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**An investigation of the relationships between affirmative action compliance, characteristics of organization structure, and managerial values/attitudes.**

Kenneth E. Marino  
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AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN AFFIRMATIVE  
ACTION COMPLIANCE, CHARACTERISTICS OF ORGANIZATION  
STRUCTURE, AND MANAGERIAL VALUES/ATTITUDES

A Dissertation Presented

By

KENNETH EDWARD MARINO

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

July 1978

Business Administration

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1978

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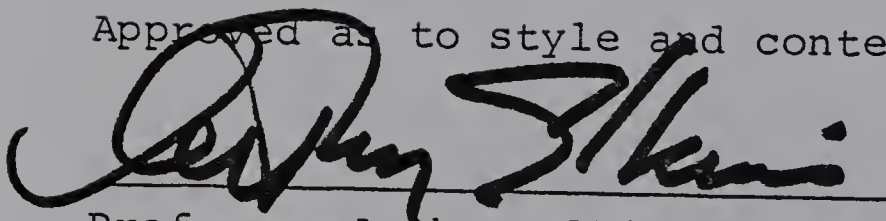
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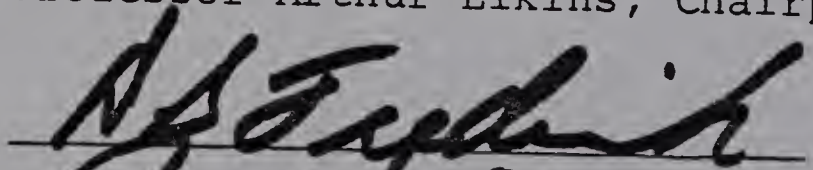
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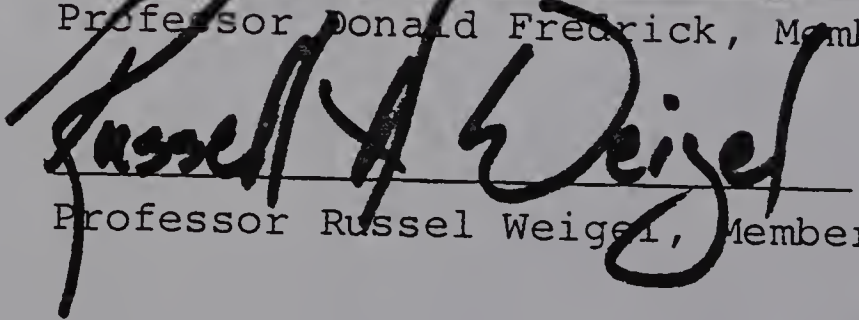
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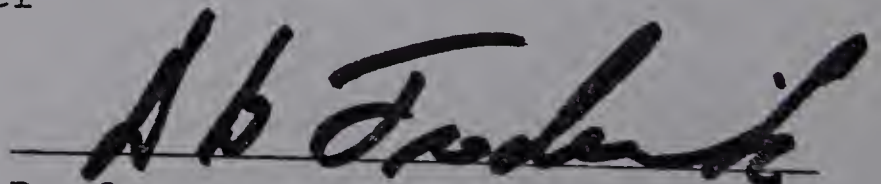
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Professor Russel Weigel, Member



Professor Donald Fredrick,  
Director of Doctoral Program

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## ABSTRACT

An Investigation of the Relationships Between Affirmative  
Action Compliance, Characteristics of Organization  
Structure, and Managerial Values/Attitudes

(September, 1978)

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Directed by: Professor Arthur Elkins

This investigation was designed to contribute to the growing body of literature concerning the interaction of organizations with their environments. The ability of an organization to adapt its procedures, processes, or outputs in order to satisfy changing environmental demands is critical to its performance, and ultimately its continued existence.

The efforts of previous investigators have identified two sets of variables that influence the adaptation of the organization. One, the individual characteristics of the managers; their values, attitudes, perceptions, and personalities. It is argued that these characteristics influence the perception of the environment, the search for alternative courses of action, the preference ranking and the ultimate selection of a strategy to pursue. A second set of variables related to the adaptation process is characteristics of the organization itself, independent of the traits



of the incumbent decision makers.

This investigation examines the relationships between selected managerial values and attitudes, characteristics of organization structure, and the effectiveness of the organization's adaptation to a particular environmental demand.

Affirmative Action regulations were conceived and implemented in an effort to equalize employment opportunities for particular groups of individuals affected by past discriminatory activities. Initially, the affected groups were identified as ethnic minorities. Subsequently, women were added, and more recent legislation has broadened the definition of affected groups to include handicapped persons and veterans. The regulations apply to all federal employment, including government contractors and subcontractors exceeding a minimum number of employees and contract dollar value. Firms competing for government contracts are required to identify underutilized affected groups by job category, design a plan with goals and timetables to eliminate the underutilization, and apply a good faith effort toward meeting these goals.

Conceptually, Affirmative Action positions a contract compliance agency in the environment of the firm. The agency has the power to influence the goal attainment of the firm by monitoring its procedures for the selection and internal advancement of human resources. Failure to apply

a good faith effort can result in conciliatory agreements or, ultimately, contract termination. The presence of the compliance agency is expected to increase the complexity, and the uncertainty of the organization's environment. Assuming the firm is a rational system implies that some action be taken to reduce the uncertainty perceived in the environment. A firm could choose not to compete for government business, and thereby redefine its environment so as to exclude the contract compliance agency. It could undertake political activities to modify or gain an exception to the requirements, or a firm could undertake a compliance effort and adapt its procedures to satisfy the requirements.

This study examines the adaptive behaviors of twenty manufacturing firms who, by holding and competing for government contracts, sought to comply with the requirements of Affirmative Action. As part of the research effort, an operational measure of Affirmative Action compliance was empirically derived from interviews with contract compliance officers employed in a federal compliance agency. This measure served as the dependent variable and measures the rigor and effectiveness of the firm's compliance effort.

It was hypothesized that several managerial attitudes would be related to the compliance effort. Specifically, an attitude toward government regulation, an attitude toward minority individuals, and the perceived threat of enforce-

ment by the compliance agency. Further, it was hypothesized that characteristics of organization structure would be related to the compliance effort. These include the centralization of decision making, the formalization of roles and procedures, and the complexity or diversity of tasks and members.

The attitudes of the chief executive officers and the management elite group were found to be strongly related to the compliance effort, however, not always in the hypothesized direction. The latter observation highlighted several methodological issues concerning attitude measurement among executive subjects. The degree of formalization of rules and procedures was found to be strongly and positively related to the compliance effort. This finding lends empirical support to modified contingency views that mechanistic structural characteristics may facilitate adaptation to certain environmental demands. Finally, it was found that the correspondence between managerial attitudes and compliance was mediated by the structure of the organization. It is suggested that, to gain a more complete understanding of the determinants of organization performance, in future investigations both individual and structural characteristics be examined.

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# C H A P T E R I

## INTRODUCTION

This investigation was designed to contribute to the growing body of literature concerning the interaction of organizations with their environments. The ability of an organization to adapt its procedures, processes, or outputs to satisfy changing environmental demands is critical to its performance, and ultimately its continued existence.

The process of innovation has been the subject of both conceptual and empirical research in the past, and can be thought of as the vehicle by which the adaptation of the organization takes place. That is, an innovation is any idea, practice, or material artifact perceived to be new by the relevant unit of adoption (Zaltman et al., 1973).

Research, previously undertaken in an effort to understand the innovation process has focused on two broad influences; the structure of the organization, and the characteristics of the individual decision makers. Both sets of variables (as influences) have sufficient empirical support to justify their inclusion here.

Specifically, this study investigates the adaptation of a sample of manufacturing firms to Affirmative



Action regulations.

Title VII of the Civil Rights Act of 1964 made it unlawful for any employer to fail to hire or to discharge, or otherwise discriminate, in compensation or other terms of employment, against any individual based on race, religion, color, sex or national origin. However, it specifically denied any requirement of preferential treatment for the purpose of curing an imbalance in the racial composition of a given body of employees or apprentices.

Executive Order 11246 issued in September of 1965 prohibited discrimination in employment on the basis of race, creed, color or national origin and states, as government policy, the promotion of the full realization of equal employment opportunity through a positive, continuing program of affirmative action. The Act covered all federal employment, and contractors and subcontractors. It empowered the Secretary of Labor to adopt rules, regulations and issue orders deemed necessary to achieve its purpose. The Order was amended in October of 1967 by Executive Order 11375 to include sex discrimination.

Most of the important rules and regulations issued by the Department of Labor are contained in Title 41, Chapter 60 of the Code of Federal Regulations. Specifically 41 CFR, Part 60-1 requires that any contractor having over 50 employees and a contract or bills of lading totaling \$50,000 or more over a twelve month period, must

develop a written Affirmative Action program for each of its establishments. The Affirmative Action Plan is a set of specific and results-oriented procedures designed to achieve prompt and full utilization of minorities and women, at all levels and in all segments of the work force. The contractor obligates himself to apply a good faith effort in meeting the minority hiring goals and timetables specified in the plan. The definition of a good faith effort will be discussed in a later chapter.

These regulations position a federal agency in the organization's environment. The agency, in turn, is empowered to monitor the organization's procedures for the selection and internal advancement of human resources. The agency, through conciliatory agreements or contract termination, can affect the organization's goal attainment.

Any organization, above the 50 employee minimum, has several legitimate adaptive options available. A firm could withdraw from the regulated line of business by not competing for government contracts. In this approach the firm defines its environment so as to avoid the regulations. A firm could allocate resources to political efforts, such as lobbying, in an effort to modify, or gain an exemption from the regulation. Finally, a firm that perceived sales to the government as desirable could choose to adapt through compliance, that is to adopt new, innovative procedures affecting its human resources. This investiga-

tion is concerned with the latter form of adaptation. Each of the subject firms hold federal contracts in excess of the minimum and are subject to the regulations.

The ability of a firm to adopt new procedures concerning its hiring and promotion activities will determine the degree of compliance the firm achieves. Relationships between structural characteristics of the organization and Affirmative Action compliance, and relationships between managerial values and attitudes and Affirmative Action compliance are the substance of this research effort.

In the next chapter a review of the relevant literature is presented. Three broad topics are reviewed. First, the conceptual development of the firm's environment is traced and the role of a regulatory body within the environment acknowledged. Second, the literature focusing on management values and attitudes and their potential influence in the firm's adaptation is discussed. Third, dimensions of organizational structure are defined, and the literature concerning their relationships with environmental adaptation is reviewed. The general research hypothesis is presented at the end of the chapter.

The research methodology is explained in Chapter III. The operational definitions of the structural characteristics and the value measures are presented along with data relevant to the validity and reliability of the scales. The

empirical development of an operational measure of affirmative action compliance is also presented. The research procedure, characteristics of the subject organizations and a description of the sample selection process are presented at the chapter's conclusion.

The specific operational hypotheses tested in the study are developed and presented in Chapter IV. A presentation of the research findings and the testing of those hypotheses is contained in Chapter V.

Finally, in Chapter VI the implications and limitations of the research are discussed.

## C H A P T E R II

### LITERATURE REVIEW

#### A. Organizations, Environments, and Regulations

The general acceptance of an open system's perspective in the analysis of organizations has focused attention on the organization's environment. The necessity of environmental support both in the securing of resources and the placement of outputs, and the variety of continued interactions with other groups outside the organization, are intuitively, a basis for examining environmental effects on organizations.

Dill (1948), in one of the earlier investigations, recognized the operational problems of treating the environment as a residual, i.e., everything that was not within the organization's boundaries. He defined the task environment of an organization as those elements of the environment which are relevant, or potentially relevant, to goal setting and goal attainment. He identified four groups within an organization's task environment:

1. Customers
2. Suppliers (materials, labor, capital)
3. Competitors (resources, markets)
4. Regulatory bodies

Levine and White (1961) offered the concept of or-

ganization domain as a tool for restricting the scope of environment to be studied. The domain identifies all the points at which the organization is dependent on inputs from the environment. These are defined by the products/services offered and the areas served. If one considers the desirability, or recognized social value, of output as a necessary condition for the continued supply of inputs from the environment, attention is again focused on Dill's four groups.

Similarly, Evan's (1966) notion of organization sets, which conceptualizes the organization in a role theory framework, leads to essentially the same groups. Evan views the organization as being faced with a role set composed of various actors with their own demands and expectations for the focal organization.

Terreberry (1968) separated an organization's environment into an internal component, an input component, an output, and a systems component. The latter being composed of environmental entities whose activities may indirectly affect the organization.

Duncan (1972) defined the environment as the ". . . totality of physical and social factors that are taken directly into consideration in the decision making behavior of individuals in the organization." While most previous authors defined the task environment as external to the organization, Duncan's definition incorporated internal fac-

tors as well. A list of environmental factors he developed through surveys is presented as Exhibit 1.

Osborn and Hunt (1974) classified the overall environment into three categories: macro, aggregation, and task environments. The macro environment embodies the general socio-cultural, legal-political and economic forces. The aggregation environment is composed of interest groups and associations operating in a given environment. The task environment, as they define it, is composed of all the organizations with which the focal organization must interact to grow and survive.

Similarly, Hall (1972) suggests classifying the environmental elements into general and specific sets. General being elements of the environment that concern all organizations, and specific those elements that have a direct effect on the focal organization.

Despite these conceptual departures, the original formulation of the task environment seems flexible enough to accommodate broader concerns.

An identification of the dimensions of the task environment relevant to the organization has been undertaken by several authors. While labels and terminology vary, a conceptual commonality has emerged.

Emery and Trist (1965) sought to categorize environments on an uncertainty continuum. They identify four states along this continuum based on the nature of the en-

## EXHIBIT 1

## Duncan's Environmental Factors

Internal Environment

1. Organizational personnel component
  - a. Educational and technological background and skills
  - b. Previous technological and managerial skill
  - c. Individual member's involvement and commitment to attaining system's goals
  - d. Interpersonal behavior styles
  - e. Availability of manpower for utilization within the system
2. Organizational functional and staff units component
  - a. Technological characteristics of organizational units
  - b. Interdependence of organizational units in carrying out their objectives
  - c. Intra-unit conflict among organizational functional and staff units
  - d. Inter-unit conflict among organizational functional and staff units
3. Organizational level component
  - a. Organizational objectives and goals
  - b. Integrative process integrating individuals and groups into contributing maximally to attaining organizational goals
  - c. Nature of the organization's product service

External Environment

4. Customer component
  - a. Distributors of product or service
  - b. Actual users of product or service
5. Suppliers component
  - a. New materials suppliers
  - b. Equipment suppliers
  - c. Product parts suppliers
  - d. Labor supply
6. Competitor component
  - a. Competitors for suppliers
  - b. Competitors for customers



## EXHIBIT 1--Continued

## 7. Socio-political component

- a. Government regulatory control over the industry
- b. Public political attitude towards industry and its particular product
- c. Relationship with trade unions with jurisdiction in the organization

## 8. Technological component

- a. Meeting new technological requirements of own industry and related industries in production of product or service
- b. Improving and developing new products by implementing new technological advances in the industry

vironment and the type of events the firm is subjected to. A Placid-Randomized environment is "peaceful," i.e., free of competition, and the events that occur are of an unpredictable or random pattern. A Placid-Clustered environment is, again, free of competition but the events that take place within the environment have a correlational sequence. Strategy and anticipation of events based on environmental "signals" become important decision making factors in this state. A Disturbed-Reactive environment is characterized by the presence of competition. In the previous two states, the events to which the organization is subjected are independent of the organization's own actions. In this range of the continuum, the possibility of environmental actors reacting to actions of the focal organization is recognized. The state associated with the highest degree of uncertainty is labeled Turbulent Fields. Here the focal organization is subjected to competitive reactions and changes in the environment which affect it, but occur independently, of it.

Thompson (1967, p. 72) and Lawrence and Lorsch (1967) both have defined four cell typologies of the task environment focusing on two dimensions.

Homogeneity in Thompson's work or diversity in Lawrence's and Lorsch's terminology, is defined by the number and similarity of the task environment actors. Thus, an organization serving different types of customers, deal-

ing with several unions, and whose activities are subject to regulatory bodies would be considered as facing a heterogeneous or diverse task environment.

A temporal dimension is designated as stable/shifting by Thompson, or not dynamic/highly dynamic by Lawrence and Lorsch. Subsequently, an organization that, over a period of time, serves the same customers, faces the same competitors, is served by the same suppliers and is subject to a constant level of regulatory activity would be classified as existing in a stable environment.

#### EXHIBIT 2

##### Thompson and Lawrence & Lorsch 4 Cell Typology

	Stable (Not Dynamic)	Shifting (Highly Dynamic)
Homogeneous (Low Diversity)	(Most Certain)	
Heterogeneous (High Diversity)		(Most Uncertain)

Duncan (1972) employed the same typology in his work, although labeled as Simple-Complex and Static-Dynamic dimensions.

Empirical work to date has focused on the two dimension configuration to identify types of environments that offer the organization various degrees of uncertainty. A

stable-unstable dimension, labeled dynamism, which reflects the degree of change in the composition of the task environment. Uncertainty is believed to increase as stability decreases. Second, a simple-complex dimension, labeled complexity, reflecting the number and similarity of the environmental actors. Uncertainty is believed to increase as complexity in the task environment increases.

Regulatory bodies are, clearly, elements of the firms' task environment and affect the organization by altering the task environment in which it operates.

Regulations can be classified into two groups: acquired and imposed. Acquired regulations are those sought out by the firm or industry and operated for its benefit. Benefits accruing to the acquiring industry in terms of entry control, price control, control or elimination of substitute goods and/or direct cash payments subsidies (Stigler, 1971). Conversely, imposed regulations are those rules or procedures which restrict the firm's behavior but which are not sought by the subject firm or industry.

This research effort focuses on imposed regulations. These regulations affect the organization's task environment and are expected to induce uncertainty.

Several authors, notably Cyert and March (1967, p. 115) and Thompson (1967, p. 10), have argued that organizations, being rational systems, will seek to reduce uncertainty in their environments by adaptive or cooperative

strategies.

This investigation seeks to determine the relative importance of a series of structural and attitudinal variables hypothesized to influence the organization's adaptive decision.

### B. Managerial Values/Attitudes as an Influence in Adaptive Decisions

The nature of human values and attitudes. Human values have, for an extensive period of time, interested philosophers, economists, anthropologists, and psychologists as a major force in both individual and group behavior. The concept of values has been variously defined over time, depending on the intellectual persuasion and purpose of the user.

Alder (1956) offered four approaches to the definition of values:

1. Values may exist as absolutes, that is "external ideas."
2. Values may be thought of as inherent in objects representing need satisfying potential.
3. Values may be viewed as preferences.
4. Values may be viewed as actions, focusing on what people do as representative of what they value.

Clyde Kluckhohn (1951, p. 390), upon reviewing the varied literature on the subject noted that values have been considered attitudes, motivations, objects, substantive areas of behavior, and affect-laden customs or traditions. He proposes, as a definition, that a value is conception, implicit or explicit, distinctive of an individual or characteristic of a group, of the desirable which influences the

selection of available modes, means and ends of action (1951, p. 395).

That is, a value places things, acts, ways of behaving, goals of action, and so on, all on an approval-disapproval continuum. This implies a rank ordering or a preference decision, similar to Alder's third definition above.

This preference decision, in fact, captures the consensus definition of values that has emerged. Rokeach (1968, p. 124), Bem (1970, p. 16), and Kluckhohn, F. and Strodtbeck (1951, p. 4) all employ similar definitional schemes. Values, then, for the purposes of this investigation are defined as preferences for either end-states or modes of conduct.

Within this conceptualization of values, classificatory schemes have been developed. Spranger (1928) sought to identify types of individuals by their value orientations. He defined six different value orientations:

1. Theoretical--valuing truth, cognitive reasoning and rationality.
2. Economic--practical, useful orientation valuing wealth.
3. Aesthetic--valuing form, boundary and artistic aspects of life.
4. Social--valuing people, love.
5. Political--valuing power and influence.
6. Religious--valuing unity between the individual and the universe.

Other classifications have focused on characteristics of values themselves rather than value orientations. Kluckhohn, C. (1951, p. 413) differentiates modality, either positive or negative values; content, aesthetic, cognitive

or moral values; intent, mode or how an act is performed, and several other characteristics such as intensity and explicitness. Bem (1970, p. 17) discusses centrality of values, i.e., how many other values are predicated on a single or central value.

These authors, through their attempts at a conceptual refinement, focus attention on the diverse nature of values within the realm of human affairs. This investigation is best served by highlighting the difference between values and attitudes.

A distinction has been drawn in the literature between values and attitudes. Attitudes are believed to derive from an individual's values, and are defined as affective orientations toward specific objects or situations. Katz (1960) in discussing the functions that attitudes serve for people, strikes a similar theme. He argues that one of the principle functions served by attitudes is the expression of values. Attitudes toward specific things or events provide the means for the expression of the individual's more general and abstract value system.

Operationally, this distinction is less clear. An end state to one individual could well be an object to another; consider wealth. The conceptual definitions can only be evoked with a knowledge of an individual's entire belief systems (Bem, p. 16). However, this investigation can proceed using the terms interchangeably, because both values and

attitudes would be expected to precede behavior.

This view, derived from the psychological literature, that values and attitudes are the precursors of individual behavior is not without its detractors. Wicker (1969), in an extensive review of the attitude-behavior research, reports that attitude measures rarely account for more than ten percent of the variance in overt behavior measures. The conceptual basis for this investigation demands some explanation as to this lack of empirical support.

