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THE DEVELOPMENT AND EMPIRICAL TEST OF A SCALE TO MEASURE
ORGANIZATIONAL VALUES FOR CORPORATE EXCELLENCE

by

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Dissertation submitted to the Graduate Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION

in

Adult and Continuing Education

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December, 1986

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(ABSTRACT)

The purpose of this study was two-fold. First a confirmatory factor analysis was performed to test the validity of a theoretical model of corporate values. The model hypothesized was supported by relevant research cited in the literature on corporate cultures, organizational change and values development. Second, based on the outcome of the factor analysis a measurement scale was devised and refined in an effort to bring to the HRD community a valid and reliable instrument for measuring corporate values. The following methodological steps were taken for empirical test and instrument development: a) an item pool was systematically selected; b) a panel of experts was selected; c) a field test was performed on a small sample; d) the instrument was modified and administered to a broader more representative population of employees; e) a multiple-group confirmatory factor analysis was performed; f) logical and content analyses were performed; g) the instrument was critiqued by a capstone panel of HRD professionals as to readiness for introduction into the field.

ACKNOWLEDGEMENTS

An unidentified mystic once said, "Light is that which lifts the hope within us until we can over look the shadow of our place of darkness". Therefore, I first thank God for the dispensation of "His Great Light". Next, I thank my wife, Jo Ann, for lighting my life with her love, knowledge, and enduring strength. I thank my parents for the light of their guidance, unconditional love, and infinite patience through the years. I thank my brother, Raymond, for his support and the light shared in endless hours of discussion.

There are many who have provided the light of their academic and professional wisdom. Just a few are:

Dr. Neal Chalofsky, who directed the study, acted as friend, mentor, and counsel for six years;

Dr. Marcie Boucouvalas, who probably understands better than any "the nature of light", challenged me to "transcend" mediocrity;

Dr. Charlie Brocato, my professional mentor, provided me with the opportunity and the financial support to pursue my research at AT&T Communications;

Dr. Jimmie Fortune, who grounded me firmly in the principles of research and statistics, waited with patience while I grew;

Dr. Orion White provided me with the foundation in organization development and planned change I needed to pursue this kind of research study;

Dr. Ron McKeen, who recognizes a dissertation when he sees one, prompted me unto the right track.

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Chapter I

INTRODUCTION

Background of the Problem

The past several years have seen a dramatic shift in the way that human resource development (HRD) professionals think about planned change within organizations. Interest in the effective management of corporate culture abounds (Bradford & Cohen, 1984; Hickman & Silva, 1984; Kanter, 1983; Maccoby, 1981; Miller, 1984). Opinions vary greatly concerning those elements of culture which are most reliable in predicting an organization's success. The debate will continue for many years and opinions may change as performance data accumulates on the so-called Excellent Companies (Peters & Waterman, 1982).

There does appear to be one aspect of culture, however, that is currently emerging as a valuable predictor of corporate success - the extent to which an organization is driven by a set of core values linked directly to a philosophy of excellence. There is growing agreement that values are the bedrock of corporate culture and provide the essence of an

organization's philosophy (Albert & Silverman, 1984; Phillips & Kennedy, 1980).

In planning change efforts, attention should be given to adequately assessing the potential effects of the change on the company's prevailing value system. An organization's extant cultural values are a major determinant of organizational behavior and of planned change outcome (Hall & Thompson, 1980). Hall and Thompson noted that "values that operate in the life of the organization originate in its culture and are expressed in employee performance and behavior" (p.47).

