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ABSTRACT

ORGANIZATIONAL VALUES, STRUCTURE AND TECHNOLOGY

By

Ronald J. Hunady

The general purpose of this study was to identify and describe values of individuals that could be relevant to the description and prediction of performance and behavior within organizations.

The value instrument used in this research, called the Organizational Value Questionnaire (OVQ), required participants to respond to a series of statements describing various organizational practices and policies. The OVQ was administered to 738 managers from 12 firms. The responses to the OVQ were factor analyzed and ten meaningful value factors were identified.

The first objective of this study was to attempt to analyze the relationship between the value factors, and an organization's structural characteristics, and system of production technology. The four organizational structural characteristics studied were: (1) Job Position, (2) Managerial Level, (3) Functional Work Area, and (4) Organization Size. The three production systems used in this study

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follow Joan Woodward's classification of: (1) Unit and Small Batch Production, (2) Large Batch and Mass Production, and (3) Process Production. This served as the descriptive aspect of the research. A two-way analysis of variance was carried out to analyze these relationships.

The second objective was to utilize values in an attempt to predict individual attitudes within business organizations by analyzing the relationship between value scores and two attitudinal measures. The two attitude measures used in this study were: (1) Job Satisfaction, and (2) Propensity To Leave. This part of the research made up the predictive study. A one-way analysis of variance was carried out to analyze these relationships.

Fourteen significant and meaningful relationships were found to exist between the value factors and the organizational structural characteristics. These relationships are too extensive to report in this summary.

Eight significant relationships were found to exist between the value factors and technology. In most cases, the results support Woodward's observations of the types of behaviors existing within each technology classification.

The results of the analysis of the relationship between values and Job Satisfaction implies that those managers who view executive positions as having status distinctions and are concerned with the welfare and needs of their employees, have greater job satisfaction than managers who do not hold these values. In addition, they stress getting

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The results of the analysis of the relationship between values and Propensity To Leave indicates that those managers who are least likely to leave an organization have a conservative orientation and place less value on competitive behavior. In addition, while they favor an equalitarian climate, they place a higher value on getting the job done through the use of controls and formal authority than those managers most likely to leave. They also place a low value on executive status distinctions. Correspondingly, managers who are less conservative in orientation and who place a higher value on competition appear to be the most likely to leave. In addition, they tend not to value an equalitarian climate, but stress a climate where there are executive status distinctions and the task is accomplished without a stress on formal authority and controls.

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ORGANIZATIONAL VALUES, STRUCTURE AND TECHNOLOGY

By

Ronald J. Hunady

A THESIS

Submitted to
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for the degree of

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CHAPTER I

INTRODUCTION

General Overview

Our contemporary society is one in which large, complex, formal organizations exert a predominant influence on the pattern of our lives and life styles.[1] We are born in, educated by, worship in, and spend most of our lives working for organizations. We have come to rely on these institutions as the most rational and efficient mechanism by which human effort and organizational resources can be combined to achieve the objectives and needs of our society.

In the interest of increasing organizational effectiveness and the integration of its human resources, management theorists and practitioners have shared a common goal in advancing the knowledge frontiers of organizational theory and behavior.[2]

---

[1]There are numerous definitions of organizations; the one used in this study follows the thinking of Etzioni in viewing organizations as social units deliberately created to achieve specific goals. See: Amitai Etzioni, Modern Organizations (Englewood Cliffs: Prentice-Hall, Inc., 1964), p. 1.

[2]Organization theory and behavior is viewed following Pugh, as the study of the structure and functioning of organizations and the behavior of groups and individuals within them. See: D. S. Pugh, "Modern Organization Theory: A Psychological and Sociological Study," Psychological Bulletin, 1966, 66, pp. 235-251.

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[4]Ibid.

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Carzo in a review of the research on the subject found that in the last ten to fifteen years, there has been a tremendous increase in writings relating to organization theory and behavior.[3] He states that there have been a variety of different approaches, paradigms and conceptual theories developed to describe and theorize about organizations. These approaches reflect different value orientations (primarily economic or humanistic) as well as methodological differences.[4] Mason Haire in analyzing the current state of knowledge on organizational theory believes that it is a development of widely differing conceptual frameworks growing out of and relative to several disciplines, among which are Sociology, Psychology, Anthropology, Political Science, Economics, and Business Administration. He states that various theorists and disciplines approach the study of organization theory from different starting points and go in divergent directions.[5]

Among the major theories and models which have proliferated throughout organizational literature in recent years in an attempt to provide a comprehensive body of theory, are

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[3]Rocco Carzo, "Organization Theory: Review of Research and Future Direction," in Management Research and Practice, William Frey, (ed.), (Amherst, Massachusetts: Eastern Academy of Management, 1970), pp. 20-21.

[4]Ibid.

[5]Mason Haire, Modern Organization Theory (New York: John Wiley, 1967), p. 1.

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concepts related to mechanical systems, organic systems, decision making, information flow and general systems. These theories and models have made a valuable contribution to the knowledge on organizations. However, at present, there is no clearly unified, comprehensive theory on organizations.[6]

Haire believes, nonetheless, that those studying organization theory draw heavily on one another and that there are specific areas where common developments exist or are needed to support advance in research.[7]

One of the specific subject areas which permeates throughout many of these theories and models advanced by organization theorists is the concept of values; individual, group, and organizational. A review of the recent literature on organization theory and behavior (which will be covered in detail later in this chapter) indicates that the notion of values is being given increasing attention. It has been appearing in theoretical and predictive models of organization theory and behavior at an intensifying rate. The literature indicates that values can and do influence organizational strategy choices, decision making, and the recruitment and socialization of its members. Values also play a prominent role in the organizational processes of communication,

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[6] Ibid., pp. 1-12.

[7] Ibid.

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[10]Ibid.

leadership, and in the patterns of interpersonal relationships existing within an organization.

In addition to the role of values in influencing the ongoing organizational processes, the concept of values is an integral part of contemporary and emerging issues in organization theory and behavior. Theorists and practitioners are currently concerned with several major issues relating to organizational performance and behavior. These issues relate to the development and renewal of organizations, the resolution of conflict, the role of structure and technology, and the influence of environmental factors.[8]

Filley identifies changing values as one of the most critical issues in the future of management teaching and practice. He states that there are significant and fundamental changes taking place in society as a whole and in our business institutions in particular. These changes reflect fundamental changes in the values and life styles of individuals.[9] Filley believes that old established organizational values such as rationality, efficiency, conformity and profit maximization are being challenged.[10]

---

[8]Richard H. Viola, "Organization Theory: A Review of Research and Future Direction," in Management Research and Practice, William Frey, (ed.), (Amherst, Massachusetts: Eastern Academy of Management, 1970), pp. 22-36.

[9]Allen C. Filley, "Some Major Issues in the Future of Management: Practice and Teaching," in The Academy of Management Proceedings - Thirteenth Annual Meeting (San Diego, California: 1970), pp. 7-34.

[10]Ibid.

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[12] Ibid.

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Others are also voicing this theme. Viola believes that the major issues in organization theory in the 1970's will be largely associated with value problems. He states that:

> In America our values are undergoing rapid change. The emphasis on the concept of property rights which has dominated behavior is shifting to one which will increasingly be contradictory to the purest form of pragmatism. It is a shift toward "personalism" with a concomitant emphasis upon the primacy of the human person who is trying to discover his identity.[11] . . . . . .
> Organizations, then, must satisfy the needs of the society in which they exist. Since needs are dynamic, and since they are based on values, we must be concerned with shifts in values.[12]

According to Warren Bennis, "Every age develops an organization form most appropriate to the genius of that age." He believes that along with the proliferation of recent research, which has increased our knowledge of organizations, other changes are taking place that make it necessary to revitalize and rebuild organizations themselves.[13]

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[11]Viola, op. cit., p. 30.

[12]Ibid.

[13]Warren G. Bennis, Organization Development: Its Nature, Origins and Prospects (Reading, Massachusetts: Addison-Wesley Publishing Company, 1969), pp. 1-13. Also see: Richard Beckhard, Organization Development: Strategies and Models (Reading, Massachusetts: Addison-Wesley Publishing Company, 1969); Robert R. Blake and Jane S. Mouton, Building A Dynamic Corporation Through Grid Organization Development (Reading, Massachusetts: Addison-Wesley Publishing Company, 1969); Edgar H. Schein, Process Consultation: Its Role in Organization Development (Reading, Massachusetts: Addison-Wesley Publishing Company, 1969); Paul R. Lawrence and Jay W. Lorsch, Developing Organizations: Diagnosis and Action (Reading, Massachusetts: Addison-Wesley Publishing Company, 1969).

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[15] Benn

This theme is carried further by Warren Schmidt who states that the 1970's will bring a time of confrontation and revolution to organizations. In his opinion, we are on an organizational frontier. One of the biggest challenges to business managers, as a result of this frontier, will be the problem of managing organizations with an infusion of new people, who will bring radically different values and life styles into the firm.[14]

It is apparent that this frontier age described by Filley, Viola, Bennis, Schmidt and others, will be one of dramatic change. Bennis argues that the only viable way to change organizations in this new frontier age is to change their culture. He defines culture as a way of life, a system of values, attitudes, and an accepted form of interaction and relating.[15] However, before the culture of an organization can be changed, it will be necessary to determine the values of organizations and individuals. While there has been a great deal of research carried out on attitude measurement, at the present time, very little research has been directed toward the actual identification and description of values that are relevant to business organizations and the issues in organization theory and behavior.

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[14]Warren H. Schmidt, Organizational Frontiers and Human Values (Belmont, California: Wadsworth Publishing Company, 1970), p. 8.

[15]Bennis, op. cit., pp. 1-13.

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Thus, values play an important role in the contemporary and emerging themes, issues, and paradigms relating to organization theory and behavior. The following sections of this chapter define the specific purposes of this research study, distinguishes between values and attitudes, covers in detail the role of values in behavior and explains the research plan and hypotheses of the study.

Purpose of the Study

As noted, very little actual research has been carried out to determine values that are pertinent to business organizations and to the study of organization theory and behavior.

The general purpose of this study is to attempt to identify and describe values that would be relevant to or an underlying framework for understanding, describing, and predicting performance and behavior within organizations.

This research project has three specific objectives. First, to determine and describe general organizational value dimensions. This enables one to compare the perceptions of organizations by various persons. The concept of organizational values then, as used in this study, refers to the values derived from the perceptions of managers of business organizations toward ideal organizational behavior. As part of this first objective, an analysis was made of the relationship and effect of selected organizational structural and technological variables on individual values.

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The second purpose of this research project is to utilize values to aid in the prediction of individual behavior within business organizations by analyzing the relationship between value scores and the individual variables of job satisfaction and propensity to leave. These individual variables are described in Chapter II.

The organizational value dimensions were developed through the administration of an organizational value questionnaire to a sample of managers in selected industries and firms. The value instrument used in this research is a modification of an organization value questionnaire developed by the Personnel Research Board at Ohio State University. The Ohio State questionnaire was administered to college students. The third objective of this research project will be an attempt to replicate the value factors produced by the Ohio State studies.

In the next section, the concept of values will be defined and distinguished from those terms which are at times used interchangeably with it in the literature.

The Concept of Values

Definition of values. There has been a considerable increase in interest in the study of values and their ramifications. This is reflected in the increasing amount and

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variety of literature on values.[16] This diversity of publications mirrors the trend in value research over the last fifteen years toward a growing interdisciplinary approach to the study of values.[17]

While the philosophical study of values can be traced back to the historical beginning of philosophy, it was not until the 1920's and 1930's that behavioral scientists became seriously interested in the descriptive, non-philosophical study of values.[18]

According to William Dukes, in his review of the literature on the psychological studies of values, the early "schools of psychology" were concerned with fact, not value, in carrying out psychological investigations. This resulted in a scarcity of research on values. It was not

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[16]Some idea of the diversity of recent research can be seen by the following: Milton Rokeach, "A Theory of Organization and Change Within Value-Attitude Systems," The Journal of Social Issues, January, 1968, pp. 13-33; George W. England, "Personal Value Systems of American Managers," Academy of Management Journal, 10, March, 1967, pp. 53-68; Warren H. Schmidt, Organizational Frontiers and Human Values (Belmont, Cal.: Wadsworth Publishing Company, 1970); Robert P. Beech, Value Systems, Attitudes and Interpersonal Attraction (East Lansing, Michigan: Unpublished Ph.D. Thesis, 1966); other references will be given throughout Chapter I.

[17]Ethel M. Albert and Clyde Kluckhohn, A Selected Bibliography on Values, Ethics and Esthetics (Glencoe: The Free Press, 1959).

[18]Ibid., Preface.

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until the 1930's that applications of the scientific method were applied to various aspects of the value question.[19]

In addition to the relatively late start in the study of and the recognition of the importance of values, value research has been hampered by a lack of consensus on a definition. The discussion of values is made difficult by pronounced differences in what the term means to different people. The term is frequently given different meanings in the literature and it is not always clear which meaning a writer intends.[20] There is often little consensus over a definition within the particular disciplines themselves that are most frequently associated with value research, such as, philosophy, sociology, psychology and anthropology.[21] Kluckhohn regards values as a point of convergence for these various specialized social sciences and a key concept for their integration with studies in the humanities. As such, values are potentially a bridging concept which can serve to link together many diverse specialized studies.[22] The idea of values serving as a linking concept was

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[19]William F. Dukes, "Psychological Studies of Values," Psychological Bulletin, 1955, 52, pp. 24-50.

[20]Franz Adler, "The Value Concept in Sociology," American Journal of Sociology, November, 1956, 62, pp. 272-279.

[21]Clyde Kluckhohn, "Values and Value-Orientations in The Theory of Action," in Toward A General Theory of Action, F. Parsons and E. A. Shils, (eds.), (New York: Harper and Row, 1951), pp. 388-433.

[22]Ibid., p. 389.

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discussed in the introduction of this chapter. It was pointed out that values have in recent years been increasingly integrated into the various theoretical and predictive models advanced by different researchers of organizations.

Dukes in his review of the literature, found a number of concepts such as attitude, interest, sentiment, and needs used to refer to values.[23] Kluckhohn found the following to be the most frequently employed terms used to define values: attitudes, motives, objects, and measurable quantities.[24] These and other reviews indicate that attitudes, motives, sentiments and opinions are the terms most often used in place of or interchangeably with the concept of value. These terms must be taken into consideration when developing an overall definition of value. These items will be discussed further in the next section.

Kluckhohn defines a value as a concept of the desirable which influences a person's selection of means and ends (goals) of behavior.[25] He believes that values imply a code or a standard which has some persistence through time. It places things, acts, ways of behaving or goals on an approval-disapproval continuum. A value is thus regarded

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[23]Dukes, op. cit., pp. 24-50.

[24]Kluckhohn, op. cit., p. 390.

[25]Ibid., pp. 395-396.

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as not just a preference, but a preference which is considered to be justified morally, by reasoning, or by aesthetic judgment.[26] Williams, like Kluckhohn, believes that values are or act as standards of desirability, phrased in terms of what is considered as good or bad, pleasant or unpleasant, or appropriate or unappropriate.[27] He regards values as the criteria by which goals and means are chosen from among alternatives.[28] Milton Rokeach considers a value to be a belief about how one ought or ought not to behave, or a belief about some end-state of existence (goal) worth or not worth attaining.[29]

The concept of value used in this study incorporates the common aspects of all three definitions previously discussed. A value is regarded as a belief about what one considers desirable. As such, it represents a preference for some act, condition, thing or goal, and is phrased in terms of what is good or bad, pleasant or unpleasant, appropriate or unappropriate.

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[26] Ibid.

[27] Roger M. Williams, "Analyst of Social Institutions and Systems," in Modern Social Theories, Charles P. Loomis and Zona K. Loomis (eds.), (Princeton, New Jersey: D. Van Nostrand Company, 1965), pp. 499-502.

[28] Ibid.

[29] Milton Rokeach, Beliefs, Attitudes and Values (San Francisco: Jossey-Bass Incompany, 1968), p. 124.

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[30] Ibid

[31] Ibid

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Differentiation between values, attitudes, needs, sentiments, and opinions. This conception of value should be differentiated from concepts which are often utilized interchangeably with values. Since the greatest amount of confusion in the literature appears to be concerning the distinction and relationship between values, attitudes, needs, sentiments, and opinions, it is necessary to explore these ideas further.

Values are most often used synonymously with attitude. Rokeach, however, regards an attitude as an organization of several beliefs focused on a specific object or situation, predisposing one to respond in some preferential manner.[30] He views values as having to do primarily with modes of conduct and end-states (goals). As such, values differ from attitudes in being a single belief, guiding action and judgment across specific objects and situations.[31] In addition, he regards a value as being more fundamental to a person in that,

> once internalized, it becomes consciously or unconsciously, a standard or criterion for guiding action, for developing and maintaining attitudes toward relevant objects and situations, for justifying one's own and other's actions and for morally judging and comparing self with others.[32]

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[30] Ibid., pp. 157-160.

[31] Ibid., p. 127.

[32] Ibid., p. 160.

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He thus regards values as being more lasting than attitudes and serving as a standard to influence attitudes. Rokeach believes that attitudes have received more attention than values in the past for three reasons:

(1) a more rapid development of methods to measure attitudes,

(2) more consensus on the meaning of attitudes,

(3) the belief that attitudes were better suited to experimentation.[33]

Kluckhohn is in basic agreement with Rokeach. He regards an attitude as a mental state of readiness, exerting an influence upon an individual's response to objects and situations. He also views attitudes as being more temporary than values.[34] The primary distinction then, between an attitude and a value, is that values are not directed toward a specific object or situation, are more enduring over time, and serve as a yardstick or standard to guide actions, attitudes, evaluations and justifications, for one's self and others.

The relationship between values and needs or motives is a complex one. Some define value synonymously with needs.[35] However, it would appear that values can both

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[33] Ibid., p. 158.

[34] Kluckhohn, op. cit., p. 423.

[35] Robert P. Beech, "Value Systems, Attitudes, and Interpersonal Attraction," (unpublished Ph.D. thesis, Michigan State University, East Lansing, Michigan, 1966), p. 4.

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create the stimulus for need arousal and develop from existing needs. Kluckhohn regards values as being a factor in the motivational process in that they can play a part in inciting an individual to action as well as in governing the direction of the resulting act.[36] He believes that any given act is a result of interaction between a motive or need, the situational conditions, the available alternatives, and a person's values.[37] Beech, in discussing this issue regards needs as becoming increasingly important under conditions of deprivation, until they are eventually satisfied, at which time they, at least, temporarily diminish in importance. He believes, however, that a value would not diminish in importance.[38] Values, then, can be considered to have an effect on need arousal, but also to be capable of existence after a need has been satisfied. As such, the motivational process of needs is not congruent with the definition of values used in this research.

Kluckhohn states that the history of thought has more or less clearly distinguished values from sentiments and opinions.[39] Sentiments can be regarded as expressions of feeling or emotion, while opinions are viewed as verbal

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[36]Kluckhohn, op. cit., pp. 424-425.

[37]Ibid., p. 403.

[38]Beech, op. cit., p. 4.

[39]Kluckhohn, op. cit., p. 396.

expressions of some attitude or value.[40] Values, then, can be clearly distinguished from the concepts of sentiment or opinion.

Research on Values and Behavior

Values and non-organizational behavior. In the previous section, the concept of value was defined. Prior to discussing values and organization behavior, it would be helpful to review the literature on the relationship between values and behavior in general.

Rokeach believes that a person's belief system, in which values play the central role, can be organized into patterns or systems whose characteristics and behavioral outcomes can be described and measured.[41] Kluckhohn also believes that values can be organized into a system. He views certain values as having more of a central role in an individuals' or groups' value system, and he terms these priority values.[42] /A value is regarded as a standard that endures through time, and which serves to organize behavior through the formulation of action commitments. These commitments become manifest in ideas, expressional symbols, and in the development of behavioral norms.[43] Williams,

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[40]Rokeach, op. cit., pp. 124-132.

[41]Ibid., p. 160.

[42]Kluckhohn, op. cit., p. 420.

[43]Ibid., pp. 394-395.

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like Rokeach and Kluckhohn, regards values as methods of organizing action. He believes that they are the real determinants of behavior, because they serve as the criteria by which ends or goals, and means are selected from among alternatives.[44] Parsons' views an individual's values as the key element behind the development of norms to guide action in organizations.[45] He believes that, whenever any individual or group is in a situation which requires a choice between alternatives, their values will commit them to norms which serve to guide their choices.[46] To Parsons, group values grow or develop from the plurality of values of the individuals making up the group. As individuals within a group interact, their values become institutionalized through their mutual desires and expectations and as a result, become standards or norms.[47] Values thus determine through the establishment of norms, an individual's commitment toward group goals and means. They also determine the sanctions on behavior employed within the group.[48]

Values then, once they are internalized, either by an individual or group, consequently serve as standards to

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[44]Williams, op. cit., p. 502.

[45]Talcott Parsons, Toward a General Theory of Action (New York: Harper and Row, 1951), pp. 59-72.

[46]Ibid.

[47]Ibid.

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guide behavior in selecting between alternative goals and means. In addition, they appear to guide behavior in interpersonal relationships through influencing the compatibility of people toward each other. Beech, in investigating the effects of value system similarity on interpersonal attraction, found in his review of the literature a number of studies which demonstrated that people are attracted to each other and prefer to associate with others who hold similar values and attitudes.[49] An individual's or group's value system then, can be regarded as a conscious or unconscious standard for developing and maintaining attitudes and for making comparisons between self and others.[50]

England in a study of the relationship between managerial values and behavior, regards values as significant for the following reasons:

(1) Personal value systems influence the way a manager looks at other individuals and groups of individuals, thus influencing interpersonal relationships;

(2) Personal value systems influence a manager's perceptions of situations and problems he faces;

(3) Personal value systems influence a manager's decisions and solutions to problems;

(4) Personal value systems set the limits for the determination of what is and what is not ethical behavior by a manager;

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[49]Beech, op. cit., p. 1.

[50]Rokeach, op. cit., p. 160.

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(5) Personal value systems influence the extent to which a manager will accept or will resist organizational pressures and goals;

(6) Personal value systems influence the perceptions of individual and organizational success as well as their achievement;

(7) Personal value systems provide a meaningful level of analysis for comparative studies among organizational groupings and/or national groupings of managers.[51]

Despite the apparent importance of values in influencing and directing behavior, most of the research studies have been predominately descriptive and comparative, with few relating to the prediction of performance.[52] For example, Dukes, in his review of the literature in psychology on values, found that most of the studies dealt with examining values as a function of individual differences such as age, sex, religion, etc. Studies connecting values to performance were scarce and largely related to organizing cognitive processes that dealt primarily with perceptions.[53]

Values and organizational behavior. Organizations have been viewed as social institutions having cultural,

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[51]George W. England, "Personal Value Systems of American Managers," Academy of Management Journal, March, 1967, 10, pp. 53-68.

[52]John Rizzo, Value Dimensions, Value Commitments and In-Basket Performance of Business Students (Columbus: Ohio State University, Ph.D. Thesis, 1964), p. 4.

[53]Dukes, op. cit., pp. 24-50.

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social, and personality, as well as structural-technical components.[54] As organizations themselves are a subculture of the larger cultural system, members of organizations may be expected to reflect in their behavior patterns many of the values and attitudes existing in the society at large. Organizations in turn, have expected patterns of conduct, values, and norms, which they consider right and proper for the organization and within which all members are expected to operate.[55]

Schein has conducted research on the process by which an individual influences and, in turn, is influenced by an organization's value system. He regards the process by which a new member learns the values, norms, and consequently, the required behavior patterns of the organization and group to which he is entering, as a socialization process.[56] He states that these values, norms and resulting behavior patterns usually involve:

(1) The basic goals of the organization;

(2) The preferred means by which these goals should be attained;

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[54]Talcott Parsons, "Social Theory," in Modern Social Theories, Charles P. Loomis and Zona K. Loomis, (eds.), (Princeton, New Jersey: D. Van Nostrand Co., Inc., 1965), p. 330.

[55]Dalton E. McFarland, Management: Principles and Practices (New York: Macmillan Company, 1964), pp. 600-612.

[56]Edgar H. Schein, "Organizational Socialization and the Profession of Management," Industrial Management Review, Winter, 1968, 9, pp. 1-6.

(3) The basic responsibilities of the member in the role given him;

(4) The behavior patterns which are required for effective performance in the role;

(5) A set of rules or principles which pertain to the maintenance of the identity and integrity of the organization and group.[57]

Organization values then, can be considered as a reflection of and in turn, reflected in, the organizations goals and methods of achieving them, and in the managerial philosophy of its major executives. Organizational values can be learned from the direct instruction of superiors, the observation of reference groups and peers, by observing examples of key executives, through reading the official literature of the organization, and from experiences with the organizations reward and sanction system.[58] Thus, the behavior of individuals within an organization can be influenced in part, by the value system of society, the organizations values, and the individuals personal values.

A review of the literature on values and organizational behavior indicates that the personal value system of managers has a major influence on their leadership approaches, communication processes, decision-making, determination of strategy, recruitment and socialization into groups, and on their interpersonal relations.

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[57] Ibid., p. 6.

[58] Ibid., pp. 6-7. Also check, Alvar Elbing and Carol Elbing, The Value Issue of Business (New York: McGraw Hill Company, 1967), pp. 197-201.

Fleishman and Peters used a questionnaire on interpersonal values developed by Gordon to obtain information about the interpersonal values of business managers from four plants of a leading soap manufacturer. They found evidence that differences in leadership ideology are related to managerial level. Lower level managers were found to exert more stress on their subordinates toward goal attainment, than did higher level managers. Higher level managers in turn, were found to show more consideration in their relations with their subordinates. They argue that the kinds of values dominant in an organization may determine the existing leadership styles. This can occur through the establishment of norms, by which leader behavior is evaluated and through determining the goals toward which leadership acts are directed.[59]

McFarland and Wickert found in their review of research on executive effectiveness that one of the major reasons individuals who were predicted for success failed was because they often were placed in situations where their background or managerial style was incompatible with the existing values in the situation.[60] Numerous studies

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[59]Edwin A. Fleishman and David R. Peters, "Interpersonal Values, Leadership Attitudes and Managerial Success," Personnel Psychology, 1962, pp. 127-128.

[60]Frederic R. Wickert and Dalton E. McFarland, Measuring Executive Effectiveness (New York: Appleton-Century-Crofts, 1967), p. 68.

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have been conducted that relate to the role of personal values in influencing selection and in the filtering and interpretation of what a person perceives.[61]

Guth and Tagiuri used the Allport-Vernon-Lindzey "Scale of Values," to measure the personal values of business managers. They administered the scale to high-level executives attending the Advanced Management Program at the Harvard Business School. They point out through examples and case studies how personal values are important determinants of corporate strategy choices.[62] Most managers are unaware of their own values and ofter misjudge the values of others. The executive who will take steps to gain a better understanding of his own and other managers' and employees' values can gain an important advantage in developing workable and supportable policies.[63]

Collier used personal observations and interviews with various business executives in an attempt to identify the major premises, or values by which decisions in business organizations are made. He found that the business managers

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[61]For an excellent review of the role of values in perception see, John Rizzo, Value Dimensions, Value Commitments and In-Basket Performance of Business Students (Columbus: The Ohio State University, Ph.D. Thesis, 1964), pp. 7-13.

[62]William D. Guth and Renato Tagiuri, "Personal Values and Corporate Strategy," Harvard Business Review, September-October, 1965, pp. 123-132.

[63]Ibid., pp. 123-124.