Weigel and Newman (1976) offer two distinct problem areas which have influenced previous attitude-behavior research, and might well have contributed to the low correlations reported by Wicker.

A methodological problem centers on the quality of the attitude measurement instrument. Failure to report on the reliability of the instrument and establish their validity in measuring the attitude of interest is widespread in early investigations. One can hardly expect high predictive power with low quality instruments.

A second problem area is the type of behavioral criterion employed in the research. As a matter of convenience, most empirical work has sought to determine the relationship between scores on a broadly focused attitude measure (e.g., attitude toward black people) and some plausible but highly specific observation of a single type of behavior (e.g., the contribution of money to the NAACP). Yet, there might be any



number of idiosyncratic feelings about politically active organizations, or situational constraints that could make the most egalitarian of persons unwilling to contribute to the NAACP at a given point in time. Consequently, Fishbein (1973) emphasizes the need to employ multiple act criteria in evaluating the relationship between such broadly focused attitudes, as opposed to a single behavior. That is, a fair test of the attitude behavior consistency should employ a number of possible behaviors representing the universe of actions a particular attitude might precipitate.

In their study, Weigel and Newman offer some empirical support for the multiple act criterion approach. An attitude instrument, of demonstrated quality, was administered to a random selection of residents in a rural New England community. The instrument measured their environmental or ecological concern. During the following eight months the subjects were offered an opportunity to participate in several environmentally oriented behaviors. These included signing and circulating petitions against off-shore oil drilling, the construction of nuclear power plants and the removal of auto emission controls; participation in roadside litter pick-ups; and participation in an eight-week recycling program. The attitude scores were only marginally correlated with performance or non-performance of each of the specific behaviors (mean  $r = .29$ ;  $p < .10$ ). However, when the various behaviors were combined to form a more inclusive "behavioral

commitment index," scores on the attitude measure exhibited a pronounced capacity to predict behavioral variation ( $r = .62$ ;  $p < .001$ ).

The prescriptions to attitude researchers are clear and the logic persuasive: use high quality attitude measurement instruments and be sure that the behavioral sample parallels the breadth of the attitude domain assessed.

In this study the relationship between managerial values/attitudes and regulatory compliance (behavior) is investigated. In order to fairly assess this phenomenon considerable effort was expended in selecting measurement instruments with demonstrated validity and internal consistency. Further, the behavioral criterion, Affirmative Action compliance, was measured as a multiple act index composed of a variety of different actions. The specific measures are discussed in Chapter III.

Values and organizational variables. Organizations, being collectives of individuals, would also be influenced, or potentially influenced by the value orientations of their members. Connor and Becker (1975) presented an organizational paradigm which facilitates the identification of the organizational variables most sensitive to member characteristics. They conceptualize the organization within a systems framework, i.e., a resource processing subsystem of a larger system. They visualize the transformation of inputs to outputs

as being dependent on the organizational context, or structure, the organizational processes and the actions of management (see Exhibit 3).

The following review of previous empirical research in these three areas is not intended to be exhaustive. It is intended, however, to depict the avenues of investigation pursued by management and organizational researchers.

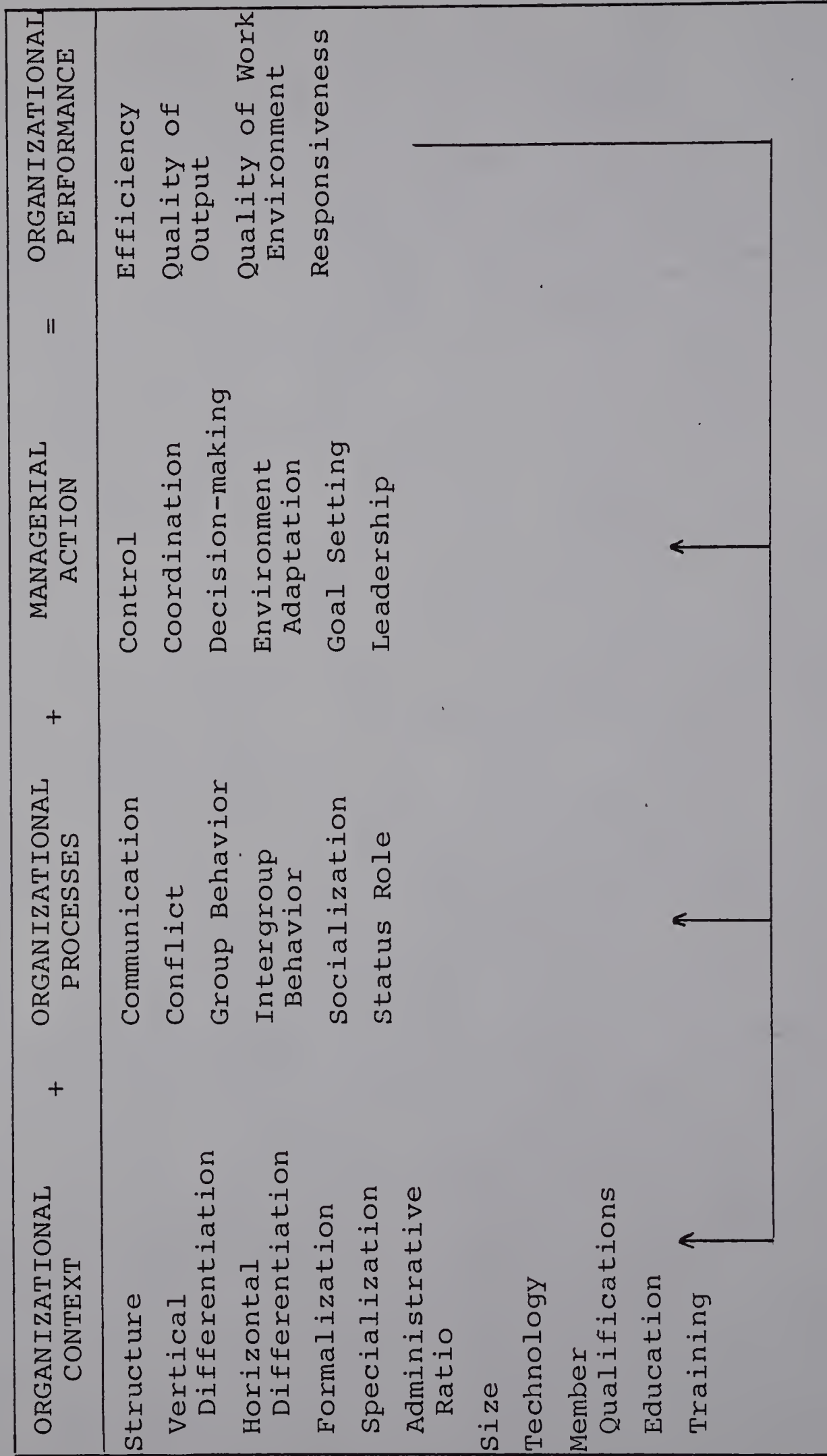
Values and context variables. A number of empirical investigations have been undertaken to evaluate the relationships between member attitudes and structural properties. These have focused primarily on job attitudes under varying conditions of span of control, centralization, line/staff positions, total organization size, and subunit size. Porter and Lawler (1965) have provided an extensive review of this empirical work.

More recently, Hodgkinson (1970) measured values of principals, vice principals and teachers in elementary schools. Significant differences were found between the teachers and the administrators. The teachers had stronger values of creativity, independence, physical development, and kindness. This led Hodgkinson to conclude that value orientations vary across hierarchical levels within the organization.

Values and process variables. The empirical work investigating the relationships between values and organizational

EXHIBIT 3

Becker's and Connor's Organizational Paradigm



processes has focused on two, quite dissimilar areas: worker values with respect to conflict and motivation, and the phenomenon of socialization.

Brown (1976) has proposed the use of value measurements as a means of identifying and reducing conflicts between supervisors and employees in hopes of increasing motivation.

Taylor and Thompson (1976) sought to differentiate the work values of younger and older employees. Their findings, which have implications for both job design and reward structures, were that younger workers are no less concerned about extrinsic rewards, such as remuneration, which perhaps is contrary to the conventional wisdom. However, younger workers were more concerned about intrinsic rewards and sought rewarding work tasks and work environments.

Similarly, Watson and Baron (1976) measured the values of black and white managers to determine if value orientations were different, which could provide the basis for considerable organizational conflict. However, they found no significant differences among these two groups and reported that both possess a basically pragmatic value orientation. The latter finding is perhaps consistent with the stereotypic image of the American business manager.

From a motivational perspective, Sikula (1971) reports of a doctoral dissertation (Morrison, 1970) which employed a value scale and measures of personal job goals.

While no statistical tests are reported, tabulations demonstrate a clear relationship between values and subjects' personal job goals. He suggests the measurement of values as a useful predictor of individual behavior.

A variety of studies on the phenomena of socialization are available in the literature. For example, Merton et al. (1957) and Becker et al. (1961) on the socialization of medical students and Schien (1973) on the socialization of professional managers.

Ondrak (1975) in a recent investigation studied the attitudes and values of student nurses in several different schools. He hypothesized that socialization should be a function of the value consistency among significant others, i.e., instructors. He found that the more consistent the values of the significant others group, the more value shift, socialization, observed in the students.

Values and managerial action variables. The relationships between values and managerial action, which are the focus of the present research effort, have not been subjected to rigorous investigation. Of the empirical work done in this area, a considerable portion is descriptive in nature.

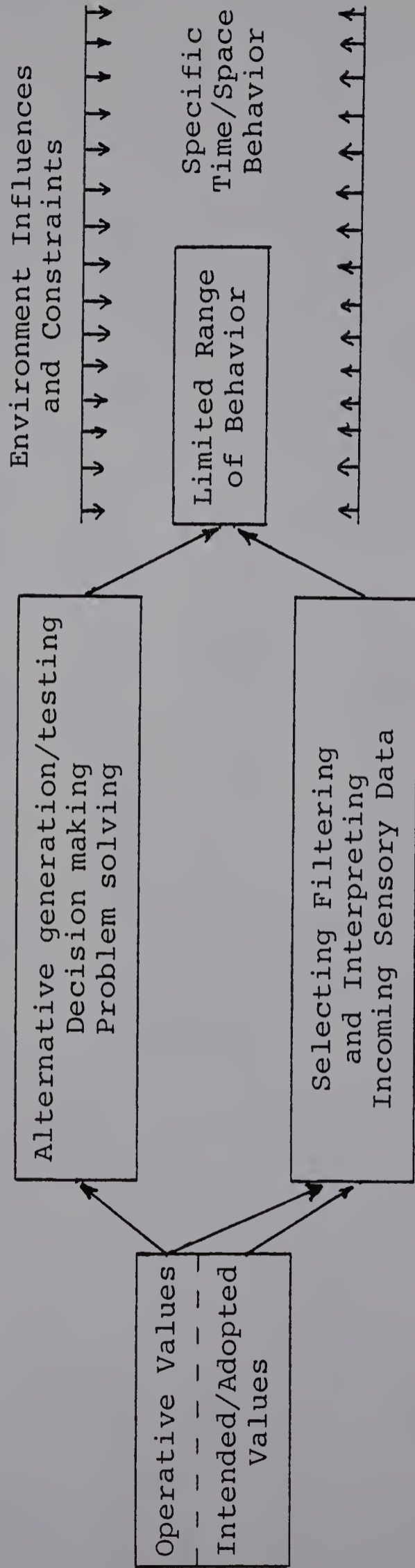
England (1967) has developed a theoretical model of the impact of personal values on managerial behavior (see Exhibit 4).

Operative values have the greatest influence on be-

EXHIBIT 4

England's Theoretical Model

Behavior Channelling



Perception Screening

havior, intended values may be professed but have little behavioral influence. The model presents two ways in which values can influence behavior, by channeling behavior, that is direct influences, and by affecting the perceptual process for the amount and types of information processed. These processes, in turn, result in a constrained set of behaviors available for the individual to choose from.

England went on to determine the major operative and adopted/intended values of a sample of American managers. His measurement device, the Personal Value Questionnaire (PVQ), seeks rankings on an importance dimension of 66 concepts and an identification as to why the concept is important, if it is. That is, if a concept such as Employee Welfare is important to an individual, is it because it leads to success, which indicates a pragmatic orientation; because it is right, indicating an ethical or moral orientation; or is the concept important because it is pleasant? England concludes that most American managers have pragmatic or moral-ethical value orientations but points out the diversity across individuals.

DeSalvio and Gemill (1971), employing the PVQ instrument, sought to compare managers' values with those of students and the students' perception of the managers. They found that actual managers were more morally oriented (Right vs. Successful justification for importance) than students and much more morally oriented than students perceived them



to be. Further, they concluded that students were more personal goal oriented, i.e., money, dignity, achievement, and success rated as important, than managers, who were more people oriented. The actual managers emphasized groups such as customers, employees, and co-workers as important.

Guth and Tagiuri (1965), employing a different value measurement, sought to identify the value orientations of scientists, research managers, and executives, and each group's perceptions of the values of the other groups. While the differences between the groups were not very dramatic, the perceptions of other groups demonstrated considerable stereotyping and misunderstanding of the values of the other work groups.

These findings have implications for control and coordination efforts. However, the authors emphasize the role of values in strategic decision making and see value assessment as a tool for reducing conflict and understanding the position of others with respect to specific strategic alternatives.

Several researchers have attempted to relate values and attitudes of managers to specific types of actions.

Helsel (1971) found that the value orientation of teachers was related to the pupil control ideology employed in the classroom. He found that teachers who maintained traditional values tended to employ a custodial pupil control ideology.

Mohr (1969) in a study of public health organizations and their officers, measured values related to activism or aggressiveness, and political ideology on a liberal-conservative scale. He found a positive relationship between those values and the institution of progressive programs, the institution of which would be considered strategic decisions. As such, the relationship between values and strategic decision making gained some empirical support.

Senger (1971) found that managers tend to evaluate the competence of subordinates on the perceived congruence of value orientations. That is, managers perceived subordinates with value structures similar to their own to be more competent than those with divergent value systems.

White and Ruh (1973) sought to mediate the relationship between participation in decision making and employee attitudes such as job involvement, by measuring personal values. They, however, found no support for the claim that the values would affect the relationship between participation and job attitudes. All of their subjects experienced positive increases in attitudes when allowed to participate in decisions regardless of their individual value orientations. They do, however, point out several methodological problems with the design, although no replication, by themselves or others, has yet been reported. It is evident that investigations seeking to systematically relate management values and attitudes to organizational actions are both rare

and diverse. One methodological problem each researcher faces is the identification of which organizational members influence particular decisions.

The management elite. Several theorists have discussed the notion of joint decision making in organizations. Simon (1965, p. 221) has described organizational decision making as a composite process of the efforts and influences of many. Such a need arises due to the mutual dependence of members on limited resources and the interdependence of timing of activities among departmental entities. Cyert and March (1963, p. 26) spend considerable time presenting the concept of goal formation as the result of negotiation and "side payments" among the members of dominant coalition in the organization. Similarly, Thompson (1967, p. 140) explains how an "inner circle" of individuals may emerge, formally or informally, from a large organizational coalition.

These authors are making the point that decisions within an organization are frequently the result of a group process. The group, variously referred to as the dominant coalition, inner circle or management elite is composed of individuals who occupy a formal position of authority and/or who possess particular expertise or knowledge with respect to the decision at hand. It is the values and attitudes of these individuals which would be expected to influence major organizational decisions.

Hage and Dewar (1973) operationalized this concept of elite values in attempting to relate values to the rate of program change in a group of health and welfare agencies. Recognizing the group influence in decision making, the elite group was defined as the policy or strategic decision making group within the organization. Operationally, they defined elite groups in both a formal and behavioral mode, the formal elite being composed of the executive director and those who held high level positions. The behavioral elite was defined as the director and those staff members who reported participating in decisions about policies, programs, personnel and promotions; clearly critical or strategic decisions. In addition to elite values toward change, they also measured several structural characteristics as independent variables. The dependent measure was the number of new programs instituted over a three year period. They found that while leader values were predictive of program change ( $r = .60$ ;  $p = .05$ ), the values of the behavioral elite were better predictors ( $r = .69$ ;  $p = .01$ ), both of which were superior to the formal elite values ( $r = .45$ ;  $p = .10$ ). Additionally, the elite values were better predictors than structural measures of decentralization, formalization, and complexity.

### C. Organization Structure as an Influence in Adaptive Decisions

Hage (1965), in formulating his axiomatic theory of organizations, defined a common set of structural character-

istics, which he categorized as organizational means. Further, he posits a group of goals or organizational ends (see Exhibit 5).

#### EXHIBIT 5

##### Hage's Definition of Organizational Means and Ends

<u>Organizational Means</u>	<u>Organizational Ends</u>
Centralization	Adaptiveness
Complexity	Production
Formalization	Efficiency
Stratification	Job Satisfaction

Based on the work of Max Weber, Chester Barnard and Victor Thompson, seven propositions and twenty-one corollaries predicting the relationships between means and ends were derived.

The concern of the present effort focuses on the relationship between the structural characteristics and organizational adaptiveness.

The need for adaptiveness centers on environmental change. As competition increases, technology advances, consumer preferences change or regulations are imposed, the organization must adapt to its environment.

Centralization addresses the issue as to where, within the organization, decisions are made. That is, who participates in decision making. If decision making power is concentrated in the hands of a few senior executives, the organization is said to be centralized.

Complexity refers to the number of different occupa-

tional categories within the organization, and the amount of training necessary for these occupations. As the diversity of occupations and the length of training increase, the organization becomes more complex.

Formalization is a measure of standardization of procedures and jobs with the firm. The existence of rules, operating procedures and job descriptions indicate a formal organization.

Stratification refers to the existence of a status system within the organization. The social distance between levels of the hierarchy: communication, mobility and reward differences between levels, is indicative of a stratified organization.

These variables are by no means independent of each other; a variety of relationships exist. If an organization is centralized we might expect it to be highly formalized also; that is, if all decisions are made by a few top people, rules must exist to govern the behavior of everyone else. Similarly, as an organization grows more complex, with higher numbers of diverse, highly trained occupations, decision making must become less centralized and the organization less formalized. Stratification is related to well defined jobs, i.e., formalization, and negatively associated with complexity.

Hage and Aiken (1967) demonstrated empirically the relationships of decentralization with other structural meas-

ures. Decentralization, measured as the degree of participation in decision making, was found to be positively related to the number of occupational specialties and professional training, which are complexity measures. Decentralization was found to be negatively related to job codification and rule observation; formalization measures. However, the latter relationships between rule observation and participation became positive when the other structural measures were controlled by means of partial correlations. This result is contrary to Hage's theoretical prediction.

In Pugh et al. (1968), complexity was again found to be negatively related to centralization. Standardization, a formalization measure, was positively related to centralization, but an overall measure of formalization had a weak negative relationship with centralization.

Both from Hage's axiomatic theory and the work of Burns and Stalker (1961), theoretical predictions of the relationships of structural characteristics and adaptiveness are possible. Negative associations between adaptiveness and centralization, formalization and stratification, and a positive relationship with complexity would be expected.

Empirical evidence has employed an operational measure of adaptiveness based on innovation, i.e., the number of new programs or techniques adopted.

In Aiken and Hage (1971) and Hage and Aiken (1967) innovation, defined as the number of new programs instituted,

was related to structural characteristics. The subject organizations, sixteen health and welfare agencies, were studied in 1964 and 1967, the 1964 results presented in the earlier publication and the 1967 results in the later one.

Complexity measures, the number of occupational specialties and the amount of extra organizational professional activity were both positively related to innovation, as was predicted. A third measure of complexity, the degree of professional training, was inconclusive.

Decentralization, measured by the degree of participation in decisions, was in the predicted direction in both studies but insignificant in the later investigation. It should be noted that the authors declined to measure statistical significance in the earlier study, arguing that the sixteen organizations constituted a universe rather than a sample, although significance levels are reported in the later study. A correlation of .49 reported in the 1967 study between participation in decisions and innovation is assumed to be significant.

The relationship between innovation and formalization is unclear. When measured as the degree of job codification, the early study supported a negative relationship but, in the later study, the relationship was insignificant and in the opposite direction. The degree of rule observation was insignificant but in the wrong direction in both studies.

In Hage and Dewar (1973), in which structural vari-



ables and elite values are both reported, the structural data is that reported in the Aiken and Hage (1967) study. The findings, as one might expect, are similar.

Baldrige and Burnham (1975) in examining innovations in two school districts found positive relationships with complexity and size, as expected. However, in another variable labeled conflict-reduction, defined as "frequency of the use of policies defining: jurisdiction and responsibilities for major departments; rules governing interdepartmental arrangements; job descriptions for administrative positions; and the organization chart." They also found a positive correlation of .24 with innovation. This seems a reasonable operational definition of formalization, yet its correlational direction is opposite of the theoretical prediction.

Mohr (1969) in the study mentioned in the previous section, reports a positive relationship between the number of years of public health training of individuals and the number of progressive programs offered by the public health agency, which is additional support for the complexity and innovation relationship.

These studies lend strong support to the argument that organizational complexity is related to innovation. Further, it seems reasonable to expect that decentralization, based on the Hage and Aiken work, and its demonstrated relationship with complexity, would also be positively related to innovation. The predicted negative relationship between

formalization and innovation has not been empirically validated under any of several operational definitions.

