well as government agencies.

---

<sup>1</sup>Georgopoulos and Tannenbaum, "A Study of Organizational Effectiveness," p. 535.

<sup>2</sup>Mott, The Characteristics of Effective Organizations.

### Limitations of the Study

Causal inferences to the findings can only be speculative because of the settings of the study. This study was limited to three types of formal organizations--an institution of higher education, a business organization and a government agency. These three organizations are by no means representative of all organizations and selected only for convenience and proximity to the investigator. The three organizations, though selected from the metropolitan area of Oklahoma City, are not designed to represent their respective types of organizations. As mentioned above, causal inferences to the finding can only be misleading and unwarranted. This study focused on three types of organizations and on the perceptions of a priori effectiveness characteristics by their respective employees. In addition, the study attempted to give light to similarities or/and dissimilarities of the three specifically selected organizations under the study, and again, any inferences should be avoided.

### Organization of the Study

Chapter I is introductory to the study. The remaining parts of the study were subdivided as follows: A literature review of relevance to organizational effectiveness in Chapter II. The review of the literature was compartmentalized into three sections: (a) the general concept of organizational effectiveness, (b) the issue of how organizational effectiveness is approached, with emphasis upon two universally accepted models: the goal and the system's model, (c) general review and previous findings on three selected organizational characteristics of productivity, adaptability, flexibility and other closely related variables.

Chapter III, "Research Design and Methodology," provides information related to design, definitions of terms, research question and hypotheses, sampling and data collection, instrumentation procedures for collection of data, and statistical procedures.

Chapter IV, "Research Findings and Analysis," comprises a compilation of the data into systematic order for statistical tabulation and interpretation to answer questions raised in the statement of the problem.

Chapter V, "Summary Conclusions and Recommendations for Further Study," contains a summary of the research findings derived from the analyses of the data, and recommendations for further studies.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

A review of relevant literature will be presented in this chapter as follows: (1) the general concept of organizational effectiveness, (2) the issue of how organizational effectiveness is pursued, and (3) studies on three selected organizational characteristics to measure organizational effectiveness. Each section will be reviewed separately.

#### The Concept of Organizational Effectiveness

Over the past several decades organizational theorists and practitioners have been debating whether the concept of organizational effectiveness can be pursued systematically and whether it can be developed for evaluating organizations. In the literature, the concept of organizational effectiveness is often encountered, and most researchers and practitioners consider it as some sort of an end state. According to Steers,<sup>1</sup> the notion of organizational effectiveness is

---

<sup>1</sup>Richard M. Steers, Organizational Effectiveness; A Behavioral View (Santa Monica, CA: Goodyear Publishing Company, Inc., 1977), p. 9.

referred to in the literature far more than it is studied in any systematic way.

Definitions of organizational effectiveness vary from one researcher to another. For example, Mott defined organizational effectiveness as, ". . . the ability of an organization to mobilize its centers of power for action-production and adaptation."<sup>1</sup>

Georgopoulos and Tannenbaum defined it as, ". . . the extent to which an organization as a social system, given certain resources and means, fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members."<sup>2</sup>

Georgopoulos and Tannenbaum concept of effectiveness subsumed the following general criteria: (1) organizational productivity, (2) organizational flexibility in the form of successful adjustments to internal organizational changes and successful adaptation to externally induced change, and (3) absence of intraorganizational strain, and conflict between organizational subgroups. These three criteria relate to the means/ends dimension of organizations and according to them "potentially apply to all organizations."<sup>3</sup>

In spite of the variety of terms, concepts and operational definitions that have been employed with regard to organizational effectiveness, most investigators tend implicitly or explicitly to make the following two assumptions: (1) that complex organizations have an

---

<sup>1</sup>Mott, The Characteristics of Effective Organizations, p. 17.

<sup>2</sup>Georgopoulos, "A Study of Organizational Effectiveness," p. 535.

<sup>3</sup>Ibid., p. 536.

ultimate goal (mission or function) toward which they are striving, and (2) that the ultimate goal can be identified empirically and progress toward it measured. In this sense, Georgopoulos and Tannenbaum allege, "the concept is functional rather than structural, furthermore, it is probably most useful in comparative organizational research rather than absolute terms, but the concept could also be used develop mentally to study the effectiveness of the same organization overtime."<sup>1</sup>

To reiterate, many researchers in this area presume that central to any discussion of organizational effectiveness is the notion of goal. In fact, most definitions of organizational effectiveness ultimately rest on the question of how successful an organization has been in attaining its stated objectives. More on this and other approaches will follow on the section of how organizational effectiveness is pursued.

#### Approaches to Organizational Effectiveness Models

Approaches to the study of organizational effectiveness models are varied. According to Cameron,<sup>2</sup> these different approaches generally have emerged from different conceptualizations of the meaning of an organization. As the conceptualization of what an organization is changes, so do the definitions and approaches to organizational effectiveness.

---

<sup>1</sup>Georgopoulos and Tannenbaum, "A Study of Organizational Effectiveness," p. 534.

<sup>2</sup>Kim Careron, "Domains of Organizational Effectiveness in Colleges and University," Academy of Management Journal (March, 1981), p. 25.

The goal and system models have received particular attention in recent years in the approaches to defining organizational effectiveness. Strasser<sup>1</sup> and collaborators noted that there are many models of organizational effectiveness that can be looked at on a continuum. He elaborated the continuum, from the simplest form of goal model on one end of the continuum to the system model at the other end. Four distinct models of goal, process, ecological or participant satisfaction and system model are briefly summarized next, stretching from one end of the continuum to the other end.

A. Goal Model. The most widely used model, both operatively and officially, is the goal model. By organizational goal it is commonly accepted to mean a state of affairs to which the organization is attempting to move. Parsons defined goal as "an image of a future state, which may or may not be brought about."<sup>2</sup>

Organizational goals can be classified in many ways. Etzioni<sup>3</sup> classified organizational goals into three types: (1) order, (2) economic, and (3) cultural. By order goals he meant an, ". . . attempt to control actors who are deviants in the eyes of some social unit the organization is serving (frequently society) by segregating them from

---

<sup>1</sup>Stephen Strasser, J. D. Eveland, Gaylord Cummins, O. Lynn Deniston, John H. Romani, "Conceptualizing the Goals and System Models of Organizational Effectiveness - Implications for Comparative Evaluation Research," Journal of Management Studies, 18 (1981), pp. 321-340.

<sup>2</sup>Talcott Parsons, The Structure of Social Action (New York: McGraw-Hill, 1937), p. 44.

<sup>3</sup>Etzioni, Comparative Analysis of Complex Organizations, p. 72.



society and by blocking them from further deviant activities."<sup>1</sup> Etzioni noted that this is a negative goal in the sense that such organizations attempt to prevent the occurrence of certain events rather than producing an object or a service. Further, he argued, "order-centered organizations differ according to the technique and means they use to attain their goals. Some merely segregate deviants; other's segregate and punish; and still others eliminate deviants altogether."<sup>2</sup>

The second classification of organizational goals is economic. Organizations with economic goals produce commodities and services supplied to outsiders.

The third type of goals is cultural goals. Etzioni described organizations that have cultural goals as, "institutionalized conditions needed for the creation and preservation of symbolic objects, their application, and the creation or reinforcement of commitments to such objects."<sup>3</sup> Research organizations and research-oriented universities for example, specialize in the creation of new culture. Like all educational organizations, the latter also contribute to the preservation of the cultural heritage by transferring it from generation to generation mainly through teaching.

The goal model is the oldest and most common evaluation model, and there are variations and examples of this approach. For example,

---

<sup>1</sup>Ibid., p. 72.

<sup>2</sup>Ibid., p. 73.

<sup>3</sup>Ibid., p. 73.

Price,<sup>1</sup> and Weiss,<sup>2</sup> based their extensive research on organizational effectiveness on this goal model. Cost-benefit and cost-effectiveness analysis, for example, are variants of this goal evaluative approach. A theme common to all of these is the strong emphasis goal model theorists and practitioners place on outcomes and suboutcomes.

According to Burns and Stalker,<sup>3</sup> the goal model grew out of the mechanistic or machine theory of organizational dynamics. The conceptual basis for this approach derives from the traditional economic model of man and is consistent both with an industrial engineering perspective and much of modern microeconomic analysis of organization behavior. Applied in operational terms by Taylor,<sup>4</sup> and consistent with Weber's<sup>5</sup> conceptualizations of bureaucracy, the machine theory implied that organizational effectiveness could be equated to the extent to which the organization attained a set of objectives which included outcomes such as profit, growth and increased productivity, and excluded measures of organizational behavior and process. The means to these ends, these theorists argued, could be attained by rationalizing organizational

---

<sup>1</sup>J. L. Price, Organizational Effectiveness: An Inventory of Propositions (Homewood, Illinois: Irwin Dorsey, 1968).

<sup>2</sup>Carol H. Weiss, Evaluation Research: Methods of Assessing Program Effectiveness (Englewood Cliffs, N.J.: Prentice Hall, 1972).

<sup>3</sup>T. Burns and G. M. Stalker, The Management of Innovation (London: Tavistock, 1961).

<sup>4</sup>F. W. Taylor, The Principles of Scientific Management (New York: Harper and Row, 1911).

<sup>5</sup>Max Weber, The Theory of Social and Economic Organization (New York: Oxford University Press, 1947).

activities in the most efficient way. This view implies that organizations are goal-seeking entities which should, therefore, be evaluated by measuring the degree of goal attainment. A secondary but related concept is that an organization's chances of attaining its goals are maximized by maximizing the quantities or organizational activities which are goal-related. This is the proposition underlying Etzioni's<sup>1</sup> notion of the "paradox of ineffectiveness." The goals to be pursued are defined as those of the owner of the enterprise, who would be the entrepreneur of stockholders for private firms and the public for educational organizations or government agencies. The possibility of a separate set of valid goals for the members of the organization, apart from the owners, is ruled out by this definition. Since goals are set in terms of rational self-interest, this definition may exclude the possibility of contradictory purposes.

Many organizations serve more than one goal. Sometimes these goals fall in the same general category, and other times they may fall into two or even three categories. One problem with this approach is that an organization may be judged to be effective in areas outside its goal domain. Another problem is, the organization may be ineffective even when accomplishing its goals if the goals are too low to outsiders.

Organization theorists argue that the assessment of organizational effectiveness in terms of goal attainment should be rejected on theoretical considerations as well as practical ones. Etzioni, for example, pointed out that, "goals, as norms, as sets of meanings depicting target states, are cultural entities. Organizations, as

---

<sup>1</sup>Etzioni, Modern Organizations, p. 109.

systems of coordinated activities of more than one actor, are social systems."<sup>1</sup> A similar criticism is offered by Starbuck.

. . . to distinguish goal from effect is all but impossible. The relation between goals and results is polluted by environmental effects, and people learn to pursue realistic goals. If growth is difficult, the organization will tend to pursue goals which<sup>2</sup> are not growth oriented. What one observes are the learned goals.<sup>2</sup>

Yuchtman and Seashore, after surveying the literature on organizational effectiveness via the goal model, pointed out that ". . . organizational goals are essentially nothing more than courses of action imposed on the organization by various forces in its environment, rather than preferred end states toward which the organization is striving."<sup>3</sup> Further, they argued, an adequate conceptualization of organizational effectiveness should incorporate factors such as organizational environment. Consequently, they proposed the "System Resource Model" to organizational effectiveness.