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he studied were guided by consistent, specific values in making their decisions. He called those values that related to hard work and self teaching as "Volition Values." Values that related to survival were termed "Capability Values" and values that related to interests in others, he referred to as "Other Values." These were found to be the primary value groups influencing decisions.[64]

Learned, Dooley and Katz relate how a managers role places him constantly in a position of conflict through causing him to choose between alternative courses of action. They express the belief that a manager's priority system of values aid him in determining his choices.[65] Bernthal concludes similarly, that implied in every decision a managers makes, there is a judgment in terms of his priority of values.[66]

Scott, in a field study of ten fraternities and sororities, attempted to determine how personal values enter into various organizational processes. He found that organizations tend to recruit new members with values similar to those of the current members and expect the new

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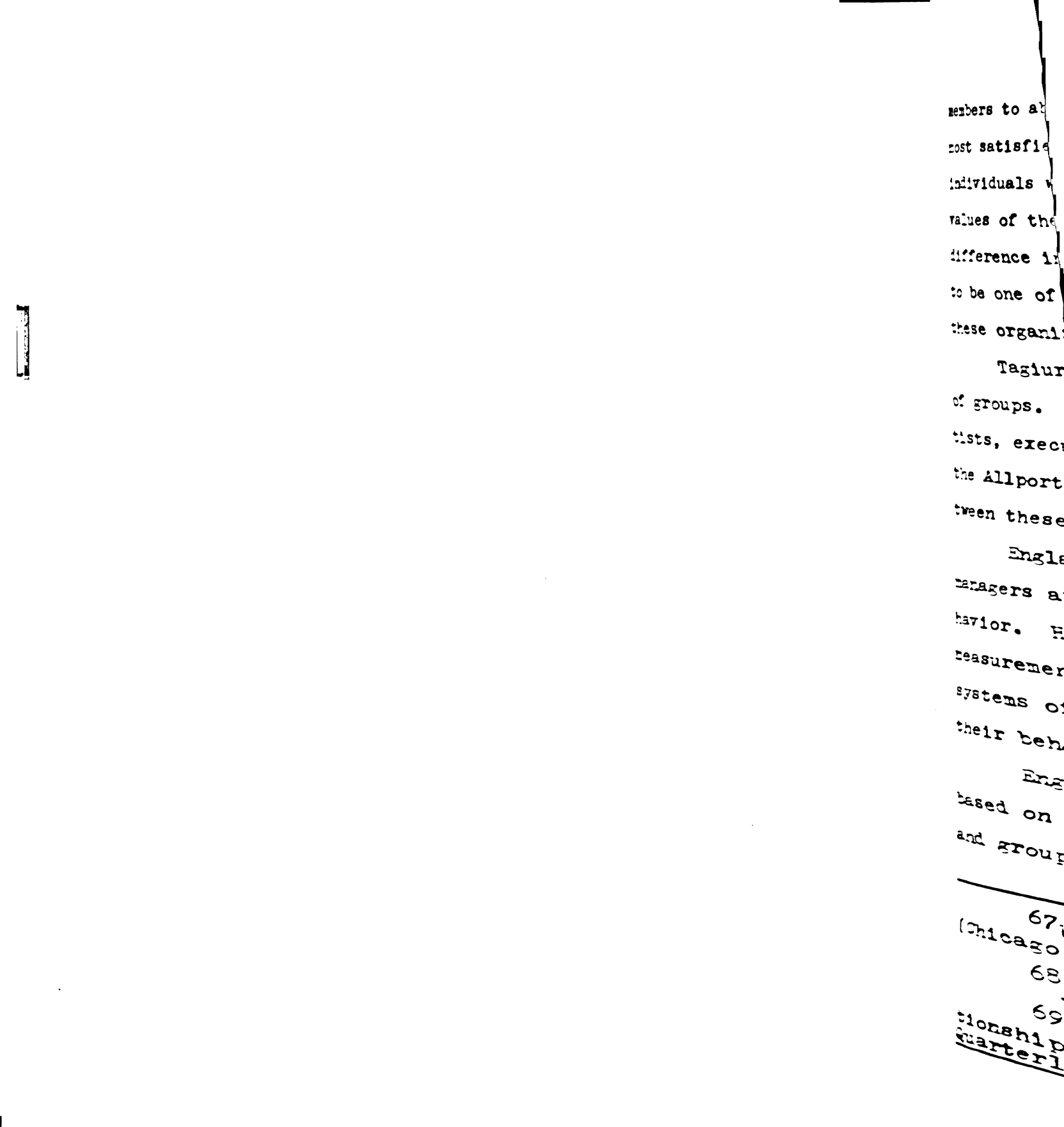
[64]Abram T. Collier, Management, Men and Values (New York: Harper and Row, 1962), pp. 225-228.

[65]Edmund P. Learned, Arch Dooley and Robert L. Katz, "Personal Values and Business Decisions," Harvard Business Review, March-April, 1959, 37, pp. 111-120.

[66]Wilmar F. Bernthal, "Value Perspectives in Management Decisions," The Journal of the Academy of Management, December, 1962, 5, pp. 190-196.



members to abide by established values and norms.[67] The most satisfied members of these organizations were those individuals whose values were most compatible with the values of the dominant group within the organization. A difference in personal values from group values was found to be one of the primary reasons for attrition within these organizations.[68]

Tagiuri is another researcher who studied the values of groups. He found that the personal values of scientists, executives, and research managers as determined by the Allport-Vernon-Lindzey Value Scale, were different between these groups.[69]

England also believes that the personal values of managers are important in understanding managerial behavior. His studies have been aimed at the description, measurement, and understanding of the personal value systems of managers and the impact of these values on their behavior.

England developed a "Personal Value Questionnaire" based on concepts dealing with organizational, individual, and group behavior. He hypothesized that the meanings

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[67]William A. Scott, Values and Organizations (Chicago: Rand McNally, 1965), pp. 220-229.

[68]Ibid., p. 190.

[69]Renato Tagiuri, "Value Orientations and the Relationship of Managers and Scientists," Administrative Science Quarterly, June, 1965, pp. 39-51.

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attached to a concept by an individual would provide a useful description of his personal value system.[70] The purpose of England's research was to determine the personal values of managers toward the goals of business organizations, the goals of individuals, their ideas on characteristics of people, and their views toward groups with which they associated.[71] From his research, England draws the following conclusions about values and managers:

(1) Personal value systems of managers can be meaningfully measured even though they are complex in nature;

(2) There is a general value pattern that is characteristic of American managers, which is subject to a great deal of individual variation;

(3) Personal values operate at the level of corporate strategy and goals as well as at the level of day-to-day decisions;

(4) The personal value systems of individual managers influence the organization in both an indirect and direct manner at the same time that personal values are influenced by organization life;

(5) Differences in perceived value systems help to explain the nature of conflict between individuals in an organization, while similarity of value patterns is probably responsible for most accommodation among individuals.[72]

Most of the research efforts cited to this point have been generally descriptive and mainly directed toward

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[70] England, op. cit., p. 56.

[71] Ibid., pp. 62-64.

[72] Ibid., pp. 67-68.

establishing the value of and need for further research on managerial values and organizational behavior.

Some research efforts have found specific relationships existing between certain managerial values, organizational characteristics, and behavior within organizations. Wickert and McFarland in summarizing a review of the literature on executive effectiveness state that marked differences exist between executives in different functions and at different levels. They view line foremen as having heavily product-oriented kinds of values and state that these, in turn, differ from the values of middle and top managers.[73] They found that the more effective executives were characterized by a desire for independence, were risk takers, had a sense of dominance, and were not necessarily humanitarian oriented.[74]

Porter and Ghiselli also found differences between managers at different levels and in diverse functional activities. They identified top managers as being daring, gamblers and risk takers, while middle and lower managers were described as being more cautious and less daring than top managers.[75]

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[73]Wickert and McFarland, op. cit., pp. 104-105.

[74]Ibid., p. 18.

[75]L. W. Porter and E. E. Ghiselli, "The Self Perceptions of Top and Middle Management Personnel," Personnel Psychology, 10, 1957, pp. 97-99.

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Harrell in studying the performance of successful managers found different personality characteristics between managers in different functional areas. He found that sales managers were highly verbal and aggressive. He writes that production managers are more defensive, stress controls, dislike competition, and are lacking in humanitarian interests.[76]

Lawrence and Lorsch also have carried out extensive research relating to structural variables and performance. They regard the functional activity of manufacturing as needing to rely more on formal rules, procedures, and controls to carry out activities than other functional areas. They found manufacturing and production personnel to be largely task-oriented. Marketing and sales personnel were found to be more relationship-oriented and concerned with people.[77]

Vroom, in his research, found basically the same significant differences as those cited above between managers in line-staff positions, in different levels and in different functional areas.[78] Porter found that there are

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[76]Thomas W. Harrell, Managers Performance and Personality (Cincinnati: South-Western, 1961), pp. 108-133.

[77]Paul R. Lawrence and Jay W. Lorsch, Organization and Environment (Boston: Harvard University, Division of Research, 1967), pp. 11-49.

[78]Victor H. Vroom, Motivation in Management (New York: American Foundation for Management Research, 1965), pp. 23-41.

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distinct differences between line and staff managers in temperament, training, and orientation. Staff managers were more social and relationship-oriented than were line managers. In addition, the line managers were found to be more forceful and decisive than staff personnel.[79]

The literature on values and behavior within organizations, therefore, indicates that values exert a significant influence on managerial behavior and that organizational characteristics can also influence managerial values.

In the next section, some of the general approaches to measuring values will be discussed along with the development of the value instrument used in this study.

The Measurement of Values

General approaches. There are a number of different approaches available for measuring or describing the values of individuals or groups. McCurdy identifies four general techniques by which values can be measured. He describes these as:

(1) self-report types, including a wide variety of paper and pencil techniques;

(2) observing the intensity of emotional reactions;

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[79]Lyman W. Porter, Organizational Patterns of Managerial Job Attitudes (New York: American Foundation for Management Research, 1964), pp. 27-44.

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(3) variations in observed moral judgment;

(4) observing the choice of fealty.[80]

Barton lists four types of paper and pencil measures which are commonly used to measure values:

(1) forced-choice interest types;

(2) self-prediction of one's probable behavior in a hypothetical situation;

(3) analysis of verbal reports in different situations;

(4) direct ranking of values.[81]

The majority of the approaches utilized in measuring values use the paper-pen, straight-answer questionnaire technique, in which an individual is asked to state his preference for or the degree of his agreement or disagreement with various ideas, words, or statements.[82]

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[80]J. T. MacCurdy, "Psychopathology and Social Psychology Part III: Hierarchies of Interest," British Journal of Psychology, 1950, 41, pp. 1-13.

[81]A. Barton, "Measuring the Values of Individuals," Religious Education, 1962, 57, pp. 62-97.

[82]For example, see: G. W. Allport, P. Vernon and G. Lindzey, A Study of Values. Revised ed. (Boston: Houghton, Mifflin, 1960); J. B. Cohen, "A Scale for the Measurement of Attitude Toward the Aesthetic Value," Journal of Psychology, 1941, 12, pp. 75-79; E. J. Chave, "A New Type of Scale for Measuring Attitudes," Religious Education, 1928, 23, pp. 364-369; George W. England, "Personal Value Systems of American Managers," Journal of Academy of Management, March, 1967, pp. 53-68; E. M. Glaser and J. B. Maller, "The Measurement of Interest Values," Charac. and Pers., 1940, 9, pp. 67-81; Leonard V. Gordon, Manual for Survey of Interpersonal Values (Chicago: Science Research Associates, Inc., 1960); L. W. Harding, "A Value-Type Generalization Test," Journal of Social Psychology, 1944, 19, pp. 53-79; W. A. Lurie, "A Study of Spranger's Value Types by the Method of Factor Analysis," Journal of Social Psychology, 1937, 8, pp. 17-37; E. Spranger, Types of Men (Translation of 5th German ed. by P. J. W. Pigors) (Halle: Niemeyer, 1928); L. L. Thurstone, "The Method of Paired-Comparisons for Social Values," Journal of Abnormal and Social Psychology, 1927, 21, pp. 384-400.

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The approach to value measurement that has probably had the most widespread application and acceptance is the Allport-Vernon-Lindzey "Study of Values." This scale was introduced by Allport and Vernon in 1931 and was later revised and updated.[83] Dukes indicates that, "even though a number of standardized tests of values are available, the large majority of investigators employ the Allport-Vernon "Study of Values."[84] The Allport-Vernon test was based on Spranger's typology of men.[85] It was designed to measure each of six values: aesthetic, political, social, economic, theoretical, and religious. It utilizes multiple-choice questions with alternative answers. The person being tested is asked to rank the questions in order of preference, and each of the alternative responses is assumed to represent one of the six value types.[86]

Other measures that are currently used with some degree of frequency are ranking approaches (Rokeach), in which an individual states his preference for some concept,

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[83]G. W. Allport and P. E. Vernon, A Study of Values (Boston: Houghton-Mifflin, 1931); G. W. Allport, P. E. Vernon and G. Lindzey, A Study of Values, revised ed. (Boston: Houghton, Mifflin, 1960).

[84]Dukes, op. cit., p. 26.

[85]E. Spranger, Types of Men (Translation of the 5th German ed. by P. J. W. Pigors), (Halle: Niemeyer, 1928).

[86]Allport, Vernon and Lindzey, op. cit., 1960.

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word, etc., and content analysis (R. K. White), in which the content of the data is analyzed to determine values.[87]

Development of the organizational value questionnaire. In this study, the perceptions of managers toward what they consider ideal organizational behavior will be measured by "The Organizational Value Questionnaire" (OVQ) which is composed of selected statements about organizational behavior. It is assumed that a subject, in responding to the items, gives an indirect expression of his personal values as well as his value judgments about the business firms. This allows for the projection of personal values in the business organization setting and for the development of individual, group, and organizational value patterns.

The Organizational Value Dimension Questionnaire (Business Form), which will be used in this study to measure values, was originally developed at the Personnel Research Board of Ohio State University, under the direction of Dr. Carroll L. Shartle. The research leading to the development of the questionnaire followed a model which used the complex organization as the basic unit of study and developed from the ten-year Ohio State Leadership

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[87]For example, see: Milton Rokeach, "A Theory of Organization and Change Within Value-Attitude Systems," Journal of Social Issues, 1968, 14, pp. 13-33; R. K. White, Value-Analysis, The Nature and Use of the Method (Glen Gardner, N. J.: Libertarian Press, 1951).

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Studies. These studies were oriented toward the study of individual leader and group behavior in military, business, and educational organizations. They were primarily directed at describing individual and group behavior by determining dimensions of behavior such as, stability, flexibility, autonomy, and control, etc.[88]

In the development of the OVQ, a number of value dimensions were initially hypothesized, based on a survey of the literature relating to organizational behavior.[89] These dimensions were assumed to be culturally determined and to represent measures that have significance for organizational behavior. The hypothesized value dimensions were (1) size, (2) achievement, (3) work tempo, (4) quality, (5) effort, (6) satisfaction, (7) efficiency, (8) security, (9) newness, (10) change, (11) independence, and (12) competition.[90]

The business firm, the military service, and the public high school were selected as vehicles for the development of the scales. With this as a framework, several thousand statements about behavior in organizations were

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[88]Carroll L. Shartle, "A Theoretical Framework for the Study of Behavior in Organizations," in Administrative Theory in Education, A. Halpin, ed. (Chicago: Midwest Administration Center-University of Chicago, 1958), p. 73.

[89]Carroll L. Shartle, Gary Brumback and John R. Rizzo, "An Approach to Dimensions of Value," The Journal of Psychology, 1964, 57, p. 103.

[90]Shartle, op. cit., p. 84.

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collected from previous studies. In addition, selected staff members were asked to develop expressions about behavior that they thought were good or poor, or that would show differences in evaluation by others, relating to a wide variety of organizational characteristics. These statements were edited and then grouped by Ohio State staff members according to the hypothesized dimensions, in order to select a final list of items which best represented these dimensions. The items selected were combined into a separate questionnaire for each of the three organizational settings; the Business Firm Questionnaire had 250 items.[91]

Each organizational questionnaire was separately administered, employing approximately 300-400 subjects on each administration. College students from a cross-section of academic areas were used as subjects. The subjects were instructed to evaluate the behavior described in each item, in accordance with their own point of view as to the degree that they thought the behavior was good or poor. A nine-point rating scale ranging from "extremely poor" through "neutral" to "excellent" was provided for judging these items. The subjects were asked to think of organizations in general in assigning ratings. They were instructed to select the scale value which best represented

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[91]Shartle, Brumback and Rizzo, op. cit., p. 103.

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their evaluation of each item. The scale was constructed so that a person with a score less than "neutral" would be in general disagreement with the behavior described by that item.[92]

After the questionnaire was administered, a factor analysis of the Business Firm Questionnaire yielded nine meaningful factors. These factors were first interpreted and named by individual staff members at Ohio State, and then a special study was undertaken using twenty-eight persons from the fields of psychology and sociology. These individuals indicated the degree of appropriateness of the titles selected for the factors. The results of the special study were considered in giving each factor a final title.[93] The value dimensions in order of their extraction were:

(1) Degree of organizational magnitude, expansion and structure;

(2) Degree of internal consideration for welfare, health, and comfort;

(3) Degree of competition, strategy, and shrewdness;

(4) Degree of ethical and social responsibility;

(5) Degree of quality of products and services;

(6) Degree of change;

(7) Degree of organizational control over member identification;

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[92] Ibid.

[93] Ibid., p. 104.

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(8) Degree of external political participation;

(9) Degree of member equality and recognition.[94]

Some of the initially hypothesized value dimensions, such as efficiency and newness, failed to appear in the factor structure. Instead of forming a single factor, these items either failed to load on any factor or loaded on several factors. Dimension scores were obtained by summing scale responses to those items loading high on a given factor and low on other factors.[95] A factor score is the sum of a person's ratings of the items selected to represent a factor. If a person has a high factor score, he can be said to be in general agreement with the behaviors described by the items, and if the score is low, the individual can be said to be in general disagreement with the behaviors described by the items.

Rizzo, in a special study, administered the OVQ to a sample of 269 Ohio State business students.[96] The earlier studies were conducted with samples that were a mixture of students from several disciplines. Students were asked to assume that each item in the questionnaire was true, then to evaluate whether it was good or bad, using the nine-point

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[94] Ibid.

[95] Ibid., pp. 107-109.

[96] John Rizzo, Value Dimensions, Value Commitments and In-Basket Performance of Business Students (Columbus: Ohio State University, Ph.D. Thesis, 1964), p. 34.

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scale, as to the degree to which they felt that each item was a desirable or undesirable condition.[97]

The responses were factor analyzed and fourteen factors were extracted. The complete description of the factors, listing the items making up the factors and their loadings, is presented in Appendix II. The fourteen factors were:

Factor A: Organizational Supervision and Structure

Factor B: Competition and Exploitation

Factor C: External Community Relations

Factor D: Attitude Toward Unionization

Factor E: Change vs. Conservatism

Factor F: Member Equality and Freedom From Control

Factor G: Consideration

Factor H: Social Responsibility

Factor I: Quality of Products and Personnel

Factor J: Executive Treatment

Factor K: Organizational Risk-Taking

Factor L: Political Activities, Employee Pay, and Retirement

Factor M: Work Emphasis and Initiative

Factor N: Paternalism and Internal Control.[98]

Rizzo's research produced a meaningful set of value dimensions. His analysis yielded a number of factors which

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[97] Ibid.

[98] Ibid., p. 79.

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were similar to those extracted in the earlier research and several which were improved versions. In addition, his analysis produced several new factors.[99]

These fourteen factors, after identification and naming, were employed, along with the factors derived from the earlier study as descriptive predictors of criterion performance.[100] The purpose of his research was to attempt to relate the value commitments of individuals to measures of their performance, as given by scores on an in-basket simulation test designed to simulate the job of an administrator. While only moderate success was achieved in his study, it did indicate that the values developed through the OVQ can be meaningfully associated with behavior.[101]

Research Objectives and Hypotheses

Introduction. As previously mentioned, very little research has been carried out in an attempt to determine values that are relevant to describing, understanding or predicting behavior in organizations. Most value research to-date has been directed toward identifying the general, personal values of managers, utilizing the Allport-Vernon-Lindzey value instrument. England's study, one of the few

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[99] Ibid.

[100] Ibid., p. 35.

[101] Ibid., pp. 146-149.

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to look at values in an organization setting, was directed primarily toward determining the personal values of managers toward various organizational goals, and toward various personality traits.

One of the purposes of this study is to determine and describe organizational values by asking managers in the organizational setting to indicate the degree of desirability or undesirability of a wide variety of statements about behavior within organizations. It is assumed that a manager in responding to the items, gives an indirect expression of his personal values as well as his value judgments about the business firm. This projection of personal values in the business setting allows for the development of organization values. Organization values then, refers to the values derived from the perceptions of managers of business organizations towards various organizational behaviors.

Organizational value factors. To this point in time, the OVQ has not been applied to managers from business organizations. To accomplish the first objective of developing general organizational value factors, the OVQ was administered to managers representing all levels of managerial responsibility, from first-line supervisors to company presidents. The subjects represented a cross-section of managers from twelve companies, representing the three industrial classifications of manufacturing, retailing, and services. In addition to these firms, the OVQ was

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administered to a number of executives in the Advanced Management Program at Michigan State University, and to participants in a Purchasing Management Workshop held at Michigan State.

The responses were factor analyzed. The factor analysis produced ten organizational value dimensions or factors. The relationships between selected organizational variables and the value factors were examined. These value factors are:

Factor 1. Consideration

> This factor describes general supervisory and organizational policies and practices which indicate a concern for member needs and welfare as well as a supportive-employee centered leadership style. A high score would, in general, be an indication of a climate tending toward a supportive-employee centered leadership approach, with a high concern for individual welfare and needs.

Factor 2. Competition and Exploitation

> This factor describes activities of organizations and individuals which indicate highly competitive and/or exploitive strategy and behavior. A high score would, in general, be an indication of a stress on competition and exploitation of opportunities.

Factor 3. Managerial Climate

> This factor relates to general leadership and organizational practices with regard to the use of hierarchical management rights, controls and formal authority, to influence individual attitudes, actions, and job performance. A high score would, in general, be an indication of a climate which puts a stress on hierarchial rights, controls and the use of formal authority to influence individuals and carry out activities.

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Factor 4. Risk Taking - Conservatism

This factor describes organizational policies and individual and organizational practices which serve to indicate an organization's or individual's values toward risk taking or conservative behavior. A high score would, in general, indicate a preference for conservatism.

Factor 5. Unionization

This factor describes practices of organizations relating to unions. A high score would, in general, be an indication of a negative or unfavorable orientation toward unions.

Factor 6. Paternalism

This factor describes organizational policies and practices relating to the concern for and control over, member housing, working conditions, personal loans, and pay and hours, that is paternalistic in nature. A high score would, in general, be an indication of a favorable orientation toward the behavior described in this factor.

Factor 7. Concern for Quality of Products and Personnel

This factor describes organizational activities and policies relating to beliefs about product quality and the excellence of employees and employee services. A high score would, in general, be an indication of a high degree of concern for quality and excellence in these items.

Factor 8. Social Responsibility

This factor describes organizational policies and practices relating to involvement in local, national, and international affairs. A high score would, in general, be an indication of a high degree of concern for social responsibility.

Factor 9. Member Equality

This factor describes general organizational and managerial practices relating to treating employees as equals. A high score would, in general, be an

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indication of an equalitarian climate, perhaps tending toward a permissive leadership philosophy.

Factor 10. Executive Status and Authority

This factor describes the existence of status distinctions for executive positions and executive prerogatives which stress the accomplishment of the job to be done. A high score, in general, would reflect a preference for executive status distinctions and the stress on getting the job done through the establishment of standards of performance.

Individual attitudinal measures. The second purpose of this study is to analyze the relationship between value scores and selected individual variables in an attempt to predict individual attitudes toward the job and firm.

To accomplish this, a separate instrument was developed to measure Job Satisfaction and Propensity To Leave, the two criterion variables selected as individual attitudinal measures toward the job and firm. This scale was administered to all subjects, along with a Personal Data Questionnaire, at the same time as the OVQ.

The specific characteristics of the sample, factor analysis, predictor variables and criterion measures will be explained in more detail in Chapter II.

The research plan summarized. In general, the plan of the research was as follows:

(1) Administration of the Organizational Value Questionnaire, Attitudinal Scale, and Personal Data Questionnaire to a sample of managers from selected industries and firms.

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(2) A factor analysis of the managers responses to the value scale in an attempt to develop value dimensions.

(3) Analysis of the relationship between value factor scores and selected organizational structural characteristics taken from the Personal Data Questionnaire, and the system of production technology utilized.

(4) Analysis of the relationship between particular value factors and individual attitudinal variables.

Hypotheses relating to values and structural and technological factors. As part of the first objective of determining organizational value factors, an attempt will be made to analyze the relationship and effect on values of selected organizational structural characteristics, and the system of production technology utilized.

The structural variables selected from the Personal Data Questionnaire were: (1) line or staff work responsibility, (2) managerial level, (3) the functional area of work, and (4) firm size. These are variables which seem most often encountered in the literature.

Managerial level and job position. The literature on values and organizational behavior previously reviewed indicated that marked differences exist between managers in different functions and at different levels.[102] Top managers' values differed greatly from those of middle and lower management. Top managers were generally identified

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[102]Wickert and McFarland, op. cit., pp. 104-105.

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as being greater risk takers than middle or lower level managers.[103] Differences were also found to exist between line and staff managers. Staff managers were found to be more social and relationship oriented, while line managers were more forceful.[104] It was also found that differences in values exist between functional work areas. Production managers were found to be more defensive, stressing controls, and lacking in humanistic interests, while marketing managers were found to be more aggressive and social oriented.[105]

Production technology. Woodward, in studying the effects of technology on organizations, identified eleven different systems of production used in manufacturing organizations. She found that the first nine of these categories formed a scale in terms of chronological development and technical complexity.[106] Woodward states that the production technology of a firm influences the roles defined by the formal organization and must therefore influence behavior, because how a person behaves depends as much on the demands of his role and the circumstances in which he finds himself as on his personality.[107]

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[103]Porter and Ghiselli, op. cit., pp. 97-99.

[104]Porter, op. cit., pp. 27-44.

[105]Lawrence and Lorsch, op. cit., pp. 11-49.

[106]Joan Woodward, Industrial Organization: Theory and Practice (London: Oxford University Press, 1965), pp. 38-42.

[107]Ibid., p. 79.

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She developed three classifications of production systems from the nine categories. The three classifications were (1) unit and small-batch production, (2) large-batch and mass production, and (3) process production.[108] Woodward found that there were differences between firms in each category, but that these differences were not as great as those existing between categories.[109] She also found the process production firms to be operating under organic systems of management. Firms in this category had more delegation and decentralization of decision making. They placed less emphasis on controls and formal authority. Employee relationships, in general, were good, as were relationships between departments or functional areas.[110] In contrast to this, she found that firms in large-batch and mass production industries largely operated under mechanistic systems of management. Firms in this category clearly defined duties and responsibilities, and they placed a greater stress on controls and formal authority. There was less concern with social relationships and member consideration. The organization structure was much more segmented and the management group was found to be less

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[108] Ibid., pp. 38-42.

[109] Ibid., p. 50.

[110] Ibid., pp. 50-60, 129-153.

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homogeneous.[111] Firms in the unit and small-batch production system category were, in general, found to be operating more organicly than those in the middle category, but less so than firms in process industries. Firms in this category utilized more delegation of authority and responsibility for decision making and were more permissive and participative than those in large-batch and mass production industries. However, the strong use of control and authority and stress on quality were found to exist to a much greater extent than in process industries.[112]

Seven of the value factors, considered to be the most relevant to the literature on values and organizational behavior previously reviewed, were used in the hypotheses. All hypotheses are the null hypotheses of no relationship between value factor scores and an organization's structural characteristics and system of production technology.

Hypothesis A-1 through A-6

There is no significant relationship between line or staff managers or the production technology of an organization and the following value factors:

A1	Factor 1.	Consideration
A2	Factor 2.	Competition and Exploitation
A3	Factor 3.	Managerial Climate
A4	Factor 4.	Risk Taking - Conservatism
A5	Factor 8.	Social Responsibility
A6	Factor 10.	Executive Status and Authority

[111] Ibid.

[112] Ibid.

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Hypothesis A-7 through A-12

There is no significant relationship between the managerial level or production technology of an organization and the following value factors:

A7	Factor	1.	Consideration
A8	Factor	2.	Competition and Exploitation
A9	Factor	3.	Managerial Climate
A10	Factor	4.	Risk Taking - Conservatism
A11	Factor	8.	Social Responsibility
A12	Factor	10.	Executive Status and Authority

Hypothesis A-13 through A-18

There is no significant relationship between the functional areas or production technology of an organization and the following value factors:

A13	Factor	1.	Consideration
A14	Factor	2.	Competition and Exploitation
A15	Factor	3.	Managerial Climate
A16	Factor	4.	Risk Taking - Conservatism
A17	Factor	8.	Social Responsibility
A18	Factor	10.	Executive Status and Authority

Hypotheses A-19 through A-25

There is no significant relationship between the size or production technology of an organization and the following value factors:

A19	Factor	1.	Consideration
A20	Factor	2.	Competition and Exploitation
A21	Factor	3.	Managerial Climate
A22	Factor	4.	Risk Taking - Conservatism
A23	Factor	7.	Concern for Quality of Products and Personnel
A24	Factor	8.	Social Responsibility
A25	Factor	10.	Executive Status and Authority

Hypotheses relating to values and attitudes toward the job and the firm. The second purpose of this study relates to analyzing the relationship between value scores and individual variables. Job Satisfaction and Propensity To

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Leave were the two variables selected as individual attitudinal measures toward the job and firm.

While the literature on job satisfaction is extensive, there is currently in existence no research on managerial values and satisfaction. Because of this, only a brief review of some of the major research findings relating to managerial job satisfaction will be presented.

Porter in his research into the need fulfillment of managers found that the level of a manager's job is a key element in his job satisfaction. He states that the higher the management level, the greater is the relative opportunity for a manager to fulfill needs. He also found that, although small organizations more than large ones have advantages for managers at lower levels to achieve greater job satisfaction, this advantage is greatly reduced at higher levels. At the upper management levels, the large company executive is conscious of greater need fulfillment and job satisfaction.[113]

Vroom in a review of the literature on job satisfaction reported that there was little evidence regarding the relationship between the nature of the function performed and job satisfaction.[114] Porter, however, found that there

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[113]Porter, op. cit., pp. 18-30.

[114]Vroom, op. cit., p. 56.

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was a slight tendency for line managers to report more need satisfaction than staff members at the same level.[115]

There is also a scarcity of research, in general, on turnover (the second additional measure, Propensity To Leave, relates to potential turnover). Moreover, there is a complete lack of research dealing with the effects of values on turnover, or potential turnover. For this reason, only a brief reporting of some of the major research findings relating to turnover will be presented.

In a review of the literature on job satisfaction, Porter and Lawler point out that there appears to be a strong correlation between absenteeism, turnover, and job satisfaction. In their opinion, focusing on job satisfaction would be an important element in any program to reduce turnover and absenteeism.[116] They also found that absence rates and turnover were less in small organization units or work groups than they were in large ones. However, none of the studies they reviewed compared turnover for managerial personnel or for different size organizations.[117]

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[115]Porter, op. cit., pp. 18-30.

[116]Edward E. Lawler and Lyman W. Porter, "The Effect of Performance on Job Satisfaction," in Readings in Organizational Behavior and Human Performance, L. Cummings and W. Scott, eds. (Homewood, Illinois: Richard D. Irwin, Inc., 1969), pp. 283-290.