The lack of consistency in the empirical findings may well be the result of the researcher's attempt to treat innovation as a single phase activity. Thompson (1965) conceptualized the innovation process as composed of three phases: initiation, adoption, and implementation.

Initiation refers to the generation of ideas that will lead to a change in the organization. Adoption addresses the decision process of management and the commitment of resources. Finally, implementation involves the definition of procedures by which a change is introduced into the organization's behavior patterns.

Hage's axiomatic theory, and its subsequent predictions, seems to focus on the initiation phase. Occupation diversity (Aiken and Hage, 1971), professional activity (Leifer, 1975), and decentralization in decision making (Thompson, 1965; and Hage and Aiken, 1967) would appear conducive to the generation of innovative ideas within the organization.

Conversely, a centralized decision structure with a highly formalized body of rules and procedures and a rigid status system might reduce the flow of information and stifle creative thought (Thompson, 1965).

The adaptive behaviors of the organization to regulations would logically be more dependent on the adoption and

implementation phases, and less so with the initiation of new ideas as to how to adapt to these environmental constraints. However, the theoretical predictions with respect to initiation of ideas and structural characteristics may not hold in the latter phases of the innovation process.

Wilson (1966) has suggested that a decentralized decision structure, which necessitates bargaining and negotiation to reach a decision, may hinder the adoption and implementation phases. Similarly, Lindblom's theory of disjointed incrementalism would predict that diversity in the goals of the policy group would lead to compromise decisions of a marginal nature. On the other hand, Vroom (1964), among others, has argued that participation in decisions leads to increased commitment in the outcome and facilitates implementation.

Formalization, or rule compliance, may well facilitate the implementation of decisions as was suggested by Mohr (1969) and Pierce and Delbecq (1977). That is, the clear definition of responsibility, through job descriptions and the existence of formal policy statements and rules might enhance the possibilities of a unified and more effective implementation. This rationale could provide one explanation to the conflicting findings in the innovation studies regarding the effect of formalization.

In summary, the dilemma facing individuals concerned with organizational design has surfaced. The structural characteristics which would logically enhance an organiza-

tion's ability to generate ideas and solutions to a problem may be the same characteristics that would hinder its ability to adopt and implement one solution.

The expected relationships between structural characteristics and Affirmative Action compliance will be discussed when the operational hypotheses are presented in Chapter IV.

#### D. Summary and General Hypothesis

This review is an endeavor to draw together, from several perspectives, concepts and empirical evidence that establish a theoretical justification for the proposed investigation of Affirmative Action compliance.

The organization's task environment has been defined, and its conceptual development traced to provide a framework for the empirical investigation of the organization's adaptive actions. The applicable governmental contracting agency is positioned in the firm's task environment. The agency has the power to investigate, seek conciliatory rectification, and petition the courts through the Equal Employment Opportunity Commission, if necessary, to modify a firm's behavior. This power represents a contingency to the firm in the selection of its inputs and certain administrative decisions, e.g., training and promotions. As an environmental contingency, it is argued, that uncertainty is induced which, under the assumption of rationality, the organization will attempt to minimize through adaptation.

An organizational paradigm identifying a variety of organizational variables which might be influenced by member values has been presented to focus attention on managerial actions, such as goal setting, decision making and coordination. The empirical evidence which employed measures of managerial values as independent variables influencing management actions is, admittedly, scant. However, these investigations consistently demonstrate a relationship between managerial values or attitudes and a diverse range of dependent variables.

The existence of a management elite group or dominant coalition, has a strong theoretical base. Further, investigations measuring the values of these group members indicate that these individual characteristics have some predictive power regarding adaptive decisions. This investigation will seek to add to this empirical base by identifying the elite group and assessing the relationship of their values to compliance behavior. The specific values believed to be related to compliance are measures of racial prejudice, modern economic liberalism and the perceived risk of enforcement, which will be discussed, from an operational perspective, in the following sections.

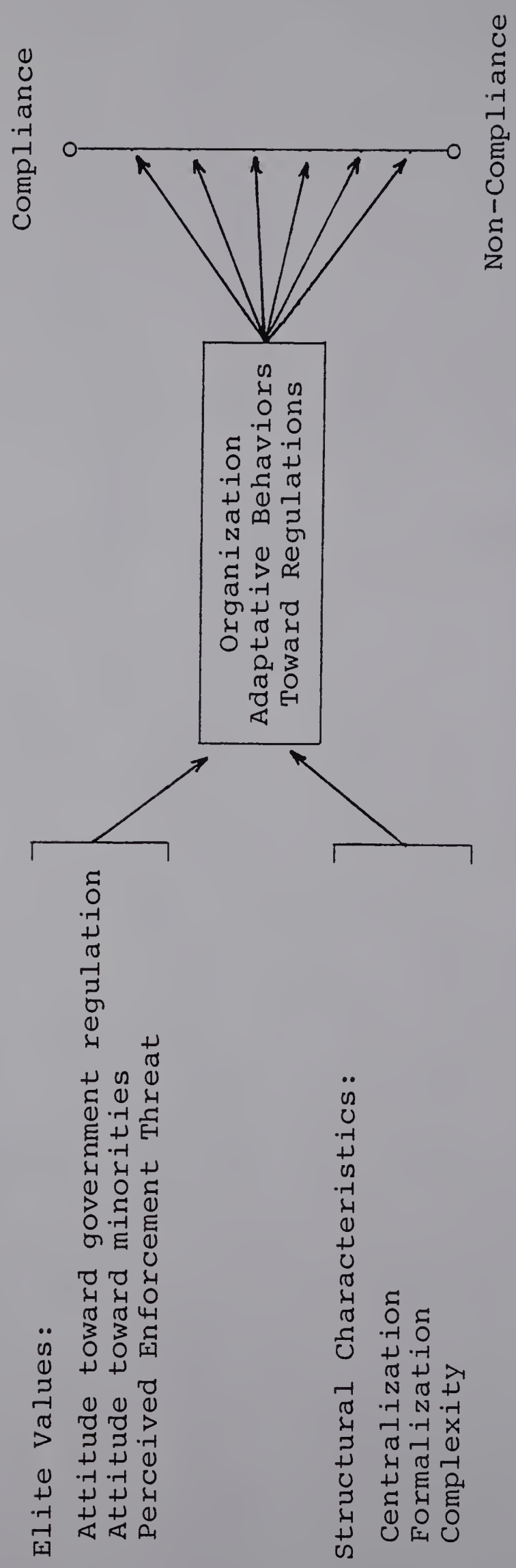
Organizational adaptiveness has been systematically related to structural characteristics, conceptually and empirically. Consequently, their inclusion as independent variables influencing adaptive behavior is well justified.

However, the empirical work has employed output innovation as a dependent measure, i.e., the number of new programs or services instituted. This is clearly one method of adapting to a changing task environment, but represents a narrow conceptualization of adaptiveness. Burns' and Stalker's (1961) notion of the organic organization, so frequently cited in investigations on innovation, embodies a broader concept of adaptation than the institution of new types of outputs. Adaptation to the requirements of Affirmative Action regulations would not involve such activities but would require the adoption of procedures new to the organization. Indeed, it is one purpose of this research to investigate the relationships of structural characteristics and innovations as defined by our broader conceptualization.

The direction of the relationships among the structural characteristics of centralization, formalization and complexity, and adaptation, is confused in light of the previous empirical work. However, from these findings, and other theoretical work, relationships of structural characteristics with regulatory adaptation will be hypothesized in a later section.

In summary, this investigation views the organization's adaptation to Affirmative Action regulations as being influenced by two sets of independent variables: management elite values and structural characteristics (see Exhibit 6).

EXHIBIT 6  
General Research Hypothesis



## C H A P T E R   I I I

### RESEARCH METHODOLOGY

#### A. Variables and Operational Definitions

An explanation of the variables, their operational definitions, and scoring procedures is undertaken in this section. In the interest of clarity, the variables have been labeled independent and dependent. Managerial values/attitudes, and the organization's structural characteristics have been conceptualized as two sets of independent variables which influence the dependent variable, Affirmative Action compliance. The design of this research project is cross-sectional, subsequently causal influences will not be appropriate. In this context, the independent/dependent labels are employed only to highlight the theoretical formulation presented. Correlations between managerial attitudes and compliance could be interpreted with a reversal causal direction under either a cognitive dissonance (Festinger, 1959) or a self perception (Bem, 1967) theoretical framework. Similarly, it could be argued that compliance has influenced the structure of the organization, and not vice versa. A longitudinal design, which is beyond the scope of the present inquiry, would be necessary to resolve these issues. An assessment of the plausibility of alternative interpretations



is undertaken when the findings are discussed. In the interim, the independent, dependent terminology will be retained.

Managerial values/attitudes. Three managerial attitudes were measured, two specific to Affirmative Action compliance behavior and one attitude toward regulatory activities in general.

Attitudes toward minorities. It is hypothesized that favorable, that is not prejudiced, managerial attitudes toward minority individuals will be positively related to Affirmative Action compliance.

A variety of instruments purported to measure racial prejudice and minority attitudes are reported in the literature. Woodmansee and Cook (1967) report on the development and testing of a multifactor racial attitude inventory. Through a series of studies among various subject groups they empirically identified ten dimensions of verbal racial attitudes including: ease in interracial contacts, derogatory beliefs about negroes, and concerns of integration-segregation policy. Each of the ten dimensions was measured in a 100-item instrument. Each dimension was measured as a subscale in the overall 100-item instrument.

In a more recent replication and extension, Brigham, Woodmansee and Cook (1976) administered the instrument to 760 college students attending institutions in Colorado,

Arizona and Tennessee. Through cluster analysis, they were again able to identify the ten dimensions of racial attitudes presented in the previous study. They computed alpha coefficients for each of the ten subscales. These coefficients ranged from .70 to .88, demonstrating the internal consistency of each individual subscale.

A known group validation study was undertaken as part of the same investigation. The instrument was administered to three additional groups of students. The first group, assumed to have the strongest egalitarian attitudes, was composed of white students active in civil rights organizations, or who had participated in pro-integration activities. The second group was made up of white students taking an elective course in minority group problems, but who had not participated actively in efforts to change race relations. The third group contained whites presumed to have anti-black attitudes; these were students who belonged to radical, right-wing political organizations or to social fraternities which were known to have explicit policies against the admission of blacks to membership. Analysis of variances of the subscale scores across criterion groups yielded F ratios significant at better than the .001 level.

It appears evident from these findings that the researchers were successful in constructing a reliable and valid measure of racial attitudes. However, the instrument is of a cumbersome length. Consequently, an eleven item

short form of the Multifactor Racial Attitude Inventory (MRAI) was developed by the same researchers. This truncated form is essentially a group of single items, each measuring a different dimension.

In the present investigation, the eleven item form of the MRAI was further shortened on two occasions. First, Professor Stuart Cook of the Institute of Behavioral Sciences at the University of Colorado provided the raw scores on the MRAI short form from a sample of college students. The alpha coefficient computed on these data was .70. Item-total correlations computed from the scores of these subjects revealed that two items had low correlations with the total score. These items were eliminated from the questionnaires used in the present inquiry. The remaining nine items are presented in Exhibit 7.

The number of items used in this analysis was further reduced following the data collection. Item-total correlations based on the responses of the executive subjects indicated that items 1 and 2 were not correlated with the scale score ( $r = .03$  and  $.13$  respectively). Apparently, among this group of executives the integration issue is not a question of only minority attitudes. One possible explanation for the low item-total correlations on the desegregation items derives from the fact that the majority of these respondents reside in the Boston Metropolitan area where court ordered bussing has been a volatile political issue in recent years.

## EXHIBIT 7

Attitude Toward Minorities  
Questionnaire Items

1. Do you believe that integration (of schools, businesses, residences, etc.) will benefit both whites and blacks?

I agree strongly that integration will benefit both whites and blacks.

I agree on the whole that integration will benefit both whites and blacks.

I agree slightly that integration will benefit both whites and blacks.

I am undecided about whether integration will benefit both whites and blacks.

I disagree slightly that integration will benefit both whites and blacks.

I disagree on the whole that integration will benefit both whites and blacks.

I disagree strongly that integration will benefit both whites and blacks.

2. Who do you think should decide about desegregation: the federal government, or states and local communities?

I strongly favor having the federal government decide about desegregation.

I moderately favor having the federal government decide about desegregation.

I slightly favor having the federal government decide about desegregation.

I am undecided about who should decide about desegregation.

I slightly favor letting states and local communities decide about desegregation.

I moderately favor letting states and local communities decide about desegregation.

I strongly favor letting states and local communities decide about desegregation.

3. Do you believe that a businessman or landlord has a right to choose whom he will deal with, even if this means refusing to deal with blacks?

I agree strongly that the businessman or landlord has this right.

I agree moderately that the businessman or landlord has this right.

I agree slightly that the businessman or landlord has this right.

## EXHIBIT 7--Continued

## 3. (Continued)

- I am undecided whether the businessman or landlord should have this right.
- I am slightly opposed to giving the businessman or landlord the right to refuse to deal with blacks.
- I am moderately opposed to giving the businessman or landlord the right to refuse to deal with blacks.
- I am strongly opposed to giving the businessman or landlord the right to refuse to deal with blacks.

## 4. If a black were put in charge of you, how would you feel about taking advice and direction from him/her.

- I would dislike it a great deal.
- I would dislike it on the whole.
- I would dislike it a little.
- I am uncertain whether I would like or dislike it.
- I wouldn't mind it.
- I would like it.
- I would be very pleased about it.

## 5. If you had a chance to introduce black visitors to your friends and neighbors, how would you feel about it?

- I would be very pleased about it.
- I would like it.
- I wouldn't mind it.
- I am uncertain whether I would like or dislike it.
- I would dislike it a little.
- I would dislike it on the whole.
- I would dislike it a great deal.

## 6. What is your opinion of this statement? "Although social equality of the races may be the democratic way, a good many blacks are not yet ready to assume the responsibilities that go with it."

- I strongly disagree.
- I disagree on the whole.
- I disagree a little.
- I am uncertain whether I agree or disagree.
- I agree a little.
- I agree on the whole.
- I strongly agree.

## EXHIBIT 7--Continued

7. How would you feel if you were eating with a black of the opposite sex in a public space?

- I would feel extremely self-conscious.
- I would feel quite self-conscious.
- I would feel a little self-conscious.
- I would feel at ease--but just barely.
- I am uncertain whether I would feel at ease or self-conscious.
- I would feel at ease on the whole.
- I would feel completely at ease.

8. How do you feel about interracial marriage?

- I am strongly opposed.
- I am moderately opposed.
- I am slightly opposed.
- I am undecided whether I am in favor or opposed.
- I am slightly in favor.
- I am moderately in favor.
- I am strongly in favor.

9. How do you feel about it when blacks hold mass demonstrations to demand what they want?

- I am strongly in favor of such demonstrations.
- I am moderately in favor of such demonstrations.
- I am slightly in favor of such demonstrations.
- I am uncertain whether I favor or oppose such demonstrations.
- I am slightly opposed to such demonstrations.
- I am moderately opposed to such demonstrations.
- I am strongly opposed to such demonstrations.

The scores reported in the following chapters are based on items 3 through 9. The alpha coefficient computed on those items, among the present respondents, is .63.

The items will be scored such that a high total score indicates favorable attitudes toward minorities. Conversely, a low score on the instrument would signify a less favorable or more prejudiced attitude toward minorities.

Attitude toward government regulation. This attitude can be considered as part of the liberal-conservative continuum. The respondent's opinion as to the appropriate role of government in a market economy is sought. At one extreme is the individual who sees intervention by a government body into the mechanics of a market system as appropriate, and indeed necessary. At the opposite extreme would be the individual opposed to government intervention and valuing individual freedom and initiative. That is, a liberal as opposed to a conservative philosophy. It is expected that individuals favoring government regulation, i.e., liberal, will be more inclined to comply with regulatory efforts.

Kerr (1952) developed a series of scales purporting to measure five dimensions of the liberal-conservative attitude: political, economic, religious, social, and aesthetic. The items which make up the economic subscale are presented in Exhibit 8.

Each item is rated on the five-point scale shown. The score on each item is summed across all items to yield

## EXHIBIT 8

Attitude Toward Government Regulation  
Questionnaire Items

1. Should every family be guaranteed a minimum standard of living?
2. In hard times, should the government invent jobs for the unemployed?
3. Should farmers be guaranteed a minimum annual income?
4. Is old age insurance paid by the government a good idea?
5. Should employees have the right to organize and bargain for wages?
6. Should employees have the right to go on strike for higher wages?
7. Should the government provide medical care for all citizens?
8. Should the government closely regulate companies which employ thousands of workers?
9. Should dental service be provided to all citizens at public expense?
10. Should every capable young person be entitled to vocational training at government expense?
11. Should all adults be entitled to a month's vacation with pay each year?
12. Should the government take over the ownership and operation of any national industry?
13. Do you favor a heavy tax on large incomes?

## SCALE:

yes	probably yes	undecided	probably no	no
5	4	3	2	1



an overall subject score. The higher the score, the more favorable the attitude toward government regulation.

Kerr reports split half reliabilities of .82 for the economic scale. A known group validity test among democrats and republicans demonstrated significant differences with republicans more opposed to government intervention.

The instrument was developed twenty-five years ago, and given the nature of the items, the data collected from the present respondents were analyzed to determine if the homogeneity of the scale had deteriorated. The analysis was based on item-total correlations.

Items 5, 6, and 12, concerning workers' rights to organize or strike, and government ownership of a national industry, were found to have low correlations with the overall score, .05, .07, and -.05, respectively. These three items have, subsequently, been excluded from the scale scores of the respondents. The alpha coefficient computed on the remaining ten items is .85.

Perceived enforcement threat. It was argued, in the previous chapter, that regulations, by altering the task environment of the subject firm, induce uncertainty. Further, being rational systems, the firms will seek to adapt, or otherwise attempt to reduce the uncertainty posed by various task environment actors. Uncertainty, however, does not exist in an absolute quantity in any given environment. Prior to any expectation of an organizational response to

uncertainty in its environment, the uncertainty must be perceived and the level of risk appraised by the organization's members.

Several researchers have constructed measures of perceived environmental uncertainty, most notably Lawrence and Lorsch (1967) and Duncan (1972). Their measures are not based on perceptions of uncertainty related to individual task environment elements, but of the environment in general. Both measures have been subjected to investigations of construct validity by other researchers (Tosi, Aldag and Storey, 1973; Downey, Hellriegel and Slocum, 1975). Both measures proved adequate in terms of reliability, with some scoring modifications. Validity, however, determined by objective and perceptual criterion measures, is poor. Tosi et al. found low and inconsistent correlations between the Lawrence and Lorsch scale and objective measures of sales, income, and technological volatility. They formed, as criterion measures, indices representing the variation in sales, earnings before taxes and interest, and R&D and capital expenses over a ten year period.

Downey et al., emphasizing the perceptual nature of the perceived environmental uncertainty construct, sought to correlate both the Lawrence and Lorsch and the Duncan instruments with managerial perceptions of the number of competitors and sales and price volatility. Additionally, they also used the variation in industry output projections, prepared

by the Department of Commerce, as another criterion variable. The Lawrence and Lorsch scale was significantly correlated only with perceived sales volatility. Duncan's scale did not correlate with any of the criterion measures. Further, the two instruments, purporting to measure the same concept, are virtually uncorrelated. Downey and Slocum (1975), in an effort towards conceptual refinement, offered four sources of variation in the perception of environmental uncertainty:

1. Perceived Environmental Characteristics;
2. Individual Cognitive Processes (e.g., personality traits of the perceiver such as dogmatism, tolerance or ambiguity);
3. Behavioral Response Repertoire (i.e., past experiences of the perceiver); and
4. Social Expectations within the organization regarding uncertainty.

It is not the intent of this research to partition the variance in the perception of environmental uncertainty across these sources of variation, however, it is hypothesized that variation in the perception of uncertainty posed by Affirmative Action requirements is related to compliance, regardless of whether the perceived uncertainty is the result of individual or situational factors.

Two aspects of uncertainty due to the presence of regulators are conceptualized: uncertainty surrounding the probability of detection for non-compliance, and uncertainty resulting from the costs of detection. That is, if a firm does not believe it likely that a non-complier will be detected or, if detected the expected cost of non-compliance

is less than the cost of compliance, the motivation to comply may be lessened.

The questions designed to measure such perceptions among the respondents are presented in Exhibit 9. The items were found to be highly intercorrelated, as might be expected. Subsequently, questions 1 and 2 were reverse scored and the three items summed to form a scale. Alpha, based on the present respondents, was computed to be .61. A high score on the scale indicates a high perceived enforcement threat.

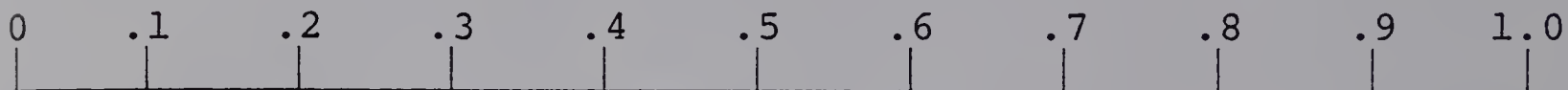
Structural characteristics. The measurement of structural characteristics of organizations has been undertaken in a number of research studies by a variety of authors. Their efforts, while diverse in terms of both conceptual and operational issues, can be classified into one of two broad methodological approaches: institutional and questionnaire (Pennings, 1973).