B. Process Model. A second approach to the study of organizational effectiveness is the process model. The process model assumes effectiveness is equated with internal organizational health, efficiency, or smooth internal process and procedures. The principle of supportive relationships as advocated by Likert is believed to bring the internal

---

<sup>1</sup>Amitai Etzioni, "Two Approaches to Organizational Analysis: A Critique and a Suggestion," Administrative Science Quarterly, 5 (September, 1960), p. 258.

<sup>2</sup>William H. Starbuck, "Organizational Growth and Development," in James G. March, ed., Handbook of Organizations (Chicago: Rand McNally, 1965), p. 465.

<sup>3</sup>Ephraim Yuchtman and Stanley E. Seashore, "A System Resource Approach to Organizational Effectiveness," American Sociological Review, 32 (1967), p. 894.

harmony and organizational health for an organization to be effective.

Likert stated the principle as follows:

The Leadership and other processes of the organization must be such as to ensure a maximum probability that in all interactions and in all relationships within the organization, each member, in the light of his background, values, desires, and expectations, will view the experience as supportive and one which builds and maintains his sense of personal worth and importance.<sup>1</sup>

Steers, in discussing the process model wrote that,

. . . ultimate behaviors or outcomes are determined by the interaction of individual needs and perceived organizational environment. The resulting level of performance, satisfaction, and so forth, then feeds back to contribute not only to the climate of the particular work environment but also to possible changes in managerial policies and practices.<sup>2</sup>

However, others argue that an organization may be effective when organizational health is low and internal processes are unfavorable. In addition, in turbulent external environments, the presence of organizational slack may indicate an efficiency in internal processes while being essential for long term organizational survival and adaptability.

C. Ecological Model or the Participant Satisfaction Model. In this model, effectiveness is defined in terms of the degree to which the needs and expectations of strategic constituents are met by the organization. This approach can be viewed as a summary measure for an organization, and, according to Steers,<sup>3</sup> the most effective organization

---

<sup>1</sup>R. Likert, New Patterns of Management (New York: McGraw-Hill 1961), p. 103.

<sup>2</sup>Richard M. Steers, Organizational Effectiveness, A Behavioral View (Santa Monica CA: Goodyear Publishing Company, Inc., 1977).

<sup>3</sup>Ibid., p. 104.

is that which at least minimally satisfies or reduces dissatisfaction of its major strategic constituencies. Cameron, however, pointed out that "organizations may ignore strategic constituencies, in seeking effectiveness, and they may achieve success in spite of conflicting or contradictory constituency expectations."<sup>1</sup>

D. The System Resource Model. The system model of evaluating organizational effectiveness is a more recent development, and can be viewed as an interactive sum of the three previous models mentioned. Though there are many variations and adaptations of this method, there do exist some common overriding themes. The most important common idea is that system theorists perceive organizational effectiveness to be a multidimensional construct. The organization is seen as a set of interdependent and interactive subsystems of roles, functions and individual behaviors, interacting with its surrounding environment. The extent to which the organization meets the problem of its internal subsystems and copes with its external environment is the extent to which the organization performs effectively.

The system model focuses on the ability of the organization to obtain needed resources. The model emphasizes according to Yuchtman and Seashore,<sup>2</sup> both the distinctiveness of the organization as an identifiable social structure and the interdependence of the organization with its environment. The first theme supports the idea of formal

---

<sup>1</sup>Cameron, "Domains of Organizational Effectiveness in Colleges and Universities," p. 26.

<sup>2</sup>Yuchtman and Seashore, "A System Resource Approach to Organizational Effectiveness," pp. 891-903.

organizations, not as phenomena incidental to individual behavior or societal functioning, but as entities appropriate for analysis at their own level. The second theme points to the nature of interrelatedness between the organization and its environment as the key source of information concerning organizational effectiveness. Yuchtman and Seashore wrote when discussing the model that, "most existing definitions of organizational effectiveness have been formulated, implicitly or explicitly, in terms of a relation between the organization and its environment and the crucial task is the conceptualization of that relation."<sup>1</sup> The system model provides a useful basis for viewing the interdependence between the organization and its environment that takes in the form of input-output transactions.

In defining organizational effectiveness, Yuchtman and Seashore proposed a model in terms of a bargaining position, as reflected in the ability of the organization in either absolute or relative terms, "to exploit its environment in the acquisition of scarce and valued resources."<sup>2</sup> The concept of "bargaining position," according to them, implies the exclusion of any specific goal or function as the ultimate criterion of organizational effectiveness. The resource-getting capability is only one of the three major cyclic phases, the other two being the throughput and the output in the system model of an organization. Their definition of organizational effectiveness points to the bargaining position with

---

<sup>1</sup>Yuchtman and Seashore, "A System Resource Approach to Organizational Effectiveness," p. 894.

<sup>2</sup>Ibid., p. 898.

regard to the acquisition of resources and not to the availability of scarce and valued resources as such.

The system resource model has potentially distinct advantages, for it rejects the notion of ultimate goal and instead replaces the concept with a multidimensional set of criteria. In similar fashion, Yuchtman and Seashore alleged "the judgement of the meaning of each criterion variable rests not upon an absolute value judgement or a universal conceptual meaning, but rather upon the joint consideration of an extensive integrated set of organizational performance and activity variables."<sup>1</sup>

In sum, system models implicitly emphasize criteria designed to reflect the concept of an organization as a social system--criteria such as organizational productivity, adaptability, flexibility, capability of dealing with conflict, coordination of subunits and allocation of resources.

Each of these four approaches has certain advantages and disadvantages as a research and theoretical tool. For example, one approach may be appropriate in certain circumstances or with certain types of organizations for which other models are not appropriate. Cameron<sup>2</sup> pointed out that one major consideration in determining which model is most appropriate in assessing effectiveness is the domain of activity in which the organization is operating. The strategic constituencies approach may be most applicable in an organization operating in multiple

---

<sup>1</sup>Ibid., p. 899.

<sup>2</sup>Cameron, "Domains of Organizational Effectiveness in Colleges and Universities," p. 26.



domains, for instance, where outcomes are obscure, or when required to respond to a diverse group of constituency demands. The goal model, on the other hand, is not appropriate in those types of organizational settings, but is most appropriate when organizational domains are narrowly defined, goals are consensual, or when outcomes are easily identifiable.

### Selected Related Studies of Organizational Effectiveness

Traditionally, in the study of organizations, effectiveness has been viewed and operationalized mainly in terms of productivity. In this connection, Thorndike<sup>1</sup> has noted a general tendency on the part of personnel and industrial psychologists to accept as "ultimate criteria" of organizational success the following: organizational productivity, net profit, the extent to which the organization accomplishes its various missions, and the success of the organization in maintaining or expanding itself. Other variables that have been used in various contexts as criteria of effectiveness include morale, commitment to the organization, personnel turnover and absenteeism, and member satisfaction.

Georgopoulos and Tannenbaum,<sup>2</sup> in a study of station units of an industrial organization, defined organizational effectiveness as "the extent to which an organization as a social system, given certain resources and means, fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members."

---

<sup>1</sup>R. L. Thorndike, Personnel Selection: Test and Measurement Techniques (New York: Wiley, 1949), pp. 121-124.

<sup>2</sup>Georgopoulos and Tannenbaum, "A Study of Organizational Effectiveness," pp. 535-536.

This conception of organizational effectiveness led the authors to propose three general effectiveness criteria that relate to the means-ends dimension of organizational behavior. These criteria are: (1) productivity, (2) flexibility--in the form of adaptation to internally and externally induced changes, and (3) absence of intra-organizational strain and conflict between individuals and work units in the organization.

The researchers operationalized these criteria in an industrial service specializing in the delivery of retail merchandise. Thirty-two operational units (stations) of the industrial service located in different metropolitan areas were studied. Productivity was measured on the basis of records of performance contained in company-wide records. Flexibility was measured by two items, one tapping adaptability to internal change and the other adaptability to external change. Intra-organizational strain was measured by a question which asked nonsupervisory personnel about the amount of conflict and tension between employees and supervisors. These variables were combined to form an overall measure of organizational effectiveness. The results of the study indicated that the variables or criteria were significantly related to one another and to overall organizational effectiveness. All relationships were found to be positive with the exception of those involving intra-organizational strain.

The importance of this study, beyond its multidimensional focus, has to do with the development of general criteria for assessing effectiveness across different types of organizations. This was one of the

first studies to advance general criteria for examining organizational effectiveness.

Friedlander and Pickle<sup>1</sup> studied the components of effectiveness in 97 small business organizations based on a general system perspective. The major assumption underlying their study was that if an organization is to be effective in terms of survival and growth, the needs and demands of its employees, owners, and the relevant members of the society with whom it transacts (i.e., community, governments, customers, suppliers, and creditors) must be fulfilled. Given this assumption, Friedlander and Pickle collected and analyzed data which reflected the internal and external components of organizational effectiveness in an effort to ascertain the extent of relationship between these components. The results of the study indicated that there were only a moderate number of relationships between the degree to which the organizations simultaneously satisfied the needs of their internal components and the components of the larger system.

Mahoney and Weitzel<sup>2</sup> conducted a study which focused on managerial perceptions and judgements of organizational effectiveness. Eighty-four managers in thirteen companies were asked to describe their subordinate organization units (i.e., departments, divisions, sections) in terms of their perception of 114 specific characteristics that have

---

<sup>1</sup>Frank Friedlander and Hall Pickle, "Components of Effectiveness in Small Organizations," Administrative Science Quarterly, 13 (1968), pp. 289-304.

<sup>2</sup>Thomas A. Mahoney and William Weitzel, "Managerial Models of Organizational Effectiveness," Administrative Science Quarterly, 14 (1969), pp. 351-365.

been considered criteria of organizational effectiveness. Factor analysis of the 114 variable assessments indicated 24 dimensions of effectiveness. The dominant dimension isolated was productivity-support utilization as reflected by "efficient performance; mutual support and respect of supervisors and subordinates; and utilization of personnel skills and abilities."

Bidwell and Kasarda<sup>1</sup> followed an open systems approach in their study on organizational effectiveness in school district organizations. They were primarily interested in determining the effects of selected environmental conditions and organizational attributes on organizational effectiveness as defined by goal achievement. Goal achievement was measured in terms of reading and mathematic achievement of students in the various school districts in the State of Colorado. The environmental variables included school district size, fiscal resources, disadvantaged students, percent nonwhite, and educational level of population residing in the school districts. The organizational variables consisted of pupil-teacher ratio, administrative intensity, professional staff support, and staff qualification. A causal model was constructed employing the environmental variables as exogenous variables, the organizational variables as intervening variables and achievement as the dependent variable. The results of the study revealed that only one of the environmental variables, percent nonwhite, had significant direct effects on student achievement levels; the other variables had

---

<sup>1</sup>Charles E. Bidwell and John D. Kasarda, "School District Organization and Student Achievement," American Sociological Review, 40 (1975), pp. 55-70.

important indirect effects on achievement through their direct effects on the organizational variables. Staff qualification was the only organizational variable that fostered achievement.