[117]Edward E. Lawler and Lyman W. Porter, "Properties of Organization Structure in Relation to Job Attitudes and Job Behavior," in Ibid., Readings in Organizational Behavior and Human Performance, pp. 402-432.

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Ingham, in a later survey, analyzed the results of the latest research findings on the relationship between turnover and organization size. He found that the few studies dealing with the topic were inconsistent.[118] While there was a strong statistical relationship between organizational size and absenteeism, no significant relationship existed for turnover.[119]

Dalton, in a study of managers in three plants, found that staff managers had a turnover rate that was two to four times as high as the turnover rate of line managers.[120]

The hypotheses in this section were developed to analyze the relationship between values and attitudinal measures for the aggregate sample of managers. All hypotheses involve testing the null hypothesis of no relationship between the values of managers whose values differ from the sample of managers as a whole, and the attitudinal variables of Job Satisfaction and Propensity To Leave. All ten values are used to test the hypotheses relating to this relationship.

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[118]Geoffrey K. Ingham, Size of Industrial Organization and Worker Behavior (Oxford: The Cambridge University Press, 1970), pp. 23-25.

[119]Ibid.

[120]M. Dalton, "Conflicts Between Staff and Line Managerial Officers," American Sociological Review, 1950, 15, pp. 342-351.

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Hypothesis B-1 through B-10

There is no significant relationship between managers whose value scores differ from other managers and Job Satisfaction for each of the following value factors:

B1	Factor	1.	Consideration
B2	Factor	2.	Competition and Exploitation
B3	Factor	3.	Managerial Climate
B4	Factor	4.	Risk Taking - Conservatism
B5	Factor	5.	Unionization
B6	Factor	6.	Paternalism
B7	Factor	7.	Concern for Quality of Products and Personnel
B8	Factor	8.	Social Responsibility
B9	Factor	9.	Member Equality
B10	Factor	10.	Executive Status and Authority

Hypothesis B-11 through B-20

There is no significant relationship between managers whose value scores differ from other managers and Propensity To Leave for each of the following value factors:

B11	Factor	1.	Consideration
B12	Factor	2.	Competition and Exploitation
B13	Factor	3.	Managerial Climate
B14	Factor	4.	Risk Taking - Conservatism
B15	Factor	5.	Unionization
B16	Factor	6.	Paternalism
B17	Factor	7.	Concern for Quality of Products and Personnel
B18	Factor	8.	Social Responsibility
B19	Factor	9.	Member Equality
B20	Factor	10.	Executive Status and Authority

Limitation of the Study

In reviewing the results of this study, it must be remembered that a limited number of firms, largely from the midwest, served as the sample. No attempt was made to explore value differences in different sections of the country. In addition, while the response to the OVQ was generally good, results may not be representative of all managers

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in the organization categories studied, or of the industry classifications in general. For these reasons, the results of this study should be regarded with caution.

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CHAPTER II

METHODOLOGY

General Overview of Procedure

The Organizational Value Questionnaire used in this study required participants to respond to a series of statements describing various organizational practices and policies. A nine-point rating scale was provided for evaluating the degree of desirability or undesirability of the behavior described in each statement.

The OVQ was administered to managers from twelve firms. In addition, it was also administered to a group of managers participating in a continuing education program at Michigan State University, and to graduates of the Advanced Management (MBA) Program in Detroit, Michigan. A factor analysis of the questionnaire responses yielded ten value factors.

The first objective of this study was to attempt to analyze the relationship between the value factors, and an organization's structural characteristics, and system of production technology. Seven of the ten value factors, along with four structural variables, and three technology systems, were used in this phase of the study. This served as the descriptive aspect of the research. A two-way

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analysis of variance was carried out to analyze these relationships.[1] All ten of the value factors served as predictor variables in an attempt to analyze the relationship between value scores, and an individual's attitude toward the job and firm. The two attitudinal criterion measures used in the study were: Job Satisfaction and Propensity To Leave. This part of the research was carried out using a one-way analysis of variance.[2]

In the following sections, the characteristics of the sample, the pilot study, the measures, the factor analysis, the analysis of variance, and the descriptive and predictive studies will be discussed in detail.

The Sample

The Organizational Value Questionnaire, Personal Data Questionnaire, and Attitudinal Scale, along with a letter of explanation was sent to each manager involved in the study. In most cases, a letter from a top management official supporting the study was included. A complete description of all items sent to each manager is presented in Appendix I.

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[1]Jeremy D. Finn, Multivariance - Univariate and Multivariate Analysis of Variance, Covariance, and Regression (Buffalo: Department of Educational Psychology, State University of New York at Buffalo, 1968), pp. 1-109.

[2]Ibid.

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The subjects. In the initial stages of the study, thirty companies, largely from the midwest, were contacted as possible candidates to participate in this project. These firms were selected because of their national or local reputations, and past interest in supporting research endeavors. A top executive, usually the Vice President or Director of Industrial Relations, was contacted by phone and a personal interview arranged, at which time, the nature of the research project and company involvement were explained.

Out of these contacts, twelve firms chose to participate in this study. Nine of the firms were in manufacturing, while two were involved in retailing, and one was in the service industry. Each firm supplied a list of all personnel who were considered members of management, from first-line supervisors to top management officials. All materials previously discussed were mailed, along with a stamped self-addressed return envelope, to each manager on the list. In addition, this material was also sent to all graduates of the Michigan State University Advanced Management Program (MBA Program) in Detroit, Michigan, and to participants in a Michigan State University Purchasing Management Workshop held for the National Association of Purchasing Agents.

Because of the number of managers involved in the study, and the limitations of time and cost, no attempt was made to use individual interviews to gather information, or

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send a follow up letter to all those who did not respond to the first mailing.

Table 1 indicates the responses of all the managers in the sample to the material sent out. An inspection of this table reveals that the majority of managers surveyed, and also, the largest number to return data, were members of firms in the manufacturing category. In this classification the responses ranged from a low of 33.1 per cent to a high of 56.3 per cent. In view of the fact that no follow up mailing was undertaken, the total managerial response of 39.5 per cent was considered to be a favorable reply.

Table 2 describes the composition of the total sample of managers according to the four organizational structural variables used in this study. These variables were taken from the Personal Data Questionnaire. The table indicates that most of the managers responding were from medium, and large size firms. The respondents appear to be fairly diversified with respect to the other organizational variables.

One of the main purposes of this research effort was to explore the effects of structure and technology on values. In view of this, only responses of managers from firms in the manufacturing classification were utilized in the descriptive aspect of the study.

Table 3 illustrates the responses of the sample of managers, according to the four organizational structural variables, and three systems of production technology used

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Firm D
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Table 1

Categorical Frequencies of Responses for the Sample of Managers by Industry and Firm

Category	Managers Surveyed	Number Responding	Percentage Responding
Manufacturing			
Firm A	12	6	50.0%
Firm B	28	14	50.0%
Firm C	124	41	33.1%
Firm D	320	132	41.3%
Firm E	152	51	33.6%
Firm F	183	70	38.3%
Firm G	136	49	36.0%
Firm H	50	18	36.0%
Firm I	190	107	56.3%
Misc. Mfg.*	191	81	42.4%
Total	1,386	569	41.1%
Retailing			
Firm J	214	48	22.4%
Firm K	74	46	62.1%
Total	288	94	32.6%
Services			
Firm L	105	39	37.1%
Misc. Services**	90	36	40.0%
Total	195	75	38.5%
Grand Total	1,869	738	39.5%

*This category includes responses of managers from the continuing education and advanced management programs at Michigan State.

**This category includes managers from banking, C.P.A., and food service firms.

Table 2

Categorical Frequencies of Responses for the Sample of Managers According to Structural Characteristics

Organizational Structural Variable	Number in Category	Percentage in Category
Size of Firm (No. of Employees)		
Small 0 - 250	22	3.0
Medium 251 - 1,000	262	35.5
Large 1,000 and over	352	47.7
No Information	102	13.8
Total	738	100.0%
Functional Area		
Production*	160	21.7
Marketing**	116	15.7
Accounting-Finance	94	12.7
Personnel	29	3.9
Purchasing	62	8.4
Administration***	64	8.7
Engineering	54	7.3
Data Processing	21	2.8
Research and Development	49	6.7
Other	66	9.0
No Information	23	3.1
Total	738	100.0%
Type of Position		
Line	230	31.1
Staff	290	39.3
Both	169	22.9
No Information	49	6.7
Total	738	100.0%
Organizational Level		
Top Management (President, Vice Presidents, Upper Management)	89	12.1
Middle Management	224	30.4
Supervision (Lower Management and First Line Management)	402	54.4
No Information	23	3.1
Total	738	100.0%

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Table 2 (cont'd.)

*This category includes production control and scheduling managers.

**This category includes advertising, marketing research, and sales managers.

***This category includes office and clerical managers.

Table 3

Number of Responses for the Sample of Manufacturing Managers

Table 3

Categorical Frequencies of Responses for the Sample of Manufacturing Managers According to Structural Characteristic and Technological Grouping

Structural Characteristic	System of Production Technology					
	Unit and Small Batch		Large Batch and Mass Production		Process	
	Number	Percent	Number	Percent	Number	Percent
1. Size of Firm						
Small	6	3.1	0	0	0	0
Medium	55	28.5	0	0	125	100.0
Large	132	68.4	170	100.0	0	0
No Information	0	0	0	0	0	0
Totals	193	100%	170	100%	125	100%
2. Functional Area						
Production*	43	22.3	73	42.9	62	49.6
Marketing**	49	25.4	15	8.8	2	1.6
Accounting-Finance	16	8.3	7	4.1	15	12.0
Personnel	6	3.1	7	4.1	3	2.4
Purchasing	6	3.1	11	6.5	1	.8
Administration***	14	7.3	4	2.4	5	4.0
Engineering	16	8.3	16	9.4	13	10.4
Data Processing	2	1.0	3	1.8	3	2.4
Research and Development	24	12.4	20	11.8	8	6.4
No Information	17	8.8	14	8.2	13	10.4
Totals	193	100%	170	100%	125	100%

Table 3 (cont'd.)

Structural Characteristic	System of Production Technology					
	Unit and Small Batch		Large Batch and Mass Production		Process	
	Number	Percent	Number	Percent	Number	Percent
3. Type of Position						
Line	62	32.1	64	37.7	43	34.4
Staff	72	37.3	60	35.3	47	37.6
Both	43	22.3	32	18.8	21	16.8
No Information	16	8.3	14	8.2	14	11.2
Totals	193	100%	170	100%	125	100%
4. Organizational Level						
Top Management	14	7.3	8	4.7	2	1.6
Middle Management	49	25.4	62	36.5	24	19.2
Supervision	114	59.0	87	51.2	86	68.8
No Information	16	8.3	13	7.6	13	10.4
Totals	193	100%	170	100%	125	100%

*This category includes production control and production scheduling managers.

**This category includes advertising, marketing research, and sales managers.

***This category includes office and clerical managers.

in the descriptive study. An examination of this table reveals that the sample of managers, with the exception of the categories of firm size, and organizational level, and the functional areas of production and marketing, are fairly representative across the three technology classifications. The three firms making up the large batch and mass production classification were all large-size companies. On the other hand, the two firms comprising the process production group were both medium-sized firms.

The responses of the managers from the two process firms were almost solely composed of middle and lower level management members. This is in contrast with the other two classifications, where the distribution of responses by organizational level was fairly representative.

In the functional classification, except for production and marketing managers, all responses were fairly distributed across technological levels. Production managers were predominately found in the large-batch and mass production categories, while the majority of marketing managers were located in the unit and small batch category.

The firms. Table 4 describes the manufacturing firms according to their system of production technology. The table follows the classification system established by Joan Woodward in which she identified three primary technological

Table 4

Categorical Responses of Manufacturing Managers According to Firm and System of Production Technology

Production Technology	Number in Category
Unit and Small Batch	
Firm A	6
Firm B	14
Firm C	41
Firm D	132
Total	193
Large Batch and Mass Production	
Firm E	51
Firm F	70
Firm G	49
Total	170
Process Production	
Firm H	18
Firm I	107
Total	125
Grand Total	438

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systems of production.[3] It also includes the total responses of managers from each firm and category.

A top executive of each firm in the manufacturing sample was contacted and asked to determine according to the Woodward classification, which category of technology was the primary one utilized by his company. This information was used to place the following firms in one of the three primary technological categories.

Firm A, located in a large midwestern city, is a modern, high production, creative stamper and manufacturer of pressed metal parts and assemblies. It provides engineering and creative design services, as well as precision stamping.

Firm B is also located in a large midwestern city. It manufactures suspension springs for the automotive industry from raw steel. Its primary products are springs, stabilizer bars and torsion bars.

Firm C, located in the same city, is one of the country's leading designers and builders of vertical transportation equipment. It designs, engineers, builds and installs both traction and hydraulic elevators.

Firm D, located in the midwest, is a large, modern firm, that manufactures actuator and control products. It

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[3]Joan Woodward, Industrial Organization: Theory and Practice (London: Oxford University Press, 1965), pp. 35-40.

produces electronic, hydraulic and pneumatic controls, instrumentation and weighing systems.

Firms E and F are two midwestern plants of a large, national, home appliance manufacturer. These firms are located in different cities and manufacture different product lines. The primary products of Firm E are stoves, refrigerators, and dishwashers. Firm F manufactures home and commercial air conditioners, and home and coin operated clothes dryers.

Firm G is a large firm located in the eastern United States. It is one of the leading firms in the design and manufacturing of home and industrial power tools.

Firms H and I are both petroleum refineries, representing different national companies. Firm H is located in the eastern part of the country. Firm I is located in a large midwestern city.

The pilot study. A pilot administration of the materials discussed in the previous chapter was carried out using the six managers from Firm A.

These managers, as a group, were told the purpose and scope of the study, and were given an explanation of all material presented to them. Those managers who chose to participate in the project were individually interviewed after they had completed and returned all material. In the interview, the instructions, form, and content of the questionnaires were discussed. The sole purpose of this pilot

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study was to determine the clarity of the instructions, and content of the questionnaires. The interview with the managers brought to light the fact that the original instructions were not clear on the OVQ. As originally stated, the instructions asked each manager to evaluate a list of items describing behavior within organizations, in terms of what was poor or good. Through the pilot study, it was found that managers looked at the questions in terms of whether the statement was true for their firm or not. In the revised instructions, the managers were told not to evaluate whether or not the statement was true for their company, but to assume it was a true statement about behavior or conditions existing within some organization. They were also asked to evaluate the degree to which they felt the behavior or condition was desirable or undesirable. The revised OVQ and all other materials were then sent to the sample of managers previously identified.

The Measures

The measures used in this study were the ten values extracted from the factor analysis of the Organizational Value Questionnaire, and the two attitude variables of Job Satisfaction and Propensity To Leave, taken from responses to the Attitudinal Scale.

The ten values were:

1. Consideration
2. Competition and Exploitation

3. Managerial Climate

4. Risk Taking - Conservatism

5. Unionization

6. Paternalism

7. Concern for Quality of Products and Personnel

8. Social Responsibility

9. Member Equality

10. Executive Status and Authority

The attitude measures used in this study consisted of the scores of managers to two attitudinal scales. They were Job Satisfaction and Propensity To Leave.

The three following items were used as a measure of an individual's job satisfaction:

1. How well do you like your job;

2. How much chance does your job give you to do the things you like best;

3. How good a job does your immediate superior do in dealing with people.

Two items were used to measure the likelihood that an individual might leave an organization. These were:

1. Which of the following statements best represents your general attitude about staying with your present company;

2. What are your plans in regard to staying with your company.

A five-point rating scale was developed for each question. Each respondent was asked to place a check mark next to one of the five statements ranging from very little to very much. Individual scores for the two measures were

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obtained by totaling the subjects responses to all the items in each subscale. A complete description of the Attitudinal Scale is presented in Appendix I.

Analytical Techniques

The factor analysis. Factor analysis is one of a number of statistical techniques which have been developed to handle problems involving a large number of variables.[4] Basically, it is an approach which can be used to locate a smaller number of dimensions, or factors (both terms are used synonomously in this study) contained in a larger set of independent items or variables.

Underlying the use of factor analysis is the concept that, when there are a large number of items or variables which are intercorrelated, there may be one or more underlying variables or factors which cause measures to be correlated.[5] One of the purposes of factor analysis then, is to enable a researcher to see whether some underlying pattern of relationships exists such that the data under study may be reduced or rearranged to a smaller set of factors, which may account for the observed interrelations in the data.[6]

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[4]Hubert M. Blalock, Social Statistics (New York: McGraw-Hill Company, 1960), pp. 383-391.

[5]Jum C. Nunnally, Psychometric Theory (New York: McGraw-Hill Company, Inc., 1967), pp. 288-290. Also check, H. H. Harman, Modern Factor Analysis (Chicago: University of Chicago Press, 1967).

[6]Ibid., pp. 301-306.

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Several different types of factor analysis programs are available.[7] The factor analysis program used, in an attempt to match as closely as possible the factor analysis study of Rizzo previously discussed, was a principal components solution with an attached varimax rotation.[8] The purpose of rotation is "to obtain a set of factors which have the property that any given factor will be fairly highly correlated with some of the items but uncorrelated with the rest."[9] This enables one to identify a factor with one of the clusters of items making up the set of factors. In the program used, the researcher has a choice of specifying the initial communality estimates. It was decided to use squared multiple correlations as the initial communality estimates.[10] The intercorrelations of item responses yielded a 143 x 143 matrix.

The factor analysis of the OVQ responses yielded ten meaningful factors. A complete description of the factors,

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[7]W. J. Dixon, Biomedical Computer Programs X-series Supplement (Berkeley: University of California Press, 1969), pp. 90-99.

[8]Nunnally, op. cit., pp. 348-355.

[9]Blalock, op. cit., pp. 384-386.

[10]Nunnally, op. cit., pp. 348-355. In addition, this manner of estimating initial communalities was recommended by Dr. R. Tucker, from the Department of Communication, at Bowling Green State University.

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items, and factor loadings is presented in Table 5. The complete results of the factor analysis are presented in Chapter III.

Analysis of variance. Analysis of variance is a technique by which we can measure the significance of the difference between several means at once. It enables one to determine whether two or more samples are taken from the same or different populations.[11] The concept underlying the analysis of variance test is the idea that part of the total variation in any sample is a result of variation within category means (referred to as unexplained variance), and part is due to variation between category means (referred to as explained variance).[12] In general, the usual hypotheses is the null hypotheses of no difference or relationship between sample means, that is, all means are equal. This is usually expressed as, Ho:ul=u2=···=uk.[13] In a two variable or factor model, we must also be concerned with interaction between the factors. In this situation, we must test three hypotheses of equal means: for column means, row means, and interaction means.[14]

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[11]Blalock, op. cit., pp. 242-246.

[12]Wilfrid J. Dixon and Frank J. Massey, Introduction to Statistical Analysis (New York: McGraw-Hill Company, 1969), pp. 150-153.

[13]Ya-Lun Chou, Statistical Analysis (New York: Holt, Rinehart and Winston, Inc., 1966), pp. 401-405.

[14]Blalock. op. cit., pp. 257-258.

The estimation of the significance of the difference between the various means was carried out by means of the F ratio. This test is the ratio of the between mean variance to the within mean variance and is the test used in an analysis of variance study.[15] When there was a significant difference and the null hypothesis of no relationship could be rejected, the Scheffe test for multiple comparisons was used to determine which contrasts were responsible. This statistical procedure tests the equality of the category means and reveals whether there are significant differences between them.[16]

The Descriptive Study

The purpose of the descriptive study was to analyze the relationship between value factor scores, and an organization's structural characteristics, and system of production technology.

Seven of the ten value factors resulting from the factor analysis were used as dependent variables in the formulation of null hypotheses relating to this relationship. The four organizational structural variables used as independent variables were: size, managerial level, line

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[15] Ibid., pp. 158-160.

[16] George Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw-Hill Company, 1966), pp. 296-297, and William C. Guenther, Analysis of Variance (Englewood Cliffs: Prentice-Hall, Inc., 1964), pp. 54-59.

and staff positions, and functional work area. These items were taken from responses to the Personal Data Questionnaire. The technological variables used as independent variables in this study were Woodward's three types of production technology (unit and small-batch, large-batch and mass production, and process) previously discussed.

The above relationships were analyzed through the application of a two-classification analysis of variance method. In this approach, managers were categorized on the basis of the two characteristics of structure and technology.

The specific program employed to carry out the descriptive study was the Finn: Univariate and Multivariate Analysis of Variance, Covariance, and Regression.[17] The results of the descriptive study are presented in Chapter III.

The Predictive Study

The purpose of the predictive study was to analyze the relationship between the value scores of managers and attitudinal measures toward the job and firm, in an attempt to utilize values to aid in the prediction of individual attitudes in organizations.

In an attempt to achieve this objective, the relationship between the value scores of managers whose values

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[17]Finn, op. cit., pp. 1-109.

differed from the aggregate sample of managers, and their scores on the two attitudinal variables, was analyzed. The attitude variables were separated into three categories. These classifications were determined by first computing the means and standard deviations for the aggregate sample of managers for each attitude variable, and then determining the high and low groups as those that were greater than, plus or minus one standard deviation from the mean.

All of the ten values resulting from the factor analysis were used as predictor variables in testing the hypotheses developed in this phase of the research.

These relationships were analyzed through the method of analysis of variance, which was described in the section dealing with the analytical techniques. As was previously discussed, a two-way analysis of variance design was utilized in the descriptive study. In carrying out the predictive study, a one-way analysis of variance design was used.

The results of the descriptive and predictive studies, along with the outcome of the factor analysis, will be presented in the next chapter.

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CHAPTER III

RESULTS

Overview

In this chapter, the results of the factor analysis of OVQ responses will be discussed, and a comparison made between the ten factors resulting from this study and the fourteen factors from Rizzo's earlier study. The next section of this chapter will analyze the relationship between values and structural and technological variables. The last section deals with the outcome of the analysis of the relationship between values and attitudinal measures.

The Factor Analysis

As previously discussed, the factor analysis of the 738 responses to the OVQ was carried out using a principal components solution with an attached varimax rotation.[1] Squared multiple correlations were used as initial communality estimates.[2]

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[1]W. J. Dixon, Biomedical Computer Programs X-series Supplement (Berkeley: University of California Press, 1969), pp. 90-99.

[2]This method of estimating initial communality estimates was recommended by Dr. Raymond Tucker, from the Department of Communication at Bowling Green State University. See also: Jum C. Nunnally, Psychometric Theory (New York: McGraw-Hill Company, Inc., 1967), pp. 348-355.

The factor analysis yielded ten dimensions, which accounted for 25.4 per cent of the variance. These ten factors are presented in the order of their extraction in Table 5, along with their high loading items. Table 5 also indicates the final items selected to score factors from along all the high loading items. The complete factor structure, along with the final communalities, is presented in Appendix III.

Factor scoring. The items selected to represent a factor served as the basis for the computation of factor scores. A factor score is the sum of an individual's responses to the items selected to represent a factor. They are taken from the individual's responses on the OVQ rating scale for each item in question.[3] A high factor score would be an indication of general agreement with the behavior described by each factor's items, while a low factor score is an indication of general disagreement.

The following procedure was utilized to determine the items used to represent and score the ten value factors:

1. All items that were not complex in nature and having a loading size equal to or greater than .28 were determined. A complex item was considered to be an item that either loaded high on

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[3]John Rizzo, Value Dimensions, Value Commitments and In-Basket Performance of Business Students (Columbus: Ohio State University, Ph.D. Thesis, 1964), p. 28. Also see Nunnally, op. cit., pp. 355-361.

Table 5

The Ten Value Factors With Their Headings, Items Used to Score Them and Item Size

Item	Loading	Item Description
Factor 1:		Consideration
88	.513	Executives look out for the welfare of the individual employees.
115	.485	Executives make employees feel at ease when talking to them.
67	.466	The firm realizes that all workers have occasional bad days.
50	.454	The firm is sympathetic with the personal worries of its employees.
89	.450	The firm's policies are based on the belief that happy employees are productive employees.
127*	.406	Executives put suggestions by employees into operation.
116	.396	Executives get approval from their assistants on important matters before going ahead.
75**	.376	Executives find a good deal of time to listen to employees.
129	.352	The firm helps the employee plan his future.
Factor 2:		Competition and Exploitation
61	.580	The firm takes advantage of loopholes in laws which restrict it.
80	.479	Because of special favors they have received, the police force gives the firm extra protection.
93	.439	The firm uses high pressure marketing tactics.

Table 5 (cont'd.)

Item	Loading	Item Description
25	.434	The firm has the right political connection.
105	.432	The firm will absorb a competitor if it can.
128	.429	The firm makes it rough for competitors.
91	.398	The firm uses every means to avoid paying taxes.
124	.391	The firm's advertising policy is: if it's legal, it's ethical.
66	.366	The firm capitalizes on the conditions of the economy in times of distress.
85*	.360	In order to compete effectively, the firm violates some anti-trust laws.
134	.329	The firm tries to recruit top personnel from its competitors.
62	.321	Executives use firm-owned cars for personal business.
82**	.314	The firm takes big risks to beat its competitors.
133	.285	The firm is managed by a small group who own most of the stock.
Factor 3:		Managerial Climate
101	.473	Employees feel that the way the firm is run is no concern of theirs.
17	.470	Executives sometimes pad their expense accounts.
78	.460	The firm has occasionally violated some state laws.

Table 5 (cont'd.)

Item	Loading	Item Description
137	.436	The executive in the firm who is a smart manipulator is more likely to get ahead.
28	.424	The workers in the firm consider management uncooperative.
106	.405	Older employees discourage new ideas.
63	.401	Executives refuse to explain their actions.
72	.392	The wives of executives are influential in the firm.
120	.386	Lower level executives really run the firm.
118	.383	Occasionally an employee has to cover up for the actions of his superior.
119***	.376	The firm has a narrow profit margin.
48	.364	A firm does what is best for itself regardless of whom or what it hurts.
143	.354	Managers openly criticize poor work of employees.
37	.325	Executives openly criticize poor work to lower level managers.
44	.323	The union in the firm limits the number of workers allowed on the job.
140	.320	Executives speak in a manner not to be questioned.
77	.319	The firm gets rid of undesirables by putting them in jobs they cannot do.
42	.317	The firm will keep almost any employee who puts in a full day's work.
45	.317	The firm has a noisy plant that disturbs local residents.

Table 5 (cont'd.)

Item	Loading	Item Description
8	.316	Length of service in the firm is the principal qualification for promotion.
30***	.300	Many unnecessary free services are given to customers.
33	.282	Many ideas of top management differ from those of middle management.
Factor 4:		Risk Taking - Conservatism
40	-.468	The firm takes big chances and sometimes makes the wrong decision.
110	.452	The firm urges everyone to follow the organization chart.
92	.412	The firm is always very cautious in making changes.
82**	-.404	The firm takes big risks to beat its competitors.
126	.365	The firm will not promote an employee who neglects his family.
13	.363	The firm has all employees punch a time clock.
47	.360	A firm does not hire individuals who are radical in their beliefs.
26	.312	The firm insists that each employee carry hospitalization insurance.
Factor 5:		Unionization
65	.579	The firm uses all legal means to weaken unions.
142	.505	The firm's management is opposed to a closed shop.
12	.504	Workers in the firm have never unionized.

Table 5 (cont'd.)

Item	Loading	Item Description
58	-.411	The firm urges all employees to join the union.
53*	.283	The firm often blames the union for declining profits.
Factor 6:		Paternalism
64	-.411	The firm transfers few executives to minimize moving established homes.
57	-.367	When work is slack, hours and weekly pay are reduced rather than lay off anyone.
49*	.359	The firm forces retirement on those over 65.
112	-.359	The firm is lenient in lending money to its employees.
6*	-.302	The firm would like to provide employees with company housing.
132	-.283	The firm emphasizes individual achievement rather than achievement as a team member.
Factor 7:		Concern for Quality of Products and Personnel
39	.577	The firm employs full time medical personnel.
136	.542	The firm has a scholarship plan for the employees' children.
117***	.541	The firm has representatives in all states soliciting business.
16	.478	High quality of product is emphasized.
114	.453	The firm has an elaborate quality control system.

Table 5 (cont'd.)

Item	Loading	Item Description
35	.446	The firm has a recreational program for its employees and their families.
130***	.427	The firm is attempting to become the largest in its field.
29	.404	The firm has a system whereby pay fluctuates according to the cost of living index.
41	.389	The firm pays the highest wages in the community.
71	.375	The firm pushes research even though it may have no immediate practical benefit.
46	.371	The firm is constantly trying to raise the employee's pride in the firm.
107***	.369	The firm solicits contracts from all sources, government included.
15	.335	The firm makes a continuing heavy investment in employee training.
24	.321	The firm is extremely particular in checking every detail of the finished product.
Factor 8:		Social Responsibility
21	.498	The firm attempts to aid in solving international problems.
11	.416	The firm backs aid to foreign countries.
104*	.299	The firm frequently sponsors programs to raise the cultural level of the community.
84*	.275	Many managers are very active in civic activities.

Table 5 (cont'd.)