The institutional approach involves the assessment of written documents, e.g., policy manuals, job descriptions, organization charts, and interviews with officials. Its objective is to determine the intended patterns of relationships that have been designed into the focal organization. This approach has been employed by the Aston group, in their investigations, among others (Pugh et al., 1968; Inkson, Pugh and Hickson, 1970; Child, 1972; Blau and Schoenherr, 1971; Holdaway, Newberry, Hickson and Heron, 1975).

## EXHIBIT 9

Perceived Enforcement Threat  
Questionnaire Items

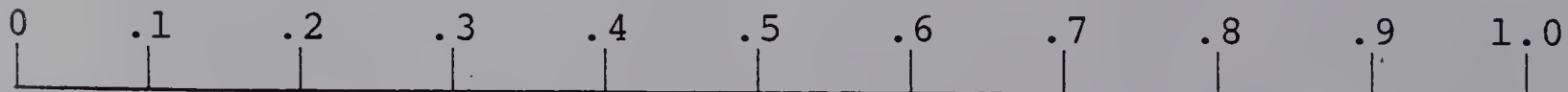
QUESTION 1: What is the probability that a federal contractor about the size of this organization and in this geographic region could fail to comply with Affirmative Action Requirements for a 12-month period and not be detected by the contracting agency?



QUESTION 2: What is the probability, if detected as a violator of Affirmative Action Requirements, that the costs involved in conciliation, legal defense, goodwill loss and so on might be less than the costs the firm would have incurred meeting the requirements?



QUESTION 3: What is the probability that a firm, detected as a violator of Affirmative Action Requirements, will have its contract terminated and be declared ineligible for future awards?



The questionnaire approach relies on survey interviews with organization members, at various hierarchical levels. Its objective is to establish the existence of structural properties based on the perceptions of the members. For instance, a sample of production workers will be surveyed to determine their perceptions regarding how many rules govern their work behavior, as a measure of formalization. Similarly, a survey among supervisors measuring their perceptions of how frequently they participate in decisions, as a measure of centralization, has been employed. This approach has been employed in the work of Hage and Aiken discussed earlier (Hage and Aiken, 1967; Aiken and Hage, 1970; Hage and Dewar, 1973).

Both approaches have their advantages and disadvantages. The institutional approach produces fairly concrete data, that is, based on written documents. However, such information can be obsolete or extraneous to organizational functioning, subsequently misleading the researcher. The survey or questionnaire approach is capable of measuring the actual relationship and patterns of interaction within the organization but are subject to the same sources of variation as the manager perceiving environmental uncertainty, discussed in the previous section.

This investigation has employed institutional measures for two reasons: one conceptual and one methodological.

Conceptually, this investigation seeks to compare organizations, not individuals within organizations. Hence, the least ambiguous measurement approach is selected to facilitate interorganizational comparisons. Further, the research will focus on the adaptive behaviors initiated by the management. The choice of adaptive behavior and its implementation plan will be influenced by the managers' perceptions of the organization's structure, whether those perceptions are shared by other members or not. It is believed that institutional measures will be more reflective of the manager's structural perceptions than would survey measures.

Methodologically, it is believed that any attempt to interview employees, once the research topic is identified, i.e., affirmative action, would have had an adverse effect on cooperation. Restricting the data collections to documents and members of the management elite was expected to minimize management's apprehension, and subsequently, the refusal rate.

Specific measures are discussed in the remaining portion of this section. The hypothetical relationships between these measures and compliance will be discussed in the next chapter.

Formalization. In this investigation, formalization can be thought of as the extent to which rules, procedures, instructions and communications are written.

Pugh et al. (1968), in an important investigation of structural characteristics, identified the major dimensions of structure through a factor analysis of data collected from 52 work organizations in the English Midlands. Their primary dimension, labeled structuring of activities, is of relevance here. This factor actually captures several structural characteristics, including formalization, specialization, standardization and vertical span.

Inkson, Pugh and Hickson (1970) developed an abbreviated instrument to measure the major structural dimensions and replicated their previous work with the shortened version. One subscale in the structuring of activities measure, formalization of role definition, is consistent with the present conceptualization of formalization and has been utilized in this investigation.

Data relevant to an assessment of reliability and validity are based on the structuring of activities factor as a whole, and therefore not specific to the subscale of interest. However, the reliability of the factor as a measurement device, along with the content validity of the subscale, provides sufficient justification for the instrument's use.

The shortened form was designed for an interview with the chief executive or an appropriate substitute, which is consistent with the needs of the present investigation. The shortened form was administered to forty organizations, simi-



lar to those in the original study. Before the shortened version was administered to the new sample, the data collected in the earlier investigation by means of the longer instrument were used to compute short scale scores. The correlation between the short and long version scores among the original sample of 52 organizations was .97.

Item analysis, carried out using the general biserial correlation coefficient, yielded coefficients of .65 in the first study and .71 in the second, for the structuring of activities factor.

The original data were collected during 1962-64, the later study, using the shortened version, was administered during 1967-68. Fourteen of the forty organizations in the later study were also subjects in the earlier investigation. The correlations on these two sets of scores between the fourteen organizations was .87. This is assumed to be a reasonable measure of test-retest reliability.

Theoretical predictions of the relationship between structuring of activities: size and workflow integration, were supported in both investigations.

The subscale items each have face validity in light of the conceptual framework. Additionally, while the items do not represent an exhaustive list of all possible written documents, the items do represent a reasonable sample of such a list. Subsequently, the subscale items are believed to possess content validity.

## EXHIBIT 10

## Items and Scoring for the Formalization Measure

Are the following documents available?

SCORING

- F1. Written contracts of employment:  
 Not Available=0  
 Available=1
- F2. Information booklets given to:  
 (An information booklet covers a general topic or topics, such as employment conditions or safety. It is not specific to a job, but can be specific to a topic, e.g., pensions.)  
 None=0  
 Few Employees=1  
 Many=2  
 All=3
- F3. Number of information booklets:  
 None=0  
 One=1  
 Two=2  
 Three=3  
 Four or More=4
- F4. Organization chart given to:  
 None=0  
 Chief Executive Only=1  
 Chief Executive Plus One Other Executive=2  
 Chief Executive Plus Most/All Department Heads=3
- F5. Written operating instructions:  
 Not Available to Direct Worker=0  
 Available to Direct Worker=1
- F6. Written terms of reference or job descriptions for direct workers:  
 Not Provided=0  
 Provided=1
- F7. . . . for line (workflow) subordinates:  
 Not Provided=0  
 Provided=1
- F8. . . . for staff (other than line subordinates):  
 Not Provided=0  
 Provided=1

## EXHIBIT 10--Continued

SCORING

- F9. . . . for chief executive:  
Not Provided=0  
Provided=1
- F10. Manual of Procedures (or standing orders):  
Not Available=0  
Available=1
- F11. Written statement of policies (excluding minutes of governing bodies):  
Not Available=0  
Available=1
- F12. Written workflow (production) schedule:  
Not Available=0  
Available=1
- F13. Written research program (listing intended research) and/or research reports (reporting work done):  
Not Available=0  
Available=1

The items were scored according to the following schedule to form a formalization score. The larger the score, the greater the formalization of the subject organization.

Complexity. Complexity as a variable has three commonly recognized components: horizontal differentiation, vertical differentiation, and spatial dispersion (Hall, 1977, p. 132).

The latter component refers to the physical separation of the subunits such as field offices or multi-plant manufacturers. It is of no concern here because individual affirmative action plans must be developed for each facility. In effect, the requirements treat the contractor's subunits as individual organizations.

Horizontal differentiation refers to the subdivision of tasks within the organization and can be thought of as specialization or the division of labor.

Complexity, then, increases as the number of occupational specialties increases, and as the amount of training required for the specialties increases. Two measures were used in the assessment of this organizational characteristic, both of which have been employed by previous researchers (Hage and Aiken, 1967; Blau and Schoenherr, 1971).

Vertical differentiation captures the notion of organizational height, that is, the depth of the hierarchy. Several researchers have measured this component of complexity in similar ways. All of the measures address the issue

of the number of hierarchical levels that exist within the firm (Pugh et al., 1968; Hall et al., 1967).

Both of these components of complexity affect the organization's efforts of control, coordination and communication. These activities, in turn are expected to influence the ability of the organization to adapt to regulatory constraints (see Exhibit 11).

#### EXHIBIT 11

##### Complexity Measures

- C1. The number of job titles defined within the organization, excluding different grades within an individual job title (specialization).
- C2. The proportion of job titles that require a college degree or post secondary technical training (professionalism).
- C3. The number of levels in the deepest division or subunit of the organization (vertical differentiation).

Centralization. Centralization defines the locus of authority, within the organization, to make decisions.

Operational definitions, formulated by various researchers, are quite diverse, ranging from the extent of delegation regarding certain specific decisions (Blau and Schoenherr, 1971) to the ratio of senior executive monetary compensation to the total organizational compensation (Whistler, 1964).

Negandhi and Prasad (1971, p. 205) present a decentralization index they developed for use in their comparative investigation of management practices in five countries. The index is composed of nine items, most of which seek to iden-

tify the composition of the decision making group regarding a particular policy decision. This is not dissimilar to Blau and Schoenherr's measure, although the former seems more content valid.

The instrument was employed, with a minor modification, by Reimann (1973). He labeled it a centralization index and eliminated one item, the number of levels of the hierarchy, due to its low correlation with the total index score ( $r = -.16$ ). He reports the lowest correlation of any item with the index as .56, which indicates reasonable homogeneity.

Construct validity is scant for all centralization measures, including Reimann's. However, in an empirically derived factor in which a delegation of authority measure loaded highly (.88), the centralization index had a strong negative loading (-.92) which, theoretically, is consistent.

The items themselves possess face validity in light of the conceptualization of centralization. Additionally, the selection of items representing various types of decisions appears valid from a content perspective.

The index score is computed by averaging the rankings obtained for all eight items. The higher the average, the more centralized the organization (see Exhibit 12).

Compliance: the dependent variable. The dependent measure, Affirmative Action compliance, is the result of a subjective evaluation on the part of a contract compliance officer.

## EXHIBIT 12

## Items and Scoring of the Centralization Index

	<u>SCORING</u>
C1. Locus of Decision Making (Major Policies)	
a. Broad representation of executives and stockholders	1
b. Top-level executive committee	2
c. Chief executive or owner only	3
C2. Locus of Decision Making (Sales Policies)	
a. Executive committee with representation of all functional areas	1
b. Chief executive with the help of sales manager	2
c. Top executive/owner only	3
C3. Locus of Decision Making (Product Mix)	
a. Executive committee with representation of all functional areas	1
b. Chief executive with the help of production/marketing manager	2
c. Chief executive/owner only	3
C4. Locus of Decision Making (Standard Settings in Production)	
a. Executive committee with representation of all functional areas	1
b. Chief executive with production manager-production manager only	2
c. Chief executive only	3
C5. Locus of Decision Making (Manpower Policies)	
a. Executive committee with representation of all functional areas	1
b. Chief executive with personnel manager	2
c. Chief executive only	3
C6. Locus of Decision Making (Selection of Executive Personnel)	
a. Executive committee with representation of all functional areas	1
b. Chief executive with personnel manager	2
c. Chief executive only	3

## EXHIBIT 12--Continued

SCORING

- C7. The Degree of Participation in Long-Range Planning
- a. All levels of executives--top, middle, and lower 1
  - b. Top level with some representation of middle-level executives 2
  - c. Chief executive/owner only 3
- C8. The Degree of Information Sharing
- a. Considerable--general memos on all major aspects of company's operation 1
  - b. Fair--special reports on company's affairs distributed to only top-level and middle-level executives 2
  - c. Little--all information kept secret from everybody except a few top-level executives 3



These officers are federal employees operating out of any one of several contracting agencies with compliance responsibilities over particular suppliers of goods and services. Compliance responsibility is distributed across federal agencies on the basis of Standard Industrial Classifications. For example, the General Services Administration oversees suppliers of furniture and fixtures, paper, electric and gas utilities, railroad equipment and so on. The Veterans Administration is responsible for suppliers of drugs, pharmaceuticals, soaps, detergents and cosmetics.

The present investigation necessitated the development of a compliance measure. In order to construct such a measure, a multiple item questionnaire, composed of behaviors a contracting organization might undertake in an effort to meet its compliance obligation, was developed. The items were prepared from an analysis of documents written to guide the compliance officers in their evaluation of contractor efforts, and from personal interviews with the Directors of Contract Compliance in the New England regional offices of two federal agencies.

The questionnaires were distributed to the compliance officers in each of the ten regional field offices of one federal agency with broad compliance responsibilities for a variety of manufactured products. A total of fifty useable questionnaires were returned, representing a response rate of approximately 45%.

The instrument itself sought a ranking on a seven-point, Likert type, scale as to how important each item would be in evaluating a contractor's compliance effort. The questionnaire items, the means, standard deviations, and the rating scale are presented in Table 1. The full questionnaire, in its original form, is contained in Appendix I.

The mean scores on the items indicate that each item has some relevance in evaluating a contractor's compliance effort. Furthermore, the list of items is believed to be fairly exhaustive of possible contractor behaviors. An open-ended item providing an opportunity for respondents to add other relevant activities yielded no new evaluative criteria.

In an effort to discover the underlying dimensions of a good faith compliance effort, these data were factor analyzed using Rao's canonical factoring technique. A varimax axis rotation was performed to facilitate interpretation of the extracted factors. The resulting factors and their correlations with the original items are presented in Table 2.

The factor analysis led to the identification of six new variables which, collectively, account for 88% of the variance in the correlation matrix of the original thirty-three items. The new variables are:

Factor 1--Increasing Minority Applicant Flow: Composed of items such as advertising in minority oriented media, contacting employing referral agencies like

TABLE 1

Contract Compliance Officer Questionnaire  
Items, Means, and Std. Deviations  
(n = 50)

VARIABLE #	MEAN	S.D.
1. Display of contractor's EEO policy statement in work areas	5.0	1.8
2. Availability of the contractor's AAP for employee review (with customary deletion of goals and timetables)	4.7	1.6
3. Explanation of contractor's EEO policy during the new employee orientation procedure	5.9	1.1
4. Discussion of EEO matters, such as program success, in the contractor's publications (house organ, newsletter)	5.4	1.4
5. Availability of career development counseling to all employees	6.3	0.9
6. Evidence that the contractor has encouraged minority employees to refer other minorities to the contractor for possible employment	6.1	0.9
7. Evidence that the contractor's EEO coordinator has the authority to review all hiring and promotion decisions	6.5	1.0
8. Frequency of preparation of written reports evaluating progress toward AAP goals	5.8	1.2
9. Involvement of the contractor's line supervisors in the establishment of AAP hiring goals	6.3	1.0
10. Inclusion of AAP progress in the performance evaluation of line supervisors	6.4	0.9
11. General awareness of the EEO coordinator with current problems, effectiveness of programs, progress toward goals, and other matters related to the contractor's compliance obligations	6.5	0.8
12. Evidence that the contractor treats violations of EEO policy with the same severity as violations of other corporate policies	6.7	0.8
13. Institution of minority oriented training programs	5.9	1.5
14. Explanation of tuition refund and training programs during new employee orientation procedure	5.3	1.5
15. Posting of promotion opportunities within work areas	6.5	1.0

TABLE 1--Continued

VARIABLE #	MEAN	S.D.
16. Direct notification to all eligible employees of promotion opportunities as vacancies occur	6.0	1.5
17. Restructuring of traditional jobs in an effort to broaden the incumbent's work skills	5.7	1.4
18. Institution of a job rotation program in an effort to broaden employee work skills	5.6	1.2
19. Conversion of the contractor's seniority system from a department to a plant wide seniority system	6.1	1.3
20. Inclusion of predominantly minority colleges and universities in the contractor's campus recruitment activities	6.0	1.4
21. Participation in Job Fair and Career Day programs at area high schools	5.0	1.2
22. Placement of employment advertising in minority oriented print and broadcast media	5.2	1.6
23. Personal contact, by the EEO coordinator, with employment referral agencies such as the Urban League or Job Corps	6.1	1.3
24. Retention of applications from unhired minorities to be reviewed as vacancies occur in the future	5.9	1.6
25. Specification of position, pay, qualifications, and other relevant information when notifying referral agencies of job vacancies	5.7	1.3
26. Institution or support of a transportation program or car pooling service if the contractor's facility is not adequately served by public transportation	5.3	1.4
27. Willingness of the contractor to conduct tours of the plant and facilities for school groups and referral agency representatives	4.7	1.5
28. Participation by the top facility executive (CEO, plant manager) in the EEO training and orientation sessions of line supervisors	6.5	0.9
29. Existence of a formal, written job description for most every job at the facility	5.7	1.1
30. Evidence that a formal EEO complaint procedure has been established within the facility	5.9	1.3
31. Appointment of key management personnel for service on Community Relations Board or similar organizations	4.8	1.6

TABLE 1--Continued

VARIABLE #	MEAN	S.D.
32. Sponsoring a formal on-the-job training program	5.8	1.4
33. Evidence that the CEO or plant manager is seriously committed to EEO policy	6.7	0.8

## RATING SCALE

Respondents were asked to rate each of the above items as to their importance in evaluating the contractor's compliance effort. The Likert type scale presented in the questionnaire is reproduced below.

Relatively  
Unimportant

Very  
Important

1	2	3	4	5	6	7
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TABLE 2

## Factors and Loadings after Varimax Rotation of Compliance Officer Responses

VARIABLE NUMBER	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
	INCREASING MINORITY APPLICANT FLOW	TOP MANAGEMENT SUPPORT	SEEKING COMMUNITY SUPPORT	INFORMING THE EMPLOYEES	BROADENING INCUMBENT WORK SKILLS	INTERNALIZING THE EEO POLICY
1	.1998	.3150	.2780	.6427	.0706	.1990
2	.1264	.2855	.0204	<u>.5234</u>	-.2749	.3347
3	.1542	.0385	.1305	<u>.6243</u>	-.0640	.2674
4	.0899	.0028	.3805	<u>.7309</u>	.1578	.0380
5	<u>.4941</u>	.0060	.2458	<u>.4452</u>	.0795	.1876
6	.2084	.1656	.1014	.0662	.2173	.6334
7	-.1175	.1429	.4137	.3146	-.1432	<u>.1139</u>
8	.1141	.4997	-.0134	.3132	.2456	.3952
9	.2755	<u>.6244</u>	.0582	.1032	-.1034	.3895
10	.0678	<u>.2984</u>	.2951	.1732	.1703	<u>.4970</u>
11	.1624	.5381	.0305	.3755	.0729	.2745
12	.0624	<u>.1479</u>	.1430	.2057	-.0386	.8235
13	.0797	-.0463	.1045	-.0534	.2084	<u>.1054</u>
14	.2807	-.0348	.4590	.2864	.0966	.0664
15	-.0311	.0837	.2708	<u>.5781</u>	.4466	.0193
16	.1322	-.0614	.3597	.0737	.2906	.4671
17	.2023	-.0466	.0351	.2074	.6377	<u>.0025</u>
18	.0413	.0775	.0204	-.0867	<u>.8541</u>	.1501
19	-.0361	.0680	-.0122	-.1674	<u>.2145</u>	.0301
20	<u>.7128</u>	.0747	.4117	.1331	-.0521	.3776

TABLE 2--Continued

VARIABLE NUMBER	FACTOR 1 INCREASING MINORITY APPLICANT FLOW	FACTOR 2 TOP MANAGEMENT SUPPORT	FACTOR 3 SEEKING COMMUNITY SUPPORT	FACTOR 4 INFORMING THE EMPLOYEES	FACTOR 5 BROADENING INCUMBENT WORK SKILLS	FACTOR 6 INTERNALIZING THE EEO POLICY
21	.5942	.0750	.1937	.3033	.1706	-.0259
22	<u>.4366</u>	.1601	.4867	.2654	.0853	.1662
23	<u>.6083</u>	.2473	<u>.4387</u>	.0254	.0503	.2352
24	<u>.4911</u>	.1134	<u>-.0875</u>	-.0314	.2847	.0704
25	<u>.1135</u>	<u>-.1403</u>	<u>.4321</u>	.2126	.0331	.0036
26	.0025	-.0871	.7675	.2143	.2093	.2754
27	.1620	.1370	<u>.8669</u>	.2537	.1419	.1391
28	.0169	.4984	<u>.2974</u>	-.0625	.4616	.0078
29	.2137	<u>.2418</u>	.4280	.2986	<u>-.1537</u>	.1049
30	.3663	.0804	<u>.5809</u>	.2151	-.2735	<u>.4476</u>
31	.1593	.2331	.7976	.1917	-.0084	.0767
32	.4226	-.0507	<u>.6409</u>	-.1253	-.0382	-.0659
33	<u>-.0062</u>	<u>.9127</u>	<u>.1094</u>	.0233	-.0097	.0548

the Job Corps, and recruiting at predominantly minority colleges and universities.

Factor 2--Top Management Support: Composed of items assessing the CEO's commitment to EEO policy, participation of the CEO in the EEO training of line supervisors, and the frequency of preparation of reports monitoring progress toward affirmative action goals.

Factor 3--Seeking Community Support: Composed of items such as appointment of executive personnel to community relations groups, conducting tours of the plant facilities for community members, and instituting a transportation program or an on-the-job training program.