Selznick's study (cited in Peters and Waterman, 1982) articulates the role of values in the organization and frames a leadership function:

The formation of an institution is marked by the making of value commitments, that is, choices which fix the assumptions of policy makers as to the nature of the enterprise, its distinctive aims, methods and roles. The institutional leader is an expert in the promotion and protection of values. Leadership fails when it concentrates on sheer survival. Institutional survival, properly understood, is a matter of maintaining values and a distinctive identity. (p. 281)

Drawing on work from Bennis (1969), Hall and

Thompson (1980) outline the realities organizations will face in the future:

1. Increasingly rapid technological change
2. A turbulent and unpredictable environment
3. A deepening complexity of individual needs
4. Increasing democratization of decision-making
5. Increasing volume, expanding markets, and diversification of products
6. Greater difficulty in clarifying goals and organizational identity
7. A rising employee educational level and desire for participation, involvement, and autonomy
8. A greater need for adaptive, innovative and creative capacities to stay vital
9. A need to cope with conflicting yet equally valid options

These realities suggest a need for explicit methods for organizations to identify and assess their cultural values as they relate to the increasing demands of the future. This study is a prelude to the indepth investigation and analysis of the concept Corporate Culture. It is, specifically, an attempt to develop a measuring tool of certain specific aspects of the work environment. This tool, the Corporate Values Questionnaire (CVQ) was constructed for the purpose of

eliciting descriptive responses from employees that relate to their perceptions of the organization's value system.

Setting of the Problem

One company critically concerned with gearing up to meet the mounting challenges presented by these new demands of the future is the American Telephone and Telegraph Company (AT&T). In 1972, AT&T hired the prominent consultant, Alvin Toffler, for the purpose of assessing the adequacy of At&T's prevailing organizational structure and to develop appropriate scenarios for the future. In the study results Toffler made recommendations for the restructuring of AT&T including the divestiture of the Bell Operating Companies (BOC's). In fact, there are very interesting parallels between the Toffler study (1975) on the Superindustrial Organization and the realities of the 1984 Divestiture of AT&T.

The impetus for change within AT&T became very pronounced during the late seventies. By the early eighties AT&T was a company poised for dramatic change. During the last two quarters of 1983 and the first two quarters of 1984, several major studies were conducted

to examine the nature of AT&T's corporate culture and how it might be changed to respond to the requirements of a competitive telecommunications industry (The AT&T Organizational Effectiveness Group, 1984; The Inner Games Corporation, 1984). The results of these studies supported a strong need for the following:

1. The changing of attitudes and mindsets
2. A new style of management
3. More open and honest communications
4. Developing consensus for new goals
5. Developing a sense of personal empowerment
6. Developing new systems of measurement that will reflect values of the new culture
7. Utilizing teamwork and feedback mechanisms to develop programs responsive to the new challenges
8. Developing new ways of training personnel to facilitate the cultural change

These recommendations supported earlier research by Byrd (1982) on the differing value orientations within AT&T. He states that:

Organizations identify themselves with some unstated values derived from the work culture and, perhaps, from even more historic roots. As the Bell System splits apart and reconfigures, we can

anticipate collisions of differing personal and historically-based organizational values (p. 67). Byrd (1982) further characterized companies as being managed principally according to one or more of the following value orientations:

1. Marketing-based
2. Technology-based
3. People-based

This conceptualization led to the identification of three salient cultural characteristics pervasive throughout AT&T (Byrd, 1982):

1. The tendency to manage by index which has shaped management attitudes must be reviewed. Total reliance on numbers does not reward managers for effectively managing the people aspect of the business not covered by the index.
2. Moving problems up and down the hierarchy several times, with solutions evolving two levels away from the implementers, causes excessive delay and loss of productivity. Inter-organization problems must be solved by those directly involved in the implementation.
3. Management must be accessible to all levels of the work force in order to anticipate problems before they become unmanageable. (p. 5)

The real question for AT&T was how to cope with and take advantage of the opportunity to develop a competitive work force of the eighties. Dotlich (1980) suggests that such a work force is expected to be:

- (a) professionally mobile
- (b) demographically and perceptually diverse
- (c) increasingly represented by women and minorities
- (d) younger
- (e) better educated
- (f) more middle class
- (g) more urbanized
- (h) less concerned with conformity

This new breed of worker will bring a new perspective and new values to work life (Byrd, 1982):

The traditional economic significance of work will be supplanted by rising concern with its psychological quality and social meaningfulness.

More workers at all levels will want to have a stronger voice in decisions affecting their jobs and to be less subject to organizational control.

A shrinking proportion of the work force will be content to have routine, unchallenging jobs.