Item	Loading	Item Description
Factor 9:		Member Equality
32***	.472	Executives are frequently transferred from one position to another.
4***	.461	Executives in the firm are rotated from one job to another.
19	.436	Executives avoid any display of authority.
18	.422	Executives treat all the employees as their equals.
125*	.300	Employees are on a first name basis with their superiors.
75**	.293	Executives find a good deal of time to listen to employees.
1	.275	Each employee is put on his own.
Factor 10:		Executive Status and Authority
97	-.391	Executives receive bonuses.
55	-.385	Executives are required to set definite standards of performance for subordinates.
111*	-.344	Executives emphasize meeting deadlines.
51***	-.343	The firm prefers hiring college graduates rather than persons with less education.
100	-.331	The executives of the firm have more comfortable working conditions than the office staff.
59***	-.314	The firm's management is composed of a group of upperclass families in the community.
94	-.314	Executives see to it that everyone is working at capacity.

Table 5 (cont'd.)

Item	Loading	Item Description
2	-.295	The board of directors holds the president solely responsible for the success of the firm.
73	-.269	The firm stresses the importance of the job to be done more than the person who does it.

*This indicates an item that was a complex item, that is, it loaded high on two factors. It normally would not be used to describe a factor, but because of its special value in relating to the behavior described by the other items on the factor in question, it was used only on that factor.

**This is a special situation, like the above, but where the item is used on two factors because its meaning contributes to both equally well.

***This indicates an item that was deleted from the list of items used to score the factor in question because of its divergence from the general behavior described by the other items. All other items were used to score the factor in question.

two or more factors, or was not at least .10 greater than its next highest value, if it had a value greater than .28 and only loaded high on one factor.[4] The item cutoff size of .28 was chosen because at this point there was a sharp drop in the loading size of the remaining items.

2. These selected items along with their loading size and description were listed in columns corresponding to the factors.
3. The complete factor structure was then reviewed once more, and, in a few special situations, a complex item (as defined above) was added to the list of items for a particular factor or factors. This occurred where an item either contributed significantly to the interpretation of two factors and was listed under both, or where it was listed only under one factor even though it loaded on several because of its relevance to the behaviors described by the other items making up that factor.
4. Items with signs opposing the predominant sign of a factor were reflected. Reflection involves

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[4]This method of eliminating or reducing factor complexity was recommended by Dr. Raymond Tucker, from the Department of Communication at Bowling Green State University. For additional information on factor loadings, see: Nunnally, op. cit., pp. 355-361.

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subtracting the actual rating given an item from the number of scale steps plus one.[5] In terms of this study, each item whose loading on a factor bore a sign opposite to the predominant sign of the other items on that factor was subtracted from ten. This procedure enables one to treat complete disagreement with a negative statement, the same as complete agreement with a positive statement.[6] This technique serves to clarify the interpretation of a factor score as a measure of agreement or disagreement with the content of the factors.[7]

5. The final step consisted of algebraically summing the responses for each subject on the items selected for each factor.

The means and standard deviations of the 143 items factor analyzed using the sample of 738 business managers is presented in Appendix IV.

The procedure for identifying factors. After the list of items corresponding to each factor was determined, a study was undertaken to identify the behaviors described by the items and to develop factor headings. Ten faculty

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[5]Nunnally, Ibid., pp. 532-533.

[6]Ibid., p. 533.

[7]Rizzo, op. cit., p. 29.

members from Bowling Green State University and Michigan State University representing the areas of Production Management, Organizational Development, Industrial Psychology, Organization Theory, and Communication took part in this study. Their comments were taken into consideration in determining final factor headings and descriptions of behavior described by each factor.

Comparison of the factor analysis results with those of the earlier study. One of the purposes of this research effort was to compare the results of the factor analysis of business manager responses to the OVQ with those achieved by Rizzo in his earlier study. In Rizzo's study, which was previously discussed in Chapter I, the original OVQ was administered to a sample of college students and yielded fourteen value factors.

Factor 1, named Consideration, appears to be a combination of Rizzo's Factor A (Organization Supervision and Structure) and Factor G (Consideration). Five of the first six high loading items on Factor 1 (items 88, 115, 67, 89 and 127) load relatively high on Factor A. All of these items, along with item 116 from Factor G and the remaining items of Factor 1, describe general supervisory and organizational policies and practices which indicate a concern for member needs and welfare. They also indicate a supportive, employee centered leadership style. As such,

Factor 1 appears to be a purer factor relating to member consideration than the previous factors, A or G.

Factor 2, Competition and Exploitation, is clearly reflective of Factor B (also called Competition and Exploitation). Six of the fourteen items making up Factor 1 (61, 25, 105, 128, 91 and 66) are high loading items on Factor B. The items comprising this factor describe a series of activities of organizations and individuals which indicate highly competitive or exploitive behavior. They appear to be a purer and stronger measure of these behaviors than the original Factor.

Managerial Climate, the third factor, seems to result from a combination of items originally loading on Factors A, B, F, G and N. These items relate to general leadership and organizational practices relative to the use of formal authority and control, along with a stress on management rights, to influence behavior. This appears to be a new dimension since none of the original factors clearly measured the behaviors described by this factor.

Factor 4, Risk Taking - Conservatism, seems to be a combination of Factors E (Change vs Conservatism) and K (Organizational Risk Taking). Items 40 and 92 from Factor E, and 82 and 47 from Factor K, load high on this dimension. These, and the other items making up Factor 4, describe organizational practices and policies which indicate risk taking or conservative behavior tendencies.

Unionization, Factor 5, looks to be a stronger and clearer indicator of values toward unionization than the original Factor D (Attitude Toward Unionization). Three of the five items making up this factor (65, 12 and 53) loaded relatively high on Factor D. The inclusion of the other two items (142 and 58) make this factor a more positive indication of practices of organizations towards unions that would be considered negative in general.

The sixth Factor, Paternalism, describes organizational practices and policies that are highly paternalistic in nature. The items making up this factor did not load on the original Paternalism factor but were found to be scattered over several other factors. This dimension appears to be a more lucid measure of paternalistic behavior than the original factor.

Concern for Quality of Products and Personnel, the seventh Factor, is a good reproduction of Factor I (Quality of Products and Personnel). There is a great deal of overlap between the items making up the factor. Seven of the eleven items comprising Factor 7 (136, 117, 16, 114, 15 and 24) were high loading items on Factor I. The items as a whole describe activities of firms relating to a concern for product quality and quality in personnel services.

Social Responsibility, Factor 8, describes organizational policies and practices relating to involvement in local, national, and international affairs. Two of the items making up this factor (21 and 104) load high on

Factor H (also named Social Responsibility). The items in general appear to be a purer measure of this value than the original factor.

Factor 9, Member Equality, has many of the characteristics of Factor F (Member Equality and Freedom From Control). The five items making up this factor are all high loading items on Factor F. These items describe organizational and managerial practices relating to treating employees as equals. It seems to be a better expression of these behaviors than the earlier dimension in that it is free of items pertaining to control or authority over employee lives or performance.

Executive Status and Authority, the tenth Factor, closely relates to those aspects of Factor A (Organization Supervision and Structure) that pertain to a stress on standards and meeting deadlines (items 55 and 111), and those aspects of Factor M (Work Emphasis and Initiative) that appertain to a stress on the job being done (items 97 and 73). The remaining items pertain to the status given executive positions. This factor thus describes general organizational and managerial work practices which largely refer to a stress on the task and performance standards, and indicates special status distinctions for executives.

In general, the factor structure resulting from this study appears to be a meaningful one. Many of the factors which emerged were replications of the factors developed in

the Rizzo study, and in most cases could be considered to be clearer versions of most of them. In addition, the analysis yielded several factors which were combinations of previous factors. These new factors were clearly interpretable and appear to be meaningful measures of the behaviors described.

Factor intercorrelations. The intercorrelation of the value factors yielded a 10 x 10 correlation matrix. These intercorrelations are presented in Table 6.

In general, the factor dimensions appear to have maintained excellent factor score independence with each other as the number of correlations between factors was low. The highest correlation in the matrix was between Consideration and Factor 7, Concern For Quality of Products and Personnel (.49). Factors 8 and 9 (Social Responsibility and Member Equality), along with Factor 7, tend to form a positive cluster with Consideration. Since Factors 1, 7 and 9 all deal with the concern for and treatment of organization members, this positive relationship is understandable. However, the association between Factor 1 and Social Responsibility is less clear. It appears that individuals scoring high on the value of Consideration toward members tend to have a high concern for Social Responsibility. The relationship between Consideration and Factor 3 (Managerial Climate) is noteworthy. Factor 3 is negatively correlated (-.29) with Factor 1. It seems that managers who score

Table 6

Intercorrelations of Factor Scores

Factor Title	Factor									
	1	2	3	4	5	6	7	8	9	10
1. Consideration	--	-.13	-.29	.16	.07	.14	.49	.33	.37	.11
2. Competition and Exploitation		--	.44	.25	.39	.24	-.12	-.03	-.03	.24
3. Managerial Climate			--	.21	.18	.26	-.23	-.22	-.04	-.05
4. Risk Taking - Conservatism				--	.19	.18	.24	.17	.03	.16
5. Unionization					--	.21	.03	.02	-.02	.18
6. Paternalism						--	.07	.10	.12	.01
7. Concern for Quality of Products and Personnel							--	.37	.18	.20
8. Social Responsibility								--	.07	.19
9. Member Equality									--	.01
10. Executive Status and Authority										--

high on the Consideration dimension tend to disfavor a climate which stresses the use of authority and controls to influence behavior.

Factor 2 (Competition and Exploitation) correlates positively with Factors 3 and 5. Managers who score high on Factor 2 thus appear to be favorably disposed toward the use of authority and controls to influence behavior. In addition, they tend to disfavor unionization (a high score on Factor 5 indicates a negative orientation toward unions).

One other relationship appears to be meaningful, although difficult to explain. There is a fairly positive correlation (.37) between Factor 7 (Concern For Quality of Products and Personnel) and Factor 8. All of the other factors kept relatively good independence between each other.

In the next section, the ten values described in this section will be used to test hypotheses relating to the descriptive and predictive studies.

Results of the Descriptive Study

Overview. Because of the number of hypotheses to be tested, and the overall length of this chapter, a brief review of the purpose and design of the descriptive study is included here.

The objective of the descriptive study was to analyze the relationship between value factor scores on selected

factors, four organizational structural characteristics, and three systems of production technology. Seven of the ten value factors were used to formulate hypotheses. Those values chosen were selected because they appeared to be most relevant to the literature on values and behavior. For some of the structural characteristics, six values are used instead of seven in the formulation of hypotheses. In any case, even though a value may not have been used to formulate a hypothesis, it was still included in the analysis of variance test.

The four organizational structural characteristics selected for analysis were: (1) job position, (2) managerial level, (3) functional work area, and (4) firm size. Each of these structural characteristics, the hypotheses relating to them, and the results of the analysis are presented as a separate subsection of the descriptive study. In addition, the main effect for the technology factor is presented as a separate subsection.

The hypotheses in the descriptive study are tested by the method of analysis of variance. The following subsection will briefly review the main aspects of this statistical technique.

Analysis of variance. The basic concepts of the analysis of variance approach were discussed in Chapter II. Briefly, the descriptive study is undertaken using the two

factors of structure and technology. As was pointed out in Chapter II, in any factorial experiment (a design with two or more factors) there are three hypotheses which must be tested. For each individual hypothesis in the descriptive study, then, the following three null hypotheses will be tested:

(1) Ho^{1} : No relationship between the means of the various levels of Factor A (Structure)

(2) Ho^{11} : No relationship between the means of the various levels of Factor B (Technology)

(3) Ho^{111} : No interaction effects between Factors A and B.

The results of the analysis of variance are given in the generally accepted analysis of variance table.[8] The resulting F test only enables us to determine whether or not a relationship exists between the variables under study; it does not reveal where the difference is. In order to determine which mean or means account for the significance, the Scheffe test for multiple comparisons was used throughout this study. This statistical procedure tests the equality of the category means and reveals whether there are significant differences between them.[9]

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[8]Wilfrid J. Dixon and Frank J. Massey, Introduction to Statistical Analysis (New York: McGraw-Hill Company, 1969), pp. 167-187. Also see: Hubert M. Blalock, Social Statistics (New York: McGraw-Hill Company, 1960), pp. 242-271.

[9]George Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw-Hill Company, 1966), pp. 290-298.

The organizational system of production technology utilized. The systems of production technology analyzed were: (1) unit and small batch production, (2) large batch and mass production, and (3) process production.

A note of explanation is necessary at this point in order to clarify why the main effect for technology is being analyzed first. While there are four structural characteristics being analyzed as separate subsections, the technology factor does not change for any of them. This means that the effects of technology, once analyzed for the first structural characteristic (job position), need not be analyzed again, except in the special case where a value that bordered on being significant in the original analysis becomes significant because of changed sample size, or, in the situation where interaction between factors is present. Because of this, a discussion of the main effects for technology appeared to be the best way to help the reader follow the overall analysis.

The hypotheses for the first structural characteristic (Job Position) and Technology are presented in the subsection dealing with the main effects for Job Position; they will not be repeated here.

In the analysis of the relationship between Job Position, Technology and values, we can reject the null hypothesis of no relationship between Consideration and Technology. Table 7 indicates that the relationship between

Consideration and Technology is highly significant at the .0001 level.

Table 8 indicates that a highly significant relationship exists between managers from the large batch and mass production group, and Consideration. The comparison between the unit and small batch group, and the large batch and mass production group was highly significant at the significance level of .001. The comparison between the large batch and mass production group, and the process group was also highly significant, but at the level of .01. The results explicitly indicate that the large batch and mass production group of managers scored significantly higher on the value of Consideration than either process, or unit and small batch managers.

The outcome of the F test for the value of Competition and Exploitation is given in Table 9. We can reject the hypothesis of no relationship between Competition and Exploitation and Technology. There is a highly significant relationship at the level of .005 between the value of Competition and Exploitation and Technology.

The outcome of the comparisons test given in Table 10 signifies that there is a highly significant relationship between the unit and small batch group of managers and Competition and Exploitation. The comparison between the unit and small batch and process groups was highly significant at the significance level of .01. This denotes that

managers from the unit and small batch technology group score significantly higher on the value of Competition and Exploitation than do managers from the process production group.

While we cannot reject the hypothesis relating to the value of Managerial Climate, we can reject the hypothesis for the value of Risk Taking - Conservatism. Table 11 shows that there is a highly significant relationship at the level of .019 between Technology and this value.

Table 12 discloses that there is a significant relationship between large batch and mass production managers and the value of Risk Taking - Conservatism. The comparison between the large batch and mass production, and process production groups was significant at the significance level of .05. The findings show that large batch and mass production managers score significantly higher on this dimension than do managers from process production.

Hypothesis number five, for Social Responsibility, can not be rejected. However, the last hypothesis for Position and Technology dealing with the value of Executive Status and Authority can be rejected for the hypothesis of no interaction and for technology. However, when interactions are present in a factorial experiment, usually the best factor combinations, rather than the best levels of a factor become the primary concern.[10] For this reason the

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[10]Dixon and Massey, op. cit., pp. 174-180.

main effect for technology will not be discussed under position, but will be discussed under Management Level where no interaction is present. Inspection of Table 13 indicates that the interaction between Position and Technology, and the value of Executive Status and Authority is highly significant at a level of .006.

Table 14 identifies the significant outcomes of the test of cell means. Inspection of this table reveals that there were thirteen significant interactions between cell means. There was significant interaction between the group of unit and small batch managers, and all three position groups of managers. Interaction was significant for the group of large batch and mass production managers, and both the staff group and combined line and staff group. No interaction was present between the process group of managers and the three job position groups. No particular explanation can be offered at this time for these interaction effects.

The values discussed to this point were the six values around which the position and technology hypotheses were developed. In addition to these hypotheses, the analysis of variance was also carried out for the four values not involved in the generation of hypotheses. Three of these values, Unionization, Paternalism, and Member Equality, were found to have significant main effects on the Technology factor. These results will be discussed in the following paragraphs.

Table 15 reveals the findings of the F test on the value of Unionization. It shows that there is a highly significant relationship at the level of .0001 between Unionization and Technology.

In the comparison of category means as pointed out in Table 16, there is a highly significant relationship between the managers from the large batch and mass production group and Unionization. The relationship between the small batch group and Unionization is also highly significant. The comparison between large batch and mass production managers, and process managers, was highly significant at a level of .001, as was the comparison between that group and unit and small batch managers. In addition, the comparison between unit and small batch managers and process production managers was highly significant at the level of .01.

The results clearly indicate that large batch and mass production managers score significantly higher on the value of Unionization than either of the other two groups. The unit and small batch group of managers also scored significantly higher than the process production group on this value.

The results of the F test on the value of Paternalism, as given in Table 17, denote that the relationship between the value and Technology is highly significant at the level of .0002.

In the comparisons as shown in Table 18, there is a highly significant relationship between both process

production, and unit and small batch managers, and the value of Paternalism. The comparison between process production and large batch and mass production managers was highly significant at the significance level of .001. The comparison between unit and small batch managers and large batch and mass production managers was also significant, but at the .05 level.

These outcomes distinctly indicate that process production managers score significantly higher on the value of Paternalism than do managers from large batch and mass production systems. In addition, the managers from the unit and small batch technology group also scored significantly higher than managers from the large batch and mass production group.

Table 19 presents the findings with regard to the F test on the value of Member Equality. An analysis of this table points out that there is a highly significant relationship, at the significance level of .0001, between technology and the value of Member Equality.

Examination of the comparisons illustrated in Table 20 reveal that there is a highly significant relationship between the large batch and mass production group of managers and Member Equality. A significant relationship also exists between the process production group and this value dimension.

The comparison between the unit and small batch and large batch mass production groups was highly significant

at the .001 level. The contrast between large batch and process production managers was also significant but at the significance level of .05. The process production group when compared to the unit and small batch group was significant at the .10 significance level.

The outcome of this analysis shows that the large batch and mass production managers scored significantly higher on the value of Member Equality than either of the other two groups. In addition, the group of managers from the process production group scored significantly higher than the managers from the unit and small batch group on this value.

In the prior analysis of organizational position and technology, it was found that interaction prevented the investigation of main effects on the value of Executive Status and Authority. As Table 23 reveals, there are no interaction effects for Management Level and Technology on this value, so the null hypothesis for interaction cannot be rejected. Investigation of Table 23 points out that there is a highly significant relationship between Executive Status and Authority and Technology at the significance level of .002.

Table 24 points out that the comparison between unit and small batch and process managers was highly significant at the significance level of .001. It further shows that the comparison between large batch and mass production

managers, and process production managers was also highly significant, but at the .01 level.

These findings then, clearly show that both unit and small batch and large batch and mass production managers score significantly higher on the value of Executive Status and Authority than do process managers.

One additional technological effect resulted from the analysis of Managerial Level and Technology. Observation of Table 27 indicates that Technology has a significant relationship to the value of Quality of Products and Personnel at the significance level of .044. This main effect bordered on being significant in the first analysis carried out on the Position variable. In that situation, the significance level was .07. In the present case, a larger sample size and increased degrees of freedom appear to be responsible for the significant relationship between this value and Technology.

The contrasts exhibited in Table 28 show that the comparison between managers from the large batch and mass production group, and the unit and small batch group was significant at the significance level of .10. This outcome illustrates that managers from large batch and mass production technology systems score significantly higher on the value of Quality of Products and Personnel than do managers from unit and small batch systems.

The analysis of values and Organization Size and Technology yielded one interaction effect. The value of

Member Equality was highly significant on interaction, as shown in Table 42.

Table 43 shows the cells that were significant on the Scheffe test for interaction. Observation of this table reveals that there were seven significant interactions between cell means. There was significant interaction between the group of managers from unit and small batch technology and the small size and large size groups. There was significant interaction for the large batch and mass production group and large size group. Interaction was also significant for the process production group and both medium and large organization size groups. No explanation can be given at this time for these interactions.

Because of the slight change in sample size over the four structural-technological samples, a test of means was undertaken for all technology means. Only a slight difference in mean scores and no deviation in direction was noted.

The organizational structural characteristic of job position. The first structural characteristic selected for analysis was the type of position responsibility held by a manager. Three categories of job position were utilized in this study. They were: (1) line responsibility, (2) staff responsibility, and combined line and staff responsibility referred to as "both."

Since the main effects for technology and interaction effects were discussed in the previous subsection, only main effects for Job Position will be presented in this subsection.

The hypotheses listed below, relating to position and technology, were proposed in Chapter I.

Hypothesis A-1 through A-6

> There is no significant relationship between line or staff managers or the production technology of an organization and the following value factors:
>
> A1 Factor 1. Consideration
> A2 Factor 2. Competition and Exploitation
> A3 Factor 3. Managerial Climate
> A4 Factor 4. Risk Taking - Conservatism
> A5 Factor 8. Social Responsibility
> A6 Factor 10. Executive Status and Authority

The results of the test of the hypothesis for the value of Consideration are presented in Table 7. Inspection of Table 7 indicates that we can reject the null hypothesis of no relationship between Consideration and Position. There is a significant relationship at the level of .04 between the value of Consideration and type of Position.

Table 8 gives the results of the test for comparisons. It reveals that the group of managers having both line and staff job responsibility (both group) were significantly related to the value of Consideration. The comparison between the line managers and the both group was significant at the significance level of .10. The comparison between the both group and staff managers was also significant at the significance level of .10. The results clearly indicate

Table 7

Analysis of Variance Table With Computations on the Value of Consideration for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	23657.78	443			
Between columns (Position)	335.94	2	167.97	3.31	.037
Between rows (Technology)	1079.02	2	539.51	10.64	.0001
Interaction	188.32	4	47.08	.93	.447
Error	22054.50	435	50.70		

Table 8

Scheffe Test for Comparison of Category Means on the Value of Consideration for Position and Technology

Comparison	Category Means	F	Significance Level P<
Position			
Line vs staff	63.06 vs 62.85	.07	NS*
Line vs both	63.06 vs 65.05	4.77	.10
Staff vs both	62.85 vs 65.05	5.98	.10
Technology			
Unit and small batch vs large batch and mass production	62.23 vs 65.50	17.52	.001
Unit and small batch vs process	62.23 vs 62.33	.01	NS
Large batch and mass production vs process	65.50 vs 62.33	12.88	.01

*Indicates results were not significant. This notation will be used throughout the descriptive and predictive studies.

that managers having both line and staff job responsibility score significantly higher on the value dimension of Consideration than do either line or staff managers.

The outcome of the F test for the value of Competition and Exploitation is given in Table 9. The results show that there are no main effects for Position, and the null hypothesis can not be rejected.

The hypothesis relating to the value of Managerial Climate can not be rejected. Since there are no significant relationships for Managerial Climate, no analysis of variance table of computations will be shown. This procedure of only presenting an analysis of variance table when one of the three null hypotheses relating to each factor can be rejected will be followed throughout the rest of this chapter.

Hypothesis number four can be rejected for Position. Table 11 shows that there is a highly significant relationship, at the level of .009, between Position and the value of Risk Taking - Conservatism.

It was found, as pointed out in Table 12, that one comparison of Position means was significant. The contrast between the group of line managers and staff managers was significant at the significance level of .05. This indicates that line managers as a group scored significantly higher on the value of Risk Taking - Conservatism than did staff managers.

Table 9

Analysis of Variance Table with Computations on the Value of Competition and Exploitation for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	65022.54	443			
Between columns (Position)	647.16	2	323.58	2.26	.106
Between rows (Technology)	1558.8	2	779.40	5.44	.005
Interaction	498.48	4	124.62	.87	.482
Error	62318.1	435	143.26		

Table 10

Scheffe Test for Comparison of Category Means on the Value of Competition and Exploitation for Position and Technology

Comparison	Category Means	F	Significance Level P<
Technology			
Unit and small batch vs large batch and mass production	57.86 vs 55.95	2.11	NS
Unit and small batch vs process production	57.86 vs 53.23	10.21	.01
Large batch and mass production vs process production	55.95 vs 53.23	3.35	NS

Table 11

Analysis of Variance Table with Computations on the Value of Risk Taking - Conservatism for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	18822.12	443			
Between columns (Position)	393.52	2	196.76	4.73	.009
Between rows (Technology)	334.8	2	167.40	4.03	.019
Interaction	15.2	4	3.80	0.09	.985
Error	18078.6	435	41.56		

Table 12

Scheffe Test for Comparison of Category Means on the Value of Risk Taking - Conservatism for Position and Technology

Comparison	Category Means	F	Significance Level P<
Position			
Line vs staff	41.93 vs 39.88	8.77	.05
Line vs both	41.93 vs 40.25	4.15	NS
Staff vs both	39.88 vs 40.25	0.21	NS
Technology			
Unit and small batch vs large batch and mass production	40.58 vs 41.81	3.02	NS
Unit and small batch vs process	40.58 vs 39.50	1.92	NS
Large batch and mass production vs process	41.81 vs 39.50	8.34	.05

Table 13

Analysis of Variance Table with Computations on the Value of Executive Status and Authority for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	19707.49	443			
Between columns (Position)	159.76	2	79.88	1.93	.146
Between rows (Technology)	941.62	2	470.81	11.38	.0001
Interaction	610.16	4	152.54	3.69	.006
Error	17995.95	435	41.37		

Table 14

Scheffe Test for Comparison of Cell Means with Significant Interaction Effects for Position and Technology on the Value of Executive Status and Authority

Comparison	Category Means	F	Significance Level P<
Position and Technology			
USB-Line vs LBMP-Line	46.18 vs 42.20	12.09	.01
USB-Line vs PP-Line	46.18 vs 42.14	10.01	.01
USB-Line vs PP-Staff	46.18 vs 41.00	17.31	.01
USB-Staff vs LBMP-Line	45.74 vs 42.20	10.27	.01
USB-Staff vs PP-Line	45.74 vs 42.14	8.42	.05
USB-Staff vs PP-Staff	45.74 vs 41.00	15.65	.01
USB-Both vs PP-Staff	44.84 vs 41.00	8.02	.05
LBMP-Line vs LBMP-Staff	42.20 vs 45.63	8.78	.05
LBMP-Line vs LBMP-Both	42.20 vs 46.91	11.43	.01
LBMP-Staff vs PP-Line	45.63 vs 42.14	7.38	.05
LBMP-Staff vs PP-Staff	45.63 vs 41.00	13.4	.01
LBMP-Both vs PP-Line	46.91 vs 42.14	10.1	.01
LBMP-Both vs PP-Staff	46.91 vs 41.00	16.10	.01

Table 15

Analysis of Variance Table with Computations on the Value of Unionization for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	11263.67	443			
Between columns (Position)	4.96	2	2.48	.114	.892
Between rows (Technology)	1680.84	2	840.42	38.61	.0001
Interaction	107.92	4	26.98	1.24	.294
Error	9469.95	435	21.77		

Table 16

Scheffe Test for Comparison of Category Means on the Value of Unionization for Position and Technology

Comparison	Category Means	F	Significance Level P<
Technology			
Unit and small batch vs large batch and mass production	22.63 vs 25.75	47.42	.001
Unit and small batch vs process production	22.63 vs 20.85	9.91	.01
Large batch and mass production vs process production	25.75 vs 20.85	70.62	.001

Table 17

Analysis of Variance Table with Computations on the Value of Paternalism for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	12440.56	443			
Between columns (Position)	111.02	2	55.51	2.06	.128
Between rows (Technology)	476.00	2	238.00	8.85	.0002
Interaction	152.04	4	38.01	1.41	.229
Error	11701.50	435	26.90		

Table 18

Scheffe Test for Comparison of Category Means on the Value of Paternalism for Position and Technology

Comparison	Category Means	F	Significance Level P<
Technology			
Unit and small batch vs large batch and mass production	27.07 vs 25.40	8.72	.05
Unit and small batch vs process	27.07 vs 28.03	2.36	NS
Large batch and mass production vs process	25.40 vs 28.03	16.48	.001

Table 19

Aanlysis of Variance Table with Computations on the Value of Member Equality for Position and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	14548.85	443			
Between columns (Position)	29.52	2	14.76	.479	.620
Between rows (Technology)	918.86	2	459.43	14.89	.0001
Interaction	180.72	4	45.18	1.47	.212
Error	13419.75	435	30.85		

Table 20

Scheffe Test for Comparison of Category Means on the Value of Member Equality for Position and Technology

Comparison	Category Means	F	Significance Level P<
Technology			
Unit and small batch vs large batch and mass production	26.60 vs 29.91	29.62	.001
Unit and small batch vs process production	26.60 vs 28.21	5.76	.10
Large batch and mass production vs process production	29.91 vs 28.21	6.02	.05

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Hypothesis number five, for Social Responsibility, can not be rejected for any of the three hypotheses relating to this factor.

Neither the last hypothesis for the value of Executive Status and Authority, nor the three values of Unionization, Paternalism, and Member Equality (which were found to have main effects on Technology) could be rejected for Job Position.

The organizational structural characteristic of managerial level. The second structural characteristic analyzed was the level of a manager's job within the organization. The following three categories of job level were used in this study: (1) top management, (2) middle management, and (3) lower management.

The hypotheses presented below, relating to management level and technology, were proposed in Chapter I.

Hypothesis A-7 through A-12

> There is no significant relationship between the managerial level or production technology of an organization and the following value factors:
>
> | | | | |
> |---|---|---|---|
> | A7 | Factor | 1. | Consideration |
> | A8 | Factor | 2. | Competition and Exploitation |
> | A9 | Factor | 3. | Managerial Climate |
> | A10 | Factor | 4. | Risk Taking - Conservatism |
> | A11 | Factor | 8. | Social Responsibility |
> | A12 | Factor | 10. | Executive Status and Authority |

As previously pointed out, for this variable and the two other structural characteristics remaining to be analyzed, only main effects will be presented.

The two null hypothesis of no relationship for managerial level can not be rejected for the first two hypothesized values of Consideration and Competition and Exploitation. The third hypothesized value, Managerial Climate, comes close to being significant (.067); however, it can not be statistically rejected. The null hypothesis for the value of Risk Taking - Conservatism, also, can not be rejected.