Factor 4--Informing the Employees: Including such activities as discussing EEO matters in employee publications, posting promotion opportunities in work areas, providing career development counseling and explaining the EEO policy to new employees.

Factor 5--Broadening Incumbent Work Skills: Composed of activities designed to increase the advancement potential of employees, such as job rotation or enlargement programs, and tuition refund plans.

Factor 6--Internalizing the EEO Policy: Composed of items necessary to insure that the EEO policy is practiced within the organization. Including the incorporation of affirmative action progress in the performance evaluations of line supervisors, and disciplining infractions of EEO policy.

These new variables provide a clarified view of what types of activities compliance officers evaluate when assessing a contractor's compliance efforts. The factors are orthogonal, i.e., independent and uncorrelated. Each represents a separate dimension of compliance behavior.

Based on the individual items that make up each factor, a scoring procedure was developed. That is, each respondent firm was scored on each of the six factors. The scores were then weighted and summed to form an overall score which serves as the dependent measure. The weights applied



to each factor score were formed by averaging the mean scale scores of the items which loaded most heavily on each factor (see Table 1). The weighting procedure was designed to acknowledge the fact that some factors are considered more important than others by the compliance officers. The items and scoring procedure for each factor are presented in Exhibit 13.

The reliability of the measure when applied to the current sample of firms was evaluated by item-total correlations. The biserial correlation of each item with the total compliance score is presented in Table 3.

Based on the correlations in Table 3, five items were eliminated from the score computations of the subject firms. The five items excluded due to low correlations were:

Item 1.5: Are the applications of unhired minority members retained and reviewed as vacancies occur?

Item 3.2: Do key management personnel serve on community relations boards or similar organizations?

Item 3.3: Is there an on-the-job training program at the facility?

Item 4.5: Is the contractor's affirmative action plan (AAP) available for employee review?

Item 5.1: Has the contractor experimented with a job enlargement or job rotation program?

Item 1.5 had no variation across the current sample of firms, i.e., all firms retain applications of unhired job applicants. Items 3.2, 3.3, and 5.1 represent activities that could be undertaken for a variety of reasons other than

## EXHIBIT 13

## Items and Scoring of the Compliance Measure

SCORINGFACTOR 1: Increasing Minority Applicant Flow

- 1.1 Have predominantly minority colleges, universities, and vocational schools been included in campus recruitment activities? Yes=1  
No=0
- 1.2 Has the EEO coordinator contacted employment referral agencies such as Job Corps or Urban League? Yes=1  
No=0
- 1.3 Has the contractor participated in Job Fair or Career Day programs at area high schools? Yes=1  
No=0
- 1.4 Has employment advertising been placed in minority oriented print and broadcast media? Yes=1  
No=0
- 1.5 Are the applications of unhired minority members retained and reviewed as vacancies occur? Yes=1  
No=0

FACTOR 2: Top Management Support

- 2.1 Are the contractor's line supervisors involved in the establishment of AAP hiring goals? Yes=1  
No=0
- 2.2 How frequently are written reports evaluating progress toward AAP goals prepared? Annually=0  
Semi-Annually=1  
Quarterly=2
- 2.3 Does the CEO participate in the EEO training sessions for line supervisors? Yes=1  
No=0
- 2.4 How concerned is the CEO with EEO progress? High=1  
Low=0  
(A highly concerned CEO receives AAP reports, monitors progress, is familiar with problems and programs undertaken)  
(Low concern is defined as delegation of authority to implement program, not being familiar with program specifics, progress and major EEO problems at the facility)

## EXHIBIT 13--Continued

SCORINGFACTOR 2--Continued

- 2.5 How committed is the EEO coordinator to AAP progress? High=1  
Low=0  
(A highly committed EEO coordinator understands the contractor's obligations and the peculiar characteristics of the organization. Programs undertaken are results oriented.)  
(Low commitment is defined as viewing compliance as a mechanical process; actions are taken with little regard for results. AA is viewed as a data collection headache. Efforts are taken to "cover our flanks" rather than to achieve goals)

FACTOR 3: Seeking Community Support

- 3.1 Is the contractor willing to conduct tours of the facility for school groups and referral agency representatives? No=0  
Yes1=1  
Yes2=2  
(Yes1--Willing but no requests recently)  
(Yes2--Willing and have conducted tours within past two years)
- 3.2 Do key management personnel serve on community relations board or a similar organization? Yes=1  
No=0
- 3.3 Is there an on-the-job training program at the facility? Yes=1  
No=0
- 3.4 Has the EEO complaint procedure been established to deal with employees who feel they have been discriminated against? no=0  
"open door" to personnel office=1  
any more formal procedure=2
- 3.5 Do referral agency communications specify pay, position, and other job particulars? Yes=1  
No=0

FACTOR 4: Informing the Employees

- 4.1 Are EEO matters discussed in employee publications such as a house organ or newsletter? Yes=1  
No=0

## EXHIBIT 13--Continued

SCORINGFACTOR 4--Continued

- 4.2 Is the contractor's EEO policy statement posted or distributed to employees? Yes=1  
No=0
- 4.3 Is the contractor's EEO policy explained during the new employee orientation period? Yes=1  
No=0
- 4.4 Are promotion opportunities posted in the work areas? Yes=1  
No=0
- 4.5 Is the contractor's AAP available for employee review? Yes=1  
No=0
- 4.6 Is the Personnel Office willing to counsel employees on matters of career development? Yes=1  
No=0

FACTOR 5: Broadening Incumbent Work Skills

- 5.1 Has the contractor experimented with a job enlargement or job rotation program? Yes=1  
No=0
- 5.2 Has the contractor restructured any traditional jobs ("bridging")? Yes=1  
No=0
- 5.3 Is there a tuition refund program? No=0  
(Yes1--program available for salaried employees) Yes1=1  
(Yes2--program available for all employees) Yes2=2

FACTOR 6: Internalizing the EEO Policy

- 6.1 Are violations of EEO policy treated with the same severity as violations of other corporate policies? Yes=1  
No=0
- 6.2 Are minority employees encouraged to refer other minorities for possible employment? No=0  
Yes, verbally=1  
Yes, written=2

## EXHIBIT 13--Continued

SCORINGFACTOR 6--Continued

- 6.3 Is progress toward AAP goals included in the performance evaluations of line supervisors?  
(Yes1--but only if progress is conspicuously poor)  
(Yes2--AAP progress is routinely included)
- No=0  
Yes1=1  
Yes2=2
- 6.4 Are eligible employees directly notified of promotion opportunities?
- Yes=1  
No=0

TABLE 3

Biserial Correlation Coefficients of Compliance  
Scale Items with Total Compliance Score  
(n = 20)

FACTOR 1	
Increasing Minority Applicant Flow	
Item	r
1.1	.91
1.2	.63
1.3	.60
1.4	.52
1.5	----*

FACTOR 2	
Top Management Support	
Item	r
2.1	1.0
2.2	.64
2.3	.53
2.4	.31
2.5	.86

FACTOR 3	
Seeking Community Support	
Item	r
3.1	.66
3.2	.24
3.3	.02
3.4	.63
3.5	.57

FACTOR 4	
Informing the Employees	
Item	r
4.1	.82
4.2	.59
4.3	.45
4.4	.45
4.5	.08
4.6	.75

FACTOR 5	
Broadening Incumbent Work Skills	
Item	r
5.1	-.06
5.2	.50
5.3	.62

FACTOR 6	
Internalizing the EEO Policy	
Item	r
6.1	.67
6.2	.74
6.3	.82
6.4	.71

\*All twenty firms scored on this item, the retention of applications of unhired minorities for review when vacancies occur.

Affirmative Action, additionally some firms either by the nature of the work or union contracts were prohibited from undertaking a training or job modification program. Item 4.5 has been confounded to some extent by the compliance officers. Several firms reported that their AAP was available for employee review because they had been told that it was a requirement of the regulations. Additionally, such availability has been stipulated in conciliatory agreements between contractors and their compliance agency.

These items, while not useful in this study, may be valid indicators among a different sample of firms, or in a different region of the country and should be retained, and examined, in any future application of the instrument.

#### EXHIBIT 14

##### Summary Characteristics and Factor Weights of the Overall Compliance Score

FACTOR	POINT RANGE	FACTOR WEIGHT	MAXIMUM POSSIBLE SCORE
1	0-4	5.6	22
2	0-6	6.4	38
3	0-5	5.4	27
4	0-5	5.6	28
5	0-3	5.3	16
6	0-6	6.3	38
Overall Score	0-29	---	169

## B. Subjects and Procedure

Subject organizations were randomly selected from the New England Manufacturers Directory (1977) listings of the cities of Boston, Worcester, and Springfield, Massachusetts, and Hartford, Connecticut (see Appendix II).

All firms with between 100 and 2000 employees were included in the initial selection. Firms listed as divisions of out-of-state corporations were excluded.

Each of the selected organizations was contacted by telephone and qualified as being a federal contractor or subcontractor and subject to Affirmative Action requirements. The cooperation of qualified organizations was solicited, and appointments with appropriate organizational members arranged. Data were collected from a total of twenty organizations. Typically, two interviews were conducted within each subject organization: one with the chief executive officer and one with the senior personnel officer or Equal Opportunity Coordinator. The chief executive usually responded to the questions on the centralization index, some of the formalization items and the compliance questionnaire items dealing with management control. The personnel officer usually supplied the responses to most of the compliance items, the remainder of the formalization items, and the complexity measures. In some organizations, the chief executive supplied all the responses, in several others the



personnel officer was capable of answering most questions. The members of the management elite group were identified during the personal interviews. The value/attitude questionnaire was distributed to those individuals along with return address envelopes. Follow-up phone calls and letters were used in an effort to reduce non-response. The number of management elite group members varied across subject organizations, the smallest group being two and the largest being made up of ten individuals. A total of thirty-two questionnaires were returned, representing a 49% response rate.

The personal interviews required approximately one hour and fifteen minutes to conduct. However, several required over two hours to complete. The value/attitude questionnaire was reported to require approximately twenty minutes to complete.

The subject organizations represent a broad range of industries and products. Exhibit 15 presents summary characteristics of the sample group and their 4-digit Standard Industrial Classifications are in Exhibit 16.

#### EXHIBIT 15

##### Summary Characteristics of Subject Organizations

Number of Organizations = 20

Number of Employees	Annual Sale Volume (millions)
Range = 80-2200	Range = 1.8-100
Mean = 608	Mean = 29
Median = 300	Median = 12

## EXHIBIT 16

Standard Industrial Classifications of  
Subject Organizations

2911 Petroleum refining  
3315 Steel wire drawing and steel nails and spikes  
3321 Gray iron foundries  
3357 Drawing and insulating non-ferrous wire  
3423 Hand and edge tools  
3452 Bolts, nuts, screws, rivets, and washers  
3461 Metal stampings  
3462 Iron and steel forgings  
3493 Steel springs  
3511 Steam engines; steam, gas, and hydraulic turbines  
3570 Office and computing machines  
3573 Electronic computing equipment  
3599 Miscellaneous machinery, except electrical  
3611 Electric measuring instruments and test equipment  
3612 Power, distribution and specialty transformers  
3613 Switchgear and switchboard apparatus  
3622 Industrial controls  
3623 Welding apparatus  
3643 Current carrying wire devices  
3679 Electronic components and accessories  
3694 Electronic equipment for internal combustion engines  
3711 Motor vehicles  
3714 Motor vehicle parts and accessories  
3728 Aircraft parts and auxiliary equipment  
3731 Ship building and repairing  
3811 Engineering, laboratory, and scientific and research instruments  
3824 Fluid meters and counting devices  
3842 Orthopedic, prosthetic, and surgical appliances and supplies

C H A P T E R   I V  
O P E R A T I O N A L   H Y P O T H E S E S

In this chapter, the specific hypotheses to be tested during the research are presented. These hypotheses can be grouped together into three sets of relationships. First, the relationships expected between the managerial value/attitude measures and Affirmative Action compliance. Second, the relationships between the measures of organizational structure and compliance. Finally, several relationships are hypothesized concerning both sets of independent measures and compliance.

The hypotheses are presented in this fashion, and the findings, presented in the next chapter, are similarly organized.

The relationships between managerial values/attitudes and compliance are based on the average scores of the members of the management elite group on each of the attitudinal measures. This approach implicitly assumes that each member of the elite group has an equal impact on the group's decisions regarding compliance activities. This is, admittedly, an unrealistic assumption. However, a technique to establish the appropriate weighting of each individual's impact on the final decision is unavailable.

Hypotheses related to the management elite value/attitude measures are:

- H1: Favorable attitudes toward minorities will be positively related to Affirmative Action compliance.
- H2: Favorable attitudes toward government regulation will be positively related to Affirmative Action compliance.
- H3: Perceived enforcement threat will be positively related to Affirmative Action compliance.

In Chapter II, the relationships between characteristics of organization structure and innovation were discussed and a confused set of empirical findings presented. In an effort to meaningfully interpret those findings, the process of innovation was conceptualized in three stages: initiation, adoption, and implementation.

Wilson (1966), Duncan (1976), and Pierce and Delbecq (1977) have all emphasized the complexity of this process and argued that structural characteristics that support and foster the accomplishment of one stage of the process may well thwart the organization's accomplishment of some other stage. For example, an organic organization structure, exemplified by decentralized authority, informality, and being composed of a variety of diverse, highly trained members would be expected to generate more novel ideas and solutions to new situations than would a mechanistically structured organization. However, once solutions to a new situation are proposed, one must be selected and implemented into the func-

tioning of the organization in order to accomplish the innovative process. In these latter stages of the process, a centralized authority structure and a formal pattern of obligations, responsibility and accountability would be expected to facilitate adoption and implementation.

The hypothetical relationships predicted here are based on the belief that compliance with Affirmative Action requirements is more dependent on the organization's ability to adopt and implement new procedures governing the recruitment, selection, and internal advancement of human resources than it is dependent on the organization's ability to generate ideas or solutions to the problem of equalizing employment opportunities. That is, the latter stages of the innovation process are more critical with respect to Affirmative Action compliance.

A centralized decision making structure is expected to provide a unity of action within the organization (Shepard, 1967). A more specific line of authority and responsibility will reduce ambiguity associated with the implementation of new procedures.

Sapolsky (1967), in his study of innovation in department stores, found that decentralized decision-making structures frustrated the implementation of innovations in purchasing and inventory control procedures. Similarly, Corwin (1972) in a study of educational reforms in low income schools found that more innovated programs, such as

team teaching and black history courses, were implemented in schools with centralized decision making and formalized rules and procedures.

Subsequently, it is hypothesized:

H4: Centralization of decision making will be positively related to Affirmative Action compliance.

Formalization, the existence of rules and written procedures to handle decisions and work processing, is similarly expected to facilitate implementation. Formalization would be expected to clarify expectations regarding the responsibility for implementation, reduce the effect of individual resistance by establishing decision premises, and establish control procedures for monitoring implementation progress.

Radnor and Neal (1973) found that formalized procedures developed to aid implementation of operations research/management science innovations in large industrial organizations were successful.

Evan and Black (1967) also found that formalization was related to the successful adoption of staff proposals.

These findings, along with Corwin's (1972) findings mentioned above, provide a basis for the following hypothesis.

H5: Formalization will be positively related to Affirmative Action compliance.

Complexity, as a variable, can be thought of as having several dimensions, as discussed in Chapter II. In

previous empirical work, complexity has been operationalized as the number of structural units, the number of role titles and the amount of professional training required for various positions. Complexity has been positively related to innovations (Hage and Aiken, 1967; Baldrige and Burnham, 1975). The logic of such a relationship is based in the diversity of organizational members. A complex organization has large numbers of highly trained professionals with different backgrounds, values and priorities. These differences bring, to the organization, a richness of experience and a diversity of views and information with respect to problems which, consequently, leads to innovative solutions. This same diversity, however, and attendant differences in values and priorities is likely to lead to conflict during the adoption phase.

In Sapolsky's (1967) study, the complexity observed in the subject department stores, i.e., large numbers of diverse departments each with their own priorities, hindered the implementation of innovative proposals.

The logic underlying previous empirical findings is difficult to apply to the case of affirmative action. Additionally, the lack of agreement on the conceptual and operational definitions of complexity, and the interpretation of previous work has lead at least two researchers to predict different relationships. Duncan (1976), based on his interpretation of previous conceptual and empirical work, would

expect complexity to be positively related to early stages of the innovation process and negatively related to the latter stage. Pierce and Delbecq (1977) predict positive relationships between all the innovation process stages and differentiation and professionalism, the latter variables measuring dimensions of the complexity construct.

In light of this confusion, and the inability to persuasively apply the prevailing logic to the case of Affirmative Action, no specific hypothesis will be tested. The relationships between compliance and the complexity measures are viewed as an exploratory aspects of the investigation.

To this point, managerial values/attitudes and organization structure have been viewed as two sets of independent variables. In an effort to provide some methodological guidance for similar studies in the future, two additional hypotheses, focusing on the relationships between these two sets of variables will be tested.

Managerial values/attitudes can be viewed as individual characteristics which influence the motivation to comply with Affirmative Action requirements. Structural characteristics can be thought of as influencing the organization's ability to comply. That is, organization structure provides the means toward goal attainment, or organizational ends (Hage, 1965). This approach presumes that the organization and member attitudes interact to determine organizational



functioning. That is, the effect of leader attitudes on organizational processes can be enhanced or stifled by the organization structure.

Hence, the interaction hypothesis:

H6: The relationships between Affirmative Action compliance and managerial values/attitudes will be influenced by the organization structure.

In addition to the interaction hypotheses, the relative merits of each set of independent measures will be examined. Based on the findings of Hage and Dewar (1973) it is hypothesized that:

H7: Managerial elite values/attitudes will be more strongly related with Affirmative Action compliance than organization structure characteristics.

## C H A P T E R V

### RESEARCH FINDINGS AND TESTS OF THE HYPOTHESES

#### A. Relationships Between Values/Attitudes and Compliance

The correlations between the value/attitude measures employed and Affirmative Action compliance presents a confusing set of relationships, quite dissimilar from those hypothesized.

Table 4 presents summary characteristics of the measures based on all the respondents. Two measures of scale reliability are included in Table 4. The alpha coefficient, which is a measure of internal consistency, is the more common of the two. However, the alpha coefficient is strongly affected by the length of the scale. The Homogeneity Ratio is not influenced by the number of items in the scale, and is a preferred indicator of reliability for short scales (Scott, 1960). The Homogeneity Ratio can be interpreted as the average inter-item correlation between all pairs of items. The appropriate value for an adequately homogeneous scale is in the neighborhood of .33. In all the remaining tabulations the unit of analysis is the organization, not the individual. Table 5 presents the product moment correlations of the value/attitude measures with the organization's com-

TABLE 4  
 SUMMARY CHARACTERISTICS OF THE VALUE/ATTITUDE  
 MEASURES (n=32)

	ATTITUDE TOWARD REGULATIONS	ATTITUDE TOWARD MINORITIES	PERCEIVED ENFORCEMENT THREAT
Number of Items	10	7	3
Cronbach's Alpha	.85	.63	.61
Homogeneity Ratio	.38	.23	.34
Possible Maximum/minimum	50-10	49-7	30-0
Actual Maximum/minimum	50-10	48-21	27-5
Mean	24.3	26.3	21.1
Standard Deviation	10.1	6.2	4.2

TABLE 5  
 PRODUCT MOMENT CORRELATIONS: COMPLIANCE  
 WITH ATTITUDES

	Chief Executive Officers (n=8)	Senior Personnel Officers (n=13)	Management Elite Groups (n=8)	Hypothesized Relationship
Attitude Toward Regulations	-.30	.21	-.77 (p<.05)*	(+)
Attitude Toward Minorities	.78 (p<.05)	-.22	-.32	(+)
Perceived En- forcement Threat	-.21	.15	-.59 (p<.10)	(+)

\*Significance levels reported here and in the following tables are based on two-tailed tests.

pliance score. Three sets of correlations have been computed: the attitudes of the chief executive officer with compliance, the attitudes of the senior personnel officer with compliance, and the attitudes of the management elite group correlated with the compliance score.

The response rate was less than had been anticipated. Eight chief executives, representing eight of the twenty subject organizations, completed the questionnaire. Similarly, thirteen of the senior personnel officers completed the questionnaire. The management elite scores were computed by averaging the scale scores of the members of the elite group within each organization; unfortunately only the elite members of eight organizations responded. Seven of these eight organizations are the same as those whose chief executives responded. Naturally, it is difficult to conceive of an elite group that doesn't include the organization's chief executive. However, in one organization, the chief executive was so far removed from personnel decisions that the responses of the two senior personnel officers were assumed to represent the elite with respect to compliance decisions. In each of the other seven firms, the responses of the CEO were averaged in with the other senior executives of the organization.

H1: Favorable attitudes toward minorities will be positively related to Affirmative Action compliance.

A significant correlation of .78 ( $p < .05$ ) was observed between the attitude toward minority scores of the chief executives and their organization's compliance score.

That is to say, organizations with effective compliance efforts are likely to be led by CEO's who maintain favorable attitudes toward minorities.

Correlations between the attitude toward minority scores of senior personnel officers and compliance, and those of the management elite groups and the compliance scores of their organizations were not significant. In fact, these relationships were in the opposite direction of that hypothesized. In the last section of this chapter, the impact of organization structure on the correspondence between member attitudes and compliance will be discussed. The mediating effects of structure can help to clarify these relationships.