Mott,<sup>1</sup> in his book, The Characteristics of Effective Organization, summarized research on organizational effectiveness on the three organizational characteristics of productivity, adaptability and flexibility. In his findings, general hospitals' pattern of responses was different from that of government agencies. On the average, hospitals' score on adaptation was well above the self-appraisal obtained in government agencies. His finding reflected that "hospitals are centers for the diffusion of new knowledge about medical techniques and drugs, and their staff feels a strong need to adapt new techniques when there is the slightest possibility that they will save the lives of patients."<sup>2</sup> The hospitals' flexibility scores were found to be considerable lower than the corresponding scores for the government agencies.

These studies are relevant to the present study in that they point to various facets of organizational behavior that should be considered as a part of the conceptual and empirical domain of the organizational effectiveness construct. The irony, however, is the gross inconsistencies among the studies with regard to defining characteristics of organizational effectiveness. One study might show a positive relationship between two variables, another no relationship,

---

<sup>1</sup>Mott, The Characteristics of Effective Organizations.

<sup>2</sup>Ibid., p. 34.

and a third a negative relationship. The explanation for these disparities could well be the dissimilarities among the settings in which these studies were conducted.

### Summary of Related Literature

The review of related literature focused on: (1) the general concept of organizational effectiveness, (2) the issue of how organizational effectiveness is pursued, and (3) related selected studies on the organizational characteristics of productivity, adaptability and flexibility used to measure organizational effectiveness.

The concept of organizational effectiveness, sometimes called organizational "success" or organizational "worth," is ordinarily used, according to theorists, to refer to goal-attainment. In this sense, it is a functional rather than a structural concept. The concept of goal, in most instances, is a mental abstraction and tends to be ambiguous and fuzzy. Studies based on this concept are likely to be of limited value.

On issues of how organizational effectiveness is pursued, four approaches were reviewed for their popularity in the literature of organizational effectiveness. These models can be viewed as extending on a continuum from the simpler model of the goal model from one end, to the more complex model of systems on the other end.

The goal model was discussed extensively. Although it is controversial, it still receives the most attention in the literature of organizational effectiveness. The process model assumes effectiveness is equivalent to internal organizational health, efficiency, or smooth internal process and procedures. Likert's principle of

supportive relationships is central to the principle of the process model. The ecological model or the participant satisfaction model emphasizes the needs and expectations of strategic constituents of the organization. The system resource model focuses on the ability of the organization to obtain needed resources. The model emphasizes the distinctiveness of the organization as an identifiable social structure and the interdependence of the organization with its environment.

Studies on organizational effectiveness by means of the three characteristics of productivity, adaptability, flexibility and other organizational characteristics are filled with contradictions, with only a few exceptions.

## CHAPTER III

### RESEARCH DESIGN

#### Theoretical Framework and the Research Model

Most original effectiveness models attempt to set forth evaluation criteria that can be applied to a wide variety of organizations. Child<sup>1</sup> terms this the "universalistic" model. Caplow, for example, stated that the development of a "single theoretical model, although rough and incomplete, can be used to analyze organizations of any type or size, regardless of their cultural or historical location . . ."2

Georgopoulos and Tannenbaum<sup>3</sup> also proposed a generalized model that can potentially apply to all organizations. The conceptual framework used in this study was based on Mott's<sup>4</sup> outline in The Characteristics of Effective Organization. The assumption is that the

---

<sup>1</sup>J. Child, "Managerial and Organizational Factors Associated with Company Performance," Journal of Management Studies (1974), pp. 175-189.

<sup>2</sup>Theodore Caplow, Principles of Organizations (New York: Harcourt, Brace & World, 1964), p. V.

<sup>3</sup>Georgopoulos and Tannenbaum, "A Study of Organizational Effectiveness," pp. 534-540.

<sup>4</sup>Mott, The Characteristics of Effective Organizations.



concept of effectiveness is multidimensional, involving many variables. Specifically, this study used three variables--productivity, adaptability, and flexibility--to measure effectiveness and their interrelationship to each other.

The research model to be utilized in this study is schematically depicted in Figure 1.

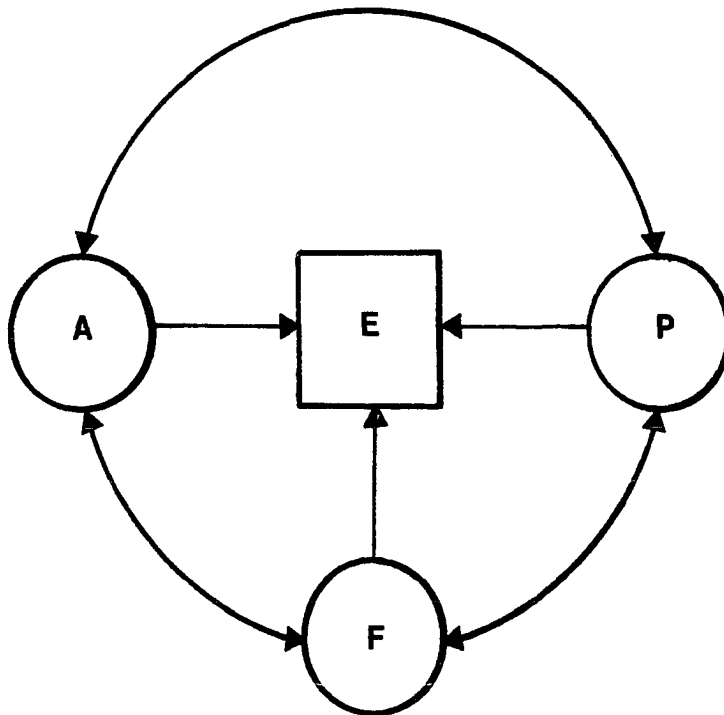


Fig. 1.--The research model

where E = Organizational Effectiveness

A = Organizational Adaptability

P = Organizational Productivity

F = Organizational Flexibility

### Restatement of the Problem

The problem for this research was: What is the relationship between selected organizational characteristics and organizational effectiveness in three formal organizations?

This research proposed to investigate whether the organizational characteristics of productivity, adaptability and flexibility, which were initially studied by Georgopoulos and Tannenbaum<sup>1</sup>, were related to organizational effectiveness in the selected organizations studied. It was further proposed to investigate whether there are differences in perceptions of these characteristics between supervisory and nonsupervisory members of three types of formal organizations, and whether there are differences in the emphasis placed on the importance of these characteristics in the three organizations.

The following conceptual questions were investigated:

1. Are there relationships between perceived organizational characteristics (productivity, adaptability and flexibility) and organizational effectiveness as perceived by nonsupervisory and supervisory employees of the organizations under the study?

2. Are there relationships between the perceptions of the importance of organizational characteristics and organizational effectiveness as perceived by nonsupervisory and supervisory employees of the organizations under the study?

---

<sup>1</sup>Georgopoulos and Tannenbaum, "A Study of Organizational Effectiveness," pp. 535-536.

3. Are there differences in the emphasis placed on the importance of the perceived organizational characteristics of productivity, adaptability, and flexibility between supervisory and non-supervisory members of the three formal organizations?

4. Are there differences in the emphasis placed on the importance of perceived organizational characteristics between the three selected formal organizations as perceived by nonsupervisory and supervisory employees of their respective organization?

#### Definition of Terms

Effectiveness: "The ability of an organization to mobilize its centers of power for action-production and adaptation."<sup>1</sup>

Productivity: "Employee's perception of the quantity and quality of work done in their division or departments as well as the efficiency with which the work is done."<sup>2</sup>

Adaptability: "Employee's perception of their organization's ability to anticipate problems, and find good solutions."<sup>3</sup>

Flexibility: "Ability to cope with temporarily unpredictable emergencies."<sup>4</sup>

---

<sup>1</sup>Mott, The Characteristics of Effective Organizations, p. 17.

<sup>2</sup>Ibid., p. 17.

<sup>3</sup>Ibid., p. VIII.

<sup>4</sup>Ibid., p. VIII.

Satisfaction: "Employee's satisfaction with fellow workers, jobs, superiors, their organization compared with others, pay, progress in the organization so far, and chances for advancement in the future."<sup>1</sup>

### Research Design and Presentation of Hypotheses

In order to gain an understanding of the major research question and hypotheses in a clear manner, both the research question and hypotheses are stated below. The research question is tested with four hypotheses which were statistically tested at the  $\alpha = 0.05$  significance level.

#### Research Problem

What is the relationship between selected organizational characteristics of productivity, adaptability, flexibility, and organizational effectiveness?

The following hypotheses are presented for investigation:

HYPOTHESIS 1: There is a significant relationship between the perceived organizational characteristics of productivity, flexibility, and adaptability and organizational effectiveness as perceived by non-supervisory and supervisory employees of the organizations under the study.

HYPOTHESIS 2: There is a significant relationship between the perceived importance of organizational characteristics and organizational effectiveness as perceived by employees of the organizations under the study.

---

<sup>1</sup>Rensis Likert, "Human Resource Accounting: Building and Assessing Productive Organizations," Personnel, May/June, 1973, p. 10.

HYPOTHESIS 3: There is no significant difference in emphasis placed on the importance of the perceived organizational characteristics between supervisory and non-supervisory members of the three organizations.

HYPOTHESIS 4: There is no significant difference in the emphasis placed on the importance of the perceived characteristics of organizational effectiveness among the three selected organizations as perceived by non-supervisory and supervisory employees of the organizations under the study.

#### Population and Sampling

The population for this study consisted of all employees employed in the three selected organizations in the Oklahoma City area. The subjects of the study were comprised of 150 employees of three formal organizations: (1) an institution of higher education, (2) a business-profit organization, and (3) a government agency. All three organizations are of similar size, in the range of 150-400 employees each. Samples were drawn from each of the three organizations by using 25 employees in administrative/supervisory capacity and 25 employees in a non-administrative/supervisory capacity, all of whom are randomly selected from the three participating organizations in the study. The assumption in this study is that the sampling procedure produced a representative sample. When discussing sampling theory, Kerlinger pointed out, "sampling is taking any portion of a population or universe as representative of that population or universe."<sup>1</sup>

---

<sup>1</sup>F. N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart, Winston, Inc., 1973), p. 98.

This study consists of four sample spaces. The first sample space is the three types of formal organizations in metropolitan Oklahoma City area. The second sample space is the specific organization under the study. The third sample space is the supervisory or management level personnel in these organizations. The fourth sample space is the nonsupervisory employees of the three selected organizations. The three organizations are designated with the letters, E for the institution of higher education, B for the business organization, and G for the government agency.

#### Method of Gathering the Data

Survey data may be collected in several ways: mailed questionnaires, personal interviews, and telephone interviews. This study basically used the inter-organization mailed questionnaires in which administrators of individual organizations were contacted by the investigator and the purpose and objectives of the study were explained.<sup>1</sup> In cooperation with a designated coordinator or facilitator, the questionnaires were mailed to the selected subjects and the participants were instructed to return the questionnaires to the designated facilitator of the respective organization. Confidentiality of individual responses and the organization's identity was assured to participants to increase participation and reduce biased responses.