Table 21 presents the results of the F test for the value of Social Responsibility. It indicates that the null hypothesis of no column effects (managerial level) can be rejected. The relationship between the value of Social Responsibility and Managerial Level is significant at the significance level of .024.

The comparison between the group of top level managers and middle level managers, shown in Table 22, was significant at the .05 level, as was the comparison of top level with lower level managers. These results clearly indicate that top level managers score significantly higher than either middle or lower level managers on the value of Social Responsibility.

In the prior analysis of organizational position and technology, it was found that interaction prevented the investigation of main effects for both factors on the value of Executive Status and Authority. As Table 23 reveals, there are no interaction effects for Management Level, so the null hypothesis for interaction can not be rejected.

Table 21

Analysis of Variance Table with Computations on the Value of Social Responsibility for Managerial Level and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	8002.7	445			
Between columns (Level)	132.78	2	66.39	3.75	.024
Between rows (Technology)	69.0	2	34.50	1.95	.144
Interaction	57.28	4	14.32	.81	.521
Error	7743.64	437	17.72		

Table 22

Scheffe Test for Comparison of Category Means on the Value of Social Responsibility for Managerial Level and Technology

Comparison	Category Means	F	Significance Level P<
Managerial Level			
Top management vs middle management	27.00 vs 24.48	7.30	.05
Top management vs lower management	27.00 vs 24.68	6.73	.05
Middle management vs lower management	24.48 vs 24.68	.21	NS

Since the hypothesis for Level can be rejected, it will be analyzed. There is a highly significant relationship between Executive Status and Authority and Managerial Level, at the significance level of .0001.

The contrasts denoted in Table 24 reveal that the comparison of top level managers to lower level managers was highly significant at the .01 level. The comparison of the middle level managers to lower level managers was also highly significant, but at the significance level of .001. These results clearly illustrate that both top and middle level managers score significantly higher on the value of Executive Status and Authority than do lower level managers.

One other significant relationship not originally hypothesized was found to exist and is presented in Table 25. Inspection of Table 25 reveals that a relationship exists between the level of managers and the organizational value of Paternalism, that is highly significant at the level of .008.

The comparisons found in Table 26 point out that the contrast between the group of middle level managers and lower level ones was significant at the .05 level of significance. The results of the comparison test thus indicate that lower level managers score significantly higher on the value of Paternalism than do middle level managers.

The organizational structural characteristic of functional area of work. The third structural characteristic

Table 23

Analysis of Variance Table with Computations on the Value of Executive Status and Authority for Managerial Level and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	19728.8	445			
Between columns (Level)	1316.64	2	658.32	16.33	.0001
Between rows (Technology)	722.16	2	361.08	8.96	.0002
Interaction	70.16	4	17.54	.44	.783
Error	17619.84	437	40.32		

Table 24

Scheffe Test for Comparisons of Category Means on the Value of Executive Status and Authority for Managerial Level and Technology

Comparison	Category Means	F	Significance Level P<
Managerial Level			
Top management vs middle management	47.96 vs 46.35	1.31	NS
Top management vs lower management	47.96 vs 43.08	13.1	.01
Middle management vs lower management	46.35 vs 43.08	24.3	.001
Technology			
Unit and small batch vs large batch and mass production	45.67 vs 44.51	2.76	NS
Unit and small batch vs process	45.67 vs 41.96	23.32	.001
Large batch and mass production vs process production	44.51 vs 41.96	10.48	.01

Table 25

Analysis of Variance Table with Computations on the Value of Paternalism for Managerial Level and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	12475.55	445			
Between columns (Level)	262.00	2	131.00	4.88	.008
Between rows (Technology)	403.54	2	201.77	7.52	.0007
Interaction	76.56	4	19.14	.71	.584
Error	11733.45	437	26.85		

Table 26

Scheffe Test for Comparisons of Category Means on the Value of Paternalism for Managerial Level and Technology

Comparison	Category Means	F	Significance Level P<
Managerial Level			
Top management vs middle management	25.04 vs 25.83	.47	NS
Top management vs lower management	25.04 vs 27.27	4.11	NS
Middle management vs lower management	25.83 vs 27.27	7.14	.05

Table 27

Analysis of Variance Table with Computations on the Value of Quality of Products and Personnel for Managerial Level and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	32033.04	445			
Between columns (Level)	127.12	2	63.56	.89	.412
Between rows (Technology)	449.22	2	224.61	3.14	.044
Interaction	211.2	4	52.80	.74	.566
Error	31245.5	437	71.50		

Table 28

Scheffe Test for Comparisons of Category Means on the Value of Quality of Products and Personnel for Managerial Level and Technology

Comparison	Category Means	F	Significance Level P<
Technology			
Unit and small batch vs large batch and mass production	80.00 vs 82.20	5.63	.10
Unit and small batch vs process production	80.00 vs 81.10	1.16	NS
Large batch and mass production vs process	82.20 vs 81.10	1.11	NS

analyzed was the Functional Work Area of managers. The following nine categories of Functional Areas were used in this study: (1) Production, (2) Marketing, (3) Accounting-Finance, (4) Personnel, (5) Purchasing, (6) Administration, (7) Engineering, (8) Data Processing, and (9) Research and Development.

The hypotheses presented below, relating to Functional Areas, were presented in Chapter I.

Hypothesis A-13 through A-18

> There is no significant relationship between the functional areas or production technology of an organization and the following value factors:
>
> A13 Factor 1. Consideration
> A14 Factor 2. Competition and Exploitation
> A15 Factor 3. Managerial Climate
> A16 Factor 4. Risk Taking - Conservatism
> A17 Factor 8. Social Responsibility
> A18 Factor 10. Executive Status and Authority

As explained in the preceding analysis on Managerial Level, all Technology main effects and interaction effects have been discussed, and only the main effects for Functional Area will be presented.

The null hypothesis of no relationship could not be rejected for main effects on Functional Area for the first three hypotheses relating to the values of: Consideration, Competition and Exploitation, and Managerial Climate. The fourth hypothesis dealing with Risk Taking - Conservatism can be rejected. As indicated in Table 29, the relationship between the value of Risk Taking - Conservatism and Functional Area is highly significant at the .0003 level.

Table 29

Analysis of Variance Table with Computations on the Value of Risk Taking - Conservatism for Functional Area and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	19142.66	443			
Between columns (Functional Area)	1244.0	8	155.50	3.79	.0003
Between rows (Technology)	378.62	2	189.31	4.62	.010
Interaction	423.04	16	26.44	.65	.847
Error	17097.0	417	41.00		

Table 30 reveals that only one contrast was significant. The comparison between managers from the production, and research and development groups, was significant at the .10 level. This finding denotes that production managers scored significantly higher on the value of Risk Taking - Conservatism than did research and development managers.

Hypothesis number five, relating to the value of Social Responsibility, can be rejected. Investigation of Table 31 points out that there is a highly significant relationship at the .007 level between Social Responsibility and Functional Area.

The analysis of category means, however, did not reveal any significant relationships between the means at a significance level of .10 or lower. For this reason, the computations are not shown.

The last hypothesis dealing with the value of Executive Status and Authority can be rejected. It was found, as Table 32 indicates, that there is a highly significant relationship at the .0006 level between this value and Functional Area.

Table 33 lists the comparisons of category means. Only one significant relationship was found to exist. The comparison between managers from the production and marketing groups was significant at the significance level of .05. The outcome thus denotes that marketing managers scored significantly higher on the value of Executive Status and Authority than did production managers.

Table 30

Scheffe Test for Comparisons of Category Means on the Value of Risk Taking - Conservatism for Functional Area and Technology

Comparison	Category Means	F	Significance Level P<
Functional Area			
Prod. vs Per.	42.01 vs 38.06	5.59	NS
Prod. vs Mkt.	42.01 vs 40.18	3.94	NS
Prod. vs Fin. & Acct.	42.01 vs 41.37	0.03	NS
Prod. vs Purch.	42.01 vs 43.67	1.10	NS
Prod. vs R. & D.	42.01 vs 38.08	15.14	.10
Prod. vs Adm. & Cler.	42.01 vs 41.65	0.07	NS
Prod. vs Eng.	42.01 vs 40.13	3.10	NS
Prod. vs Data Proc.	42.01 vs 35.12	8.86	NS
Per. vs Mkt.	38.06 vs 40.18	1.41	NS
Per. vs Fin. & Acct.	38.06 vs 41.37	3.01	NS
Per. vs Purch.	38.06 vs 43.67	6.50	NS
Per. vs R. & D.	38.06 vs 38.08	0.00	NS
Per. vs Adm. & Cler.	38.06 vs 41.65	2.96	NS
Per. vs Eng.	38.06 vs 40.13	1.23	NS
Per. vs Data Proc.	38.06 vs 35.12	1.12	NS
Mkt. vs Fin. & Acct.	40.18 vs 41.37	0.84	NS
Mkt. vs Purch.	40.18 vs 43.67	4.20	NS
Mkt. vs R. & D.	40.18 vs 38.08	3.13	NS
Mkt. vs Adm. & Cler.	40.18 vs 41.65	0.90	NS
Mkt. vs Eng.	40.18 vs 40.13	0.00	NS
Mkt. vs Data Proc.	40.18 vs 35.12	4.45	NS
Fin. & Acct. vs Purch.	41.37 vs 43.67	1.57	NS
Fin. & Acct. vs R. & D.	41.37 vs 38.08	5.79	NS
Fin. & Acct. vs Adm. & Cler.	41.37 vs 41.65	0.03	NS
Fin. & Acct. vs Eng.	41.37 vs 40.13	0.77	NS

Table 30 (cont'd.)

Comparison	Category Means	F	Significance Level P<
Fin. & Acct. vs Data Proc.	41.37 vs 35.12	6.30	NS
Purch. vs R. & D.	43.67 vs 38.08	10.18	NS
Purch. vs Adm. & Cler.	43.67 vs 41.65	1.01	NS
Purch. vs Eng.	43.67 vs 40.13	3.93	NS
Purch. vs Data Proc.	43.67 vs 35.12	9.88	NS
R.&D. vs Adm. & Cler.	38.08 vs 41.65	4.96	NS
R.&D. vs Eng.	38.08 vs 40.13	2.47	NS
R.&D. vs Data Proc.	38.08 vs 35.12	1.48	NS
Adm. & Cler. vs Eng.	41.65 vs 40.13	0.86	NS
Adm. & Cler. vs Data Proc.	41.65 vs 35.12	6.17	NS
Eng. vs Data Proc.	40.13 vs 35.12	4.16	NS

Table 31

Analysis of Variance Table with Computations on the Value of Social Responsibility for Functional Area and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	7974.83	443			
Between columns (Functional Area)	370.24	8	46.28	2.70	.007
Between rows (Technology)	79.6	2	39.80	2.32	.10
Interaction	373.44	16	23.34	1.36	.157
Error	7151.55	417	17.15		

Table 32

Analysis of Variance Table with Computations on the Value of Work Emphasis for Functional Area and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	19723.85	443			
Between columns (Functional Area)	1162.4	8	145.30	3.53	.0006
Between rows (Technology)	530.72	2	265.36	6.45	.002
Interaction	879.52	16	54.97	1.34	.171
Error	17151.21	417	41.13		

Table 33

Scheffe Test for Comparisons of Category Means on the Value of Work Emphasis for Functional Area and Technology

Comparison	Category Means	F	Significance Level P<
Functional Area			
Prod. vs Per.	42.52 vs 44.62	1.57	NS
Prod. vs Mkt.	42.52 vs 46.48	18.45	.05
Prod. vs Fin. & Acct.	42.52 vs 44.82	4.04	NS
Prod. vs Purch.	42.52 vs 45.28	3.04	NS
Prod. vs R. & D.	42.52 vs 45.08	6.42	NS
Prod. vs Adm. & Cler.	42.52 vs 46.26	6.93	NS
Prod. vs Eng.	42.52 vs 45.91	10.08	NS
Prod. vs Data Proc.	42.52 vs 42.87	0.02	NS
Per. vs Mkt.	44.62 vs 46.48	1.10	NS
Per. vs Fin. & Acct.	44.62 vs 44.82	0.04	NS
Per. vs Purch.	44.62 vs 45.28	0.09	NS
Per. vs R. & D.	44.62 vs 45.08	0.06	NS
Per. vs Adm. & Cler.	44.62 vs 46.26	0.62	NS
Per. vs Eng.	44.62 vs 45.91	0.48	NS
Per. vs Data Proc.	44.62 vs 42.87	0.40	NS
Mkt. vs Fin. & Acct.	46.48 vs 44.82	1.62	NS
Mkt. vs Purch.	46.48 vs 45.28	0.49	NS
Mkt. vs R. & D.	46.48 vs 45.08	1.39	NS
Mkt. vs Adm. & Cler.	46.48 vs 46.26	0.04	NS
Mkt. vs Eng.	46.48 vs 45.91	0.21	NS
Mkt. vs Data Proc.	46.48 vs 42.87	2.27	NS
Fin. & Acct. vs Purch.	44.82 vs 45.28	0.06	NS
Fin. & Acct. vs R. & D.	44.82 vs 45.08	0.04	NS
Fin. & Acct. vs Adm. & Cler.	44.82 vs 46.26	0.72	NS

Table 33 (cont'd.)

Comparison	Category Means	F	Significance Level P∠
Fin. & Acct. vs Eng.	44.82 vs 45.91	0.60	NS
Fin. & Acct. vs Data Proc.	44.82 vs 42.87	0.71	NS
Purch. vs R. & D.	45.28 vs 45.08	0.04	NS
Purch. vs Adm. & Cler.	45.28 vs 46.26	0.24	NS
Purch. vs Eng.	45.28 vs 45.91	0.12	NS
Purch. vs Data Proc.	45.28 vs 42.87	0.78	NS
R. & D. vs Adm. & Cler.	45.08 vs 46.26	0.54	NS
R. & D. vs Eng.	45.08 vs 45.91	0.41	NS
R. & D. vs Data Proc.	45.08 vs 42.87	0.82	NS
Adm. & Cler. vs Eng.	46.26 vs 45.91	0.04	NS
Adm. & Cler. vs Data Proc.	46.26 vs 42.87	1.66	NS
Eng. vs Data Proc.	45.91 vs 42.87	1.53	NS

The organizational structural characteristic of size. The last structural characteristic analyzed was the size of organizations. The following three categories of size were utilized in this study: (1) small size, (2) medium size, and (3) large size.

The hypotheses presented below, relating to the size of organizations, were presented in Chapter I.

Hypothesis A-19 through A-25

> There is no significant relationship between the size or production technology of an organization and the following value factors:
>
> | | | | |
> |---|---|---|---|
> | A19 | Factor | 1. | Consideration |
> | A20 | Factor | 2. | Competition and Exploitation |
> | A21 | Factor | 3. | Managerial Climate |
> | A22 | Factor | 4. | Risk Taking - Conservatism |
> | A23 | Factor | 7. | Concern for Quality of Products and Personnel |
> | A24 | Factor | 8. | Social Responsibility |
> | A25 | Factor | 10. | Executive Status and Authority |

The hypothesis of no relationship concerning the factor of Consideration can be rejected. Examination of Table 34 indicates that a significant relationship at the level of .044 exists between the size of an organization and the value of Consideration.

In the comparisons table, Table 35, large size firms were found to be significantly related to Consideration. The contrast between the medium size firm group and the large size firm group was significant at the .10 significance level. These findings thus show, that, managers from large size firms score significantly higher on this value than do managers from medium size firms.

Table 34

Analysis of Variance Table with Computations on the Value of Consideration for Size and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	25706.41	487			
Between columns (Size)	323.34	2	161.67	3.15	.044
Between rows (Technology)	780.52	2	390.26	7.60	.0006
Interaction	30.96	4	7.74	.15	.860
Error	24587.07	479	51.33		

Table 35

Scheffe Test for Comparisons of Category Means on the Value of Consideration for Size and Technology

Comparison	Category Means	F	Significance Level P<
Organization size			
Small vs Medium	60.14 vs 62.67	.84	NS
Small vs Large	60.14 vs 64.14	2.13	NS
Medium vs Large	62.67 vs 64.14	4.70	.10

The next five hypotheses dealing with the values of; Competition and Exploitation, Managerial Climate, Risk Taking - Conservatism, Concern for Quality of Products and Personnel, and Social Responsibility could not be rejected for the main "column" effect of size. However, hypothesis number 25, the last of the descriptive hypotheses, relating to Executive Status and Authority, can be rejected. As pointed out in Table 36, there is a highly significant relationship at the .005 level between the value of Executive Status and Authority, and an organization's size.

The category comparisons as illustrated in Table 37 denote that the contrast between the group of managers from medium and large size firms was highly significant at the significance level of .01. This clearly signifies that managers from large size firms score significantly higher on the value of Executive Status and Authority, than managers from medium size firms.

In addition to the previously stated hypotheses, analyzed for Size, several other significant relationships were found to exist.

It was found, as exemplified in Table 38, that a highly significant (.0001) relationship exists between an organization's size and the value of Unionization.

An examination of Table 39 indicates that two relationships are significant. The comparison between the group of managers from large size firms and medium size firms was highly significant at the significance level of

Table 36

Analysis of Variance Table with Computations on the Value of Executive Status and Authority for Size and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	21438.34	487			
Between columns (Size)	450.96	2	225.48	5.41	.005
Between rows (Technology)	612.34	2	306.17	7.34	.0008
Interaction	391.16	4	97.79	2.34	.097
Error	19983.88	479	41.72		

Table 37

Scheffe Test for Comparisons of Category Means on the Value of Executive Status and Authority for Size and Technology

Comparison	Category Means	F	Significance Level P<
Organization size			
Small vs Medium	47.14 vs 43.10	2.64	NS
Small vs Large	47.14 vs 44.98	0.77	NS
Medium vs Large	43.10 vs 44.98	9.54	.01

Table 38

Analysis of Variance Table with Computations on the Value of Unionization for Size and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	12280.64	487			
Between columns (Size)	1307.04	2	653.52	30.65	.0001
Between rows (Technology)	745.84	2	372.92	17.49	.0001
Interaction	15.48	4	3.87	0.18	.834
Error	10218.28	479	21.32		

Table 39

Scheffe Test for Comparisons of Category Means on the Value of Unionization for Size and Technology

Comparison	Category Means	F	Significance Level P<
Organization Size			
Small vs Medium	25.86 vs 21.12	7.01	.05
Small vs Large	25.86 vs 24.48	0.61	NS
Medium vs Large	21.12 vs 24.48	59.42	.001

.001. In addition, the comparison between managers from small size firms and medium size firms was also significant, but at the .05 level. These results indicate that both the managers from large size, as well as those from small size firms, scored significantly higher on the value of Unionization than did managers from medium sized firms.

Table 40 points out that the relationship between organization size and the value of Paternalism is highly significant at the .001 level of significance.

As presented in Table 41, the outcome of the analysis of category means reveals that the comparison between the group of managers from medium and large size firms was highly significant (.01). The results indicate that managers from medium size firms score significantly higher on the value of Paternalism than do managers from large size firms.

The analysis of values yielded one other relationship that was significant. The value of Member Equality was significant for both main effects and interaction. Table 42 shows the results of the analysis. Since interaction effects were discussed in the subsection dealing with Technology, only the main effect for Size will be presented in this section.

Inspection of Table 42 reveals that there is a significant relationship between the value of Member Equality and Organization size, at the .037 significance level.

Table 40

Analysis of Variance Table with Computations on the Value of Paternalism for Size and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	13606.01	487			
Between columns (Size)	375.44	2	187.72	6.97	.001
Between rows (Technology)	246.00	2	123.00	4.57	.011
Interaction	94.68	4	23.67	.88	.416
Error	12889.89	479	26.91		

Table 41

Scheffe Test for Comparisons of Category Means on the Value of Paternalism for Size and Technology

Comparison	Category Means	F	Significance Level P<
Organization Size			
Small vs Medium	28.71 vs 27.79	.21	NS
Small vs Large	28.71 vs 26.03	1.83	NS
Medium vs Large	27.79 vs 26.03	12.92	.01

The comparison of category means shown in Table 43 indicates that one contrast was significant. The comparison between managers from medium size firms and large size firms was significant at the .10 level. This result indicates that the managers from large size firms scored significantly higher on the value of Member Equality than did managers from medium size firms.

The preceding presentation of the results of the Descriptive Study will be explained and summarized in the Conclusions Chapter.

The last section of this chapter deals with the outcome of the analysis of the predictive study.

Results of the Predictive Study

Overview. The purpose of the predictive study was to analyze the relationship between the value scores of managers and attitudinal measures toward the job and firm. This objective was carried out by analyzing the relationship between value scores and the attitudinal variables of Job Satisfaction and Propensity To Leave.

These attitude variables were classified into three levels: (1) High, (2) Moderate, and (3) Low. The groups were determined by going plus and minus one standard deviation from the mean for each variable and placing all scores greater than this into the respective high or low group. For the attitudinal-variable of Propensity To Leave, the

Table 42

Analysis of Variance Table with Computations on the Value of Member Equality for Size and Technology

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Total	16341.68	487			
Between columns (Size)	206.1	2	103.05	3.33	.037
Between rows (Technology)	685.84	2	342.92	11.07	.0001
Interaction	610.32	4	152.58	4.93	.008
Error	14839.42	479	30.98		

Table 43

Scheffe Test for Comparison of Cell Means with Significant Interaction Effects for Size and Technology on the Value of Member Equality

Comparison	Category Means	F	Significance Level P<
Size and Technology			
USB-Small vs PP-Small	27.67 vs 12.0	7.90	.05
USB-Medium vs LBMP-Large	25.78 vs 29.94	23.07	.01
USB-Medium vs PP-Medium	25.78 vs 28.51	9.09	.05
USB-Large vs LBMP-Large	27.39 vs 29.94	15.48	.01
USB-Large vs PP-Small	27.39 vs 12.00	7.59	.05
LBMP-Large vs PP-Small	29.94 vs 12.00	10.30	.01
PP-Small vs PP-Large	12.00 vs 25.00	8.71	.05
Organization Size			
Small vs Medium	25.43 vs 27.67	1.09	NS
Small vs Large	25.43 vs 28.81	2.52	NS
Medium vs Large	27.67 vs 28.81	4.64	.10

group that was greater than plus one standard deviation from the mean became the low group, and correspondingly, the group that was greater than minus one standard deviation from the mean became the high group. These relationships were analyzed through a one-way analysis of variance.

All 738 managers making up the aggregate managerial group were included in the predictive study.

Job satisfaction. The null hypotheses listed below were presented in Chapter I.

Hypothesis B-1 through B-10

> There is no significant relationship between managers whose value scores differ from other managers and Job Satisfaction for each of the following values:
>
> | | | | |
> |---|---|---|---|
> | B1 | Factor | 1. | Consideration |
> | B2 | Factor | 2. | Competition and Exploitation |
> | B3 | Factor | 3. | Managerial Climate |
> | B4 | Factor | 4. | Risk Taking - Conservatism |
> | B5 | Factor | 5. | Unionization |
> | B6 | Factor | 6. | Paternalism |
> | B7 | Factor | 7. | Quality of Products and Personnel |
> | B8 | Factor | 8. | Social Responsibility |
> | B9 | Factor | 9. | Member Equality |
> | B10 | Factor | 10. | Executive Status and Authority |

Examination of the one-way analysis of variance tables for the ten value factors indicates that hypothesis B-1 through B-10 can not be rejected at the .05 significance level. Tables 44 through 53 reveal the results of the F tests for these hypotheses.

Three of the values, however, are significant at the .10 level, and border on being significant at the .05 level. Even though the null hypothesis for these values can not be

Table 44

Analysis of Variance Table with Computations on the Value of Consideration for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	343.3	2	171.65	2.80	.062
Within columns (Error)	37460.41	611	61.31		
Total	37803.71	613			

Table 45

Analysis of Variance Table with Computations on the Value of Competition and Exploitation for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	408.48	2	204.24	1.28	.279
Within columns (Error)	97442.28	611	159.48		
Total	97850.76	613			

Table 46

Analysis of Variance Table with Computations on the Value of Managerial Climate for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	1126.26	2	563.13	2.56	.078
Within columns (Error)	134664.4	611	220.40		
Total	135790.66	613			

Table 47

Analysis of Variance Table with Computations on the Value of Risk Taking - Conservatism for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	188.2	2	94.10	2.24	.107
Within columns (Error)	25662.0	611	42.0		
Total	25850.2	613			

Table 48

Analysis of Variance Table with Computations on the Value of Unionization for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	32.52	2	16.26	.64	.528
Within columns (Error)	15549.95	611	25.45		
Total	15582.47	613			

Table 49

Analysis of Variance Table with Computations on the Value of Paternalism for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	74.42	2	37.21	1.22	.297
Within columns (Error)	18678.27	611	30.57		
Total	18752.69	613			

Table 50

Analysis of Variance Table with Computations on the Value of Quality of Products and Personnel for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	261.6	2	108.30	1.19	.305
Within columns (Error)	55704.87	611	91.17		
Total	55921.47	613			

Table 51

Analysis of Variance Table with Computations on the Value of Social Responsibility for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	56.74	2	28.37	1.44	.237
Within columns (Error)	12012.26	611	19.66		
Total	12069.0	613			

Table 52

Analysis of Variance Table with Computations on the Value of Member Equality for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	42.94	2	21.47	.61	.543
Within columns (Error)	21476.65	611	35.15		
Total	21519.59	613			

Table 53

Analysis of Variance Table with Computations on the Value of Executive Status and Authority for Job Satisfaction

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Job Satisfaction)	244.14	2	122.07	2.74	.066
Within columns (Error)	27262.82	611	44.62		
Total	27506.96	613			

rejected at the .05 significance level, it appears valuable to discuss the relationships existing for these values. The three values that are significant between .05 and .10 are: (1) Consideration, (2) Managerial Climate, and (3) Executive Status and Authority.

Investigation of Table 44 shows that there is a significant relationship at the level of .062 between the value of Consideration and Job Satisfaction.

The outcome of the comparisons test presented in Table 54 indicates that there is a significant relationship between the group of managers with high job satisfaction and Consideration. The contrast between the high job satisfaction group and the low satisfaction group was significant at the .10 level. The group of managers with high job satisfaction scored significantly higher on the value of Consideration than did the low satisfaction group.

The results of the F test on the value of Managerial Climate are presented in Table 46. An examination of this table points out that there is a significant relationship between the value of Managerial Climate and Job Satisfaction at the .078 level.

Table 55 indicates that one comparison was significant. The contrast between the group of managers with high job satisfaction and the group with moderate job satisfaction was significant at the .10 level. The outcome of the comparisons test thus indicates that managers with moderate

Table 54

Scheffe Test for Comparison of Category Means on the Value of Consideration for Job Satisfaction

Comparison	Category Means	F	Significance Level P<
Job Satisfaction			
High vs Moderate	64.15 vs 62.74	3.43	NS
High vs Low	64.15 vs 62.00	5.08	.10
Moderate vs Low	62.74 vs 62.00	.80	NS

Table 55

Scheffe Test for Comparison of Category Means on the Value of Managerial Climate for Job Satisfaction

Comparison	Category Means	F	Significance Level P<
Job Satisfaction			
High vs Moderate	59.81 vs 63.02	4.90	.10
High vs Low	59.81 vs 61.36	.73	NS
Moderate vs Low	63.02 vs 61.36	1.12	NS

Table 56

Scheffe Test for Comparison of Category Means on the Value of Executive Status and Authority for Job Satisfaction

Comparison	Category Means	F	Significance Level P<
Job Satisfaction			
High vs Moderate	45.38 vs 44.70	1.10	NS
High vs Low	45.38 vs 43.49	5.41	.10
Moderate vs Low	44.70 vs 43.49	2.92	NS

job satisfaction scored significantly higher on the value of Managerial Climate than did managers in the high job satisfaction group.

The last value, Executive Status and Authority, as shown in Table 53, has a significant relationship to Job Satisfaction at the .066 level.

As illustrated in Table 56, one contrast was found to be significant. The comparison between managers in the high satisfaction group and those in the low satisfaction group was significant at the .10 level. This outcome reveals that the group of high satisfaction managers scored significantly higher on the value of Executive Status and Authority than those managers in the low job satisfaction group.

Propensity to leave. The null hypotheses listed below were discussed in Chapter I.

Hypothesis B-11 through B-20

There is no significant relationship between managers whose value scores differ from other managers and Propensity To Leave for each of the following value factors:

B11	Factor	1.	Consideration
B12	Factor	2.	Competition and Exploitation
B13	Factor	3.	Managerial Climate
B14	Factor	4.	Risk Taking - Conservatism
B15	Factor	5.	Unionization
B16	Factor	6.	Paternalism
B17	Factor	7.	Quality of Products and Personnel
B18	Factor	8.	Social Responsibility
B19	Factor	9.	Member Equality
B20	Factor	10.	Executive Status and Authority

As shown in Table 57, the null hypotheses of no relationship between the value of Consideration and Propensity To Leave can not be rejected at the .05 significance level.

Table 58 presents the results of the F test for the value of Competition and Exploitation. It indicates that the null hypothesis can be rejected. The relationship between the value of Competition and Exploitation is highly significant at the .003 level.

The Scheffe test of category means, presented in Table 59, points out that the contrast between the group of managers having a low propensity to leave and the group of managers with a moderate propensity to leave was highly significant at the level of .01. In addition, the comparison between the low propensity to leave and high propensity groups was also significant, but at the .05 level. These results clearly indicate that both the moderate and high propensity to leave groups of managers scored significantly higher on the value dimension of Competition and Exploitation, than did the low propensity to leave group.