H2: Favorable attitudes toward government regulation will be positively related to Affirmative Action compliance.

This hypothesis was not supported among any of the three groups under investigation. In fact, a strong negative relationship ( $-.77$ ;  $p < .05$ ) was found between the attitudes of the management elite and the compliance score.

A high score on this scale represents a willingness to involve the government in the economic concerns of individual citizens. Individuals with a favorable attitude toward government regulation tend to favor a guaranteed minimum standard of living for each family; they also tend to favor government provided medical and dental care for all citizens, guaranteed minimum annual income for farmers, and government created jobs in hard times. In short, these individuals see

the intervention of the government into the economic decisions of individuals as legitimate, and indeed, desirable.

It was hypothesized that these individuals would perceive government regulation of the hiring practices of business organizations as legitimate, and institute an effective compliance effort.

The opposite relationship was found, however. Firms whose management elite members tended to favor government regulation were typically members of organizations with poor compliance efforts. Clearly, the attitude construct measured by the scale does not precede compliance related behaviors.

The items in the scale represent direct forms of government intervention in subsidizing or providing goods and services to the public. Affirmative Action, on the other hand, requires that private employers expend resources to benefit segments of the general population.

It is conceivable that individuals favoring government regulation would prefer to see direct cash payments, subsidized wages or government financed training programs for minority individuals in an effort to equalize employment opportunities. Affirmative Action might be seen, by these individuals, as an attempt to place the financial burden of resolving a social problem on private industry.

Data are not available to evaluate this modified conceptualization. It does appear that the construct is more complex than originally conceived. Public institutions do

have alternatives available to them in attempting to resolve social problems. The relevant attitude may not be concerned with the legitimacy of government action, as originally conceptualized, but with the method of government action.

H3: Perceived enforcement threat will be positively related to Affirmative Action compliance.

As with the attitude toward government regulation, these measures were frequently related to compliance in the opposite direction than had been hypothesized.

This attitude was measured on three probability scales; one accessing the respondent's perception as to how likely it would be that a firm could not comply and go undetected for a year, a second probability measuring the likelihood that a delay in meeting the requirements could save the firm money, and a third probability accessing the likelihood that a detected non-complier will have its contracts terminated.

It was expected that the higher the perceived enforcement threat, the more rigorous the compliance effort would be. Among the management elite groups, the opposite relationship was found ( $r = -.59$ ;  $p < .10$ ). Those organizations whose management members perceive a low enforcement threat tend to be the better compliers. The attitudes of the chief executives and the senior personnel officers are virtually unrelated to the compliance behavior of the organization.

It is interesting to note that the average perceived

probability of contract termination approaches .6 among the respondents. A relatively high probability considering such action has been taken against contractors only sixteen times since the contracts compliance program started in 1965 (Chin, 1978).

It is obvious, from these findings, that measures of the perceived enforcement threat are of little value in predicting the compliance efforts of manufacturing organizations. Two possible explanations of these unexpected findings can be posited. First, organizations may respond and comply with the regulations out of respect for legal authority, or out of the moral conviction that the goal of equal employment opportunity is just. That is, the firm may comply regardless of the contracting agency's ability to enforce the regulations. A second explanation is based on a methodological consideration. Attitudes are not likely to be stable over time; the enforcement threat perceived today is the result of several years experience, on the part of organization members, in observing the enforcement process.

In most organizations, the decisions as to compliance activities were made several years ago. It is conceivable that these decisions were made under a different perception of the rigor and effectiveness of the enforcement procedure.

Summarizing, the correspondence observed between the compliance effort and the selected attitudes of management personnel is discouraging. However, through this ex-



perience, several methodological concerns have surfaced which may provide guidance in future investigations. These issues are discussed in the next chapter.

### B. Relationships Between Organizational Structure and Compliance

Two relationships were specifically hypothesized between characteristics of organizational structure and Affirmative Action compliance. Additionally, the relationship between organizational complexity and compliance was investigated from an exploratory perspective.

Table 6 presents the correlation matrix of the structural measures, compliance and size. The unit of analysis is, naturally, the organization;  $n = 20$ . The measures are clearly inter-correlated, as expected and discussed in previous chapters. In order to properly test the hypotheses, partial correlations were computed controlling for the influences of the extraneous structural characteristics. These are presented in Table 7.

H4: Centralization of decision making will be positively related to Affirmative Action compliance.

The centralization index was negatively related to the compliance score. However, the relationship all but disappeared ( $r = -.13$ ) when the effects of other structural characteristics were controlled by means of the partial correlations. Consequently, no support for the hypothesis can be found among this subject group.

TABLE 6

PRODUCT MOMENT CORRELATION MATRIX OF THE  
STRUCTURAL MEASURES (n=20)

	CENT.	FORM.	COMPLEXITY			SIZE	
			SPEC.	PROF.	VERT.	# EMP.	SALES VOLUME
Compliance	-.37**	.73†	.39*	-.01	.18	.38*	.19
Centralization	--	-.39*	-.31**	.07	-.46*	-.18	-.24*
Formalization		--	.30**	.35*	.27	.45*	.47*
Specialization			--	-.04	.64†	.38*	.29
Professionalism				--	-.11	-.11	.32**
Vertical Differentiation					--	.38*	.34*
Number of Employees						--	.73†
Annual Sales Volume							--

†p &lt; .01

\*p &lt; .05

\*\*p &lt; .10

TABLE 7

PRODUCT MOMENT AND PARTIAL CORRELATIONS OF  
STRUCTURAL MEASURES WITH COMPLIANCE

	PRODUCT MOMENT	PARTIAL*
Centralization	-.37	-.13
Formalization	.73	.69 (p<.01)
Specialization	.39	.37
Professionalism	-.01	-.40 (p<.10)
Vertical Differentiation	.18	-.16
Size (# of Employees)	.38	-.09

\*Partials are fifth order, controlling for size and each of the other structural measures.

The presence of a centralized decision making structure was expected to provide a unified and unambiguous atmosphere for the adoption and implementation of compliance related activities. While this was not the case, such a structural characteristic may only facilitate the compliance effort when the managerial attitudes are favorable. This interaction is the subject of the following section.

H5: Formalization will be positively related to Affirmative Action compliance.

Formal organizations, with clearly defined responsibilities, procedures and policies are more effective at complying with Affirmative Action regulations. A partial correlation of .69 ( $p < .01$ ) indicates a clear and strong relationship between the compliance score and the formalization measure.

Specialization, or the division of labor, was moderately correlated with the compliance score. A partial correlation of .37, while not significant at the 90% confidence level, is reported here due to the exploratory interest in the relationship. Organizations, who due to the nature of their products and markets are capable of dividing the work into smaller, more specialized tasks appear to be more effective at Affirmative Action compliance. Such organizations would typically have more entry level jobs that require less formal training and can be learned quickly by a new employee. Similarly, specialized organizations would offer more advancement opportunities through various job grades or levels.

These factors would, logically, facilitate a compliance effort by reducing the amount of specialized training required by applicants and minimizing the training expense incurred by the employer.

Professionalism was found to be negatively related to the compliance score ( $r = -.40$ ;  $p < .10$ ). This dimension of complexity is measured as the proportion of jobs within the organization that require specialized training beyond the high school level.

The higher this proportion within an organization the more complex its recruiting process. College trained or vocationally specialized individuals are more likely to participate in regional or national employment markets. These markets are typically more competitive and require a more rigorous, and expensive, recruiting effort.

Vertical differentiation, measured as the number of hierarchical levels in the organization, was essentially uncorrelated with the compliance score ( $r = -.16$ ).

### C. Combined Relationships

The previously tested hypotheses were derived from two distinct sets of variables related to the organization's ability to adjust to its environment. The remaining analysis views the combined effect of the two sets of variables, and the relative worth of each in predicting compliance.

The hypotheses relating compliance to managerial at-

titudes were not well supported. However, the relationships among these variables are quite strong, despite their directions.

In order to test the remaining hypotheses, the strength of the relationships will be investigated; their directions will be discussed in the next chapter.

H6: The relationship between Affirmative Action compliance and managerial values/attitudes will be influenced by the organization structure.

Table 8 presents the correlations of the attitude scales and the compliance score for each manager group under investigation. If the hypothesis is supported, the strength of the relationship would be expected to change when the structural characteristics are controlled by means of partial correlations.

The relationship between the attitude toward regulations and compliance does not differ when the effects of formalization and/or centralization are controlled. This is consistent regardless of whose attitudes are studied, i.e., the management elite group, the chief executives, or the personnel officers.

Correlations between compliance and minority attitudes do appear to be influenced by structural characteristics; particularly management elite group and chief executive attitudes. Among the chief executives, a significant zero order correlation between compliance and minority attitudes is sharply reduced when formalization is controlled. This

TABLE 8

RELATIONSHIPS OF MANAGEMENT ATTITUDES TO COMPLIANCE  
CONTROLLING FOR STRUCTURAL CHARACTERISTICS

	CORRELATIONS WITH COMPLIANCE		
	ATTITUDE TOWARD REGULATIONS	ATTITUDE TOWARD MINORITIES	PERCEIVED ENFORCEMENT THREAT
MANAGEMENT ELITE GROUP (n=8)			
Product Moment	-.77 (p<.05)	-.32 (p<.10)	-.59 (p<.10)
Partial (Formalization)*	-.62 (p<.10)	-.60 (p<.10)	.20
Partial (Centralization)	-.79 (p<.05)	.09	-.45
Partial (Form. and Cent.)	-.73 (p<.05)	-.34	.39
CHIEF EXECUTIVE OFFICERS (n=8)			
Product Moment	-.30	.78 (p<.05)	-.21
Partial (Formalization)	-.20	.26	.41
Partial (Centralization)	-.12	.84 (p<.05)	-.12
Partial (Form. and Cent.)	-.15	.61	.47
SENIOR PERSONNEL OFFICERS (n=13)			
Product Moment	.21	-.22	.15
Partial (Formalization)	.07	-.02	.37
Partial (Centralization)	.34	.03	.28
Partial (Form. and Cent.)	.13	.13	.45 (p<.10)

\*Controlled variables in parentheses.

indicates that the correspondence between the CEO attitude and organizational functioning is increased under formal conditions. That is to say, a formal organization relying on rules, policies and procedures as a means of controlling individual behavior, increases the influence of the chief executive's attitudes.

The opposite effect appears when the relationship between the minority attitudes of the management elite and compliance is studied. The insignificant, negative zero order correlation becomes more negative and marginally significant when the effect of formalization is controlled. In this situation, formalization apparently weakens or inhibits the correspondence between the elite attitudes and compliance.

Among all three groups investigated the relationship between the perceived enforcement threat and compliance is sharply altered when the effects of formalization, and to a lesser extent centralization, are controlled. In two of the three groups, removing the effect of formalization changes the direction of the relationship, and in all three the relationship becomes more interpretable in the expected direction.

To further investigate and interpret these results each of the three groups of attitude scores were divided at their respective medians into high and low formalization sub-groups. Table 9 presents the correlations between attitudes and compliance in more formal and less formal



TABLE 9

PRODUCT MOMENT CORRELATIONS OF MANAGEMENT ATTITUDES AND  
COMPLIANCE UNDER CONDITIONS OF HIGH AND LOW FORMALIZATION

	CORRELATIONS WITH COMPLIANCE		ABSOLUTE DIFFERENCE $ r_h - r_l $
	HIGH FORMALIZATION	LOW FORMALIZATION	
Management Elite Groups	(n=4)	(n=4)	
Attitude Toward Regulations	-.81 (p < .10)	-.92 (p < .05)	.11
Attitude Toward Minorities	-.90 (p < .10)	-.75	.15
Perceived Enforcement Threat	.77	-.76	1.53
Chief Executive Officers	(n=4)	(n=4)	
Attitude Toward Regulations	-.24	.28	.52
Attitude Toward Minorities	.63	-.63	1.26
Perceived Enforcement Threat	-.22	.65	.87
Senior Personnel Officers	(n=6)	(n=7)	
Attitude Toward Regulations	.47	-.17	.64
Attitude Toward Minorities	-.05	-.16	.11
Perceived Enforcement Threat	.63 (p < .10)	-.12	.75

organizations.

Previous observations concerning the relationship between CEO minority attitudes and compliance are again evident. However, the effect of formalization on the relationship between the perceived enforcement threat and compliance is more striking. The relationship changes direction among all three manager groups under the different degrees of formalization. The relationship is in the expected direction in the more formal organizations for both the management elite groups and the personnel officers.

None of the differences in the correlation coefficients between high and low formalization sub-groups are statistically significant at the 90% confidence level. The particularly small sample size is a critical factor in this lack of significance. Severe differences, such as the coefficients based on perceived enforcement threat among the elite groups, or minority attitudes among the chief executives, would be significant if sample sizes were increased to six instead of four organizations.

Based on the data in Tables 8 and 9, it must be concluded that the correspondence between management attitudes and compliance is influenced by the structure of the organization, particularly the degree of formalization.

The existence of rules and procedures in a formal organization would be expected to stifle the expression of individual attitudes by restraining the choice of behaviors

available to an individual. However, differences across the manager groups investigated indicate that the opposite effect is also plausible. It would appear that a formal organization provides the means of expression of manager attitudes. The formation of rules and policies could insure that the manager's attitudes dominate those of the other organization members and have the greatest influence on organizational outcomes. Which effect formalization will have appears dependent on the nature of the attitude itself and the manager group. That is, no general conclusion as to the effect of formalization seems possible. Under some conditions the correspondence is increased, under other conditions it is weakened.

H7: Managerial values/attitudes will be more strongly related with Affirmative Action compliance than characteristics of organization structure.

The combined effect of each set of variables was evaluated by means of multiple correlation.

The multiple correlation coefficient represents the relationship between the actual values on the compliance score and those values predicted from a linear regression on the group of independent variables. It can be thought of as the maximum correlation obtainable between the dependent measure and the group of independent measures.

The coefficient of determination, the  $r^2$  statistic, is a measure of the proportion of variance in the dependent measure associated with variance in the independent measures.

Table 10 displays both statistics for each manager group for each step in a stepwise regression procedure. The first variable entered is the one most correlated with the dependent measure. In each subsequent step the variable entered makes the greatest unique contribution to the  $r^2$  statistic.

Organization structure, management elite attitudes and chief executive attitudes are all effective predictors of compliance. The attitudes of the senior personnel officers are far less efficient in predicting compliance.

Management elite attitudes, taken in linear combination are the most effective. The attitude toward regulation and perceived enforcement threat are associated with 74% of the variance in the compliance score. Among the chief executives, attitudes toward minorities and regulations account for 66% of compliance score variation. The structural characteristics, excluding centralization, are equally efficient ( $r^2 = .66$ ).

The hypothesis, while supported, is limited in its practical significance due to the difficulty encountered in predicting the direction of the attitude relationships. The implications of these findings for future research are discussed in the final chapter.

TABLE 10

MULTIPLE CORRELATIONS OF STRUCTURE AND MANAGEMENT  
ATTITUDES WITH COMPLIANCE

	MULTIPLE CORRELATION	COEFFICIENT OF DETERMINATION
<u>Structure</u>		
Formalization	.73	.53
+ Professionalism	.78	.61
+ Specialization	.79	.62
+ Vertical Differentiation	.81	.66
<u>CEO Attitudes</u>		
Attitude Toward Minorities	.78	.61
Attitude Toward Regulations	.81	.66
Perceived Enforcement Threat	.81	.66
<u>Senior Personnel Officer Attitudes</u>		
Attitude Toward Minorities	.21	.05
Attitude Toward Regulations	.31	.10
Perceived Enforcement Threat	.33	.11
<u>Management Elite Attitudes</u>		
Attitude Toward Minorities	.77	.59
Attitude Toward Regulations	.86	.74
Perceived Enforcement Threat	.86	.74

## C H A P T E R   V I

### IMPLICATIONS

The findings of this investigation are believed to have implications in several areas. First, some methodological issues concerning the inclusion of managerial attitudes or values in the study of organizational functioning. Second, these findings provide empirical support for the theoretical refinement of the structure/adaptiveness relationship proposed by Duncan (1976) and Pierce and Delbecq (1977). Third, some tentative prescriptions to practicing managers are offered, and finally, the importance, in future studies, of incorporating both attitudinal and structural characteristics in assessing organizational adaptation is emphasized.

Before any attempt is made to discuss the implications, it is appropriate to examine the limitations imposed on the data by the research design and procedures.

#### A. Limitations of the Data

The generalizability of the findings is, naturally, dependent on the sample of organizations from which the data were collected. The sample of organizations was randomly selected. Refusals to cooperate were rare among qualified firms, i.e., federal contractors (see Appendix II). Subse-

quently, any bias due to non-response is considered minimal. All the firms were manufacturing organizations. The relationships between Affirmative Action compliance and the independent variables cannot be generalized outside the manufacturing sector. Affirmative Action regulations do apply to educational, financial, and other non-manufacturing organizations but the adaptive behaviors, perceptions of enforcement threat, and structural characteristics would be expected to vary considerably across these types of organizations. Two additional characteristics of the sample organizations necessitate cautious generalization of the findings: size and location. All the firms were located in the New England region of the country. The rigor of the enforcement effort and the predominant ethnic/sex/racial affected group may well vary from region to region. The findings concerning the structural characteristics would seem more generalizable than those concerning the value/attitude characteristics.

Further, by most any definition, the twenty firms represent a sample of small businesses. All were under 2000 employees and all but four had annual sales volume of under 50 million dollars. The sample was intentionally selected in this manner for two reasons. First, the design necessitated interviews with senior executives who become more difficult to reach as the size of the organization grows, hence cooperation becomes more difficult to obtain. Second, the members of the management elite become significantly more complex to

identify. The composition of the elite group shifts considerably depending on the type of decision facing the organization. Both of these problems were experienced when interviewing the largest firms in the present sample. The chief executives were unavailable and the elite group was difficult to identify. Decentralization of decision making, which usually occurs as organizations grow in size, is seen as the major source of confusion in identifying the management elite group. Senior executives in the larger organizations formulate policy directives in broader or more general terms. The actual implementation and design of specific programs or procedures is frequently delegated to a lower level executive. This individual would typically have considerable discretion in program specifics and be evaluated on the basis of performance, i.e., meeting hiring goals of avoiding agency enforcement proceedings. Such a dual decision process confounds the identification of the influence network associated with various decisions.

These problems do not render the concept of the management elite useless in larger organizations. The identification of the elite group members is likely to require more time on the researcher's part as the organization grows in size. A researcher might have to become an organizational member and observe the decision making process for a period of time before the elite members can be accurately identified.

The generalizability of these data is limited then to



small manufacturing organizations, and to a lesser extent, located in the New England area.

### B. Methodological Implications

The findings presented concerning the value/attitude measures highlight several methodological issues that must be addressed in any future investigation.

First, there is the always present problem of construct validity. Value/attitude measures, due to their abstractness, are particularly trying in this respect. The attitude toward regulation, a correlate of the more familiar liberalism construct, is clearly more complex than had been originally thought. However, its strong negative relationship with compliance would indicate it may be a relevant managerial characteristic in future investigations of organizational functioning. Social psychologists have documented the disparity of the liberalism concept when applied to economic and non-economic issues (Sears, 1954, p. 403). The results here would indicate that further refinements, acknowledging differences among economic issues, may be necessary. The lack of correspondence between the attitude toward regulation and compliance may suggest that economic issues might be usefully classified according to which sector will bear the financial burden for resolving or rectifying the economic concern.

Guidance in the selection of value/attitude con-

structs in future investigations would focus on the specificity of the construct and the organizational action being studied. The attitude toward regulation is a fairly general construct. Conversely, the attitude toward minorities is more specific to the Affirmative Action issue. The more general the construct measured, the more possible behaviors it could precipitate, and consequently, it is less likely that its behavioral implications will be adequately reflected by any single category of actions. At least among the chief executives, the more specific attitude toward minorities was more effective at predicting compliance behavior. Similarly, Hage and Dewar (1973) measured an attitude toward change and found it was an efficient predictor of the rate of program innovation in health and welfare agencies. In future investigations aimed at determining attitude/behavior correspondence, the prudent investigator should strive to measure constructs as specific to the phenomena under investigation as possible. This prescription raises serious doubts regarding the role of value measurements in future studies. Values are, by definition, more general than attitudes. While the two terms have been used interchangeably throughout this investigation the conceptual difference was discussed in Chapter II. Values may manifest themselves into quite diverse attitudes toward specific objects or actions depending on a variety of other individual characteristics, hence the researcher seeking predictive power would be well advised to

concentrate on the more specific attitudes.

A second methodological concern associated with attitude research is the timing of the data collection vis-a-vis the organizational action of interest. Attitudes are not necessarily stable over time but can be modified by experience. In the cross-sectional design, so widely employed in organizational research, the most accurate correspondence would be obtained by measuring the attitudes as closely as possible to the behavior. A time lag between behavior and attitude measurement has changed due to the observed outcome of the behaviors. The illogical correlations between the perceived enforcement threat and compliance may well be attributable to the lag, of several years, between the institution of compliance activities and the recent attitude measurement.

Frequently, the researcher may have little control over such time lags. However, being cognizant that such attitude changes may have occurred, the researcher may be able to include additional questionnaire items to evaluate the stability of the attitude in question.