The response rate of returned questionnaires by the three selected organizations for the study is shown in Table 1.

---

<sup>1</sup>Initial contact to the organizations was made by the investigator with the help of individuals familiar with the organizations studied.

TABLE 1

## ORGANIZATION TYPE AND RESPONSE RATE

---

---

Organization Type*	Questionnaires Distributed	Questionnaires Collected	Return Rate (%)
E	50	43	86%
G	50	32	64%
B	50	35	70%

---

---

\*Type E = An Institution of Higher Education

G = A Government Agency

B = A Profit Business Organization

TABLE 2

## RESPONSE RATE BY TYPE OF EMPLOYEE

Organization/Type of Employee	Questionnaire Distributed	Questionnaire Returned	Return Rate (%)
<u>Organization E</u>			
Administrator Supervisor	25	21	84%
Staff Employee	25	22	88%
<u>Organization B</u>			
Administrator Supervisor	25	14	56%
Staff Employee	25	21	84%
<u>Organization G</u>			
Administrator Supervisor	25	17	68%
Staff Employee	25	15	60%



In this study, the Mott<sup>1</sup> effectiveness instrument was used as the means to collect the basic data.

The organizations' effectiveness is the dependent variable. As stated earlier, three criteria (independent variables) were selected to be used as measures of organizational effectiveness: adaptability, productivity, and flexibility.

Mott's basic instrument contained eight items to measure effectiveness. (See Appendix A) The first three items are related to productivity, the next four items to adaptability, and the last item to flexibility. The researcher supplemented the instrument with six more items that did not affect the reliability of the instrument, related to questions such as satisfaction and ranking the characteristics of effectiveness in order of importance to the respective organization.

The notable characteristics of the instrument are: 1) its simpleness and briefness to administer, and 2) its ability to provide comparable data across types of organizations. Mott's instrument was widely used in different settings of studies from hospitals, banks, government agency to manufacturing firms, and the reported reliability coefficients range from 0.55 to 0.77 with the test-retest method.<sup>2</sup> In addition to the reliability coefficients reported by Mott and co-workers, they have also found that their effectiveness measure by the self-evaluation approach consistently agreed with evaluations of

---

<sup>1</sup>Mott, The Characteristics of Effective Organization, pp. 205-216.

<sup>2</sup>Mott, The Characteristics of Effective Organization, pp. 193-194.

effectiveness by a panel of outside expert/professionals who are familiar with the particular organization under the study. Nevertheless, Mott warns that the "self-evaluation approach assumes that respondents will use viable professional standards. If they do not, the validity of the result is questionable."<sup>1</sup>

#### Method of Analyzing the Data

This study had four primary objectives: (1) to observe the relationship between selected organizational characteristics of productivity, adaptability, flexibility, and organizational effectiveness of three types of organizations in an institution of higher education, a business organization and a government agency, (2) to discover differences, if any, between supervisory and nonsupervisory perceptions of the importance of organizational characteristics, (3) to observe differences in emphases of importance of the perceived organizational characteristics between supervisory and nonsupervisory employee, and (4) to investigate differences in the emphases placed on the perceived organizational characteristics between the three selected organizations under the study.

Since the study utilized a Likert-type scaling, the measurement can be considered as an interval scale,<sup>2</sup> measuring from the lowest value of one to the highest of five. The data represent a sample of a given

---

<sup>1</sup>Ibid., p. 199.

<sup>2</sup>Claire Seltiz, Lawrence S. Wrightsman, and Stuart W. Cook, Research Methods in Social Relations, 3rd ed. (New York: Holt, Rinehart and Winston, 1976), p. 420.

population. Therefore, inferential as well as descriptive statistics would be appropriate.<sup>1</sup> The basic research posture was to show whether there was a relationship between the dependent variable, in this case organizational effectiveness, and the independent variables of organizational productivity, adaptability and flexibility. In addition, it was intended to go further and predict the value of the dependent variable from the independent variables using a linear model. Hays,<sup>2</sup> in discussing the linear relationship between variables, states that the reasons for using linear rules for prediction are: (1) linear functions are the simplest to discuss and understand, (2) linear rules are often good approximations to other much more complicated rules, and (3) in certain circumstances, the only prediction rules that can apply are linear.

Another need the statistician should address is the issue of the use of parametric or nonparametric statistics. In distribution-free or nonparametric tests, no assumptions are made about the precise form of the sampled population, whereas in parametric statistics, assumptions of normality and homogeneity of variance are of major importance.<sup>3</sup> Most researchers view parametric procedures as the standard tool of psychological statistics, simply because parametric statistical

---

<sup>1</sup>V. Gourveitch, Statistical Methods: A Problem Solving Approach (Boston: Allyn & Bacon, Inc., 1965), pp. 271-272.

<sup>2</sup>William L. Hays, Statistics (New York: Holt, Rinehart and Winston, 1981), p. 326.

<sup>3</sup>N. M. Downie and R. W. Heath, Basic Statistical Methods (New York: Harper and Row, Publishers, Inc., 1974), p. 259.

tests are more powerful than nonparametric tests.<sup>1</sup> The power of a statistical test refers to the probability of rejecting the null hypotheses when it is actually false. In other words, power is equal to 1 minus the probability of making a Type II error, or  $1-B$ . One important factor contributing to the power of a statistical test is the sample size,  $N$ . As  $N$  increases, the probability of making a Type II error decreases and hence the power of the test increases.<sup>2</sup>

There is no reason to believe that the population in this study is not normal, the variance to be heterogeneous, or  $N$  is not large enough. Hence, parametric statistics are used to analyze the data. The statistical procedures that were used in testing the hypotheses are: the Pearson Product - Moment Correlation Coefficient, and the Linear Regression Model in conjunction with Analysis of Variance.

Both single and multiple regression models were utilized in this study. Single linear regression is a procedure for analyzing the contribution of one variable to the explanation of a dependent variable, while multiple linear regression examines the collective and unique contributions of two or more variables to the explanation of a dependent variable.<sup>3</sup> Hays, in describing a linear model states that "in essence, any linear model of data states that an observed value of the dependent

---

<sup>1</sup>N. Anderson, "Scales and Statistics: Parametric and Nonparametric," Psychological Bulletin, Vol. 58 (1961), p. 315.

<sup>2</sup>Downie and Heath, Basic Statistical Methods, p. 260.

<sup>3</sup>Fred N. Kerlinger and Elazer J. Pedhazur, Multiple Regression in Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1973).

variable is equal to a weighted sum of values associated with one or more independent variables, plus a term standing for error."<sup>1</sup>

The basic equations for single and multiple regression models are respectively depicted as:

$$Y_1 = a_0 + b_1x_1 \quad (1)$$

$$Y_1 = a_0 + b_1x_1 + b_2x_2 + b_3x_3 \dots\dots b_ix_i \quad (2)$$

where  $Y$  = predicted scores of the dependent variables;

$x$  = scores of the independent variable(s);

$a_0$  = intercept constant;

$b$  = regression coefficient

The  $Y$  values are predicted from  $x$  values.

Blalock<sup>2</sup> stated that there are two distinct uses for regression equations: (1) as estimating equations, and (2) as causal models. The first type of usage involves generating statements about unknown values based on pieces of information contained in a sample. The second type of usage has to do with the assumption that hypothesized casual linkages can be represented by linear regression equations.

There are several criteria for evaluating linear regression models.<sup>3</sup> These include: (1) F-test for significance of the overall

---

<sup>1</sup>Hays, Statistics, p. 326

<sup>2</sup>Hubert M. Blalock, Casual Inferences in Non-Experimental Research (Chapel Hill: The University of North Carolina Press, 1964), p. 43.

<sup>3</sup>Kerlinger, Multiple Regression in Behavioral Research, p. 395-410.

regression model, (2) size and significance of the squared multiple correlation coefficient ( $R^2$ ), and (3) size and significance of the regression coefficients. The F-test involves comparing a computed F value at an appropriate level of significance (0.05 for this study) to determine whether the regression of the dependent variable on the independent variable is statistically significant. The squared multiple correlation coefficient provides information on the magnitude of the relation between the dependent and independent variable(s) and how much variance in the dependent variable is accounted for by the independent variable(s). Finally, the regression coefficients indicate the amount of change in the dependent variable with a per unit change in the independent variables.

Here, it seems appropriate to reiterate the assumptions which underlie the use of linear regression in this study: (1) the sample was drawn at random, (2) the dependent variable scores were normally distributed at each value of the independent variables, (3) the relationship among the variables are assumed to be linear, (4) residuals (errors) are randomly and normally distributed with equal variances at each value of the independent variable<sup>1</sup>, and (5) variables are measured on an interval scale. All variables were measured on a Likert-type scale.

---

<sup>1</sup>Residual (errors) were randomly scattered when plotted against the values of the variables.

## CHAPTER IV

### RESULT AND ANALYSIS OF THE DATA

#### Introduction

This chapter contains an evaluation of the hypotheses which were stated in the preceding chapter. Two statistical procedures were utilized to test the various hypotheses: (1) the Pearson moment correlation coefficients, and (2) the squared multiple correlation coefficients with the analysis of variance in the linear regression models. The F-test is applied in testing for the significance of the overall regression of the dependent variable on the independent variables, and a t-test is applied to show whether an individual independent variable contributes a significant effect on the dependent variable.

#### Presentation of Hypotheses

The first hypothesis in this study states:

There is a relationship between the perceived organizational characteristics of productivity, flexibility, and adaptability and organizational effectiveness as perceived by non-supervisory and supervisory employees of the organizations under the study.

The hypothesis stated more operationally reads:

The organizational effectiveness score is a function of the organizational productivity score, the organizational adaptability score, and the organizational flexibility score.

The relevant data for evaluation of this hypothesis are presented in the tables that include: (1) unstandardized partial regression coefficients, (2) t-values to check if the respective independent variables contribute significantly in the regression equation, and (3)  $R^2$  to provide information on the magnitude of the relationship between organizational effectiveness and three independent variables. The partial regression coefficients "b" show change in the dependent variable with a per unit change in the respective independent variables. The Pearson correlation coefficients indicate degree of relationship between the variables. (See Tables 3 to 10)

It can be concluded on the basis of these findings that the hypothesis is moderately supported. Strong support cannot be claimed overall, because organization B does not show a significant relationship between the dependent and the independent variables. The F-test at the 0.05 level of significance indicates that organizational effectiveness is a function of, or is related to, the independent variables of productivity, adaptability and flexibility.

The second research hypothesis states:

There is a significant relationship between the perceived importance of organizational characteristics and organizational effectiveness as perceived by employees of the organizations under the study.

The hypothesis stated more operationally reads:

The organizational characteristic that is perceived as the most important by the employees in the study, is the same characteristic that is statistically significant in the organizational effectiveness model of the respective organizations.

The relevant data for the evaluations of this hypothesis are presented in Tables 11 and 12.



TABLE 3

UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS,  $t$ -VALUES,  $R^2$  AND F VALUE  
FOR ORGANIZATIONAL EFFECTIVENESS MODEL (ALL ORGANIZATIONS'  
DATA TREATED IN A SINGLE REGRESSION EQUATION)

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	0.2031	1.97*
X2 Adaptability	0.3556	2.61*
X3 Flexibility	0.2258	2.41*
	$R^2 = 0.3267$	$F = 17.33^{**}$

\* Significant at 0.05 level.