Table 60 illustrates that we can not reject the null hypothesis for the value of Managerial Climate at the .05 significance level. However, because this value borders so closely on being significant (.053), it was analyzed. As shown in Table 60, the relationship between Managerial Climate and Propensity To Leave is significant at the .053 level.

Table 57

Analysis of Variance Table with Computations on the Value of Consideration for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	280.38	2	140.19	2.28	.103
Within columns (Error)	37527.62	611	61.42		
Total	37808.0	613			

Table 58

Analysis of Variance Table with Computations on the Value of Competition and Exploitation for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	1885.14	2	942.57	6.00	.003
Within columns (Error)	95963.66	611	157.06		
Total	97848.8	613			

Table 59

Scheffe Test for Comparison of Category Means on the Value of Competition and Exploitation for Propensity To Leave

Comparison	Category Means	F	Significance Level P<
Propensity To Leave			
Low vs Moderate	52.95 vs 57.56	11.68	.01
Low vs High	52.95 vs 57.23	6.57	.05
Moderate vs High	57.56 vs 57.23	.06	NS

Table 60

Analysis of Variance Table with Computations on the Value of Managerial Climate for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	1300.52	2	650.26	2.95	.053
Within columns (Error)	134487.21	611	220.11		
Total	135787.73	613			

The comparison of category means given in Table 61 reveal that the contrast between the group of managers with a low propensity to leave and those with a high propensity to leave was significant at the .10 level. This outcome points out that those managers with a low propensity to leave score significantly higher on the value of Managerial Climate, than do those managers with a high propensity to leave.

Inspection of Table 62 shows that the null hypothesis for the value of Risk Taking - Conservatism can be rejected. The relationship between this value and Propensity To Leave is highly significant at the significance level of .0003.

Investigation of Table 63 indicates that two contrasts are significant. The comparison between the low propensity to leave group of managers, and the moderate propensity to leave group, was highly significant at the .01 level, as was the comparison between the low propensity to leave group and the high propensity to leave group. These results point out that the group of managers with a low propensity to leave scored significantly higher on the value of Risk Taking - Conservatism, than either the moderate or high propensity to leave groups.

Tables 64 through 67 reveal that the null hypotheses for the values of Unionization, Paternalism, Quality of Products and Personnel, and Social Responsibility can not be rejected.

Table 61

Scheffe Test for Comparison of Category Means on the Value of Managerial Climate for Propensity To Leave

Comparison	Category Means	F	Significance Level P<
Propensity To Leave			
Low vs Moderate	64.73 vs 61.62	3.79	NS
Low vs High	64.73 vs 60.07	5.55	.10
Moderate vs High	61.62 vs 60.07	.96	NS

Table 62

Analysis of Variance Table with Computations on the Value of Risk Taking - Conservatism for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	701.96	2	350.98	8.53	.0003
Within columns (Error)	25142.65	611	41.15		
Total	25844.61	613			

Table 63

Scheffe Test for Comparison of Category Means on the Value of Risk Taking - Conservatism for Propensity To Leave

Comparison	Category Means	F	Significance Level P<
Propensity To Leave			
Low vs Moderate	42.92 vs 40.75	9.81	.01
Low vs High	42.92 vs 39.45	16.49	.01
Moderate vs High	40.75 vs 39.45	3.60	NS

Table 64

Analysis of Variance Table with Computations on the Value of Unionization for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	66.16	2	33.08	1.30	.273
Within columns (Error)	15513.29	611	25.39		
Total	15579.45	613			

Table 65

Analysis of Variance Table with Computations on the Value of Paternalism for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	99.96	2	49.98	1.64	.195
Within columns (Error)	18653.83	611	30.53		
Total	18753.79	613			

Table 66

Analysis of Variance Table with Computations on the Value of Quality of Products and Personnel for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	324.6	2	162.30	1.78	.169
Within columns (Error)	55594.89	611	90.99		
Total	55919.49	613			

We can, however, reject the null hypothesis for the value of Member Equality. Table 68 points out that the relationship between the value of Member Equality and Propensity To Leave is significant at the level of .025.

Observation of the comparisons as illustrated in Table 69 indicates that one contrast is significant. The comparison between the low propensity to leave group of managers and the high propensity to leave group was significant at the .05 level of significance. This outcome points out that the group of managers with a low propensity to leave score significantly higher on the value of Member Equality than do managers with a high propensity to leave.

The last null hypothesis, as shown in Table 70, for the value of Executive Status and Authority, can not be rejected. However, like the value of Managerial Climate, it borders on being significant at the .05 level and is significant at the level of .059.

Table 71 reveals that one contrast was significant in this comparison. The comparison between managers with a low propensity to leave, and those with a moderate propensity to leave, was significant at the .10 level. This indicates that those managers with a moderate propensity to leave scored significantly higher on the value dimension of Executive Status and Authority than did those managers with a low propensity to leave.

Table 67

Analysis of Variance Table with Computations on the Value of Social Responsibility for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	49.5	2	24.75	1.26	.285
Within columns (Error)	12024.48	611	19.68		
Total	12073.98	613			

Table 68

Analysis of Variance Table with Computations on the Value of Member Equality for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	258.86	2	129.43	3.72	.025
Within columns (Error)	21262.80	611	34.80		
Total	21521.66	613			

Table 69

Scheffe Test for Comparison of Category Means on the Value of Member Equality for Propensity To Leave

Comparison	Category Means	F	Significance Level P<
Propensity To Leave			
Low vs Moderate	28.41 vs 27.18	3.78	NS
Low vs High	28.41 vs 26.27	7.39	.05
Moderate vs High	27.18 vs 26.27	2.13	NS

Table 70

Analysis of Variance Table with Computations on the Value of Executive Status and Authority for Propensity To Leave

	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level P<
Between columns (Propensity To Leave)	254.34	2	127.17	2.85	.059
Within columns (Error)	27250.60	611	44.60		
Total	27504.94	613			

Table 71

Scheffe Test for Comparison of Category Means on the Value of Executive Status and Authority for Propensity To Leave

Comparison	Category Means	F	Significance Level P<
Propensity To Leave			
Low vs Moderate	43.27 vs 44.98	5.62	.10
Low vs High	43.27 vs 44.77	2.85	NS
Moderate vs High	44.98 vs 44.77	.08	NS

The conclusions drawn from the results of the descriptive and predictive studies, along with implications for future research, will be presented in the next chapter.

CHAPTER IV

SUMMARY AND CONCLUSIONS

General Summary

The general purpose of this study was to identify and describe values of individuals that could be relevant to the description and prediction of performance and behavior within organizations.

This research project had three specific objectives. The first objective was to attempt to replicate the value factors produced in earlier research studies using the value scale.

The second objective was to analyze the relationship between individual values, four organizational structural characteristics, and three systems of production technology. The four structural variables studied were: (1) Job Position, (2) Managerial Level, (3) Functional Work Area, and (4) Organization Size. The three production systems used in this study follow Joan Woodward's classification of: (1) Unit and Small Batch Production, (2) Large Batch and Mass Production, and (3) Process Production. This aspect of the research constituted the Descriptive Study.

The final objective was to utilize values in an attempt to predict individual attitudes within business organizations by analyzing the relationship between value

scores and two attitudinal measures toward the firm and job. The two attitude measures used in this study were: (1) Job Satisfaction and (2) Propensity To Leave. This part of the research made up the Predictive Study.

The value instrument used in this research, called the Organizational Value Questionnaire (OVQ), was a modification of an organization value questionnaire originally developed by the Personnel Research Board at The Ohio State University. It contained a series of statements describing business practices relating to behavior within organizations. Managers participating in the study were asked to rate each questionnaire item as to the degree to which they believed the practices were desirable or undesirable. It was assumed that a manager in responding to the items gives an indirect expression of his personal values, as well as his value judgments about the organization of which he is a member. This allowed for the projection of personal values in the organizational setting and for the development of individual and organizational value patterns. The concept of organizational values then, as used in this study, refers to the values derived from the perceptions of managers toward organizational behavior.

The OVQ was administered to 738 managers from 12 firms. The responses to the Organizational Value Questionnaire were factor analyzed and ten meaningful value factors were identified. These factors were substantially similar

to the earlier Ohio State studies and in several cases new dimensions were developed.[1] The ten organizational values resulting from the factor analysis were used as variables in the Descriptive and Predictive Studies. All ten of the organizational values were found to have at least one significant relationship with one or more of the structural, technological, or attitudinal variables.

The Value Scale Factor Analysis

The ten organizational value factors. The factor analysis of managers' responses to the Organizational Value Questionnaire produced ten meaningful and interpretable value dimensions. Faculty members from Bowling Green State University and Michigan State University participated in a special study to identify the behaviors described by the items corresponding to each factor, and to develop factor headings. These value factors and an explanation of their meanings are:

Factor 1. Consideration

> This factor describes general supervisory and organizational policies and practices which indicate a concern for member needs and welfare as well as a supportive - employee centered leadership style. A high score would, in general, be an indication of a climate tending toward a supportive - employee centered leadership approach, with a high concern for individual welfare and needs.

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[1] John Rizzo, Value Dimensions, Value Commitments and In-Basket Performance of Business Students (Columbus: Ohio State University, Ph.D. Thesis, 1964), pp. 66-79.

Factor 2. Competition and Exploitation

This factor describes activities of organizations and individuals which indicate highly competitive and/or exploitative strategy and behavior. A high score would, in general, be an indication of a stress on competition and exploitation of opportunities.

Factor 3. Managerial Climate

This factor relates to general leadership and organizational practices with regard to the use of hierarchical management rights, controls and formal authority, to influence individual attitudes, actions, and job performance. A high score would, in general, be an indication of a climate which puts a stress on hierarchical rights, controls and the use of formal authority to influence individuals and carry out activities.

Factor 4. Risk Taking - Conservatism

This factor describes organizational policies and individual and organizational practices which serve to indicate an organization's or individual's values toward risk taking or conservative behavior. A high score would, in general, indicate a preference for conservatism.

Factor 5. Unionization

This factor describes practices of organizations relating to unions. A high score would, in general, be an indication of a negative or unfavorable orientation toward unions.

Factor 6. Paternalism

This factor describes organizational policies and practices relating to the concern for and control over, member housing, working conditions, personal loans, and pay and hours, that is paternalistic in nature. A high score would, in general, be an indication of a favorable orientation toward the behavior described in this factor.

Factor 7. Concern for Quality of Products and Personnel

This factor describes organizational activities and policies relating to beliefs about product quality and the excellence of employees and employee services. A high score would, in general, be an indication of a high degree of concern for quality and excellence in these items.

Factor 8. Social Responsibility

This factor describes organizational policies and practices relating to involvement in local, national, and international affairs. A high score would, in general, be an indication of a high degree of concern for social responsibility.

Factor 9. Member Equality

This factor describes general organizational and managerial practices relating to treating employees as equals. A high score would, in general, be an indication of an equalitarian climate, perhaps tending toward a permissive leadership philosophy.

Factor 10. Executive Status and Authority

This factor describes the existence of status distinctions for executive positions and executive prerogatives which stress the accomplishment of the job to be done. A high score, in general, would reflect a preference for executive status distinctions and the stress on getting the job done through the establishment of standards of performance.

The replication of the earlier research. The results of the factor analysis yielded factors similar to those extracted in the earlier research conducted by Rizzo using a longer version of the value scale.[2] Analysis of the resulting factors indicated that a number of them were

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[2] Ibid., pp. 66-79.

extensions and clearer expressions of the factors extracted in Rizzo's study. Several meaningful new factors resulting from a combination of the earlier factors were developed. In addition, one unique new dimension was identified through the present study.

The earlier competition and exploitation factor seems like an improved expression in this analysis and is also titled Competition and Exploitation. Similarly, the values of Unionization, Quality of Products and Personnel, and Social Responsibility are similar to the original factors of the same name, and can be considered to be less confounded measures of them.

Factor 1, named Consideration, is largely composed of items from the two earlier factors of Organization Supervision and Structure, and Consideration. This factor is a clearer description of general supervisory and organizational policies and practices, which show a concern for member needs and welfare, than either of the original factors.

Risk Taking - Conservatism, Factor 4, also results from a combination of two earlier factors; Factor E (Change vs Conservatism) and Factor K (Organizational Risk Taking).

In Rizzo's study, a Paternalism and Internal Control factor was extracted. None of the items on the original factor appeared in Factor 6 also titled Paternalism. However, the items describing this dimension, which were found

on several earlier factors, appear to be clearer measures of paternalistic behavior than the original factors.

Factor 9, Member Equality, closely resembles the original Member Equality and Freedom from Control dimension. This factor, however, seems to be a better expression of organization and managerial practices relating to treating employees as equals than the original dimension, because it is free of items pertaining to control or authority.

Executive Status and Authority is another factor that results largely from a combination of items taken from the two previous factors of Organization Supervision and Structure, and Work Emphasis. The items comprising this factor relate to a stress on standards and the task to be done. This dimension also identifies status distinctions for executive positions over other organizational members.

One factor, Managerial Climate, was unique to the present study. This dimension is composed of items that loaded on five of the original factors. The items in this new dimension clearly relate to behaviors which indicate a climate stressing management rights, and the use of authority and control to influence behavior.

Summary of the Descriptive Study

As previously pointed out, the purpose of the Descriptive Study was to analyze the relationship between and effect on values of selected Organizational Structural characteristics and Production Technology. In order to study

this relationship, thirty-two null hypotheses were formulated, fourteen of which were subsequently rejected and the alternative hypotheses accepted.

The conclusions for each of the four Organizational Structural characteristics and three systems of Production Technology will be discussed as separate subsections.

The relationship between job position and values. The following three categories of Job Position were used in this study: (1) line responsibility, (2) staff responsibility, and (3) combined line and staff responsibility.

Various research studies dealing with the line-staff relationship found staff managers to be more social and relationship oriented, and line managers to be largely task-oriented.[3] However, as pointed out in Table 72, no significant relationship was found to exist between line or staff managers on the value of Consideration. However, managers having both line and staff job responsibility were found to score significantly higher on this value than either line or staff managers.

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[3]For example, see: Thomas W. Harrell, Managers Performance and Personality (Cincinnati: South-Western, 1961), pp. 108-133; Paul R. Lawrence and Jay W. Lorsch, Organization and Environment (Boston: Harvard University, Division of Research, 1967), pp. 11-49; Victor H. Vroom, Motivation in Management (New York: American Foundation for Management Research, 1965), pp. 23-41; and Lyman W. Porter, Organizational Patterns of Managerial Job Attitudes (New York: American Foundation for Management Research, 1964), pp. 27-44.

Table 72

Summary Comparison of Significant Relationships Between Values and Structure, Technology and Attitude Measures

Values	Structure, Technology and Attitude Variables						
	Job Position	Managerial Level	Functional Area	Organization Size	Tech-nology	Job Satis-faction	Propensity To Leave
1. Consideration	.037*			.044	.0001	.062	
2. Competition and Exploitation					.005		.003
3. Managerial Climate						.078	.053
4. Risk Taking - Conservatism	.009		.0003		.019		.0003
5. Unionization				.0001	.0001		
6. Paternalism		.008		.001	.0002		
7. Quality of Products and Personnel					.044		
8. Social Responsibility		.024	.007				

Table 72 (cont'd.)

Values	Structure, Technology and Attitude Variables						
	Job Position	Managerial Level	Functional Area	Organization Size	Tech-nology	Job Satis-faction	Propensity To Leave
9. Member Equality				.037 **	.0001		.025
10. Executive Status and Authority	**	.0001	.0006	.005	.0001	.066	.059

*This denotes the actual level of significance for the relationship.

**This indicates that interaction was present in the relationships.

A significant relationship was also found to exist between Job Position and the value of Risk Taking - Conservatism. It was found that line managers scored significantly higher on this value than did staff managers. As was previously discussed, a high score on this value would, in general, indicate a preference for conservative behavior. This result is counter to research studies that have found line managers to be more forceful and decisive than staff managers.[4]

The relationship between managerial level and values. The following three categories of job level were used in this study: (1) top management, (2) middle management, and (3) lower management.

A significant relationship was found to exist between Managerial Level and the values of Paternalism, Social Responsibility and Executive Status and Authority.

Lower level managers were found to score significantly higher on the value of Paternalism than middle level managers. The mean score of 27.27 for lower level managers, (see Table 26) is a neutral score on this value. This indicates that middle level managers are not favorably disposed toward the paternalistic behaviors indicated by this factor, while lower level managers are, in general, neutral.

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[4]Porter, op. cit., pp. 27-44.

On the value of Social Responsibility, as might be expected, top level managers were found to score significantly higher than either middle or lower level managers. No significant relationship was found to exist between middle and lower level managers on this value. This outcome thus shows that top level business managers have a high concern for social responsibility.

The last significant relationship between Managerial Level and Values deals with the value of Executive Status and Authority. This factor describes behaviors indicating a stress on the task to be performed and standards. In addition, it also stresses status distinctions between executives and other organization members. The analysis pointed out that while no distinction can be made between top and middle managers, both of these groups scored significantly higher on this value than lower level managers. This outcome indicates that the two higher level management groups view their positions as having status distinctions from lower level managers, and in addition, use their authority to stress meeting standards and getting the job done. This finding is similar to the results reported by Wickert and McFarland in a survey of the literature on executive effectiveness. They found that marked differences in

values exist between executives in different functions and at different levels.[5]

The relationship between functional work area and values. The third structural characteristic analyzed was the functional work area of managers. The following nine categories of Functional Work Areas were used in this study: (1) Production, (2) Marketing, (3) Accounting-Finance, (4) Personnel, (5) Purchasing, (6) Administration, (7) Engineering, (8) Data Processing, and (9) Research and Development.

Various research studies such as those of Tagiuri, Porter and Ghiselli, and Harrell have found differences existing between different functional groups.[6] For example, sales managers were found to be highly verbal and aggressive, while production managers were characterized as being more defensive, stressing controls and being less humanitarian oriented.[7] Lawrence and Lorsch found similar results in their research studies.[8]

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[5]Frederic R. Wickert and Dalton E. McFarland, Measuring Executive Effectiveness (New York: Appleton-Century-Crofts, 1967), pp. 18-105.

[6]Renato Tagiuri, "Value Orientations and the Relationship of Managers and Scientists," Administrative Science Quarterly, June, 1965, pp. 39-51; L. W. Porter and E. E. Ghiselli, "The Self Perceptions of Top and Middle Management Personnel," Personnel Psychology, 10, 1957, pp. 97-99; and Harrell, op. cit., pp. 108-133.

[7]Harrell, Ibid.

[8]Lawrence and Lorsch, op. cit., pp. 11-49.

Table 72 reveals that a significant relationship exists between Functional Work Area and the values of Risk Taking - Conservatism, Social Responsibility, and Executive Status and Authority.

Production managers were found to score significantly higher on the value of Risk Taking - Conservatism than research and development managers. Since a high score on this value dimension indicates conservative behavior orientations, production managers can be considered to be more conservative than research and development managers. This outcome is similar to the results reported by Harrell.[9]

Even though Table 72 illustrates a highly significant relationship (.007) between Functional Area and the value of Social Responsibility, no significant relationships between category means at a significance level of .10 or lower could be found. The only explanation that can be offered for this event is that, perhaps, because of the small category sample sizes and large number of levels, the variance was spread too finely over the analysis for individual categories to become statistically significant.

Marketing managers were found to score significantly higher on the value of Executive Status and Authority than production managers. Both groups of managers have high scores on this dimension.

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[9]Harrell, op. cit., pp. 108-133.

The relationship between organization size and values. The last structural characteristic studied was the size of organizations. Three categories of size were used in this study; they were: (1) small size, (2) medium size, and (3) large size.

The results of the analysis of this relationship, as summarized in Table 72, show that there is a significant relationship between Organization Size and the values of Consideration, Unionization, Paternalism, Member Equality, and Executive Status and Authority.

The results of the analysis given in Table 35 show that managers from large size firms score significantly higher on the value of Consideration than do managers from medium size firms.

As previously indicated, a high score on the Value of Unionization would indicate an unfavorable orientation toward unions. It was found that managers from large size firms, as well as those from small size firms, scored significantly higher on this value than did managers from medium sized firms. This result indicates that managers from small and large size firms have decidedly negative outlooks toward the idea of unions, while managers from medium size firms are favorably disposed toward unions.

Managers from medium size firms were found to have a favorable orientation toward paternalistic practices. They scored significantly higher on the value of Paternalism

than did managers from large size firms, whose mean score on this value indicates an unfavorable outlook toward paternalistic practices.

The value of Member Equality describes practices indicating the treatment of organization members in an equalitarian manner. Managers from large size firms were found to be favorably disposed toward this value, as they scored significantly higher on it than medium size firm managers whose value score also indicated a favorable orientation toward it.

On the value of Executive Status and Authority, the group of managers from small size firms had the highest mean score. However, no significant relationship between this group and medium and large size firm managers could be found. The managers from large size firms had a positive score on this factor. They scored significantly higher on this value than the medium size group of managers.

The relationship between technology and values. The systems of production technology analyzed, following Joan Woodward's classification, were: (1) unit and small batch production, (2) large batch and mass production, and (3) process production. As previously stated, Woodward found that process production firms tended to operate under more organic systems of management than large batch or mass production firms. They placed less stress on controls, delegated more authority, and placed a greater stress on

decentralization of decision making. She also implies that there was greater member consideration in organic firms.[10] In contrast, she found large batch and mass production firms tending to operate largely under mechanical systems of management. Firms in this category clearly defined duties, placed a greater stress on controls, formal authority, and the task more so than process or unit and small batch firms.[11]

We would expect, based on the preceding discussion, that managers from large batch and mass production firms would score lower on the value of Consideration than managers from the other two classifications. It was found, however, that all three technology groups scored high on this value, but the managers from large batch and mass production firms scored significantly higher than either process or unit and small batch managers. This implies that perhaps the general assumption that large batch and mass production organizations are less considerate of member needs and welfare is not true. However, the results here might be due to the fact, as was later discovered, that the three firms in this sample were not unionized and prided themselves on their high concerns for the welfare of

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[10]Joan Woodward, Industrial Organization: Theory and Practice (London: Oxford University Press, 1965), pp. 38-80 and 129-233.

[11]Ibid.

their employees. This information reinforces the finding that the factor of Consideration is a good measure of practices relating to a concern for employee welfare and needs.

Managers from the unit and small batch technology group were found to score significantly higher on the value of Competition and Exploitation than managers from the process production group. However, the mean scores of all three groups indicates an unfavorable orientation toward competitive or exploitative behaviors. This result appears to support Woodward's observation that firms in the unit and small batch production category were, in general, placing a greater stress on the task and the use of formal authority and controls to achieve results, than were process firms.[12] The process firm managers had the lowest mean score on this value. This implies, as would be expected following Woodward, that process managers have the least tendency toward the use of competitive or exploitative behavior.

Large batch and mass production managers scored significantly higher on the value of Risk Taking - Conservatism than did managers from process production firms. It will be recalled that a high score on this value indicates conservative behavior orientations. Large batch and mass production managers, then, were found to be more conservative than process production managers.

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[12] Ibid.

It was found that large batch and mass production managers scored significantly higher on the value of unionization than either unit and small batch or process production managers. Their high score on this value indicates a highly negative view toward unions. This fact was substantiated by the discovery that firms in this category were not unionized. It was also found that unit and small batch managers scored significantly higher on the Unionization factor than process managers. The process production managers mean value score indicates that they were favorably disposed toward unions.

Woodward's observation that process firms, in general, tend to operate more organicly, while large batch and mass production firms tend to operate more mechanistically, appears to be substantiated by the results on the value of Paternalism. Process production managers scored significantly higher on this value than did large batch and mass production managers. In addition, it was found that unit and small batch managers scored significantly higher on this value than large batch and mass production managers. However, the mean score of the unit and small batch managers indicates a neutral stand rather than a favorable orientation toward the value of Paternalism. This implies that the more organic a firm, the more paternalistic is its concern for the welfare of its members.

Managers from large batch and mass production firms scored significantly higher on the value of Quality of Products and Personnel than did managers from unit and small batch technology systems. This outcome appears to support Woodward's finding that large batch and mass production firms placed a greater stress on control of quality than unit or small batch firms.[13]

The outcome of the analysis on the value of Member Equality shows that large batch and mass production managers scored significantly higher on this value than either of the other two groups. Once again this finding reinforces the outcome of the discussion with the top officials previously mentioned. In addition, process production managers were found to score significantly higher than unit and small batch managers on this value. This outcome supports Woodward's observation that process production firms have a greater concern for their members and delegate more authority.[14]

It was found, as would be expected according to the results of Woodward's study, that both unit and small batch and large batch and mass production managers scored significantly higher on the value of Executive Status and Authority than did process managers. This implies that

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[13] Ibid.

[14] Ibid.

they place a greater value on executive status distinctions and the use of authority to get the job done than do process managers.

Interaction in the descriptive study. Interaction effects between structural characteristics and technology were found to exist for two values. There was interaction between Job Position and Technology on the value of Executive Status and Authority. It was found that there were thirteen significant relationships existing between cell means. There was significant interaction between the group of unit and small batch managers and all three position classifications. Significant interaction also occurred between large batch and mass production managers and managers with staff and both line and staff job responsibility. No interaction was present between the process managers and the three position categories. At this time, no particular explanation can be offered to account for these interaction effects.

Interaction was also found to exist between Organization Size and Technology for the value of Member Equality. In this situation, seven cases of significant interaction were discovered. Significant interaction was found to exist between managers from unit and small batch systems and managers from both small and large size organizations. There also was significant interaction between the managers from large batch and mass production groups and managers

from large size firms. In addition, interaction was also significant for the process production group of managers and managers from both medium and large size firms. As in the previous situation of interaction, the interrelations are so complex that no explanation can be given for their occurrence at this time.

Summary and Implications of The Predictive Study

As previously pointed out, the purpose of the predictive study was to analyze the relationship between the value scores of managers and two attitude measures toward the job and firm. To achieve this objective, an analysis was made of the relationship between managers whose value scores differed from the aggregate group of managers, and the two attitude variables of Job Satisfaction and Propensity To Leave.

The aggregate group was composed of all 738 managers who completed the Organizational Value Questionnaire.

In order to study this relationship, the ten organizational value factors were used as independent variables in the formulation of hypotheses, with Job Satisfaction and Propensity To Leave serving as the dependent variables. In all, twenty hypotheses were formulated, eight of which were subsequently rejected.

The summary and implications for each attitude variable will be discussed as separate subsections.

The relationship between values and job satisfaction. This attitude variable was classified into the following three groups: (1) managers with high job satisfaction, (2) managers with moderate job satisfaction, and (3) managers with low job satisfaction. These groups were determined by computing the mean for this variable and placing all scores greater than plus or minus one standard deviation from the mean into the respective high or low group.

As shown in Table 72, there are no significant relationships between values and Job Satisfaction at the .05 level. However, there are three significant relationships between values and Job Satisfaction at the .10 level. They are: (1) Consideration, (2) Managerial Climate, and (3) Executive Status and Authority.

The analysis of category means on the value of Consideration revealed that managers in the high job satisfaction group scored significantly higher on this value than did managers in the low job satisfaction group. This outcome indicates that the higher the value a manager places on the value factor of Consideration, the more likely he is to find his job highly satisfying. Corresponding, the lower the value placed on this factor, the greater are the prospects of the manager having low job satisfaction.

A significant relationship was also found to exist between the value of Managerial Climate and Job Satisfaction. It was found that managers with moderate job satisfaction scored significantly higher on this value than did

managers with high job satisfaction. Those managers with the highest job satisfaction had the lowest category mean score on this value, while those managers with moderate job satisfaction had the highest mean score. The mean scores of all three groups would indicate a negative orientation toward the behaviors described by this factor. The value factor of Managerial Climate, as previously mentioned, describes a climate which stresses hierarchical rights, and the use of controls and formal authority to influence individuals. With this definition in mind, it appears that managers who place less of a value on the behaviors described by the value factor of Managerial Climate tend to have the highest job satisfaction.

The last significant relationship found to exist was between Job Satisfaction and the value of Executive Status and Authority. The analysis of this relationship revealed that managers with high job satisfaction score significantly higher on this value than do managers with low job satisfaction. As pointed out in the beginning of this chapter, the value dimension of Executive Status and Authority indicates the existence of status distinctions for the executive role and describes various executive prerogatives that stress accomplishing the task to be done. This outcome, then, implies that those managers who place a high value on this factor tend to have greater job satisfaction than those managers who place a low value on this factor.

The results of this analysis of the relationship between values and the attitude measure of Job Satisfaction lead to some interesting implications for future research. Although no hypotheses were formulated concerning combinations of factors predicting Job Satisfaction, the analysis just summarized indicates that such a cluster may exist. As pointed out, the group of highly satisfied managers tended to place a greater value on the factors of Consideration and Executive Status and Authority, and a lower value on Managerial Climate, than did those managers who had low job satisfaction. This outcome implies that those managers who view executive positions as having status distinctions and are concerned with the welfare and needs of their employees, have greater job satisfaction than managers who do not hold these values. In addition, they stress getting the job done but not through a stress on the use of controls and formal authority to do so. This implication suggests the value of future research to determine if this combination of organizational values does indeed indicate an "open" organization climate and can serve as one indicator of managerial job satisfaction.

The relationship between values and propensity to leave. This attitude variable was also classified into three categories. These three groups were: (1) managers with low propensity to leave, (2) managers with moderate propensity to leave, and (3) managers with high propensity

to leave. These groups were determined by computing the mean for this attitude variable and placing all scores greater than plus one standard deviation from the mean into the low propensity to leave group and all scores greater than minus one standard deviation from the mean into the high propensity to leave group.