The difficult question concerning time lags between the criterion behavior and the attitude measurement is how long is too long? A rule of thumb might focus on the length of time necessary to receive feedback from the environment on the behavioral adaptation in question. That is, the attitudes precipitating some adaptive behavior would be expected

to remain fairly stable until feedback from the environment led to a change in the attitude. Most of the firms in the sample receive feedback from their compliance agency annually. However, the management attitudes that precipitated a strategic decision to internally expand into a new line of business may remain stable for several years since it is unlikely that feedback, facilitating an evaluation of such a decision, could be received in less time. Once feedback has been received any attitude/behavior correspondence could also be challenged from a cognitive dissonance or self-perception theoretical basis. Consider the chief executive who, after being complimented on his firm's Affirmative Action program by the compliance officer, concludes that he must not be as racially prejudiced as he originally thought.

The cross-sectional design can never fully resolve such a theoretical dispute. But a timely data collection can weaken such alternative explanations.

A third methodological concern in investigating the effects of managerial attitudes in any organizational setting is determining whose attitudes should be measured. The elite, as defined here, seems an appropriate group to concentrate research efforts on. Of course, if the directions of the relationships between management elite attitudes and compliance had been correctly predicted, these findings would be all the more interesting. Nevertheless, these relationships are significantly strong. In this investigation, the chief

executive was asked to identify those individuals usually involved in strategic, or senior policy level decisions. Since any operational definition would include the chief executive, the capacity to separately evaluate the relationships of their attitudes to some organizational action is preserved.

Identifying the elite group members was relatively easy in these small organizations; imposing on them to complete a series of attitude scales proved considerably more difficult. A final methodological caution to future investigators is on the length of questionnaire instruments. Throughout the design of this investigation, considerable attention was expended in the selection and subsequent shortening of the attitude scales. Attitude researchers are prone to develop excessively long, repetitive item scales. While non-response is not a problem among the typical, paid college student sample, it is among practicing executives. Despite conscious efforts, the response rate in the present investigation is distressing, particularly among a subject group cordial in every other respect. It is important that attitude scales be concise, and their content as intriguing as possible in order to obtain some reasonable level of cooperation.

### C. Theoretical Implications

The structural variables provide support for theoretical refinement rather than methodological guidance.

An innovation has been defined as anything new to the focal organization, regardless of how common it may be to other organizations or the environment at large. The design and implementation of a computer based inventory control system might well be an innovation to the adopting organization, despite the fact that such systems have existed in other organizations for some time.

Innovation has further been conceptualized as a three stage process: initiation and generation of ideas, adoption of a course of action or solution, and implementation. Duncan (1976) and Pierce and Delbecq (1977) both have identified the dilemma facing those responsible for organizational design. The organic form of organization which is less formalized, less centralized, and composed of diverse professional members is appropriate to the initiation stage of the innovative process. The lack of defined roles and the diversity of training and past experiences foster the search for new or different ways of functioning. However, once ideas are generated, a more mechanistic or bureaucratic structure would be expected to facilitate the adoption and implementation stages. More formal role definition and accountability would facilitate coordination of implementation activities and reduce conflict among members.

The findings concerning the relationship between formalization and Affirmative Action compliance empirically support this refined view of the innovation process. A strong,

positive relationship was found among these variables indicating that more formal organizations were better compliers.

The adaptation to Affirmative Action regulations requires changes, or innovations, in the personnel function of the organization. These changes, however, are well known and, consequently, the initiation phase is not dominant; the adoption and implementation phases are more critical. The opposite emphasis may be required in an organization whose environment is increasingly competitive. The adaptation may require process or input modifications aimed at reducing costs. Here the generation of ideas may be most critical in a successful adaptation.

The contingency view of organizations is based on the notion that there is no best way of designing and managing organizations. That is, organization structure and management practices depend on the situation, the situation being defined by the technology, the environment, and the size of the organization (Hrebiniak, 1978, p. 108). These data contribute to the empirical base supporting contingency views. It appears that the types of demands made upon the organization by task environment actors will have implications for structural design.

The importance of each phase in the innovation process is determined by the type of environmental demand. In the event that an organization is subjected to similar demands by its various task environment actors an overall

structural design can be conceived. However, organizations are subjected to diverse demands from their respective environments. As the diversity of demands increases so does the complexity and the uncertainty in the environment. Lawrence and Lorsch (1967) suggest that organizations facing uncertain environments must differentiate their structure; that is, vary the structure across subunits. Hence, a mechanistic manufacturing division could be used to implement product design modifications conceived in an organic, or more loosely structured, research and development department.

#### D. Implications for Practicing Managers

The ability to differentiate structure is a critical factor in deriving the implications of this research to practitioners. Organizations facing simple/stable environments are likely to be formally structured already. Adaptation to Affirmative Action should not be problematic to such organizations. What action can be taken by a practicing manager of a firm, which either due to its technology or other environmental demands, can't formalize? These data indicate that efforts taken to formalize the personnel function may lead to a better compliance adaptation. The formulation of rules and procedures governing job advertising and recruitment activities, written disposition of each applicant's interview experience, the centralization of hiring decisions, concise assignment of responsibility for Affirmative Action



programs, and the written definition of jobs and promotion criteria are all actions expected to facilitate the compliance effort.

For example, consider a job shop manufacturing firm. Customers demand particular product characteristics or specifications such that each order is unique in some way. The environment demands output flexibility, hence the manufacturing function can't be formalized. Each operative must be free to modify production procedures to fit each customer order. Such an organization would be informally structured, with a minimum of rules and written procedures to insure autonomy and flexibility at the operative level. It is proposed that differentiating the personnel function from the manufacturing function and subsequently formalizing or standardizing personnel procedures is the appropriate course of action. This would enable the organization to better adapt to Affirmative Action demands while not inhibiting the organization's ability to adapt to customer demands.

This proposal is more complex than it may first appear. Differentiating subunits increases the need for coordinating and integrating activities. Top management support would be imperative to such a modification. Management would have to negotiate conflicts between personnel and other functions, and insure that personnel procedures are followed. Additionally, the manpower planning activities of the other functional areas may have to become more timely and sophisti-

cated in order to communicate staffing needs to personnel in sufficient time for effective recruitment.

The task of identifying the necessary areas of coordination and selecting the appropriate integrating mechanism is critical. In addition to management support and planning, interdepartmental liaison roles or temporary task force teams may have to be developed (Galbraith and Nathanson, 1978, p. 66). This may require the expertise of individuals external to the organization. Particularly among small firms, an external consultant might prove to be a valuable resource.

The findings from the compliance officer survey, used to develop the dependent measure, identify a variety of other, more specific actions that could, and should, be undertaken to move the firm into compliance. These would include familiarizing the chief executive with the current status of the Affirmative Action program, documenting contact with external recruiting sources, instituting training programs, and so on. The reader is referred to Table 1 (page 68).

#### E. Future Research Directions

A fourth and final set of implications is based on the interaction of the attitude and structural variables. Both sets of variables are related to the organization's compliance effort, but under various structural conditions the correspondence between attitudes and compliance shifts

markedly. This is particularly true, across all management groups, of the relationship between the perceived enforcement threat and compliance. The perceived enforcement threat scale was developed and conceptualized as one dimension of the more comprehensive construct, perceived environmental uncertainty. Leifer (1976) found that the relationship between perceived environmental uncertainty and individual performance among a sample of life insurance salespeople was also mediated by structural characteristics. Particular structural characteristics were formalization and participation in decision making, i.e., a measure of perceived decentralization. In the present study the relationship between the perceived enforcement threat and a measure of organizational performance was mediated by formalization.

In addition to influencing the relationship between a perceived uncertainty measure and performance measures, formalization might be expected to influence the actual amount of uncertainty perceived in an environment. Formalized rules and procedures would be expected to "insulate" the organization from new sources of information, similarly, standardized reporting systems would be likely to screen out unexpected information received from the environment. The mean score on perceived enforcement threat scale was significantly lower among the high formalization subsample as opposed to the low formalization subsample (see Table 11).

Table 11 supports the notion that structure influ-

TABLE 11

MEAN SCORES ON PERCEIVED ENFORCEMENT THREAT  
SCALE UNDER CONDITIONS OF HIGH AND LOW  
FORMALIZATION

MANAGEMENT GROUPS	MEAN PET SCORES	
	HIGH FORMALIZATION	LOW FORMALIZATION
Chief Executives	11.5	20.7*
Senior Personnel Officers	15.8	17.9
Management Elite	12.3	22.3**

\*t = 2.1 (p < .10)

\*\*t = 4.3 (p < .01)

ences the perception of environmental uncertainty. Additionally, the relationship between such a perception and a performance measure is also influenced by the degree of formalization in the organization's structure.

Based on these findings, those of Hage and Dewar (1973), and Leifer (1976), it seems appropriate to suggest that future investigations involving determinants of organizational performance incorporate both individual and organizational characteristics. It only makes sense to treat these sets of variables as competing explanations of performance variance if they are independent of each other. Judged by these data, this is not the case. A more complete understanding of the determinants of performance may well depend on measuring both the relevant characteristics of the decision makers and the organization characteristics that define the context in which decisions are made and put into

effect.

The task of future investigators will be to determine, under what conditions, structural characteristics enhance, or thwart, the expression of decision maker attitudes.

In conclusion, this investigation contributes to our understanding of the process by which organizations adapt to environmental demands in several ways. First, the experience here highlights several methodological issues concerning the measurement of attitudinal constructs among executives. Second, empirical support for a modified contingency view of the influence of structural characteristics across various phases of an innovation process was found. Third, some guidance to the practicing managers seeking to improve the compliance effort of their organizations and avoid enforcement proceedings. Finally, a suggestion for the improvement of descriptive studies of organizational performance by broadening the scope of explanatory variables has been offered.

## BIBLIOGRAPHY

- Aiken, Michael, and Hage, Jerald. "The Organic Organization and Innovation." Sociology 5 (January, 1971):68-72.
- Alder, Franz. "The Value Concept in Sociology." American Journal of Sociology 62 (November, 1956):272-279.
- Baldrige, Victor J., and Burnham, Robert A. "Organizational Innovation: Individual, Organizational, and Environmental Impacts." Administrative Science Quarterly 20 (June, 1975):165-176.
- Becker, Howard S.; Geer, Blanche; Hage, Everett O.; and Strauss, Anselm. Boys in White: Student Culture in Medical School. Chicago: University of Chicago Press, 1961.
- Bem, Daryl. "Self-Perception: An Alternative Interpretation of Cognitive Dissonance Phenomena." Psychological Review 74 (1967):183-200.
- Bem, Daryl. Beliefs, Attitudes and Human Affairs. Belmont, Calif.: Brooks/Cole, 1970.
- Blau, Peter M., and Schoenherr, Richard A. The Structure of Organizations. New York: Basic Books, 1971.
- Brigham, John C.; Woodmansee, John J.; and Cook, Stuart W. "Dimensions of Verbal Racial Attitudes: Interracial Marriage and Approaches to Racial Equality." Journal of Social Issues 32 (1976):9-21.
- Brogden, Hubert E. "A New Coefficient: Application to Bivariate Correlation and to Estimation of Selective Efficiency." Psychometrika 14 (September, 1949):169-182.
- Brown, Martha. "Values--A Necessary but Neglected Ingredient of Motivation on the Job." Academy of Management Review 1 (October, 1976):15-23.
- Burns, T., and Stalker, G.M. The Management of Innovation. Chicago: Quadrangle Books, 1961.

- Child, John. "Organizational Structure, Environment and Performance--The Role of Strategic Choice." Sociology 6 (January, 1972):1-22.
- Chin, James. "The Difficult Role of the Compliance Officer." Equal Opportunity Forum 5:8 (May, 1978):4-5.
- Connor, Patrick E., and Becker, Boris W. "Values and the Organization." Academy of Management Journal 18 (December, 1975):550-561.
- Corwin, Ronald G. "Strategies for Organizational Innovation: An Empirical Comparison." American Sociological Review 37 (1972):441-454.
- Cyert, Richard M., and March, James G. A Behavioral Theory of the Firm. Englewood Cliffs, N.J.: Prentice-Hall, 1963.
- DeSalvio, Donald N., and Gemill, Gary. "An Exploratory Study of the Personal Value Systems of College Students and Managers." Academy of Management Journal 14 (June, 1971):227-238.
- Dill, William R. "Environment as an Influence on Managerial Autonomy." Administrative Science Quarterly 2 (1958):409-443.
- Directory of New England Manufacturers, 41st Edition. Boston, Mass.: George D. Hall Co., 1977.
- Downey, Kirk, and Slocum, John Jr. "Uncertainty: Measures, Research and Sources of Variation." Academy of Management Journal 18 (September, 1975):562-578.
- Downey, Kirk; Hellriegel, Don; and Slocum, John Jr. "Environmental Uncertainty: The Construct and Its Application." Administrative Science Quarterly 20 (December, 1975):613-629.
- Duncan, Robert. "Characteristics of Organization Environments and Perceived Environmental Uncertainty." Administrative Science Quarterly 17 (September, 1972):313-327.
- Duncan, Robert. "The Ambidextrous Organization: Designing Dual Structures for Innovation." In The Management of Organization Design. Edited by R. Kilman, L. Pondy, and D. Slevin. New York: Elsevier, 1976.
- England, George W. "Personal Value Systems of American Managers." Academy of Management Journal 10 (March, 1967):53-68.

- Emery, F.W., and Trist, E.L. "The Causal Texture of Organizational Environments." Human Relations 18 (February, 1965):21-31.
- Evan, William M. "The Organization Set: Toward a Theory of Interorganizational Relations." In Approach to Organizational Design. Edited by James D. Thompson. Pittsburgh: University of Pittsburgh Press, 1966.
- Evan, William M., and Block, Guy. "Innovation in Business Organizations: Some Factors Associated with Success or Failure of Staff Proposals." Journal of Business 40 (October, 1967):519-530.
- Festinger, Leon. A Theory of Cognitive Dissonance. Evanston, Ill.: Row Peterson, 1957.
- Fishbein, M. "The Prediction of Behaviors from Attitudinal Variables." In Advances in Communications Research. Edited by C.D. Mortensen and K.K. Sereno. New York: Harper and Row, 1973.
- Galbraith, Jay R., and Nathanson, Daniel A. Strategy Implementation: The Role of Structure and Process. St. Paul, Minn.: West Publishing, 1978.
- Guth, William D., and Tagiuri, Renato. "Personal Values and Corporate Strategy." Harvard Business Review 43 (September-October, 1965):123-132.
- Hage, Jerald. "An Axiomatic Theory of Organizations." Administrative Science Quarterly 10 (December 1965): 289-320.
- Hage, Jerald, and Aiken, Michael. "Relationships of Centralization to Other Structural Properties." Administrative Science Quarterly 12 (June, 1967):72-92.
- Hage, Jerald, and Dewar, Robert. "Elite Values Versus Organization Structure in Predicting Innovation." Administrative Science Quarterly 18 (June, 1973): 279-290.
- Hall, Richard H.; Hass, Eugene J.; and Johnson, Norman J. "Organizational Size, Complexity, and Formalization." American Sociological Review 32 (December, 1967): 903-912.
- Hall, Richard M. Organizations: Structure and Process. Englewood Cliffs, N.J.: Prentice-Hall, 1972.



- Helsel, Ray. "Value Orientation and Pupil Control Ideology of Public School Educators." Educational Administration Quarterly 7 (Winter, 1971):24-33.
- Hodgkinson, Christopher. "Organizational Influence on Value Systems." Educational Administration Quarterly 6 (Autumn, 1970):46-55.
- Holdaway, Edward P.; Newberry, John F.; Hickson, David J.; and Heron, R. Peter. "Dimensions of Organizations in Complex Societies." Administrative Science Quarterly 20 (March, 1975):37-58.
- Hrebiniak, Lawrence G. Complex Organizations. St. Paul, Minn.: West Publishing, 1978.
- Inkson, J.H.K.; Pugh, D.S.; and Hickson, D.J. "Organization Context and Structure: An Abbreviated Replication." Administrative Science Quarterly 15 (September, 1970):318-329.
- Jones, Stanley H., and Cook, Stuart W. "The Influence of Attitude on Judgments of the Effectiveness of Alternative Social Policies." Journal of Personality and Social Psychology (1975):767-773.
- Katz, Daniel. "The Functional Approach to the Study of Attitudes." Public Opinion Quarterly 24 (1960):163-204.
- Kerr, W.A. "Untangling the Liberalism-Conservatism Continuum." Journal of Social Psychology (1952):111-125.
- Kluckhohn, Clyde. "Value and Value Orientations in the Theory of Action: An Exploration in Definition and Classification." In Toward a General Theory of Action. Edited by T. Parsons and E. Shils. Cambridge, Mass.: Harvard University Press, 1951.
- Kluckhohn, Florence, and Strodtbeck, Fred L. Variations in Value Orientations. Evanston, Ill.: Row-Peterson, 1961.
- Lawrence, Paul R., and Lorsch, Jay W. Organizations and Environment. Homewood, Ill.: Irwin, 1967.
- Leifer, Richard. "Relationships Between Individual Performance and Personality, Perceived Environmental Uncertainty and Organizational Structure." Working Paper #76-24. Amherst, Mass.: University of Massachusetts, 1975.

- Levine, S., and White, P.E. "Exchange as a Conceptual Framework for the Study of Interorganizational Relationships." Administrative Science Quarterly 5 (1961): 583-601.
- Merton, Robert K.; Reader, George; and Kendell, Patricia L., eds. The Student Physician: Introductory Studies in the Sociology of Medical Education. Cambridge, Mass.: Harvard University Press, 1957.
- Mohr, Lawrence B. "Determinants of Innovation in Organizations." American Political Science Review 63 (1969): 111-126.
- Morrison, James C. "Organizational Climate, Individual Background, and Values and Personal Job Goals in a Sample of Scanlon Plans." Ph.D. dissertation, Michigan State University, 1970.
- Negandhi, Anant R., and Prasad, S. Benjamin. Comparative Management. New York: Appleton-Century-Crofts, 1971.
- Ondrak, D.A. "Socialization in Professional Schools: A Comparative Study." Administrative Science Quarterly 20 (March, 1975):97-155.
- Osborn, Richard, and Hunt, James. "Environment and Organizational Effectiveness." Administrative Science Quarterly 19 (June, 1974):231-245.
- Pennings, Johannes. "Measures of Organizational Structure: A Methodological Note." American Journal of Sociology (1973).
- Pierce, Jon L., and Delbecq, Andre L. "Organization Structure, Individual Attitudes and Innovation." Academy of Management Review 2 (January, 1977):27-37.
- Porter, Lyman W., and Lawler, Edward E., III. "Properties of Organization Structure in Relation to Job Attitudes and Behavior." In Readings in Organizational Behavior and Human Performance. Edited by L.L. Cummings and W.E. Scott. Homewood, Ill.: Richard D. Irwin, 1969.
- Pugh, D.H.; Hickson, D.J.; Hinings, E.R.; and Turner, C. "Dimensions of Organization Structure." Administrative Science Quarterly 13 (June, 1968):65-105.
- Radnor, Michael, and Neal, Rodney. "The Progress of Management Science Activities in Large U.S. Industrial Corporations." Operations Research 21 (1973):427-450.

- Reimann, Bernard C. "On the Dimensions of Bureaucratic Structure: An Empirical Re-Appraisal." Administrative Science Quarterly 18 (December, 1973):462-476.
- Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco, Calif.: Jossey-Bass, 1968.
- Sapolsky, Harvey M. "Organizational Structure and Innovation." Journal of Business 40 (October, 1967):497-510.
- Schein, Edgar H. "Organizational Socialization and the Profession of Management." In Readings in Managerial Psychology. Edited by H. Levitt and L. Pondy. Chicago: University of Chicago Press, 1973.
- Scott, W.A. "Measures of Test Homogeneity." Educational and Psychological Measurement 20:4 (1960):751-757.
- Scott, W.A. "Attitude Measurement." In The Handbook of Social Psychology, Volume II. Edited by Gardner Lindzey and Elliot Aronson. Reading, Mass.: Addison-Wesley, 1954.
- Sears, David O. "Political Behavior." In The Handbook of Social Psychology, Volume V. Edited by Gardner Lindzey and Elliot Aronson. Reading, Mass.: Addison-Wesley, 1954.
- Senger, John. "Managers' Perceptions of Subordinates' Competence as a Function of Personal Value Orientations." Academy of Management Journal 14 (December, 1971):415-423.
- Shepard, H.A. "Innovation-Resisting and Innovation-Producing Organizations." Journal of Business 40 (October, 1967):470-477.
- Sikula, Andrew F. "Values and Value Systems: Relationship to Personal Goals." Personnel Journal 50 (April, 1971):310-312.
- Simon, H.A. Administrative Behavior. New York: Macmillan Publishing, 1965.
- Spranger, E. Types of Men. Translated by P.J. Pigors. New York: Johnson Reprint Corp., 1966.
- Stigler, George J. "The Theory of Economic Regulation." The Bell Journal of Economics and Management Science 2 (Spring, 1971):3-21.