\*\* Significant at 0.05 level.

TABLE 4

PEARSON CORRELATION COEFFICIENTS BETWEEN EFFECTIVENESS  
CHARACTERISTICS AND ORGANIZATIONAL EFFECTIVENESS  
(ALL ORGANIZATIONS' DATA AGGREGATED TOGETHER)

Variable	Y	X1	X2	X3
Y Organizational Effectiveness	1.0000	0.4470*	0.5030*	0.4512*
X1 Productivity	. . .	1.0000	0.5756*	0.4209*
X2 Adaptability	. . .	. . .	1.0000	0.5200*
X3 Flexibility	. . .	. . .	. . .	1.0000

\*Significant at 0.01 level

TABLE 5

UNSTANDARDIZED, PARTIAL REGRESSION COEFFICIENTS,  
t-VALUES, R<sup>2</sup> AND F VALUE-ORGANIZATION E

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-value
X1 Productivity	0.0936	0.43
X2 Adaptability	0.7088	3.44*
X3 Flexibility	-0.0851	-0.44
	$R^2 = 0.3314$	$F = 6.44^{**}$

\* Significant at 0.05 level

\*\* Significant at 0.05 level

TABLE 6

PEARSON CORRELATION COEFFICIENTS BETWEEN EFFECTIVENESS CHARACTERISTICS  
AND ORGANIZATIONAL EFFECTIVENESS-ORGANIZATION E

Variable	Y	X1	X2	X3
Y Organizational Effectiveness	1.0000	0.3114*	0.5699**	0.2426
X1 Productivity	. . .	1.0000	0.45711**	0.2189
X2 Adaptability	. . .	. . .	1.0000	0.5147**
X3 Flexibility	. . .	. . .	. . .	1.0000

\* Significant at 0.05 level

\*\* Significant at 0.01 level

TABLE 7

UNSTANDARDIZED, PARTIAL REGRESSION COEFFICIENTS,  
t-VALUES,  $R^2$  AND F-VALUE-ORGANIZATION G

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	0.0913	1.36
X2 Adaptability	0.4849	2.11*
X3 Flexibility	0.3505	1.38
$R^2 = 0.4034$		$F = 6.31^{**}$

\*Significant at 0.05 level

\*\*Significant at 0.05 level

TABLE 8

PEARSON CORRELATION COEFFICIENTS BETWEEN EFFECTIVENESS CHARACTERISTICS  
AND ORGANIZATIONAL EFFECTIVENESS-ORGANIZATION G

Variable	Y	X1	X2	X3
Y Organizational Effectiveness	1.0000	0.3838*	0.5550**	0.5641**
X1 Productivity	. . .	1.0000	0.6502**	0.3270**
X2 Adaptability	. . .	. . .	1.0000	0.5635**
X3 Flexibility	. . .	. . .	. . .	1.0000

\*Significant at 0.05 level

\*\*Significant at 0.01 level

TABLE 9

UNSTANDARDIZED, PARTIAL REGRESSION COEFFICIENTS,  
T-VALUES,  $R^2$  AND F-VALUE-ORGANIZATION B

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	0.1466	0.76
X2 Adaptability	0.1962	0.79
X3 Flexibility	0.1319	0.74
$R^2 = 0.1087$		F = 1.30

\* Significant at 0.05 level

\*\* Significant at 0.05 level

TABLE 10  
 PEARSON CORRELATION COEFFICIENTS BETWEEN EFFECTIVENESS CHARACTERISTICS  
 AND ORGANIZATIONAL EFFECTIVENESS-ORGANIZATION B

Variables	Y	X1	X2	X3
Y Organizational Effectiveness	1,0000	0.2455	0.2803	0.2096
X1 Productivity	. . .	1.0000	0.5015**	0.1422
X2 Adaptability	. . .	. . .	1.0000	0.3503*
X3 Flexibility	. . .	. . .	. . .	1.0000

\*Significant at 0.05 level

\*\*Significant at 0.01 level



TABLE 11  
t-TEST ON THREE CHARACTERISTICS OF PRODUCTIVITY,  
ADAPTABILITY, FLEXIBILITY AND EFFECTIVENESS

Variable	Number of Cases	Mean	Standard Deviation	Mean Difference	Correlation	t-Values
<u>Organization E</u>						
Productivity	43	4.17	0.51	0.22	0.31	1.59
Effectiveness		3.95	0.75			
Adaptability	43	3.62	0.61	-0.33	0.57	-2.24*
Effectiveness		3.95	0.75			
Flexibility	43	4.30	0.60	0.35	0.24	2.39*
Effectiveness		3.95	0.75			
<u>Organization G</u>						
Productivity	32	3.78	0.64	0.25	0.39	1.34
Effectiveness		3.53	0.84			
Adaptability	32	3.34	0.62	-0.19	0.56	-1.03
Effectiveness		3.53	0.84			
Flexibility	32	3.81	0.90	0.28	0.56	1.29
Effectiveness		3.53	0.89			
<u>Organization B</u>						
Productivity	36	2.94	1.01	-0.12	0.25	-0.50
Effectiveness		3.06	1.01			
Adaptability	36	3.09	0.83	0.03	0.28	0.14
Effectiveness		3.06	1.01			
Flexibility	36	3.22	1.02	0.16	0.21	0.67
Effectiveness		3.06	1.01			

\*t-value significant at 0.05 level.

TABLE 12  
 PERCENTAGE OF RESPONDENTS THAT CHOOSE ORGANIZATIONAL  
 CHARACTERISTICS AS THE MOST IMPORTANT IN THEIR  
 RESPECTIVE ORGANIZATIONS

Organizational Characteristics	Organization E	Organization G	Organization B
Productivity	44.44%	32.30%	25.00%
Adaptability	32.54%*	26.05%*	36.11%
Flexibility	27.77%	35.42%	19.44%

\* t-value significant at 0.05 level in respective regression equation.

These results suggest that the hypothesis did not receive support and it can tentatively be concluded that there is no relationship between the perceived importance of organizational characteristic in terms of the majority percentage that choose a characteristic as the most important, and the actual characteristics that were statistically significant in the respective regression equations of the three organizations.

The third research hypothesis states:

There is no significant difference in emphasis placed on the importance of the perceived organizational characteristics of effectiveness between the supervisory and nonsupervisory members of the three organizations under the study.

The hypothesis stated more operationally reads:

The mean score of organizational characteristics of effectiveness as scored by supervisory employees is not different from the mean score of organizational characteristics as scored by nonsupervisory employees of the three organizations under the study.

The statistical test utilized to evaluate this hypothesis was the  $t$ -statistics and is shown in Table 13. The null hypothesis is stated as follows:  $H_0: M_1 = M_2$ , where  $M_1$  is the mean score for supervisory employees and  $M_2$  is the mean score for nonsupervisory employees.

Differences on emphasis of importance of organizational characteristics between the two groups is explored in the regression coefficients,  $t$ -values,  $R^2$  and  $F$ -value for the respective organizations and type of employees in Table 14 to 19.

The  $t$ -values in Table 13 indicate no significant difference between the mean score of supervisory and nonsupervisory employees, except in one instance where the mean score of adaptability as scored

by supervisory employees of organization G differed significantly from the score of non-supervisory employees of that organization.

The F-test at the 0.05 level of significance for organization E (supervisory employees) is significant. Collectively, the independent variables explain fifty-five percent of the variance in the perception of organizational effectiveness. In the case of non-supervisory employees, the F-test at the 0.05 level is not significant, and the independent variables explain thirty-four percent of the variance in the dependent variable measure. However, the only significant predictor of organizational effectiveness--according to the two groups--is adaptability, after controlling for the effects of other variables.

The F-test at 0.05 level of significance is significant for the supervisory employees of organization G. Collectively, the independent variables explain sixty-four percent of the variance in organizational effectiveness. All coefficients are positive, and there was no specific predictor variable of organizational effectiveness after controlling for the effects of other variables. In the case of non-supervisory employees, the independent variables explain only six percent of the variance in the dependent variable measure. The F-test was not significant and there was no significant specific predictor variable of organizational effectiveness after controlling for the effects of other variables.

The F-test at 0.05 level of significance is not significant for the supervisory employees of organization B. The independent variables explain ten percent of the variance in organizational effectiveness. All coefficients are positive and there was no specific

TABLE 13

t-TEST ON MEAN SCORES OF ORGANIZATIONAL CHARACTERISTICS BETWEEN SUPERVISORS  
AND NON-SUPERVISOR EMPLOYEES OF THE THREE ORGANIZATIONS

Variable		Number of Respondents	Mean	Standard Deviation	Mean Difference	t-Value
<u>Organization E</u>						
Productivity	Supervisors	21	4.08	0.65	-0.18	-1.15
	Non-Supervisors	22	4.26	0.31		
Adaptability	Supervisors	21	3.73	0.60	0.22	1.18
	Non-Supervisors	22	3.51	0.62		
Flexibility	Supervisors	21	4.43	0.51	0.25	1.39
	Non-Supervisors	22	4.18	0.66		
<u>Organization G</u>						
Productivity	Supervisors	17	3.82	0.62	0.10	0.44
	Non-Supervisors	15	3.73	0.67		
Adaptability	Supervisors	17	3.66	0.57	0.69	3.79*
	Non-Supervisors	15	2.97	0.46		
Flexibility	Supervisors	17	3.88	1.11	0.15	0.49
	Non-Supervisors	15	3.73	0.59		
<u>Organization B</u>						
Productivity	Supervisors	15	3.15	1.19	0.36	1.00
	Non-Supervisors	21	2.79	0.85		
Adaptability	Supervisors	15	3.08	0.93	0.07	0.24
	Non-Supervisors	21	3.01	0.77		
Flexibility	Supervisors	15	3.00	1.07	-0.38	-1.09
	Non-Supervisors	21	3.38	0.97		

\*t-value significant at 0.05 level direction unconsidered.