As shown in Table 72, the three values of Competition and Exploitation, Risk Taking - Conservatism, and Member Equality are significant at the .05 level. In addition, two values, Managerial Climate and Executive Status and Authority, are significant at the .10 significance level.

A highly significant relationship was found to exist between the value of Competition and Exploitation, and Propensity To Leave. It was found that both the moderate and high propensity to leave groups of managers scored significantly higher on the value dimension of Competition and Exploitation, than did the low propensity to leave group. However, the mean scores of all three groups indicates an unfavorable orientation toward the behaviors described by this factor. This result implies that those managers who place less of a value on the value factor of Competition and Exploitation tend to have the lowest propensity to leave an organization, while those who place a higher value on this factor have the greatest propensity to leave.

The analysis of category means for the value of Managerial Climate reveals that those managers with a low

propensity to leave a firm score significantly higher on the value of Managerial Climate, than do those managers with a high propensity to leave. However, the mean score of all three groups indicates a negative orientation toward this factor's behaviors. This outcome indicates that those managers who place a higher value on a climate stressing the use of controls and formal authority to influence behavior are the most likely to remain with an organization, while those managers who do not place a high value on this factor are most likely to leave an organization.

A highly significant relationship was also found to exist between the value of Risk Taking - Conservatism and Propensity To Leave. As previously pointed out, a high score on this value is, in general, an indication of a conservative orientation. It was found that managers with a low propensity to leave an organization scored significantly higher on the value of Risk Taking - Conservatism, than either the moderate or high propensity to leave groups of managers. This result implies that those managers who place a greater value on conservative behavior are most likely to remain with a firm, while those who place less of a value on this factor are most likely to leave an organization.

One other highly significant relationship was found to exist between values and Propensity To Leave. The value of Member Equality was highly significant in relation to

Propensity To Leave. Those managers with a low propensity to leave were found to score significantly higher on the value of Member Equality than those managers with a high propensity to leave. This indicates that those managers who place a high value on Member Equality tend to be the managers most likely to remain with an organization. Correspondingly, those managers who place a low value on this factor tend to be the most likely to leave an organization.

The last significant relationship found to exist was between the value of Executive Status and Authority and Propensity To Leave. It was found that managers who had a moderate propensity to leave scored significantly higher on the value dimension of Executive Status and Authority than did those managers with a low propensity to leave. This result implies that those managers most likely to remain with a firm place a lower value on this factor than those managers who have the greatest tendency to leave an organization.

Once again, as in the preceding section dealing with the analysis of Job Satisfaction, a definite pattern appears to exist, although such a combination of values was not hypothesized.

The results just discussed indicates that the values as a group may be useful in predicting potential managerial turnover. As pointed out, the managers most likely to stay with an organization place a higher value on the value

factors of Member Equality, Risk Taking - Conservatism, and Managerial Climate, and a lower value on the factors of Competition and Exploitation and Executive Status and Authority, than did those managers who are most likely to leave a firm. This implies that those managers who are least likely to leave an organization have a conservative orientation, and place less value on competitive behavior. In addition, while they favor an equalitarian climate, they place a higher value on getting the job done through the use of controls and formal authority than those managers most likely to leave. They also place a low value on executive status distinctions. Correspondingly, managers who are less conservative in orientation and who place a higher value on competition appear to be the most likely to leave. These managers, in addition, tend not to value an equalitarian climate, but stress a climate where there are executive status distinctions and the task is accomplished without a stress on formal authority and control.

The results of this analysis indicates that future research may take the form of follow-up studies to see which managers have actually left the organizations studied would be very valuable in determining the worth of these values as predictors of managerial turnover. In addition, it would appear useful to identify the existing climate of an organization in an attempt to match the climate indicated by the values of the kinds of executives the organization would wish to retain.

General Conclusions

The purpose of this study was to attempt to develop a set of organizational value factors that could be used to: (1) describe the values of managers and organizations, (2) study the relationship between values and an organization's structural characteristics and system of technology, and (3) be used to predict performance. These objectives were largely accomplished. Ten interpretable and meaningful value factors were developed. These values were found to have at least one or more significant relationships between the structural characteristics, technology system, or attitude variables used in this study. In addition, the results of the predictive study indicate the usefulness of the values to predict performance and lead to several interesting implications for future research effort.

APPENDICES

APPENDIX I

THE ORGANIZATIONAL VALUE QUESTIONNAIRE WITH COVER LETTER AND THE ATTITUDINAL SCALE

APPENDIX I

THE ORGANIZATIONAL VALUE QUESTIONNAIRE WITH COVER LETTER AND THE ATTITUDINAL SCALE

Cover Letter

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_____

Dear_____

Industrial and academic leaders are becoming increasingly interested in Organization Theory and Organization Behavior research studies. Their aim has been to secure a better understanding of individual behavior within a business organization.

The belief that individual and group values play an important part in influencing managerial behavior in many areas including: supervision, motivation, communication, decision making and executive development, has gained increasing strength in recent years. Little actual research, however, has been done in determining and describing managerial and executive values within an organizational setting. I am currently involved in such a research study, directed toward the determination, description and evaluation of these values.

I need your help and cooperation in answering the enclosed questionnaire. Your assistance will help make this a successful project and you will be contributing toward advancing research knowledge. There are no correct or incorrect responses. Your personal beliefs are the important answers. Information about you and your job will be helpful in comparing responses from managers with similar backgrounds. I have enclosed two personal data sheets for this information.

Personal identification for the purpose of follow-up studies will increase the value of my research. However, if you prefer not to identify yourself or your company, please provide all other information requested, as your help is vital for the overall success of this research project.

Information you supply will be held strictly confidential. Aggregate terms will be used in summarizing the research and no individual identities will be revealed.

I have enclosed a pre-stamped, addressed envelope for your use in returning the enclosed materials. Thank you for your cooperation in this research.

Sincerely,

Ronald J. Hunady
Assistant Professor

Enclosure

ORGANIZATION VALUES DIMENSION QUESTIONNAIRE*

INSTRUCTIONS:

There is a great deal of variation among business organizations in their characteristics, methods of operation and managerial behavior. On the following pages you will find a list of items. Each item in the questionnaire represents a statement about behavior or conditions which exist within some business organizations. We are interested in obtaining your personal beliefs as to the desirability or undesirability of these characteristics and methods of operation.

ASSUME THAT EACH ITEM IS TRUE and that it represents a condition as it actually exists within some organization. DO NOT EVALUATE WHETHER OR NOT THE STATEMENT IS TRUE FOR YOUR COMPANY. Remember that these statements pertain to behavior within some business organizations and are not statements about behavior or conditions within your company.

For each item, evaluate in accordance with your own point of view, the degree to which you believe that the described practice or condition is desirable or undesirable. Please use the following scale in your evaluation of each item.

Extremely Poor	Very Poor	Quite Poor	Slightly Poor	Don't Care or Neutral	Slightly Good	Quite Good	Very Good	Excellent
1	2	3	4	5	6	7	8	9

EXAMPLE:

Take item 1 as an example: In some business organizations, each employee is put on his own. Assume that this item is a true statement of fact and EVALUATE THE DEGREE TO WHICH YOU FEEL THAT THIS IS A DESIRABLE OR UNDESIRABLE CONDITION. Then, select the scale value which represents your belief toward the condition described in the item and record the scale number on the answer sheet. Do this for each item.

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The Bureau of Business Research
The Ohio State University
Columbus, Ohio

Do not write anything on the pages containing the items. Use only one scale number for each item and do not leave any items blank.

1. Each employee is put on his own.
2. The board of directors holds the president solely responsible for the success of the firm.
3. The firm donates money only when such gifts appear to benefit the firm directly or indirectly.
4. Executives in the firm are rotated from one job to another.
5. The firm prefers to sell more goods to its present customers rather than to increase the number of customers to increase sales volume.
6. The firm would like to provide employees with company housing.
7. Political strategy is necessary for one to get promotions.
8. Length of service in the firm is the principal qualification for promotion.
9. The firm encourages the wives of executives to express their opinions about the firm.
10. The basic objectives of the firm never change.
11. The firm backs aid to foreign countries.
12. Workers in the firm have never unionized.
13. The firm has all employees punch a time clock.
14. The firm's primary objective is large profit.
15. The firm makes a continuing heavy investment in employee training.
16. High quality of product is emphasized.
17. Executives sometimes pad their expense accounts.
18. Executives treat all the employees as their equals.
19. Executives avoid any display of authority.
20. How well an employee gets along with others on the job is considered more important than his production.
21. The firm attempts to aid in solving international problems.
22. The firm places greater emphasis on quality than it does on quantity.
23. The firm occasionally wages price "wars" with its competitors.
24. The firm is extremely particular in checking every detail of the finished product.
25. The firm has the right political connection.
26. The firm insists that each employee carry hospitalization insurance.

27. The firm asks its executives to keep quiet about political views.
28. The workers in the firm consider management uncooperative.
29. The firm has a system whereby pay fluctuates according to cost of living index.
30. Many unnecessary free services are given to customers.

31. Employees are asked not to bring their personal worries to work.
32. Executives are frequently transferred from one position to another.
33. Many ideas of top management differ from those of middle management.
34. Executives act without consulting their subordinates.
35. The firm has a recreational program for its employees and their families.

36. Employees who volunteer to work extra hours are the ones more likely to get ahead.
37. Executives openly criticize poor work to lower level managers.
38. The firm always puts a larger advertisement in the media than its competitors.
39. The firm employs full time medical personnel.
40. The firm takes big chances and sometimes makes the wrong decision.

41. The firm pays the highest wages in the community.
42. The firm will keep almost any employee who puts in a full day's work.
43. Promotion is slow but steady.
44. The union in the firm limits the number of workers allowed on the job.
45. The firm has a noisy plant that disturbs local residents.

46. The firm is constantly trying to raise the employee's pride in the firm.
47. A firm does not hire individuals who are radical in their beliefs.
48. A firm does what is best for itself regardless of whom or what it hurts.
49. The firm forces retirement on those over 65.
50. The firm is sympathetic with the personal worries of its employees.

51. The firm prefers hiring college graduates rather than persons with less education.
52. The firm encourages the employees to go to a church of their own choice.
53. The firm often blames the union for declining profits.

54. The firm lobbies at all government levels.
55. Executives are required to set definite standards of performance for subordinates.

56. The firm rewards initiative at every opportunity.
57. When work is slack, hours and weekly pay are reduced rather than lay off anyone.
58. The firm urges all employees to join the union.
59. The firm's management is composed of a group of upper-class families in the community.
60. The firm encourages the employees and their families to join community activities that will help the firm.

61. The firm takes advantage of loopholes in laws which restrict it.
62. Executives use firm-owned cars for personal business.
63. Executives refuse to explain their actions.
64. The firm transfers few executives to minimize moving established homes.
65. The firm uses all legal means to weaken unions.

66. The firm capitalizes on the conditions of the economy in times of distress.
67. The firm realizes that all workers have occasional "bad" days.
68. A new method is never adopted unless it earns money.
69. Employees in the firm set their own speed of work.
70. During economic recessions the firm gives customers special discounts in order to improve business.

71. The firm pushes research even though it may have no immediate practical benefit.
72. The wives of executives are influential in the firm.
73. The firm stresses the importance of the job to be done more than the person who does it.
74. The firm gives special considerations to its bigger customers.
75. Executives find a good deal of time to listen to employees.

76. The firm never reduces the rate paid the worker per item produced.
77. The firm gets rid of "undesirables" by putting them in jobs they cannot do.
78. The firm has occasionally violated some state laws.
79. Every employee must know the firm's objectives and goals.
80. Because of special favors they have received, the police force gives the firm extra protection.

81. The firm allows its name to be listed as one of the supporters of a political party.
82. The firm takes big risks to beat its competitors.

83. Employees don't feel pressured by management.
84. Many managers are very active in civic activities.
85. In order to compete effectively, the firm violates some antitrust laws.

86. The firm seems to spend money freely.
87. The firm is strict about changing standard prices.
88. Executives look out for the welfare of the individual employees.
89. The firm's policies are based on the belief that happy employees are productive employees.
90. The firm engages in open fights with union officers.

91. The firm uses every means to avoid paying taxes.
92. The firm is always very cautious in making changes.
93. The firm uses high pressure marketing tactics.
94. Executives see to it that everyone is working at capacity.
95. The firm's compensation system is based upon individual productivity.

96. Policy changes are the rule rather than the exception.
97. Executives receive bonuses.
98. Executives keep to themselves.
99. Many of the firm's executives are active participants in political activities.
100. The executives of the firm have more comfortable working conditions than the office staff.

101. Employees feel the way the firm is run is no concern of theirs.
102. The firm's departments are encouraged to compete with each other.
103. The firm has very conservative political views.
104. The firm frequently sponsors programs to raise the cultural level of the community.
105. The firm will absorb a competitor if it can.

106. Older employees discourage new ideas.
107. The firm solicits contracts from all sources, government included.
108. Executives let the employees know what is expected of them.
109. The firm contributes to college athletic scholarships.
110. The firm urges everyone to follow the organization chart.

111. Executives emphasize meeting deadlines.
112. The firm is lenient in lending money to its employees.
113. The firm pays executives higher salaries than research scientists.
114. The firm has an elaborate quality control system.

115. Executives make employees feel at ease when talking to them.

116. Executives get approval from their assistants on important matters before going ahead.
117. The firm has representatives in all states soliciting business.
118. Occasionally an employee has to cover up for the actions of his superior.
119. The firm has a narrow profit margin.
120. Lower level executives really run the firm.

121. The firm pushes hard to be first in introducing new products and services.
122. Employees are given standard vacation periods regardless of the length of service.
123. Employees act as if their lives belong to the firm.
124. The firm's advertising policy is: if it's legal, it's ethical.
125. Employees are on first name basis with their superiors.

126. The firm will not promote an employee who neglects his family.
127. Executives put suggestions by employees into operation.
128. The firm makes it rough for competitors.
129. The firm helps the employee plan his future.
130. The firm is attempting to become the largest in its field.

131. The firm has family-controlled management.
132. The firm emphasizes individual achievement rather than achievement as a team member.
133. The firm is managed by a small group who own most of the stock.
134. The firm tries to recruit top personnel from its competitors.
135. Executives do personal favors for the employees.

136. The firm has a scholarship plan for the employee's children.
137. The executive in the firm who is a smart manipulator is more likely to get ahead.
138. The firm keeps the quality of its services high even when it's business is declining.
139. The firm has a chaplain who leads devotional services for employees.
140. Executives speak in a manner not to be questioned.

141. The firm does not transfer or promote employees who desire to remain on their present job.
142. The firm's management is opposed to a closed shop.
143. Managers openly criticize poor work of employees.

ORGANIZATION VALUE DIMENSION QUESTIONNAIRE

Attitudinal Scale

Please place a check mark next to the statement that most accurately describes your answer on each question.

****

1. How well do you like your work:
   - Very Much ____
   - Pretty Well ____
   - Somewhat ____
   - Not Very Much ____
   - Not at All ____

2. How much chance does your job give you to do the things you like best:
   - Very Good Chance ____
   - Fairly Good Chance ____
   - Some Chance ____
   - Very Little Chance ____
   - No Chance ____

3. How good a job does your immediate superior do in dealing with people:
   - A Great Job ____
   - A Very Good Job ____
   - A Fairly Good Job ____
   - A Fairly Poor Job ____
   - A Poor Job ____

4. Which of the following statements best represents your general attitude about staying with your present company:

   ____I would not consider leaving under any circumstances
   ____I would leave for a promotion and a 20% increase in pay
   ____I would leave for a similar kind of job and a 20% pay increase
   ____I would leave for a similar job and salary, which has more challenge
   ____I would leave for a similar kind of job and pay

5. What are your plans in regard to staying with your company:

   ____I would like to stay all my working life
   ____I would leave only for an exceptional opportunity
   ____I will leave if something better turns up
   ____I hope for a chance to leave under favorable circumstances
   ____I expect to leave as soon as possible

NAME _____

COMPANY _____

APPENDIX II

THE FOURTEEN ORGANIZATIONAL VALUES WITH THEIR HIGH LOADING ITEMS FROM RIZZO'S STUDY

APPENDIX II

THE FOURTEEN ORGANIZATIONAL VALUES WITH THEIR HIGH LOADING ITEMS FROM RIZZO'S STUDY

Item	Loading	Item Description
Factor A		Organizational Supervision and Structure
148	.640	Executives let the employee know what is expected of them.
75	.563	The firm recognizes and rewards initiative.
147	.560	The firm solicits contracts from all sources, government as well as others.
144	.551	The plant is equipped with the latest safety devices.
91	-.546	The firm has employees working at dangerous jobs without proper equipment.
169	.544	The firm has the right to expect employees to work hard, to do the best they can, and to produce a fair day's work.
152	.538	Executives emphasize meeting deadlines.
102	.527	Executives find time to listen to employees.
160	.520	Executives make sure their part in the firm is understood by employees.
88	-.516	One section of the firm has no respect for another section.
158	.515	Executives make employees feel at ease when talking to them.
84	-.513	Executives refuse to explain their actions.
140	-.508	Employees feel the way the firm is run is no concern of theirs.
105	-.505	The firm gets rid of "undesirables" by putting them in jobs they cannot do.
165	-.497	Occasionally, an employee has to cover up for the actions of his superior.
107	.485	Every employee must learn what the objectives and goals of the firm are.
106	-.469	The firm has occasionally violated some state laws.
74	.466	Executives require their subordinates to have definite standards of performance.
39	-.466	The workers in the firm consider management uncooperative.

Item	Loading	Item Description
174	-.464	The firm has misleading advertising.
92	.432	The firm realizes that all workers have occasional "bad" days.
23	-.431	Executives sometimes pad their expense accounts.
149	.430	A firm reviews salaries of professional employees at least once a year.
62	.428	The firm is constantly trying to raise the employees' pride in the firm.
169	.427	The firm pushes hard to be first in introducing new products and services.
117	.421	Executives look out for the welfare of the individual employees.
132	-.410	Policies are changed quickly and often.
146	-.407	Older employees discourage new ideas.
97	.406	The firm pushes research even though it may have no immediate practical benefit.
83	.400	Executives receive bonuses.
122	-.379	The firm engages in open fights with union officers.
178	.377	Executives put suggestions by employees into operation.
135	.372	Executives receive bonuses.
121	.367	The firm's policies are based on the belief that happy employees are productive employees.
130	.363	Top positions in the firm are highly valued by employees.
20	.326	The firm spends money on a training program to keep its employees up to date and well-informed.
Factor B		Competition and Exploitation
81	.543	The firm takes advantage of loopholes in laws which restrict it.
90	.543	The firm capitalizes on the conditions of the economy in times of distress.
145	.543	The firm will absorb a competitor if it can.
19	.541	The firm places large profits as a top objective.
63	.509	A firm does what is best for itself regardless of whom or what it hurts.
179	.490	The firm makes it rough for competitors.
3	.458	The firm donates money only when such gifts appear to benefit the firm directly or indirectly.
36	.425	The firm has the right political connections.
123	.420	The firm uses every legitimate means to avoid paying taxes.
23	.407	Executives sometimes pad their expense accounts.
155	.403	The firm is located in an area where labor can be obtained cheaply.

Item	Loading	Item Description
122	.397	The firm engages in open fights with union officers.
95	.379	A new method is never adopted unless it earns money.
156	.365	The executive in the firm who is a smart manipulator is more likely to get ahead.
156	.365	The firm is as big as a small city.
73	.361	The firm lobbies in state and national capitals to influence legislation.
22	.328	The firm pays women less than men for the same kind of work.
159	.327	Executives of competing firms may be good friends but they do not trust each other.
138	.322	Executives of the firm have more comfortable working conditions than does the office staff.
182	.308	The firm is attempting to become the largest in its field.
166	-.296	The firm has a narrow profit margin.
Factor C		External Community Relations
115	-.398	The firm is strict about changing standard prices.
190	-.382	Executives do personal favors for employees.
36	-.323	The firm has the right political connections.
79	-.306	The firm's management is composed of a group of upper-class families in the community.
62	-.306	The firm is constantly trying to raise the employees' pride in the firm.
61	.305	The firm has a noisy plant that disturbs residents in the neighborhood.
73	-.292	The firm lobbies in state and national capitals to influence legislation.
175	-.269	The firm encourages employees and their families to join community activities that will help the firm.
51	-.289	Executives criticize poor work.
103	-.268	Because of special favors they have received, the police force gives the firm extra attention.
29	-.267	The firm attempts to aid in solving international problems.
Factor D		Attitude Toward Unionization
60	.645	The union in the firm limits the number of workers allowed on the job.
17	-.622	Workers in the firm have never unionized.

Item	Loading	Item Description
78	.516	The firm requires that all employees belong to the union.
87	-.434	The firm uses all legal means to weaken unions.
72	.368	The firm is losing profits because of union demands.
64	-.306	The firm is a leader in keeping taxes down.
192	.287	The executive in the firm who is a smart manipulator is more likely to get ahead.
142	-.281	The firm has very conservative political views.
Factor E		**Change vs. Conservatism**
15	-.373	The basic objectives of the firm never change.
85	-.370	The firm transfers few executives to minimize moving established homes.
170	-.369	Employees are given standard vacation periods regardless of the length of service they have had.
5	-.351	The firm prefers to sell more goods to its present customers than simply to increase the number of customers.
38	-.345	The firm asks its executives to keep quiet about political views.
104	-.264	The firm never reduces the rate paid the worker per item produced.
173	-.264	The firm makes many of its products by hand rather than by machine to ensure highest quality.
124	-.258	The firm is always very cautious in making changes.
56	.252	The firm takes big chances and sometimes gambles wrong.
Factor F		**Member Equality and Freedom from Control**
58	.527	The firm will keep most any employee who puts in a full day's work.
175	.511	The firm's officials are called by their first names.
25	.463	Executives avoid any display of authority.
24	.456	Executives treat employees as their equals.
59	.383	Promotion is slow but steady.
190	.320	Executives do personal favors for employees.
110	.320	There is a carefree atmosphere in the firm.
96	.319	Employees in the firm set their own speed of work.
83	-.291	Executives receive bonuses.
136	-.284	Executives keep to themselves.

Item	Loading	Item Description
135	-.274	Executives receive bonuses.
138	-.273	The executives of the firm have more comfortable working conditions than does the office staff.
111	.268	The firm attempts to hold production and sales at a constant rate regardless of what other firms do.
26	.258	The firm holds back marketing new products until other firms have introduced them.

Factor G Consideration

2	-.440	The board of directors holds the president solely responsible for the firm.
47	-.427	Executives act without consulting subordinates.
134	.391	The firm tries to locate new branch plants near housing developments.
27	-.391	The workers in the firm dislike the president.
161	.345	Executives get approval from their assistants on important matters before going ahead.
183	.343	The firm has a family controlled management.
140	-.262	Employees feel the way the firm is run is no concern of theirs.
54	-.258	The firm does not provide medical service for employees.

Factor H Social Responsibility

181	.532	The firm helps the employee plan his future.
48	-.436	The firm does not have a recreational program for its employees and their families.
28	.435	How well an employee gets along with others on the job is considered more important than his production.
69	.411	The firm is sympathetic with the personal worries of its employees.
98	.385	The wives of executives are influential in the firm.
14	.372	The firm encourages the wives of employees to voice their opinions about the firm.
70	.356	The firm encourages the employees to go to a church of their own choice.
198	.344	The firm has a chaplain that leads devotional services for employees.
76	.340	The firm encourages employees and their families to join community activities that will help the firm.
143	.310	The firm frequently carries out programs to "lift" the cultural level of its community.

Item	Loading	Item Description
44	-.302	Employees are asked to leave their personal worries at the door as they come to work.
112	.297	The firm's management is comprised mainly of civic leaders.
29	.287	The firm attempts to aid in solving international problems.
154	.286	The firm contributes to college athletic scholarships.
176	.281	The firm will not promote an employee who neglects his family.
139	.272	Wives of executives discuss affairs of the firm among themselves.
153	.268	The firm is lenient in lending money to its employees.
Factor I		Quality of Products and Personnel
52	.541	The firm always puts a larger advertisement in the media than its competitors.
21	.532	High quality of products is emphasized.
33	.475	The firm places greater emphasis on quality than it does on quantity.
157	.469	The firm has an elaborate system for inspecting the quality of its product.
163	.451	The firm has a salesman in all states soliciting business.
35	.439	The firm is extremely particular in checking every detail of the finished product.
57	.437	The firm pays the highest wages in the community.
54	-.394	The firm does not provide medical service for employees.
193	.394	The firm keeps the quality of its services high even when it loses business.
20	.375	The firm spends money on a training program to keep its employees up to date and well informed.
104	.370	The firm never reduces the rate paid the worker per item produced.
191	.362	The firm has a scholarship plan for employees' children.
169	.361	The firm pushes hard to be first in introducing new products and services.
53	.341	The president knows everyone in the firm by name.
121	.335	The firm's policies are based on the belief that happy employees are productive employees.
189	.330	The firm believes that its employees can never learn too much about its organization and policies.

Item	Loading	Item Description
68	.325	Whenever possible, the firm hires college graduates rather than persons of less education.
154	.314	The firm contributes to college athletic scholarships.
37	.315	The firm insists that each employee carry hospitalization insurance.
94	.309	In bad times during economic recessions the firm gives its employees special discounts in order to improve its business.
144	.301	The plant is equipped with the latest safety devices.
156	.300	The firm is as big as a large city.
55	.294	The firm tends to overtrain its personnel.
9	.281	The firm emphasizes hiring office personnel who are dignified and responsible.
158	.277	Executives make employees feel at ease when talking to them.
6	.264	The firm plans to set up many branch offices so that more customers can be conveniently reached.
Factor J		Executive Treatment
4	.590	Executives in the firm are rotated from one job to another.
45	.533	Executives are transferred from one position to another more frequently than in other firms.
135	.344	Executives receive bonuses.
108	.325	The firm allows its name to be listed as one of the supporters of a political party.
83	.324	Executives receive bonuses.
82	.310	Executives drive firm-owned cars to conferences and other events related to its business.
18	-.245	The firm has all its employees punch a time clock.
Factor K		Organization Risk-Taking
114	.482	The firm seems to spend money freely.
56	.436	The firm takes big chances and sometimes gambles wrong.
166	.371	The firm has a narrow profit margin.
1	.355	Each employee is put on his own.
43	.328	Many unnecessary free services are given to customers.
109	.319	The firm takes big risks to beat its competitors.
96	.317	Employees in the firm set their own speed of work.
110	.305	There is a carefree atmosphere in the firm.

Item	Loading	Item Description
67	-.290	The firm does not hire individuals who are radical in their beliefs.
6	.272	The firm plans to set up many branch offices so that more customers can be conveniently reached.
16	.263	The firm backs aid to foreign countries.
Factor L		Political Activities, Employee Pay, and Retirement
137	.430	Many of the firm's executives are active participators in political activities.
41	-.398	The firm has a system whereby employees are paid in relation to the cost of living.
65	-.372	The firm forces retirement on those over 65.
38	-.346	The firm asks its executives to keep quiet about political views.
66	-.330	Rate of pay in the firm automatically goes down as the cost of living decreases.
188	.319	The firm tries to recruit top personnel from its competitors.
34	.303	The firm has occasionally waged price "wars" with its competitors.
31	-.261	The goals of the firm and the union are considerably different.
48	.254	The firm does not have a recreational program for its employees and their families.
Factor M		Work Emphasis and Initiative
131	.388	The firm relies on piece work to retain as much individual initiative as possible.
99	.370	The firm stresses the importance of the job to be done more than the person who does it.
141	.344	The firm has its major departments compete heavily with each other for efficiency and output.
135	.326	Executives receive bonuses.
101	.322	The firm has its properties guarded by uniformed police.
198	.319	The firm is managed by a small group who own most of the stock.
151	.303	The firm urges everyone to follow the organization chart.
186	.267	The firm emphasizes individual achievement rather than achievement as a team member.

Item	Loading	Item Description
Factor N		Paternalism and Internal Control
7	.456	The firm prefers that its employees live in company housing.
12	.439	Most of the employees are required to wear uniforms.
171	.382	Employees act as if their lives belonged to the firm.
125	.330	Employees of the firm must sell their stock in the company if they leave.
183	.320	The firm has a family controlled management.
39	.306	The workers in the firm consider management uncooperative.
32	.300	Activities of the firm frequently conflict with the planned activities of executive's families.
59	.295	Promotion is slow but steady.
13	.280	The firm is not vitally concerned with safety and safety programs for their workers.
18	.279	The firm has all employees punch a time clock.
178	-.278	Executives put suggestions by employees into operation.
61	.272	The firm has a noisy plant that disturbs residents in the neighborhood.
71	.253	Children of the employees are encouraged to prepare for vocations in the firm.