- Taylor, Ronald N., and Thompson, Mack. "Work Value Systems of Young Workers." Academy of Management Journal 19 (December, 1976):522-536.
- Terreberry, Shirley. "The Evolution of Organizational Environments." Administrative Science Quarterly 12 (March, 1968):141-170.
- Thompson, James D. Organizations in Action. New York: McGraw-Hill, 1967.
- Thompson, Victor. "Bureaucracy and Innovation." Administrative Science Quarterly 10 (June, 1965):1-20.
- Tosi, Henry; Aldag, Ramon; and Storey, Ronald. "On the Measurement of Environment: An Assessment of the Lawrence and Lorsch Environmental Uncertainty Subscale." Administrative Science Quarterly 18 (March, 1973):27-36.
- Vroom, Victor H. Work and Motivation. New York: John Wiley & Sons, 1964.
- Watson, John G., and Barone, Sam. "The Self-Concept Personal Values and Motivational Orientations of Black and White Managers." Academy of Management Journal 19 (March, 1976):36-48.
- Weigel, Russell H., and Newman, Lee S. "Increasing Attitude-Behavior Correspondence by Broadening the Scope of the Behavioral Measure." Journal of Personality and Social Psychology 33 (June, 1976):793-802.
- Whistler, Thomas L. "Measuring Centralization of Control in Business Organizations." In New Perspectives in Organization Research. Edited by W.N. Cooper, H.J. Leavitt, and M.W. Skelly II. New York: John Wiley & Sons, 1964.
- White, Kenneth J., and Ruh, Robert A. "Effects of Personal Values on the Relationship Between Participation and Job Attitudes." Administrative Science Quarterly 18 (December, 1973):506-513.
- Wicker, A.W. "Attitudes Versus Actions: The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects." Journal of Social Issues 25 (1969):41-48.
- Wilson, James. "Innovation in Organizations: Both Toward a Theory." In Approaches to Organizational Design. Edited by James D. Thompson. Pittsburgh: Pittsburgh University Press, 1966.

- Woodmansee, John J., and Cook, Stuart W. "Dimensions of Verbal Racial Attitudes: Their Identification and Measurement." Journal of Personality and Social Psychology 7 (1967):240-250.
- Zaltman, Gerald; Duncan, Robert; and Holbeck, Johnny. Organizations and Innovation. New York: Wiley-Interscience, 1973.

A P P E N D I X I  
QUESTIONNAIRE INSTRUMENTS EMPLOYED

PREDICTIONS ABOUT ECONOMIC AND SOCIAL PROGRAMS

The following questionnaire contains four parts, each of which is attempting to measure your attitudes and opinions.

Please take twenty to twenty-five minutes to complete the questionnaire as soon as possible and mail it in the attached postage-paid envelope. Thanks for your help.

Part I

Instructions

Look at the example below. The first paragraph refers to the difficulty minorities have in finding jobs. The next two paragraphs, designated A and B, propose something that might be done about jobs for minorities. These two proposals, as well as the ones on the following pages, were gathered from many sources.

Under Paragraph A note the rating scale ranging from complete inequality to complete equality. Place an "X" at some point along the line to show how much equality you predict Proposal A would bring about.

Now read Paragraph B and place an "X" on the scale below it to show how much equality you predict Proposal B would bring about.

After you mark the example, continue on and make your predictions about the other proposals.

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Example

The lack of equality between minorities and non-minorities in regard to finding jobs is widespread. Opinion concerning the best solution is essentially divided in two ways.

- A. One group holds that the only reasonable means of getting minority citizens into the labor force is by providing funds to support job training programs for all who wish to participate. Those in favor of this position maintain that once the minority is trained to perform some job efficiently, he will be readily accepted into the work community and no further steps will be needed. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality                  Some Inequality                  Some Equality                  Complete Equality  
/                  /                  /                  /                  /                  /                  /

---

- B. Another group maintains that legislation should be enacted to enforce an "industrial employment quota" based on the percentage of an area's population that is composed of minorities; i.e., if one-tenth of an area's population is minority then one-tenth of all new industrial hirings in that area would be legally required to go to minority members. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality                  Some Inequality                  Some Equality                  Complete Equality  
/                  /                  /                  /                  /                  /                  /

---

1. One of the reasons for the lack of effective programs to meet problems in minority areas is the inequality of minority representation on community advisory and planning committees. There are two ways to improve this situation.

- A. Minority members of the community could be encouraged to learn more about community affairs so that they will be qualified to participate on such committees. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality                  Some Inequality                  Some Equality                  Complete Equality  
/                  /                  /                  /                  /                  /                  /

---

- B. Each committee should have on it a certain number of minority citizens from the community regardless of their qualifications. These new members could become acquainted with methods of solving problems during their service on the committee. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality                  Some Inequality                  Some Equality                  Complete Equality  
/                  /                  /                  /                  /                  /                  /

2. One aspect of inequality between minorities and non-minorities is seen in the fact that only a small percentage of the eligible minority voters actually vote. What is the best way to increase the proportion of minority voters?

A. One plan is based on minority initiative. This calls for training programs to impress on minority citizens the need for personal responsibility as an American citizen, including the responsibility to vote. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /

B. Another plan is based on making it easier and safer for minority citizens to vote. For example, extra polling places would be located in minority neighborhoods and instructions about the use of voting machines would be provided at the polls. The secret ballot would be protected by minority poll watchers. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /

3. Inequality is evident in those labor unions where only a very small percentage of overall membership is composed of minorities and only a few of each year's new members are minorities. Opinions differ as to how this may be improved.

A. One plan is to require labor unions to admit a fair proportion of minorities each year, even though at first they may not meet the Unions' usual requirements. Training of such members might continue after admission to union membership. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /

B. The Unions say that all employees are first hired as "helpers" and after they gain the requisite skills of the particular trade, they are invited into the Union. According to the Unions, they will increase the number of minorities who are hired as helpers and any minority worker who improves his skills enough to meet the same standards as everyone else will be offered membership. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /

4. One manifestation of the inequality between minorities and non-minorities is found in the difficulty minorities experience in finding jobs. There are two general possibilities for overcoming this difficulty.

A. Some are of the opinion that the government must pass and enforce laws against discrimination in hiring practices. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /

B. Others argue that the only assurances that are really needed are those of educational opportunity. They say that if minorities take advantage of educational opportunity, they can attain equal economic status without additional legislated assurances. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality / / / Some Inequality / / / Some Equality / / / Complete Equality / / /



5. One aspect of the inequality existing between minorities and non-minorities is the difficulty experienced by minorities in attempting to find appropriate housing. There are two points of view as to how conditions should be improved.

A. Some maintain that a feeling of personal pride and accomplishment is needed to solve the problem permanently. These leaders propose that minorities organize themselves by neighborhoods, thus pooling their financial resources and personal skills. These neighborhood groups could build new residences or improve existing ones. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality      Some Inequality      Some Equality      Complete Equality  
 /                    /                    /                    /

B. Others are of the opinion that federal funds should be made available to provide for construction of low-cost housing complexes and, also, to allow for paying rent subsidies within these complexes. Those of this opinion feel that this is the only type of program which will provide the opportunity for minority families to find suitable housing at reasonable cost. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality      Some Inequality      Some Equality      Complete Equality  
 /                    /                    /                    /

6. Private athletic clubs rarely include minority members. Two approaches to increasing the number of minority applicants admitted have been proposed.

A. One approach is to spread the word that qualified minorities will be admitted in the hope that this will encourage more minorities to achieve the qualifications normally required for club membership (specified income level, a record of civil services, etc.). How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality      Some Inequality      Some Equality      Complete Equality  
 /                    /                    /                    /

B. A second approach is to pass laws forbidding discrimination in such clubs. If a club did not accept a reasonable proportion of minorities members, it could be prosecuted. How much equality would result if this policy were put into operation? (Answer with an "X" on the scale below.)

Complete Inequality      Some Inequality      Some Equality      Complete Equality  
 /                    /                    /                    /

Part II

The following questions seek your opinion on several issues concerning the role of government in American economic affairs.

After reading each statement, place an "X" on the scale below it to indicate your opinion.

7. Should every family be guaranteed a minimum standard of living?

Yes      Probably Yes      Undecided      Probably No      No  
 /                    /                    /                    /                    /

8. In hard times, should the government invent jobs for the unemployed?

Yes      Probably Yes      Undecided      Probably No      No  
 /                    /                    /                    /                    /

9. Should farmers be guaranteed a minimum annual income?

Yes      Probably Yes      Undecided      Probably No      No  
 /                    /                    /                    /                    /

10. Is old age insurance paid by the government a good idea?

Yes      Probably Yes      Undecided      Probably No      No  
 /                    /                    /                    /                    /

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11. Should employees have the right to organize and bargain for wages?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

12. Should employees have the right to go on strike for higher wages?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

13. Should the government provide medical care for all citizens?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

14. Should the government closely regulate companies which employ thousands of workers?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

15. Should dental service be provided to all citizens at public expense?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

16. Should every capable young person be entitled to vocational training at government expense?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

17. Should all adults be entitled to a month's vacation with pay each year?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

18. Should the government take over the ownership and operation of any national industry?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

19. Do you favor a heavy tax on large incomes?

Yes      Probably Yes      Undecided      Probably No      No  
 /      /      /      /      /

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Part III

This next set of questions seeks your opinion on several racial issues.

After reading each statement, please place an "X" next to the statement that most closely reflects your opinion.

20. Do you believe that integration (of schools, businesses, residences, etc.) will benefit both whites and blacks?

- I agree strongly that integration will benefit both whites and blacks.  
 I agree on the whole that integration will benefit both whites and blacks.  
 I agree slightly that integration will benefit both whites and blacks.  
 I am undecided about whether integration will benefit both whites and blacks.  
 I disagree slightly that integration will benefit both whites and blacks.  
 I disagree on the whole that integration will benefit both whites and blacks.  
 I disagree strongly that integration will benefit both whites and blacks.

21. Who do you think should decide about desegregation: the federal government, or states and local communities?

- I strongly favor having the federal government decide about desegregation.  
 I moderately favor having the federal government decide about desegregation.  
 I slightly favor having the federal government decide about desegregation.  
 I am undecided about who should decide about desegregation.  
 I slightly favor letting states and local communities decide about desegregation.  
 I moderately favor letting states and local communities decide about desegregation.  
 I strongly favor letting states and local communities decide about desegregation.

-5-

22. Do you believe that a businessman or landlord has a right to choose whom he will deal with, even if this means refusing to deal with blacks?
- I agree strongly that the businessman or landlord has this right.  
 I agree moderately that the businessman or landlord has this right.  
 I agree slightly that the businessman or landlord has this right.  
 I am undecided whether the businessman or landlord should have this right.  
 I am slightly opposed to giving the businessman or landlord the right to refuse to deal with blacks.  
 I am moderately opposed to giving the businessman or landlord the right to refuse to deal with blacks.  
 I am strongly opposed to giving the businessman or landlord the right to refuse to deal with blacks.
23. If a black were put in charge of you, how would you feel about taking advice and direction from him/her.
- I would dislike it a great deal.  
 I would dislike it on the whole.  
 I would dislike it a little.  
 I am uncertain whether I would like to dislike it.  
 I wouldn't mind it.  
 I would like it.  
 I would be very pleased about it.
24. If you had a chance to introduce black visitors to your friends and neighbors, how would you feel about it?
- I would be very pleased about it.  
 I would like it.  
 I wouldn't mind it.  
 I am uncertain whether I would like or dislike it.  
 I would dislike it a little.  
 I would dislike it on the whole.  
 I would dislike it a great deal.
25. What is your opinion of this statement? "Although social equality of the races may be the democratic way, a good many blacks are not yet ready to assume the responsibilities that go with it."
- I strongly disagree.  
 I disagree on the whole.  
 I disagree a little.  
 I am uncertain whether I agree or disagree.  
 I agree a little.  
 I agree on the whole.  
 I strongly agree.
26. How would you feel if you were eating with a black of the opposite sex in a public space?
- I would feel extremely self-conscious.  
 I would feel quite self-conscious.  
 I would feel a little self-conscious.  
 I would feel at ease—but just barely.  
 I am uncertain whether I would feel at ease or self-conscious.  
 I would feel at ease on the whole.  
 I would feel completely at ease.
27. How do you feel about interracial marriage?
- I am strongly opposed.  
 I am moderately opposed.  
 I am slightly opposed.  
 I am undecided whether I am in favor or opposed.  
 I am slightly in favor.  
 I am moderately in favor.  
 I am strongly in favor.

28. How do you feel about it when blacks hold mass demonstrations to demand what they want?

- I am strongly in favor of such demonstrations.  
 I am moderately in favor of such demonstrations.  
 I am slightly in favor of such demonstrations.  
 I am uncertain whether I favor or oppose such demonstrations.  
 I am slightly opposed to such demonstrations.  
 I am moderately opposed to such demonstrations.  
 I am strongly opposed to such demonstrations.
- 

#### Part IV

These final questions are about affirmative action. They ask you to predict the likelihood of an event on a probability scale. For example, if you feel that there is no chance a firm could fail to comply with affirmative action requirements and go undetected, you would place an "X" near the zero side of the scale.

29. What is the probability that a federal contractor about the size of this organization and in this geographic region could fail to comply with Affirmative Action Requirements for a twelve month period and not be detected by the contracting agency?

0      .1      .2      .3      .4      .5      .6      .7      .8      .9      1.0  
 /      /      /      /      /      /      /      /      /      /      /

---

30. What is the probability, if detected as a violator of Affirmative Action Requirements, that the costs involved in conciliation, legal defense, goodwill loss and so on might be less than the costs the firm would have incurred meeting the requirements in the first place?

0      .1      .2      .3      .4      .5      .6      .7      .8      .9      1.0  
 /      /      /      /      /      /      /      /      /      /      /

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31. What is the probability that a firm, detected as a violator of Affirmative Action Requirements, will have its contract terminated and be declared ineligible for future awards?

0      .1      .2      .3      .4      .5      .6      .7      .8      .9      1.0  
 /      /      /      /      /      /      /      /      /      /      /

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Thanks very much for your time and cooperation. Please put the questionnaire in the postage-paid envelope and mail it as soon as possible.

**KENNETH E. MARINO**

CONTRACT COMPLIANCE OFFICER QUESTIONNAIRE

Please assume, as a contract compliance officer, you are about to conduct an on-site review of a contractor's facility. Before the review, you are aware that the contractor has performed a utilization analysis, based on acceptable availability computations, which indicates underutilization in several job groups, both blue and white collar. Further, the contractor has established acceptable annual goals toward correcting the situation.

There are a number of characteristics of the contractor's organization, policies, members and their behavior which you can evaluate in determining the contractor's effort in meeting the good faith compliance obligation.

The attached questionnaire contains a list of such characteristics, some of which you may consider as very important in your evaluation of the contractor's compliance efforts, other characteristics may be relatively unimportant in your evaluation.

Please rate each of the characteristics as to its importance in your evaluation of the contractor's compliance efforts.

FOR EXAMPLE: How important is

Involvement of the contractor's line supervisors in the establishment of AAP hiring goals.

Relatively Unimportant							Very Important
1	2	3	4	5	6	7	

If you feel that the involvement of line supervisors is an important indicator of the contractor's compliance effort, you would select a ranking of 4 or higher, depending on how important you feel such a characteristic is. Conversely, if you don't feel such a characteristic is important in evaluating the compliance effort, select a rating of 4 or below.

The list is, naturally, not all inclusive. Please add, and rate any other characteristics you consider important when making such an evaluation.

Please return the completed questionnaire in the self-addressed, stamped envelope provided. Thank you for your time and cooperation.

Relatively  
Unimportant

Very  
Important

1	2	3	4	5	6	7
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How important is:

RATING

1. Inclusion of the contractor's EEO policy statement in the policy manual. \_\_\_\_\_
2. Display of the contractor's EEO policy statement in work areas. \_\_\_\_\_
3. Availability of the contractor's AAP for employee review (with customary deletion of goals and timetables). \_\_\_\_\_
4. Explanation of the contractor's EEO policy during the new employee orientation procedure. \_\_\_\_\_
5. Discussion of EEO matters, such as program success, in the contractor's publications (house organ, newsletter). \_\_\_\_\_
6. Frequency of publication of EEO related items in the contractor's publications. \_\_\_\_\_
7. Availability of career development counseling to all employees. \_\_\_\_\_
8. Evidence that the contractor has encouraged minority employees to refer other minorities to the contractor for possible employment. \_\_\_\_\_
9. Designation of an executive from other than the personnel department as the contractor's EEO coordinator. \_\_\_\_\_
10. Evidence that the contractor's EEO coordinator has the authority to review all hiring and promotion decisions. \_\_\_\_\_
11. Frequency of preparation of written reports evaluating progress toward AAP goals. \_\_\_\_\_
12. Involvement of the contractor's line supervisors in the establishment of AAP hiring goals. \_\_\_\_\_
13. Inclusion of AAP progress in the performance evaluation of line supervisors. \_\_\_\_\_
14. General awareness of the EEO coordinator with current problems, effectiveness of programs, progress toward goals, and other matters related to the contractor's compliance obligations. \_\_\_\_\_
15. Evidence that the contractor treats violations of EEO policy with the same severity as violations of other corporate policies. \_\_\_\_\_
16. Institution of minority oriented training programs. \_\_\_\_\_

1	2	3	4	5	6	7
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How important is:

RATING

- 17. Availability of tuition refund benefits to clerical employees. \_\_\_\_\_
- 18. Explanation of tuition refund and training programs during new employee orientation procedure. \_\_\_\_\_
- 19. Posting of promotion opportunities within work areas. \_\_\_\_\_
- 20. Direct notification to all eligible employees of promotion opportunities as vacancies occur. \_\_\_\_\_
- 21. Maintenance of an inventory of academic and work experience of all minority employees to be referenced as job vacancies occur. \_\_\_\_\_
- 22. Restructuring of traditional jobs in an effort to broaden the incumbent's work skills. \_\_\_\_\_
- 23. Institution of a job rotation program in an effort to broaden employee work skills. \_\_\_\_\_
- 24. Conversion of the contractor's seniority system from department seniority to a plant seniority system. \_\_\_\_\_
- 25. Inclusion of predominantly minority colleges and universities in the contractor's campus recruitment activities. \_\_\_\_\_
- 26. Participation in Job Fair or Career Day Programs at area high schools. \_\_\_\_\_
- 27. Placement of employment advertising in minority oriented print and broadcast media. \_\_\_\_\_
- 28. Personal contact, by the EEO coordinator, with employment referral agencies such as Urban League or Job Corps. \_\_\_\_\_
- 29. Retention of applications from unhired minorities to be reviewed as vacancies occur in the future. \_\_\_\_\_
- 30. Notifying employment referral agencies of job vacancies as they occur. \_\_\_\_\_
- 31. Specification of position, pay, qualifications and other relevant information when notifying referral agencies of job vacancies. \_\_\_\_\_
- 32. Institution or support of a transportation program or car pooling service if the contractor's facility is not adequately served by public transportation. \_\_\_\_\_
- 33. Willingness of the contractor to conduct tours of the plant and facilities for school groups and referral agency representatives. \_\_\_\_\_

1	2	3	4	5	6	7
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How important is:

RATING

- 34. Participation by the top facility executive (chief executive, plant manager) in the EEO training and orientation sessions of line supervisors. \_\_\_\_\_
- 35. Existence of formal, written job descriptions for most every job at the facility. \_\_\_\_\_
- 36. Evidence that a formal EEO complaint procedure has been established within the facility. \_\_\_\_\_
- 37. Appointment of key management personnel for service on Community Relations Board or similar organizations. \_\_\_\_\_
- 38. Sponsoring a formal on-the-job training program. \_\_\_\_\_
- 39. Evidence that the CEO or plant manager is seriously committed to EEO policy. \_\_\_\_\_

The following items represent the technical requirements all contractors are obligated to meet under the provisions of 41 CFR, Part 60-1. We're interested in determining how important you feel technical compliance is in the evaluation of a contractor's effort.

How important is:

- 40. Failure to include "Equal Opportunity Employer" caption in recruitment ads. \_\_\_\_\_
- 41. Failure to include EEO clause on purchase orders. \_\_\_\_\_
- 42. Failure to include EEO clause in subcontracts. \_\_\_\_\_
- 43. Failure to obtain certification of non-segregated facilities. \_\_\_\_\_
- 44. Not obtaining certification of non-segregated facilities from applicable subcontractors. \_\_\_\_\_
- 45. Failure to prominently display EEO posters throughout the facility. \_\_\_\_\_
- 46. Failure to notify unions or worker representatives of their commitments under E.O. 11246, as amended. \_\_\_\_\_





A P P E N D I X   I I  
GEOGRAPHIC DISTRIBUTION AND SPECIFICS OF  
SAMPLE ATTRITION

TABLE 12

## GEOGRAPHIC DISTRIBUTION AND SPECIFICS OF SAMPLE ATTRITION

	TOTAL (%)	BOSTON	SPRINGFIELD	HARTFORD	WORCESTER
Number of firms contacted	64 (100)	42	9	8	5
Disposition:					
Not Federal Contractor	23 (36)	16	4	2	1
Others Not Qualified*	5 (8)	5	0	0	0
Refused	12 (19)	10	2	0	0
Qualified But Not Interviewed**	4 (6)	2	0	1	1
Completed Interview	20 (31)	9	3	5	3

\*Includes firms that were (a) subsidiaries of out-of-state parents; (b) recently acquired; (c) going out of business; and (d) of insufficient size due to recent reductions in the number of employees.

\*\*Includes firms that were willing to cooperate but due to scheduling problems could not be interviewed.