More people will think in terms of long range careers and multiple careers, not just in terms of

immediate jobs. The importance of non-worklife (family, community, retirement, leisure) will increasingly rival that of work. The work force will have a wider variety of work values and will value that diversity.

These new work force realities are highly consistent with and support firmly what Peters and Waterman (1982) conclude is the right side of the set of value contradictions that ground the cultures of the excellent companies. These value choices are:

1. An orientation toward the provision of high quality service to the customer
2. An orientation that rewards innovation, creativity, and fosters a receptivity to change
3. An orientation that perpetuates informal communication, the free and open exchange of information, and the sharing of perceptions among employees
4. An orientation that puts people first, not machines or administrative controls and procedures (p. 285)

In summary, the present study grew out of and is a response to two unmet needs. The first need was for AT&T to find methods and techniques through which it could cope with dramatic changes in the

telecommunications industry. Second, a need had surfaced within the HRD profession for new ways to assess vital components within an organization's culture. The values scale developed in this study attempts to meet these needs by:

1. Empirically testing a set of value dimensions derived from relevant literature on the new breed worker (Yankelovich, 1981), corporate cultures (Deal & Kennedy, 1982; Peters & Waterman, 1982), values development and values measurement (Hall, 1971; Hultman, 1979; Kirschenbaum & Simon, 1973; Raths, 1964; Resher, 1969; Rokeach, 1973)

2. Establishing a framework whereby a set of salient value dimensions might be refined into a measurement tool used by an organization, such as AT&T, to monitor and assess the degree of change in its value system.

Statement of the Problem

This study addressed the problem of empirically testing a set of dimensions derived from relevant literature on values, trends in the work force, and organizational culture. Although some conceptual literature concerning the theoretical structure of

corporate values does exist, no one has attempted to elicit, empirically, any information that confirms these theories. Such an analysis was definitely needed before any truly effective corporate culture change modalities could be evolved.

To accomplish the purpose of this study, the following research question was addressed:

Is there a set of salient value dimensions derived from the relevant literature that can be confirmed empirically and refined into a measurement tool to be used by organizations?

Significance of the Study

The study was intended to have both practical and theoretical significance. Its practical significance lay in the development and potential use of a survey instrument designed to assist an organization, such as AT&T, to discover value development-based needs and to devise strategies to address those needs. The theoretical significance of the study lay in its potential contribution to the development of a body of knowledge about corporate culture change and the assessment of corporate values.

Purpose of the Study

The broad purpose of this study was to contribute to the integration of values theory into planned change approaches within organizations. A practical purpose was to provide human resource development professionals and organization decision- and policy-makers with an assessment tool useful in planning and in understanding the process of values development.

Limitations of the study

This study was limited to a selected and random sample of employees from the Operator Services Division of the American Telephone and Telegraph Company, Eastern Region. The development of the values scale used in the study was based on a specific four-factor model; it did not explore the validity of other factor models. Also, the scale was designed to exclusively measure organizational values.

Definition of Terms

Attitude.....a relatively enduring organization of beliefs around an object or situation

predisposing one to respond in some preferential manner

Behavior.....action(s) resulting from motivation ranging from a single act to whole sets of acts

Belief.....an inference made by an observer about underlying states of expectancy

Culture.....the system of traditions, mores, and customs that convey the shared values of a group, organization, or institution

Ideology.....an organization of beliefs and attitudes - religious, political, or philosophical in nature - that is more or less institutionalized or shared with others, deriving from external authority

Opinion.....a verbal expression of some belief, attitude, or value, insufficient to produce certainty

Philosophy.....the accepted truths or principles underlying the direction and action(s) taken by a person, group, or organization

Value.....a belief upon which a person, group, or organization acts by preference; an enduring belief that a specific mode of conduct or end-state of existence is

personally or socially preferable to an
opposite or converse mode of conduct
or end-state of existence

Value System...an enduring organization of beliefs
concerning preferable modes of conduct
or end-states of existence along a
continuum of relative importance

Chapter II

REVIEW OF RELEVANT LITERATURE

The problem for this study was to empirically test a set of dimensions derived from literature detailing the importance of values in the development of organizational excellence.