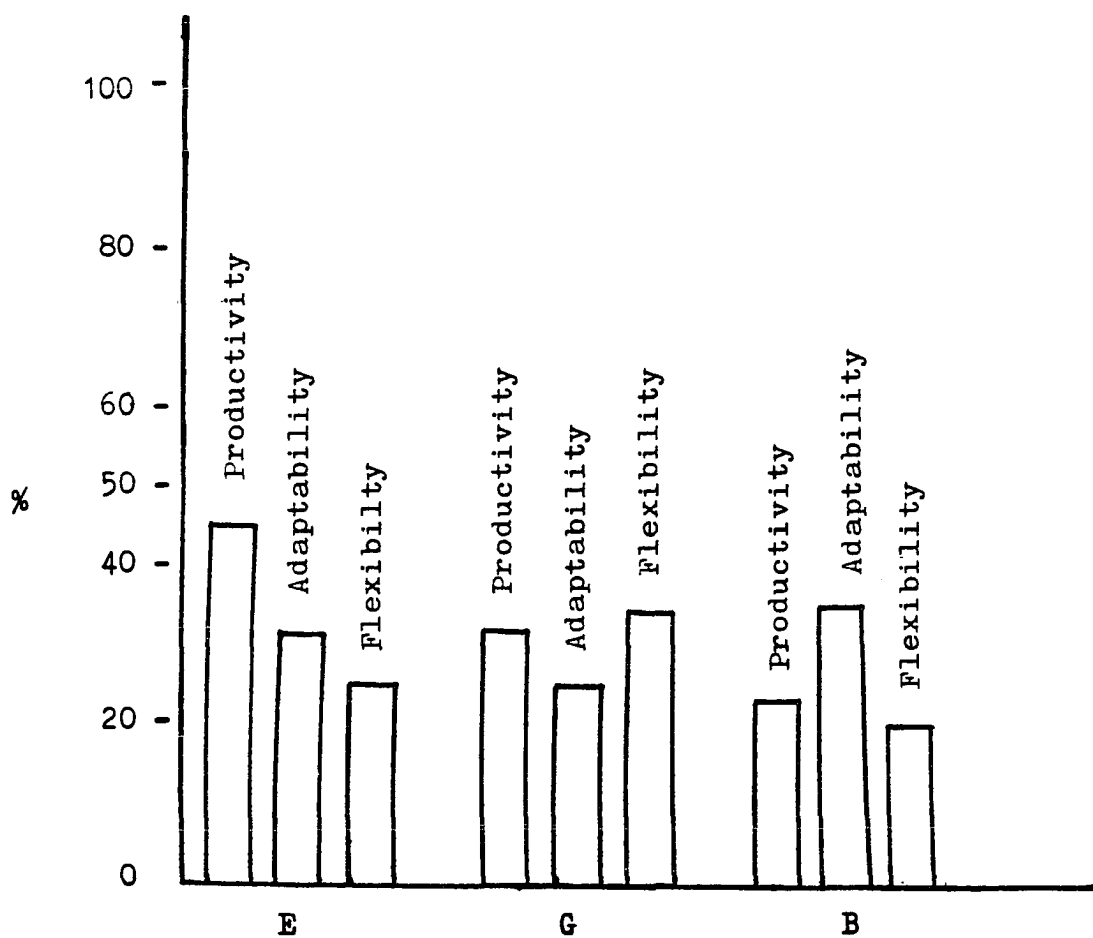


Fig. 2.--Histogram depicting percentage of respondents' preferences of a characteristic considered the most important in their respective organization.

TABLE 14  
 UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES,  
 $R^2$  AND F-VALUE-ORGANIZATION E, SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	-0.1254	-0.49
X2 Adaptability	0.9561	3.02*
X3 Flexibility	0.3419	1.01
$R^2 = 0.5474$	$F = 6.85^{**}$	

\*Significant t-value at 0.05 level.

\*\*Significant F-value at 0.05 level.

TABLE 15  
 UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES, R<sup>2</sup> AND  
 F-VALUE-ORGANIZATION E, NON-SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	-0.3029	-0.66
X2 Adaptability	0.7093	2.81*
X3 Flexibility	-0.2019	-1.02
R <sup>2</sup> = 0.3355	F = 3.03	

\*Significant t-value at 0.05 level.



TABLE 16

UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES,  
 $R^2$  AND F-VALUE-ORGANIZATION G SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	0.4646	0.91
X2 Adaptability	0.3867	0.50
X3 Flexibility	0.3725	1.44
$R^2 = 0.6417$		$F = 7.76^{**}$

**\*\*** Significant F-value at 0.05 level.

TABLE 17  
 UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES,  $R^2$  AND  
 F-VALUE-ORGANIZATION G, NON-SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	-0.2239	-0.57
X2 Adaptability	0.4292	0.75
X3 Flexibility	0.0602	0.18
$R^2 = 0.0627$		$F = 0.25$

TABLE 18  
 UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES,  
 $R^2$  AND F-VALUES-ORGANIZATION B, SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	-0.2147	0.45
X2 Adaptability	0.1499	0.25
X3 Flexibility	0.0187	0.05
	$R^2 = 0.0968$	$F = 0.3900$

TABLE 19  
 UNSTANDARDIZED PARTIAL REGRESSION COEFFICIENTS, t-VALUES,  $R^2$  AND  
 F-VALUE-ORGANIZATION B, NON-SUPERVISORY EMPLOYEES

Dependent Variable: Organizational Effectiveness		
Independent Variable	b	t-values
X1 Productivity	0.1431	0.61
X2 Adaptability	0.1334	0.45
X3 Flexibility	0.2410	1.04
$R^2 = 0.1490$		$F = 0.99$

predictor variable of organizational effectiveness according to this group. In the case of non-supervisory employees, the F-test at 0.05 level is not significant and the independent variables explain fourteen percent of the variance in organizational effectiveness. All coefficients are positive and there was no significant predictor variables of organizational effectiveness.

Thus, it can be inferred on the basis of these findings that the hypothesis received minimal support given that only one of the three organizations was found to have congruence of perception of one important organizational characteristic (adaptability) by both supervisory and non-supervisory employees of the three organizations.

The fourth research hypothesis states:

There is no significant difference in the emphasis placed on the importance of the perceived characteristics of organizational effectiveness among the three selected organizations as perceived by non-supervisory and supervisory employees.

The hypothesis stated more operationally reads:

The index score on emphasis of importance of organizational characteristics of effectiveness as scored by employees of the organizations in the study is not different from one organization to another.

The relevant data for evaluating this hypothesis are presented in Tables 20 and 21.

The F-test at 0.05 level provided some supportive evidence (except for the last organization in the table) which shows that organizational effectiveness is a function of the independent variables in the hypothesis. Out of the three independent variables adaption is the only important predictor of organizational effectiveness in two of the organizations (Organizations E and G) in the study. In the

case of the other organization (Organization B) there was no important or significant predictor variable.

These results suggest that the hypothesis received some qualified support and that the importance of adaptability as a predictor of organizational effectiveness is particularly notable.

TABLE 20  
 CONSOLIDATED UNSTANDARDIZED PARTIAL REGRESSION  
 COEFFICIENTS, t-VALUES, R<sup>2</sup> AND F-VALUES

Organization	Independent Variables	b	t-values
E	Productivity	0.0936	0.43
	Adaptability	0.7099	3.44*
	Flexibility	-0.0851	-0.44
		R <sup>2</sup> = 0.3314	F = 6.44**
G	Productivity	0.0913	1.35
	Adaptability	0.4849	2.11*
	Flexibility	0.3505	1.38
		R <sup>2</sup> = 0.4034	F = 6.31**
B	Productivity	0.1466	0.76
	Adaptability	0.1962	0.79
	Flexibility	0.1319	0.74
		R <sup>2</sup> = 0.1087	F = 1.30

\*Significant t-values.

\*\*Significant F-values.

TABLE 21  
 CONSOLIDATED MEAN SCORES AND STANDARD DEVIATIONS FOR EFFECTIVENESS DIMENSIONS OF  
 PRODUCTIVITY, ADAPTABILITY, FLEXIBILITY, AND ORGANIZATIONAL EFFECTIVENESS

Organization	Productivity	S.D.*	Adaptability	S.D.*	Flexibility	S.D.*	Effectiveness	S.D.*
E	4.19	0.51	3.62	0.61	4.30	0.60	3.95	0.75
B	2.94	1.01	3.09	0.83	3.22	1.02	3.06	1.01
G	3.78	0.64	3.34	0.62	3.81	0.90	3.53	0.84

\*Standard Deviation (S.D.)



Summary

This chapter presented a systematic presentation of the statistical results and analysis. The results were organized into four sections according to the order in which the hypotheses were presented in the preceding chapter. For hypothesis 1, in order to determine relationship between the dependent variable and the independent variables, the results of unstandardized partial regression coefficients and the Pearson correlation coefficients were used for the various groups in the study. In hypothesis 2, a t-test was utilized to determine whether a significant statistical difference existed between perceived and actual effectiveness. The results of unstandardized partial regression coefficients,  $R^2$  and t-test between the scores of supervisory and non-supervisory employees were used to analyze hypothesis 3. Hypothesis 4 was analyzed by consolidating and comparing some of the data that were presented in the earlier hypotheses. A summary of the findings will be presented and elaborated in Chapter V, with implications of these findings discussed and suggestions made for future research.

## CHAPTER V

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE STUDIES

#### Summary

The core problem for this investigation was: What is the relationship between selected organizational characteristics and organizational effectiveness in the three selected formal organizations? Sub-problems were: (1) Are there relationships between the perceptions of the importance of organizational characteristics and organizational effectiveness as perceived by non-supervisory and supervisory employees of the three organizations under the study?, (2) Are there differences in the emphases of importance of the perceived organizational characteristics of productivity, adaptability, and flexibility between supervisory and non-supervisory employees of the three organizations studied?, and (3) Are there differences in the emphases of importance of perceived organizational characteristics between the three selected formal organizations as perceived by non-supervisory and supervisory employees of their respective organization?

Statistical analyses for the above problems stated in hypotheses form indicates that:

- a) Hypothesis one dealt on the relationship between

organizational characteristics of productivity, adaptability and flexibility, and organizational effectiveness as perceived by employees of the three organizations under the study. This hypothesis was tested by the Pearson correlation coefficients and the unstandardized partial regression coefficients, t-values,  $R^2$  and F-value in the respective regression equations for the various organizations. In order to get a generalized relationship between the various variables, the data from the three different organizations were treated in a single regression equation. Significant relationships were indicated by both the individual variable contribution to the regression equation as shown by the t-test and overall relationship as shown by the F-test. Furthermore, the above tests were applied on the various organizations separately. The findings in the institution of higher education organization were: (1) a significant relationship existed between productivity, adaptability, flexibility, and organizational effectiveness, (2) a significant contribution to the regression equation by the variable adaptability as indicated by the t-test, and (3) the Pearson correlation coefficients indicated that adaptability and flexibility are related significantly to organizational effectiveness.

In the government agency or organization G, it was found that there were: (1) significant relationship between the independent variables and the dependent variable as indicated by the F-test, (2) significant contribution of the variable adaptability to the regression equation as shown by the t-test, and (3) the Pearson correlation coefficients indicated a significant relationship between productivity, adaptability, flexibility, and the dependent variable of organizational effectiveness.

In the business firm (or organization B), it was found that: (1) there was no significant relationship between the independent variables and the dependent variable, (2) there was no variable that contributed significantly to the regression equation as indicated by the t-tests, and (3) the Pearson correlation coefficients indicated a significant relationship between the variables of productivity and adaptability, and between the variables of adaptability and flexibility.

b) Hypothesis two was related to the relationship between the perceived importance of organizational characteristics and organizational effectiveness as perceived by employees of the organization under the study. This hypothesis was tested using a t-test between the three characteristics and organizational effectiveness, and further comparisons between percent of respondents that choose organizational characteristics as the most important and the actual organizational characteristic that significantly contributed to the respective regression equation at the 0.05 level of significance.