APPENDIX III

COMPLETE FACTOR STRUCTURE OF VALUE SCALE ITEMS FOR THE SAMPLE OF MANAGERS

APPENDIX III

COMPLETE FACTOR STRUCTURE OF VALUE SCALE ITEMS FOR THE SAMPLE OF MANAGERS

Variable	Factor 1	2	3	4	5
1	.09929	-.05860	.11010	-.06714	-.01678
2	-.04919	.08527	-.07691	-.11732	.02532
3	-.20690	.28929	.06715	-.08120	-.01559
4	.01709	.16220	-.06429	-.19832	-.04477
5	.00783	.15297	.07485	-.08225	.04783
6	.06915	.15243	.04049	.12914	-.07483
7	-.01583	.25764	.29595	-.05263	-.03148
8	-.01629	-.07131	.31551	.18433	-.01739
9	.20279	.14941	.04980	-.07558	-.07102
10	-.00375	.00612	.24293	.20106	.10949
11	.05244	-.06115	-.01185	-.01800	-.08446
12	.17605	.19502	-.13241	.07188	.50386
13	-.06668	.00453	.21143	.36340	.06141
14	-.16345	.23980	.09590	.14692	.03577
15	.16675	-.00365	-.21064	-.00269	.00384
16	.15512	-.15416	-.07503	.03268	.09053
17	-.04019	.15384	.47028	-.17136	-.06194
18	.28257	-.12075	-.01557	.11566	.05630
19	.08026	-.01985	.08330	.02229	-.03129
20	.04376	-.17015	.28532	.06711	-.00708
21	.07867	.01013	-.00478	-.01928	-.06658
22	.18220	-.21457	-.05609	-.01050	.07944
23	.01299	.25935	.10370	-.03937	.05134
24	.15276	-.20533	-.01957	.19314	.08590
25	-.04051	.43373	.10603	.04192	.09367
26	.01501	.01825	.07543	.31179	-.08952
27	-.09456	.00714	.11036	.21192	-.20687
28	-.22014	.12567	.42430	-.01900	-.11463
29	-.01907	.01158	-.05853	.16496	-.14115
30	.05077	-.05958	.29969	-.01636	.04688
31	-.04373	.06876	.06768	.25857	-.00860
32	.00284	.15539	.03171	-.11201	-.05375
33	-.05510	.10834	.28219	-.04147	-.15421
34	-.24846	.03187	.33062	.03596	-.08535
35	.17386	.01988	-.13162	.18057	.02451
36	.00923	.05051	-.06240	.16968	-.03032
37	-.06938	.13511	.32518	.01486	.04725
38	.01789	.17692	-.04200	.13681	.07710
39	.05144	-.04212	-.03376	.03901	.05626

Variable	Factor 1	2	3	4	5
40	.06665	.16366	.22273	-.46801	.02542
41	.13776	-.03466	.01526	.08576	.26749
42	.07446	-.09450	.31731	.08042	.06141
43	.05604	-.16597	.21662	.23250	-.01281
44	-.12695	.02075	.32291	.13339	-.21395
45	-.21553	.15382	.31699	.11905	-.07148
46	.25035	.06252	-.19366	.05722	.01661
47	-.07292	.00859	-.05775	.36041	.12251
48	-.16670	.19250	.36432	.14663	.01548
49	.00748	.00263	.15982	.27188	.03600
50	.45438	-.08706	-.08222	-.04821	.03686
51	-.06053	.12386	.03706	-.02431	-.01123
52	.19214	-.05736	-.01390	.33463	.00614
53	-.07288	.24418	.29700	.11046	.28343
54	-.13196	.35660	.03716	.02399	.13431
55	.07684	.12869	-.16654	.09118	-.02058
56	.29247	.08976	-.33329	-.04780	.04730
57	.04850	.03329	.00762	.00664	-.07159
58	-.04320	-.01196	.12000	.06129	-.41101
59	-.07105	.12659	.14781	.12538	-.03199
60	.10590	.25478	-.03286	.19157	.05682
61	-.10496	.58009	.03771	-.07802	.13930
62	-.06897	.32090	.08866	-.18061	-.06922
63	-.20551	.17981	.40053	-.04190	.01179
64	.04236	-.03321	.14646	.15565	.08304
65	.03636	.29042	.14391	.08420	.57926
66	-.07068	.36621	.04480	-.11366	.17740
67	.46645	-.00046	-.11767	-.10000	.00146
68	-.06096	.26874	.06427	.18717	-.03528
69	.05613	-.05604	.37426	-.13147	-.04287
70	.13721	.16554	-.00813	-.01893	.07964
71	.23840	-.06075	.01522	-.07142	.06388
72	.08200	.19416	.39151	.07748	-.14785
73	-.02019	-.00857	.04378	.04692	-.01948
74	.01022	.26386	.14597	.06623	.11371
75	.37600	.01947	-.18761	.04597	.08346
76	.13012	-.01954	.24659	.23184	-.01373
77	-.07967	.20372	.31949	.02935	.13189
78	-.10915	.30473	.45980	-.07570	.01535
79	.17356	-.08726	-.22690	.09004	.03164
80	-.06214	.47941	.16657	.08028	.09664
81	-.04397	.32219	.25994	.02997	.07998
82	.03402	.31413	.14710	-.40356	.09400
83	.31275	-.14373	-.01264	.14519	.19508
84	.37132	-.04815	-.17523	.13984	.06231
85	-.11629	.35956	.27630	-.03641	-.03373
86	.04296	.01056	.31928	-.19572	.08233
87	.25230	-.09135	.07494	.14861	.02174
88	.51317	-.02028	-.19766	.07017	.08248
89	.45014	-.16232	-.01065	.29028	.08403

Variable	Factor 1	2	3	4	5
90	.04768	.34221	.32157	.09516	.23361
91	-.11312	.39845	.10931	.01090	.09088
92	.18368	.04776	.07049	.41246	.04368
93	-.02795	.43913	.13950	.03817	.03108
94	.14235	.14459	-.15787	.16654	-.01496
95	.10471	.26698	-.29780	.01569	-.05967
96	.00485	.10265	.14220	.15155	-.01418
97	.12610	.15766	-.12558	-.05430	.15499
98	-.21761	.05948	.34896	-.02156	-.00833
99	.19354	.11446	.01638	-.10235	.11067
100	-.07543	.20781	.13551	-.10974	-.02801
101	-.25683	.02863	.47321	.07157	-.04664
102	.13649	.19347	-.12005	.05022	-.02185
103	.11192	.12210	.01247	.25621	.02129
104	.36516	-.03931	-.24589	.15165	.00647
105	.12234	.43188	-.09205	-.01044	-.00685
106	-.09474	.04270	.40542	-.03905	-.06729
107	.16452	.07011	-.09679	.02571	-.04108
108	.30969	.12377	-.35750	-.05707	.00114
109	.16428	.05699	.14802	.28277	-.21542
110	.16928	.00123	.02047	.45224	-.12584
111	.28012	.10971	-.12963	.17859	-.09032
112	.11063	.19805	.13236	-.00996	-.08741
113	.03704	.26555	-.13830	-.06968	-.04489
114	.24806	-.03105	-.12924	.13515	.04050
115	.48508	-.02850	-.28573	.05934	.10510
116	.39570	.00772	.12659	.08427	-.01762
117	.08579	.05591	-.03172	-.02681	-.09231
118	.06943	.22265	.38254	-.11786	-.00282
119	.11765	-.01550	.37608	-.03354	-.00399
120	.12296	.01928	.38647	.01014	.12830
121	.27778	.02015	-.13077	.08847	-.01125
122	-.09497	.09356	.25030	.07459	-.09369
123	-.02023	.24842	.07389	.17639	-.06972
124	-.12654	.39110	.22210	.24204	-.04889
125	.21904	.01476	.10014	.00274	.09584
126	.17129	-.01930	.02498	.36506	.03596
127	.40617	-.06497	-.21495	-.02242	-.04409
128	.18902	.42916	-.16944	-.15411	-.08132
129	.35158	.17439	-.21616	.07479	-.09221
130	.14937	.22038	-.05182	-.01477	-.05189
131	.04068	.22887	.18099	.11743	-.19742
132	.03056	.11735	.13147	-.12109	.03478
133	-.01253	.28504	.14819	.03609	-.08204
134	.13149	.32885	.07508	-.11031	-.06131
135	.30930	.17697	.13844	-.06678	.04764
136	.20620	.00364	-.07609	.01871	.12330
137	.02785	.31066	.43569	.04880	-.01682
138	.29088	-.16852	-.04323	.01151	.15000

Variable	Factor 1	2	3	4	5
139	.07099	.10494	.04343	.25058	-.02709
140	-.14163	.09157	.32021	.19964	-.02666
141	.21017	-.03752	.05219	.03540	.11237
142	.12226	.12512	-.02697	-.05808	.50511
143	-.13296	.20296	.35430	.05456	.04557

Variable	Factor 6	7	8	9	10
1	-.13570	-.11669	.05565	.27522	.00929
2	.02799	-.07529	-.05848	-.02791	-.29455
3	-.10513	-.04533	-.10503	.02751	-.16735
4	.17613	.16193	.22120	.46076	-.04869
5	.01302	-.17426	.01124	.08053	-.10946
6	-.30223	.08903	.06714	.04552	.20863
7	.14626	-.14805	.08731	-.04564	-.18337
8	-.08245	-.13601	-.10520	.14280	.11497
9	-.06908	.02070	.24009	.15137	.10692
10	-.02786	-.08270	-.13061	.08289	-.06349
11	-.12515	.16661	.41565	-.03577	-.09069
12	.01244	.20172	.12616	-.01995	.05418
13	-.07204	.13230	-.02238	.03768	.10426
14	-.05862	-.03841	-.07942	.03512	-.27131
15	-.06418	.33532	.23984	.08821	-.15744
16	.00617	.47793	.08008	.04981	-.12509
17	.00722	-.12836	-.08323	-.10220	.01307
18	-.09126	.05692	-.08428	.42208	.13247
19	-.03457	-.04900	-.02259	.43633	.04895
20	-.12344	.00976	.10628	.22941	.07969
21	-.10446	.11750	.49811	.04570	-.05964
22	-.08634	.16069	.04924	-.00361	-.03169
23	-.09139	-.04345	.03407	-.01571	.05151
24	-.12635	.32097	.00174	.16683	-.08111
25	.09666	-.00863	.10888	-.05470	-.14887
26	-.05808	.11418	.09460	.02746	.02670
27	-.13435	.10750	-.22000	-.17132	.12564
28	.04591	-.23060	-.07969	-.00109	-.07900
29	-.06659	.40445	.05234	.05244	.05183
30	-.14684	.03857	.11244	.08668	.10382
31	-.13333	.03427	-.21880	-.09607	-.12790
32	.11979	.18485	.14314	.47215	-.06954
33	.01860	-.01065	-.00845	.00577	-.02575
34	-.07094	-.03233	-.05385	-.06740	-.09502
35	-.00436	.44583	.20853	-.06747	.27695
36	-.12333	.08355	.09253	.01120	-.17576
37	-.12468	-.03946	-.05784	-.00894	-.03578
38	-.25432	.32288	.10532	.02509	.02091
39	.05753	.57726	.14201	.08614	.12647
40	-.01551	.02720	.02774	-.00285	-.06516
41	-.13998	.38897	.09405	.08535	.07207
42	-.05878	.12669	-.00382	.07302	.03304
43	-.04562	.19544	-.03179	-.02343	.03027
44	-.06437	-.01106	.01075	.10896	.08779
45	-.03112	-.05932	.02306	.09556	-.03734
46	-.00833	.37066	.08217	.00829	-.15076
47	.06154	.02001	.01725	-.06073	-.10849
48	.00506	-.09869	-.18819	.04619	-.22629
49	.35920	.00860	-.03697	.11868	-.15637
50	.02507	.12291	.19692	.09141	-.00871

Variable	Factor 6	7	8	9	10
51	.14676	.07322	.08921	.08310	-.34285
52	-.05281	.20647	.33365	-.01600	.01375
53	-.12801	-.04581	.06537	-.03254	.02693
54	.05992	.04021	.34607	.09327	-.12004
55	.03477	.16125	.11377	-.02003	-.38514
56	-.14713	.34307	.17121	.04174	-.20297
57	-.36737	.08972	.10777	.05009	-.05277
58	-.19628	-.04544	.11889	.05488	-.07481
59	-.10472	-.05540	.11323	-.01243	-.31420
60	-.00050	.11540	.19585	.06860	-.26373
61	.01490	.00140	-.02387	.04760	-.14349
62	-.06210	-.00755	.20106	.01644	-.13992
63	-.09652	-.12237	.02838	-.05858	-.13987
64	-.41082	-.01453	-.05756	-.10512	.02362
65	-.03489	-.07264	-.04322	.03096	-.00045
66	-.04803	-.03481	-.03577	.08968	-.14436
67	-.02466	.20342	-.01854	-.07525	.09926
68	-.12178	-.00497	-.15379	.17903	-.15886
69	-.32107	-.12981	-.11442	.16885	.08870
70	-.18401	.03472	.05080	.04071	-.08305
71	.05239	.37498	.14055	-.02033	-.11801
72	-.02102	-.04270	.15137	.06761	.04508
73	-.08717	.08412	-.08642	-.11808	-.26891
74	.08021	-.01312	-.00922	-.15901	-.25456
75	-.15798	.18285	.09981	.29271	.07265
76	-.15899	.07641	-.13359	.14966	.12246
77	-.14132	.02122	.02351	-.01823	.01139
78	.13555	-.13626	.05197	-.14287	.15082
79	-.01358	.10714	.08177	.24677	-.10942
80	-.03700	-.03565	.18027	-.01305	-.06346
81	-.16588	-.15390	.25575	.05359	-.03196
82	-.08343	.06412	.05378	.05937	-.07345
83	-.06822	.13384	-.05413	.13707	.23379
84	.13069	.25657	.27407	.12018	-.11579
85	.06859	-.20168	.10258	-.06291	.17004
86	-.22505	.12531	.15121	.03790	-.00379
87	.01715	.10169	-.00647	.01601	-.19698
88	-.16237	.16935	.16264	.10580	.02171
89	-.17472	.18164	.00781	.04950	.02076
90	-.19009	-.07852	.08809	.01041	.05843
91	-.02109	-.10429	-.05490	.04453	-.08400
92	.03574	.00982	-.13436	-.03067	-.06278
93	-.13374	.05721	-.03143	.02576	-.10448
94	-.14111	.09057	-.06784	.14690	-.31424
95	-.18597	.02384	.07938	.04371	-.28632
96	-.06796	-.06014	.09297	.18517	-.00841
97	.11280	.05385	.19094	.05922	-.39145
98	-.03802	-.10852	.11539	-.18721	-.27485
99	.04919	-.01674	.28931	.20413	-.22639
100	.17693	.18577	.08430	-.15207	-.33091

Variable	Factor 6	7	8	9	10
101	-.02237	-.19546	-.07013	-.02971	.02623
102	.00806	.06875	.04665	-.06756	-.13767
103	.02585	-.02673	-.01867	-.22420	-.09164
104	-.08881	.24036	.29938	-.02834	-.05164
105	.00109	.09129	-.06751	-.12386	-.01127
106	.10012	-.28531	.02059	.02595	.02768
107	.00807	.36892	.02402	-.07452	-.19155
108	-.04473	.13406	.02731	-.08153	-.25217
109	-.07860	.15468	.25470	-.08431	.06978
110	.01808	.19886	-.00275	-.09719	-.19325
111	.07747	.29555	-.00855	.00267	-.34364
112	-.35881	.12762	.12149	.03832	.05393
113	.14333	.18990	.00175	-.09998	-.27997
114	-.00219	.45309	-.05178	.11476	-.19603
115	.03871	.28922	.00855	.06674	-.03542
116	-.03310	.04032	.01845	.14402	.10146
117	-.06500	.54119	-.05166	-.00981	-.01241
118	.08241	-.09858	.10378	-.03060	-.03168
119	-.07694	-.25623	.00176	.02801	.06249
120	.16600	.00379	-.02572	.16700	.03161
121	-.04030	.31150	-.02045	-.10213	-.11755
122	-.22857	-.08888	.01501	.11148	.05606
123	-.04399	.06694	-.04909	.17396	-.09278
124	-.13894	.05338	-.09373	.11656	.10176
125	.26112	.17839	-.07487	.29973	.01700
126	.08996	.06149	.11186	.09871	.04223
127	-.01384	.36643	-.02809	.04841	-.03498
128	.03867	.16568	-.11922	-.09413	-.16128
129	-.06418	.23458	.11544	.00841	-.02930
130	.03061	.42650	-.18016	-.10332	-.12621
131	-.14216	-.03854	.08266	.01778	-.06076
132	-.28318	-.00994	-.04478	.02861	-.03917
133	-.19370	-.13870	.11469	-.07567	-.14754
134	-.10946	.12077	-.06043	-.07690	.00436
135	-.22644	.02612	.16044	.12098	-.06283
136	.09695	.54169	.21342	.10696	.08288
137	.10478	.07152	.00062	.01832	.01170
138	-.02432	.31086	-.06553	-.05357	-.13105
139	-.27517	.12989	.32226	.08999	.19332
140	-.14393	.02331	-.01037	-.11515	-.10219
141	-.01032	.13162	-.06286	.09975	-.00335
142	-.02270	.03855	-.04147	-.03822	-.09315
143	-.11833	-.08318	-.08602	.02102	-.06448

APPENDIX IV

MEANS AND STANDARD DEVIATIONS OF THE 143 ITEMS FACTOR ANALYZED

APPENDIX IV

MEANS AND STANDARD DEVIATIONS OF THE 143 ITEMS FACTOR ANALYZED

Variable	Mean	St. Dev.
1	4.737617	2.522176
2	5.797651	2.580962
3	3.608081	2.295012
4	5.592269	2.368981
5	3.181535	2.036084
6	2.803964	1.910018
7	2.326876	1.743552
8	2.519606	1.605931
9	3.860834	2.351172
10	3.165750	2.341664
11	4.955618	1.949806
12	6.766040	2.115101
13	3.437467	2.168427
14	5.638083	2.395966
15	7.642829	1.362502
16	8.432710	0.927222
17	2.448525	1.601280
18	5.548044	2.284610
19	3.488013	2.098857
20	3.469051	1.624370
21	4.808706	2.136114
22	7.056734	1.576068
23	4.383743	1.978387
24	7.184692	1.681669
25	4.845033	1.902184
26	6.527503	2.162574
27	4.465896	2.253486
28	2.288963	1.366431
29	6.138876	2.102476
30	3.977743	1.989541
31	5.497486	2.070031
32	5.123075	2.089136
33	4.244732	1.966079
34	3.427979	1.787312
35	6.780265	1.622819
36	5.519604	1.885962
37	3.309506	2.026423
38	5.480110	1.601984
39	7.118339	1.693281

Variable	Mean	St. Dev.
40	4.325294	2.170313
41	6.796063	1.753229
42	4.598597	2.361347
43	5.505385	1.753000
44	2.589113	1.584710
45	2.394810	1.304330
46	8.096230	1.167233
47	5.514863	1.953595
48	3.012508	1.838330
49	6.053578	2.197562
50	6.505388	1.521040
51	5.576470	1.750444
52	6.145199	2.028491
53	3.680744	1.531044
54	4.516439	1.849578
55	7.249461	1.558207
56	7.691800	1.380741
57	5.178383	2.263754
58	2.876641	1.870958
59	4.191009	1.910908
60	5.683900	1.939246
61	4.017238	2.005036
62	3.295280	1.832243
63	2.615971	1.428490
64	4.391645	1.995540
65	4.165735	2.115164
66	4.533819	2.185778
67	7.031456	1.219113
68	4.355309	2.120932
69	2.966681	1.602135
70	5.944562	1.762396
71	7.148350	1.644892
72	2.615978	1.730062
73	5.736035	1.939292
74	5.881371	1.728413
75	6.952461	1.529520
76	4.810283	2.052008
77	2.830828	1.650118
78	2.551197	1.524340
79	7.209966	1.708591
80	3.393222	1.891437
81	2.789750	1.788232
82	4.134137	2.052140
83	5.862421	1.876308
84	7.533825	1.203544
85	2.255793	1.508663
86	4.173635	1.736073
87	5.851360	1.767297
88	6.966678	1.491663
89	7.424818	1.618030
90	2.781856	1.708064

Variable	Mean	St. Dev.
91	2.993536	2.243102
92	5.255783	1.955381
93	4.036198	1.775407
94	6.217861	1.850352
95	6.481690	1.984901
96	4.031455	1.909053
97	6.950875	1.730882
98	3.973001	1.722198
99	5.634920	1.780099
100	5.895588	1.727051
101	2.538563	1.248572
102	5.685472	1.847160
103	5.342669	1.510789
104	7.224196	1.407532
105	5.875057	1.725217
106	2.617548	1.454712
107	7.407434	1.562398
108	8.186266	0.998379
109	5.494333	2.116144
110	6.420086	1.682997
111	7.483270	1.197319
112	3.900334	2.015230
113	6.153101	1.677325
114	7.311076	1.411767
115	8.130982	1.115241
116	5.717073	2.254491
117	7.017241	1.848164
118	3.506968	1.843631
119	3.492750	1.656476
120	3.794487	2.046625
121	7.742349	1.323447
122	3.247883	1.642974
123	4.042516	2.004653
124	3.113605	1.600904
125	6.434294	1.873975
126	5.304764	1.954415
127	7.494332	1.250425
128	6.762887	1.708316
129	6.797642	1.548820
130	7.579638	1.449657
131	3.481689	1.580120
132	4.127830	1.759501
133	3.785008	1.577485
134	4.578056	1.700855
135	4.535407	1.836419
136	7.314239	1.644128
137	3.909800	1.863969
138	7.770784	1.220686
139	3.677581	2.063155
140	3.717069	1.929247
141	5.996701	1.695090
142	6.306334	1.981915
143	2.944570	1.811968

LIST OF REFERENCES

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Adler, Franz. "The Value Concept in Sociology," American Journal of Sociology, November, 1956, 272-279.

Albert, Ethel M., and Clyde Kluckhohn. A Selected Bibliography on Values, Ethics and Esthetics. Glencoe: The Free Press, 1959.

Allport, G. W., P. Vernon, and G. Lindzey. A Study of Values. Boston: Houghton-Mifflin, 1960.

Barton, A. "Measuring the Values of Individuals," Religious Education, 1962, 57, 62-97.

Beckard, Richard. Organization Development: Strategies and Models. Reading, Mass.: Addison-Wesley Company, 1969.

Beech, Robert P. Value Systems, Attitudes, and Interpersonal Attraction. East Lansing: Michigan State University, Ph.D. Thesis, 1966.

Bennis, Warren G. Organization Development: Its Nature, Origins and Prospects. Reading, Mass.: Addison-Wesley Company, 1969.

Bernthal, Wilmar F. "Value Perspectives in Management Decisions," The Journal of the Academy of Management, December, 1962, 190-196.

Blalock, Hubert M. Social Statistics. New York: McGraw-Hill Company, 1960.

Carzo, Rocco. "Organization Theory: Review of Research and Future Direction," Management Research and Practice, Amherst, Mass.: Eastern Academy of Management, 1970, 20-21.

Chave, E. J. "A New Type of Scale for Measuring Attitudes," Religious Education, 1928, 23, 364-369.

Chou, Ya-Lun. Statistical Analysis. New York: Holt, Rinehart and Winston, 1966.

Cohen, J. B. "A Scale for the Measurement of Attitude Toward the Aesthetic Value," Journal of Psychology, 1941, 12, 75-79.

Collier, Abram T. Management, Men and Values. New York: Harper and Row, 1962.

Dalton, M. "Conflicts Between Staff and Line Managerial Officers," American Sociological Review, 1950, 342-351.

Dixon, W. J. Biomedical Computer Programs X-series Supplement. Berkeley: University of California Press, 1969.

_____, and Frank J. Massey. Introduction to Statistical Analysis. New York: McGraw-Hill Company, 1969.

Dukes, William F. "Psychological Studies of Values," Psychological Bulletin, 1955, 52, 24-50.

Elbing, Alvar, and Carol Albing. The Value Issue of Business. New York: McGraw-Hill Company, 1967.

England, George W. "Personal Value Systems of American Managers," Academy of Management Journal, March, 1967, 53-68.

Etzioni, Amitai. Modern Organizations. Englewood Cliffs: Prentice-Hall, 1964.

Ferguson, George. Statistical Analysis in Psychology and Education. New York: McGraw-Hill Company, 1966.

Filley, Allen C. "Some Major Issues in the Future of Management: Practice and Teaching," The Academy of Management Proceedings - Thirteenth Annual Meeting, San Diego, 1970, 7-34.

Finn, Jeremy D. Multivariance - Uni-variate and Multivariate Analysis of Variance, Covariance, and Regression. Buffalo: State University of New York at Buffalo, 1968.

Fleishman, Edwin A., and David R. Peters. "Interpersonal Values, Leadership Attitudes and Managerial Success," Personnel Psychology, 1962, 127-143.

Glaser, E. M., and J. B. Maller. "The Measurement of Interest Values," Character and Personality, 1940, 9, 67-81.

Gordon, Leonard V. Manual for Survey of Interpersonal Values. Chicago: Science Research Associates, Inc., 1960.

Guenther, William. Analysis of Variance. Englewood Cliffs: Prentice-Hall, Inc., 1964.

Guth, William D., and Renato Tagiuri. "Personal Values and Corporate Strategy," Harvard Business Review, September-October, 1965, 123-132.

Haire, Mason. Modern Organization Theory. New York: John Wiley, 1967.

Harding, L. W. "A Value - Type Generalization Test," Journal of Social Psychology, 1944, 19, 53-79.

Harman, H. H. Modern Factor Analysis. Chicago: University of Chicago Press, 1967.

Harrell, Thomas W. Managers Performance and Personality. Cincinnati: South-Western, 1961.

Ingham, Geoffrey K. Size of Industrial Organization and Worker Behavior. Oxford: The Cambridge University Press, 1970.

Kluckhohn, Clyde. "Values and Value Orientations in the Theory of Action," Toward a General Theory of Action. Edited by T. Parsons and E. A. Shils. New York: Harper and Row, 1951.

Lawler, Edward E., and Lyman W. Porter. "The Effect of Performance on Job Satisfaction," Readings in Organizational Behavior and Human Performance. Edited by L. Cummings and W. Scott. Homewood, Illinois: Richard Irwin, Inc., 1969, 283-290.

_____. "Properties of Organization Structure in Relation to Job Attitudes and Job Behavior," Readings in Organizational Behavior and Human Performance. Edited by L. Cummings and W. Scott. Homewood, Illinois: Richard Irwin, Inc., 1969, 402-432.

Lawrence, Paul R., and Jay W. Lorsch. Organization and Environment. Boston: Division of Research, Harvard University, 1967.

Learned, Edmund P., Arch Dooley, and Robert L. Katz. "Personal Values and Business Decisions," Harvard Business Review, March-April, 1959, 111-120.

MacCurdy, J. T. "Psychopathology and Social Psychology - Part III: Hierarches of Interest," British Journal of Psychology, 1950, 41, 1-13.

McFarland, Dalton E. Management: Principles and Practices. New York: Macmillan Company, 1964.

Nunnally, Jum. Psychometric Theory. New York: McGraw-Hill, Inc., 1967.

Parsons, Talcott. Toward a General Theory of Action. New York: Harper and Row, 1951.

_____. "Social Theory," Modern Social Theories. Edited by Charles Loomis and Zona Loomis. Princeton: D. Van Nostrand Company, 1965, 330-395.

Porter, Lyman W. Organizational Patterns of Managerial Job Attitudes. New York: American Foundation for Management Research, 1964.

_____, and E. E. Ghiselli. "The Self Perceptions of Top and Middle Management Personnel," Personnel Psychology, 1957, 97-99.

Pugh, D. S. "Modern Organization Theory: A Psychological and Sociological Study," Psychological Bulletin, 1966, 235-251.

Rizzo, John. Value Dimensions, Value Commitments and In-Basket Performance of Business Students. Columbus: Ohio State University, Ph.D. Thesis, 1964.

Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass Inc., 1968.

_____. "A Theory of Organization and Change Within Value-Attitude Systems," Journal of Social Issues, 1968, 14, 13-33.

Schein, Edgar. Process Consultation: Its Role in Organization Development. Reading, Mass.: Addison-Wesley, 1969.

_____. "Organizational Socialization and the Profession of Management," Industrial Management Review, Winter, 1968, 1-6.

Schmidt, Warren H. Organizational Frontiers and Human Values. Belmont, Calif.: Wadsworth Publishing Company, 1970.

Scott, William A. Values and Organizations. Chicago: Rand McNally, 1965.

Shartle, Carroll. "A Theoretical Framework for the Study of Behavior in Organizations," Administrative Theory in Education. Edited by A. Halpin. Chicago: Midwest Administration Center, University of Chicago, 1958, 73-88.

_____, Gary Brumback, and John Rizzo. "An Approach to Dimensions of Value," The Journal of Psychology, 1964, 57, 101-111.

Spranger, E. Types of Men. Translated by P. J. W. Pigors. Halle: Niemeyer, 1928.

Tagiuri, Renata. "Value Orientations and the Relationship of Managers and Scientists," Administrative Science Quarterly, June, 1965, 39-51.

Thurstone, L. L. "The Method of Paired - Comparisons for Social Values," Journal of Abnormal and Social Psychology, 1927, 21, 384-400.

Viola, Richard H. "Organization Theory: A Review of Research and Future Direction," Management Research and Practice. Amherst, Mass.: Eastern Academy of Management, 1970.

Vroom, Victor H. Motivation in Management. New York: American Foundation for Management Research, 1965.

Wickert, Frederic, and Dalton E. McFarland. Measuring Executive Effectiveness. New York: Appleton-Century-Crofts, 1967.

Williams, Roger M. "Analyst of Social Institutions and Systems," Modern Social Theories. Edited by Charles Loomis and Zona Loomis. Princeton: D. Van Nostrand Company, 1965, 499-527.

White, R. K. Value-Analysis, The Nature and Use of the Method. Glen Gardner, New Jersey: Libertatarian Press, 1951.

Woodward, Joan. Industrial Organization: Theory and Practice. London: Oxford University Press, 1965.