Peters and Waterman (1982) identified four theoretical contradictions that frame the development of value systems within the excellent companies. These were (a) cost versus service, (b) operations versus innovation, (c) formality versus informality, (d) a control orientation versus a people orientation. They went on to say that:

The value systems of the excellent companies do come down rather clearly on one side of these apparent contradictions. The specific content of the dominant beliefs of the excellent companies is narrow in scope, including just a few basic values:

- (1) a belief in being the best
- (2) a belief in the importance of the details of execution, the nuts and bolts of doing a job well

- (3) a belief in the importance of people as individuals
- (4) a belief in superior quality and service
- (5) a belief that most members of the organization should be innovators, and its corollary, the willingness to support failure
- (6) a belief in the importance of informality to enhance communication
- (7) an explicit belief in and a recognition of the importance of economic growth and profits (p. 285)

Ferguson (1980) suggests that value choices no longer need to be polarized either/or decisions. The process of values development and change in an age of social and personal transformation should be one of finding the center.

Given the work of Peters and Waterman (1982) and the work of Ferguson (1980) as a starting point, a more extensive literature review was conducted. An attempt has been made to focus selectively on research that can be integrated into a framework for conceptualizing values development and values measurement within organizations.

The review has been organized into these topic areas:

- (A) the research issue, which includes:
 - (1) a concept analysis of values
 - (2) the importance of beliefs and values in society
 - (3) the importance of values in the organization
- (B) the search for value measures, which includes:
 - (1) the feasibility of values study
 - (2) the evaluation of existing scales
 - (3) the need for a new scale

A. The Research Issue

1. A concept Analysis of Values

An integral and highly complex aspect in the measurement of values, attitudes, beliefs, and opinions has been the problem of distinguishing the shades of differences existing among them. Because all four of the preceding concepts have many characteristics in common, an inability to sharply differentiate among them and their individual effects on human behavior has been a major deterrent to their assessment.

Krathwohl, Bloom, and Masia (1964) offer an

approach which can be utilized in attempting to conceptualize the problem of differentiating among beliefs, attitudes, and values. By way of summary, they have categorized valuing into various levels based on differences in the degree of internalization involved in the process (see Figure 1).

Belief is characterized as having the lowest degree of internalization. It is defined as an implicit emotional acceptance of proposition or doctrine. Belief in something is described as an acceptance at some level of probability that a thing exists. Belief about something refers to the probability that specific relationships exist between one concept and some other concept, value, or goal (Fishbein, 1975; Fishbein and Ajzen, 1980). Hultman (1979) states that a belief is a mental construct which allows a person to interpret past and present experiences, and to predict what will happen in the future. Rokeach (1968, 1973) divides beliefs into two major types: descriptive, which are interpretations regarding what is correct or incorrect; and evaluative, which are interpretations about what is good or bad.

Belief becomes an attitude when accompanied by an affective component reflecting preference (Shaw, 1981; Shaw & Wright, 1967). Attitude formation then is

	Behavior	Action	
Overt			
Manifestations:	1. Opinions	verbal expressions	
	2. Beliefs	active and measure specific ideas about phenomena, objects, things	
Internalizations:	3. Attitudes	latent and measure specifics about phenomena, objects, things	
	4. Values	diffuse and measure general ideation about phenomena, objects, things	

Figure 1. Levels of Internalization

considered to be the second level of the hierarchy in the internalization process. Behavior at this level implies not just the acceptance of a value, but a willingness to be identified with it. The individual is sufficiently committed to the value to pursue it (Krathwohl et al., 1964). Attitudes then reflect preferences, i.e., choices in behavior or predispositions to respond (Brown, 1976; Rokeach, 1973).

The third level in the hierarchy is termed commitment. A high degree of faith, sometimes bordering on certainty, characterizes this level. Persons who display behavior at this level are clearly perceived as holding the value. They act to deepen their involvement with the value and with the things representing it. They try to convince others and seek converts to their cause (Krathwohl et al., 1964).