The findings were: (1) adaptability and flexibility scores were found to be significantly different from the organizational effectiveness score in the institution of higher education, (2) the hypothesis did not receive support because the perceived importance of organizational characteristics (in terms of the majority percentage that choose a characteristic as the most important, and the actual characteristics that were statistically significant in their respective regression equations) were different. In the business firm, no comparison was possible due to lack of a variable that significantly contributed to the equation.

c) Hypothesis three dealt with the differences on emphasis of importance of the perceived organizational characteristics of effectiveness between the supervisory and non-supervisory member employees of the three organizations under the study. This hypothesis was tested with t-statistics and regression coefficients. The findings were: (1) no significant difference on emphasis of importance of organizational characteristics was found between the two groups in the three organizations, and (2) even though adaptability was considered as an important variable in the institution of higher education by both the supervisory and non-supervisory employees as indicated in the regression equations, the mean score of adaptability as tested by t-test was significantly different for the two groups.

d) Hypothesis four dealt with differences on emphasis of importance of the perceived characteristics of organizational effectiveness between the three selected organizations. This hypothesis was tested with the unstandardized partial regression coefficients, t-values,  $R^2$  and F-values. The findings were: (1) adaptability was an important variable in the institution of higher education and the government agency, and (2) no significant differences on emphasis of other important characteristic was found between the three organizations.

### Conclusions

The summary of the research findings indicates that it is possible to make these tentative conclusions:

1. This study gave support to the theoretical notion of Mott, Georgopoulos, and Tannenbaum that the three organizational

characteristics of productivity, adaptability and flexibility are closely related to organizational effectiveness, particularly when the data of all organizations studied were aggregated. However, separate analysis of the data for the business firm showed no significant relationship between the three independent variables and organizational effectiveness, while the institution of higher education and the government agency showed a significant relationship between the independent variables and the dependent variable.

2. The results of testing the third hypothesis led to the conclusion that perception of importance of the perceived organizational characteristics of productivity, adaptability and flexibility between the supervisors and non-supervisory employees of the three organizations studied was not different.

3. The results of testing the fourth hypothesis led to the conclusion that adaptability was an important variable of organizational effectiveness for the institution of higher education and the government agency.

### Implications

The research problem under investigation in this study is the relationship of a priori selected characteristics of organizations to organizational effectiveness, and whether these characteristics can describe organizational effectiveness across organizations. In the theoretical framework, organizational effectiveness was conceptualized in terms of Mott's and Georgopoulos' models of organizational effectiveness. The findings generated from an empirical analysis of these

hybrid models suggest some important implications to both practitioners and theorists.

1. The finding associated with the relationship of productivity, adaptability and flexibility to organizational effectiveness, generally support the notion that these characteristics are related to organizational effectiveness. However, in order to fully understand effectiveness, more criteria of organizational characteristics should be custom-tailored for different organizations to explain the internal processes and environmental interaction that makes an organization effective or ineffective, and research of such nature would potentially help decision-makers of organizations in the future.

2. The notion of comparing or measuring organizational effectiveness across different organizations is difficult, because different organizations have different goals, needs, climates, and environment and it is safe to imply that the best an organizational evaluator can do is an in-depth effectiveness analysis of subunits of departments for a specific organization to determine effectiveness. Nevertheless, further probing of empirical based studies in conjunction with qualitatively designed research can serve as a guide in administering and studying organizations.

In sum, overall evaluation of a total organization, and comparing it to others in terms of effectiveness, is full of theoretical problems. The findings generated from the empirical analysis indicate that consideration of both the organization's internal processes and external environment are paramount for explaining observed differences in organizational effectiveness between the organizations studied.

These findings should provide an additional confirmation to some of the literature which advocated that effective research on organizational effectiveness be performed only by identifying and specifying different organizational characteristics for different organizations with different goals and needs.

#### Recommendations for Future Research

Much research remains to be accomplished in the field of organizational effectiveness specifically in clearly defining and operationalizing the organizational effectiveness construct. First, future research should endeavor to broaden the types of organizations studied and relevant organizational characteristics of variables used. Second, future research should consider formal evaluation of the model utilized by providing direct inferences about cause and effect relations among the variables to be used. Third, future research should expand beyond the data sources that were used in this study, which included both subjective and objective data for effectiveness evaluations. Finally, effectiveness of organizations is a complicated multidimensional phenomena that is not well understood by either theorists or practitioners, and the need for qualitative designed future research with the generation of hypotheses in conjunction with an empirical based testing of the construct of organizational effectiveness can serve as a helpful guide in administering and studying organizations.



APPENDIX A

EFFECTIVENESS INSTRUMENT

MOTT'S EFFECTIVENESS INSTRUMENT (ADAPTED)

Every worker/administrator/supervisor produces something in his/her work. It may be a "product" or a "service."

We would like you to think carefully of the things that you produce or give service to in your work and of the things produced or service given by those people around you in your organization.

1. Thinking now of the various things produced by the people you know in your organization, how much are they producing?

CHECK ONE

\_\_\_\_(1) Their production is very low.

\_\_\_\_(2) It is fairly low.

\_\_\_\_(3) It is neither high nor low.

\_\_\_\_(4) It is fairly high.

\_\_\_\_(5) It is very high.

2. How good would you say the quality is of the products or services produced by the people you know in your organization?

CHECK ONE

\_\_\_\_(1) The quality is very poor.

\_\_\_\_(2) The quality is poor.

\_\_\_\_(3) The quality is neither good nor bad.

\_\_\_\_(4) The quality is good.

\_\_\_\_(5) The quality is very good.

3. Do the people in your organization seem to get maximum output from the resources (money, people, equipment, etc.) they have available and do they do their work efficiently? CHECK ONE
- (1) The efficiency is very poor.
  - (2) The efficiency is poor.
  - (3) Efficiency is neither good nor bad.
  - (4) The efficiency is good.
  - (5) The efficiency is very good.
4. How good a job is done by the people in your organization in anticipating problems that may come up in the future and in minimizing or preventing these problems from occurring? CHECK ONE
- (1) The anticipation is very poor.
  - (2) The anticipation is poor.
  - (3) The anticipation is fair.
  - (4) The anticipation is good.
  - (5) The anticipation is very good.
5. From time to time newer ways are discovered to organize work and newer equipment and techniques are found with which to do the work. How good a job do the people in your organization do at keeping up these changes that could affect the way they do their work? CHECK ONE
- (1) They do a poor job of keeping up to date.
  - (2) Not too good a job.
  - (3) A fair job.

\_\_\_\_(4) They do a good job.

\_\_\_\_(5) They do an excellent job of keeping up to date.

6. When changes are made in routines or equipment, how quickly do the people in your organization accept and adjust to these changes? CHECK ONE

\_\_\_\_(1) Acceptance is very slow.

\_\_\_\_(2) Acceptance is slow.

\_\_\_\_(3) Acceptance is fairly rapid.

\_\_\_\_(4) Acceptance is rapid, but not immediately.

\_\_\_\_(5) Acceptance is very rapid.

7. What proportion of the people in your organization readily accept and adjust to these changes? CHECK ONE

\_\_\_\_(1) Considerably less than half of the people accept and adjust to these changes.

\_\_\_\_(2) Slightly less than half do.

\_\_\_\_(3) The majority do.

\_\_\_\_(4) Considerably more than half do.

\_\_\_\_(5) Practically everyone accepts and adjusts to changes readily.

8. From time-to-time emergencies arise, such as crash programs, schedules moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they cause work overload for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your organization do at coping with 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 these situations.

9. To what extent do you enjoy performing the actual day-to-day activities that make up your job? CHECK ONE

\_\_\_\_(1) To a very little extent.

\_\_\_\_(2) To a little extent.

\_\_\_\_(3) To some extent.

\_\_\_\_(4) To a great extent.

\_\_\_\_(5) To a very great extent.

10. To what extent are there things about your job (people, policies, or conditions) that encourage you to work hard?

CHECK ONE

\_\_\_\_(1) Little or no influence.

\_\_\_\_(2) Some.

\_\_\_\_(3) Quite a bit.

\_\_\_\_(4) A great deal.

\_\_\_\_(5) A very great deal of influence.

11. Do you consider your organization as effective? CHECK ONE

\_\_\_\_(1) Effective to a very little extent.

\_\_\_\_(2) Effective to a little extent.

\_\_\_\_(3) Effective to some extent.

\_\_\_\_(4) Effective to a great extent.

\_\_\_\_(5) Effective to a very great extent.

12. Of the three characteristics of an organization (productivity, adaptability, flexibility), which of the three characteristics is the most important for your organization to be effective?

CHECK ONE

\_\_\_\_(1) Productivity.

\_\_\_\_(2) Adaptability.

\_\_\_\_(3) Flexibility.

\_\_\_\_(4) None of the above.

\_\_\_\_(5) All of them are important.

13. How satisfied are you with your organization? CHECK ONE

\_\_\_\_(1) To a very little extent.

\_\_\_\_(2) To a little extent.

\_\_\_\_(3) To some extent.

\_\_\_\_(4) To a great extent.

\_\_\_\_(5) To a very great extent.

14. How would you categorize your job? CHECK ONE

\_\_\_\_(1) Administration/ Manager/Supervisor

\_\_\_\_(2) Staff

\_\_\_\_(3) Other \_\_\_\_\_  
(specify)

## SELECTED BIBLIOGRAPHY

## SELECTED BIBLIOGRAPHY

- Anderson, N. "Scales and Statistics: Parametric and Non-parametric." Psychological Bulletin, 58 (1961): 305-316.
- Argyris, Chris. Interpersonal Competence and Organizational Effectiveness. Homewood, Ill.: Irwin, Inc., 1962.
- Argyris, Chris. Personality and Organization. New York: Harper and Row, Publishers, 1957.
- Argyris, Chris. Integrating the Individual and the Organization. New York: Wiley, 1964.
- Barnard, Chester. The Functions of the Executive. Cambridge, Mass.: Harvard University Press, 1938.
- Bennis, W. G. Organization Development: Its Nature, Origins, and Prospects. Reading, Mass.: Addison-Weseley, 1969.
- Bidwell, C. E., and Kasarda, J. D. "School District Organization and Student Achievement." American Sociological Review, 40 (1975): 55-70.
- Blalock, H. M. Casual Inferences in Non-Experimental Research. Chapel Hill: The University of North Carolina Press, 1964.
- Blau, Peter M., and Scott, W. R. Formal Organizations: A Comparative Approach. San Francisco: Chandler Publishing Co., 1962.
- Bowers, D. G., and Seashore, S. E. "Predicting Organizational Effectiveness with a Four Factor Theory of Leadership," in W. E. Scott and L. L. Cummings (eds.) Reading in Organizational Behavior and Human Performance. Homewood, Ill.: Richard D. Irwin, Inc., 1973.
- Brown, Frederick G. Principles of Educational and Psychological Testing. New York: Holt, Rinehart and Winston, 1976.
- Burns, T., and Stalker, G. M. The Management of Innovation. London: Tavistock, 1961.



- Cameron, Kim. "Measuring Organizational Effectiveness in Institutions of Higher Education." Administrative Science Quarterly, 23 (1978): 604-629.
- Cameron, Kim. "Domains of Organizational Effectiveness in Colleges and University." Academy of Management Journal (March 1981): 25-47.
- Cameron, Kim. "The Relationship Between Faculty Unionism and Organizational Effectiveness." Academy of Management Journal, 25 (1982): 6-24.
- Cameron, Kim. "Organizational Effectiveness: Its Measurement and Prediction in Institutions of Higher Education." Ph.D. Dissertation, Yale University, 1978.
- Campbell, John P. "On the Nature of Organizational Effectiveness," in Paul S. Goodman and Johannes M. Pennings (ed.) New Perspective on Organizational Effectiveness. San Francisco: Jossey-Bass Publishing, 1979.
- Campbell, J., et al. Managerial Behavior Performance and Effectiveness. New York: McGraw-Hill, 1970.
- Caplow, Theodore. Principles of Organizations. New York: Harcourt, Brace and World, 1964.
- Chickering, Arthur W. Education and Identity. San Francisco: Jossey-Bass, Inc., 1968.
- Child, J. "Managerial and Organizational Factors Associated with Company Performance." Journal of Management Studies, 11 (1974): 175-189.
- Cronbach, H. L. "Coefficient Alpha and the Internal Structure of Tests." Psychometrika, 16 (1951): 297-334.
- Cunningham, Burton J. "Approaches to the Evaluation of Organizational Effectiveness." Academy of Management Review (July 1977): 463-474.
- Downie, N. M. and Heath, R. W. Basic Statistical Methods. New York: Harper and Row, Publishers, Inc., 1974.
- Dubin, Robert. "Organizational Effectiveness: Some Dilemmas of Perspective," pp. 7-14 in S. Lee Spray (ed.), Organizational Effectiveness: Theory, Research and Application. Kent, Ohio: Kent State University Press, 1977.
- Duncan, Robert B. "Multiple Decision-Making Structures in Adapting to Environmental Uncertainty: The Impact on Organizational Effectiveness." Human Relations, 26 (1973): 273-291.

- Etzioni, Amitai. Comparative Analysis of Complex Organizations. New York: Free Press of Glencoe, 1961.
- Etzioni, Amitai. "Two Approaches to Organizational Analysis: A Critique and a Suggestion." Administrative Science Quarterly, 5 (1960): 257-278.
- Etzioni, Amitai. "Authority Structure and Organizational Effectiveness." Administration Science Quarterly, 5 (1960): 43-67.
- Fiedler, F. E., and Chemers, M. M. Leadership and Effective Management. Glenview, Ill.: Scott, Foresman and Company, 1974.
- Fiedler, F. E. A Theory of Leadership Effectiveness. New York: McGraw-Hill Book Co., 1967.
- Finch, Frederic E.; Jones, Halsey R.; and Litterer, Joseph A. Managing for Organizational Effectiveness: An Experimental Approach. New York: McGraw-Hill Book Co., 1976.
- French, Wendell L., and Bell, Cecil H. Organization Development, 2nd ed. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978.
- Friedlander, F., and Pickle, H. "Components of Effectiveness in Small Organizations." Administrative Science Quarterly, 13 (1968): 289-304.
- Georgopoulos, Basil S., and Mann, Floyd C. The Community General Hospital. New York: McMillan, 1962.
- Georgopoulos, Basil S., and Mann, Floyd C. "A Study of Organizational Effectiveness." American Sociological Review, 22 (1957): 534-540.
- Getzels, J. W., et al. Educational Administration as a Social Process. New York: Harper and Row, 1968.
- Ghorpade, J. Assessment of Organizational Effectiveness. Pacific Palisades, Calif.: Goodyear, Publishing Co., 1971.
- Gourveiteh, B. Statistical Methods: A Problem Solving Approach. Boston: Allyn and Bacon, Inc., 1965.
- Gross, E. "Universities as Organizations: A Research Approach." American Sociological Review, 33 (1968): 518-544.

- Halpin, A., and Croft, D. The Organizational Climate of Schools. U. S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C., 1962.
- Hanan, M. T., Freeman, J., and Meyer, M. W. "Specification Models for Organizational Effectiveness." American Sociological Review, 41 (1976): 136-143.
- Hays, W. L. Statistics. New York: Holt, Rinehart and Winston, 1981.
- Hemphill, J. J. Personal Variables and Administrative Styles: In Behavioral Science and Educational Administration. National Society for the Study of Education, Washington, D.C., 1964.
- Hersey, P., and Blanchard, K. H. Management or Organizational Behavior. 3rd ed. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1977.
- Hill, J. E., and Kerver, A. Models, Methods and Analytical Procedures in Education Research. Detroit: Wayne State University Press, 1967.
- Hirsch, P. M. "Organizational Effectiveness and the Institutional Environment." Administrative Science Quarterly, 20 (1975): 327-344.
- Herowitz, Leonard M. Elements of Statistics for Psychology and Education. New York: McGraw-Hill Book Company, 1974.
- House, Edgar F. Organization Development. 2nd ed. New York: West Publishing Company, 1980.
- Hoy, F., and Hellriegel, D. "The Kilmann and Herden Model of Organizational Effectiveness Criteria for Small Business Managers." Academy of Management Journal, 25 (1982): 308-322.
- Hunt, E. H. "Assessing Organizational Effectiveness." Management World, 5 (1976): 26-27.
- Huse, Edgar F. Organization Development. 2nd ed. New York: West Publishing Company, 1980.
- Ivancevich, John M., Gibson, James L., and Donnely, James H. Organizations. 3rd ed. Dallas, Texas: Business Publication, Inc., 1979.
- Jafary, A. A. "Management Systems and Organizational Effectiveness in Selected Multinational Organizations in the Arabian Gulf Region." Ph.D. Dissertation, University of Oklahoma, 1979.

- Johnson, J. D., and Schneck, Rodney. "Constituent Views of Organizational Effectiveness: Evidence from Police Organizations." Academy of Management Journal, 25 (1982): 25-46.
- Katz, Daniel, and Kahn, Robert L. The Social Psychology of Organizations. New York: John Wiley and Sons, Inc., 1966.
- Kerlinger, F. N., and Pedhazur, E. J. Multiple Regression in Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.
- Kerlinger, F. N. Foundations of Behavioral Research. New York: Holt, Rinehart, Winston, Inc., 1973.
- Kilman, Ralph H., and Herden, Richard P. "Towards A Systematic Methodology for Evaluating the Impact of Interventions on Organizational Effectiveness." The Academy of Management Review, 1 (1976): 87-98.
- Kitchoff, Bruce A. "Organizational Effectiveness Measurement and Policy Research." Academy of Management Review, 2 (1977): 347-355.
- Lawler, E. E. Pay and Organizational Effectiveness: A Psychological View. New York: McGraw-Hill Book Company, 1971.
- Lawrence, P., and Lorsch, J. Organization and Environment. Homewood, Ill.: Irwin, 1969.
- Likert, R. New Patterns of Management. New York: McGraw-Hill, 1961.
- Likert, R. "Human Resource Accounting: Building and Assessing Productive Organizations." Personnel (May/June 1973): 8-24.
- Mahoney, Thomas A., and Weitzel, W. "Managerial Models of Organizational Effectiveness." Administrative Science Quarterly, 14 (1969): 351-365.
- Maslow, A. Motivation and Personality. New York: Harper and Row, 1954.
- McGregor, Douglas. The Human Side of Enterprise. New York: McGraw-Hill Book Co., 1960.
- Moorhead, Gregory. "Organizational Analysis: An Integration of the Macro and Micro Approaches." Journal of Management Studies, 18 (1981): 1919-218.

- Mott, Paul E. The Characteristics of Effective Organizations. New York: Harper and Row, Publishers, 1972.
- Mulford, Charles L. "Comments on Measurement of Effectiveness." Administrative Science Quarterly, 21 (1976): 156-157.
- Neghandi, A. R., and Reimann, B. C. "Task Environment Decentralization and Organizational Effectiveness." Human Relations, 26 (1973): 203-214.
- Parsons, Talcott. The Structure of Social Action. New York: McGraw-Hill, 1937.
- Pennings, Johannes M., and Goodman, Paul S. "Toward a Workable Framework." In Paul S. Goodman and Johannes M. Pennings (eds.), New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass, 1977.
- Pennings, Johannes M. "The Relevance of the Structural Contingency Model for Organizational Effectiveness." Administrative Science Quarterly, 20 (1975): 393-410.
- Perrow, Charles. "The Analysis of Goals in Complex Organizations." American Sociological Review, 26 (1961): 854-866.
- Price, J. L. Organizational Effectiveness: An Inventory of Propositions. Homewood, Ill.: Irwin, 1968.
- Price, J. L. "The Study of Organizational Effectiveness." Sociological Quarterly, 13 (1972): 3-15.
- Reddin, W. J. Managerial Effectiveness. New York: McGraw-Hill Book Company, 1970.
- Scott, Richard W. "Effectiveness of Organizational Effectiveness Studies." In Paul S. Goodman and Johannes Pennings (eds.), New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass, 1977.
- Selltiz, Claire; Wrightsman, Lawrence S.; and Cook, Stuart W. Research Methods in Social Relations. 3rd ed. New York: Holt, Rinehart and Winston, 1976.
- Steers, Richard M. Organizational Effectiveness: A Behavioral View. Santa Monica, Calif.: Goodyear Publishing Company, Inc., 1977.

- Steers, Richard M. "Problems in the Measurement of Organizational Effectiveness." Administrative Science Quarterly, 20 (1975): 546-558.
- Steers, Richard M. "When is an Organization Effective? A Process Approach to Understanding Effectiveness." Organizational Dynamics (Autumn 1976): 50-63.
- Simon, Herbert A. Administrative Behavior. 2nd ed. New York: MacMillan Co., 1961.
- Simon, Herbert A. "On the Concept of Organizational Goal." Administrative Science Quarterly, 9 (1964): 2-22.
- Simon, Robert H. Achieving Humane Organization. Malibu, California: Daniel Spencer Publisher, 1981.
- Spray, Lee S. "Organizational Effectiveness: Theory Research and Utilization Introduction." Organization and Administrative Sciences, Vol. 7, Nos. 1 and 2 (Spring/Summer 1976): 14.
- Starbuck, William H. "Organizational Growth and Development." In James G. March, ed., Handbook of Organizations. Chicago: Rand McNally, 1965.
- Strasser, S., et al. "Conceptualizing the Goal and System Models of Organizational Effectiveness Implications for Comparative Evaluation Research." Journal of Management Studies, 18 (1981): 321-340.
- Taylor, F. W. The Principles of Scientific Management. New York: Harper and Row, 1911.
- Thorndike, R. L. Personnel Selection: Test and Measurement Techniques. New York: Wiley, 1949.
- Von Bertalanffy L. General Systems Theory. New York: Brazziles, 1968.
- Webb, Ronald J. "Organizational Effectiveness and the Voluntary Organization." Academy of Management Journal, 17 (1974): 663-677.
- Weber, Max. The Theory of Social and Economic Organization. New York: Oxford University Press, 1947.
- Weick, K. E. "Educational Organizations as Loosely Coupled Systems." Administrative Science Quarterly, 21 (1976): 1-19.

Weiss, Carol H. Evaluation Research: Methods of Assessing Program Effectiveness. Englewood Cliffs, New Jersey: Prentice Hall, 1972.