Traditional definitions of the concept attitude in the literature reflect the affective preference component described by Krathwohl et al. (1964). Attitude is considered to be:

1. An enduring learned predisposition to behave in a consistent way toward a class of objects (English & English, 1964)
2. An enduring system of positive or negative

evaluations, emotional feelings, and pro or con action tendencies with respect to social objects (Krech, Crutchfield & Ballachey, 1962)

3. A mental and neutral state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related
(Allport, 1961)
4. An individual's social attitude is a syndrome of response consistency with regard to social objects (Campbell, 1963)
5. A relatively enduring system of evaluative, affective reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about characteristics of a social object or class of social objects (Shaw & Wright, 1967)
6. A set of interrelated predispositions to respond (Rokeach, 1973)
7. A relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner
(Brown, 1976)

Another concept which is similar to attitude and

belief is opinion. An opinion is a belief that one holds without emotional commitment and is always open to inference and re-evaluation since the evidence is not affirmed to be convincing (Rokeach, 1973). This definition denies to opinion the affective aspect which typifies attitude. Brown (1976) suggests that opinions are verbal expressions, whereas attitudes are response predispositions.

The concept value refers to what one should do , ought do, or must do, whether or not one is consciously aware that these imperatives, acquired through socialization and learning, are giving direction to thoughts and actions (Allport, 1961). A value is a belief upon which a person acts by preference. It is thus a cognitive, a motor, and above all, a deeply appropriate disposition (Honigmann, 1976). Honigmann sees the concept value as referring to an explicit or implicit socially standardized conception of what is desirable. Values in turn influence selection from available means or ends of action.

According to Parsons (1978), values, in terms of analyzing structure and process in the social system, are the commitments of individuals to pursue and support certain directions or types of action for that system. Values are preferences, criteria, or choices of personal

or group conduct. A value in this sense is a standard for decision-making held by an individual and is identified when articulated in an expressed verbal statement or in overt conduct (Gorsuch, 1970).

Kluckhohn (1951) comes closest to being all inclusive of the various traditional shades of meaning of values, reflecting feelings, beliefs, commitments, concepts, and standards for decision-making, in the statement:

Values, then, are images formulating positive or negative action commitments, a set of hierarchically-ordered prescriptions and postscriptions. Without a hierarchy of values human behavior could be described as a list of instincts and probabilistic calculus.

Values take distinctive forms in different cultures, tend to persist tenaciously through time, and are not mere random outcomes of conflicting human desires (p. 20).

In recent literature, Hall and Thompson (1980) define a value as an important type of belief that represents a person's conception about what is worth pursuing in life. Hultman (1979) and Rokeach (1973) maintain that there is a very strong relationship between values, needs, and what people think. Values are the

cognitive representation and transformation of needs (Rokeach, 1973). Rokeach maintains further that there are two types of values: instrumental (called process by Hultman) and terminal (called outcome by Hultman). Instrumental values relate to such things as being honest, friendly, or courageous. Terminal values are concerned with such things as happiness, freedom, and security. Every behavior the person engages in is motivated by one or more of these types of values. This motivating process may be conscious or unconscious. Those that are unconscious tend to be much more resistant to change. Nevertheless, all values can be changed, if people elect to do so (Hultman, 1979).

2. The Importance of Beliefs and Values in Society

Not only do values shape the way individuals look at the world, but they provide the basis for them to interpret reality and decide what is socially meaningful for them in their lives (Tice, 1983). However, Tice suggests that often what is perceived as reality can vary greatly from person to person. This occurs because people have a tendency to lock-on to information that supports their dominant values (Hultman, 1979). Hultman calls this phenomenon looking at life through a belief darkly.

Ferguson (1980) supports this contention in her description of what she terms a paradigm shift. Ferguson contends that if there is power in the transformative (change) experience, it must shake our values and, therefore, the total economy, the marketplace, the factory, the corporations, the professions, the small business, and social welfare. She looks at these as criteria and evidence of a new paradigm based on values:

The shift to a new values paradigm (from an economics paradigm) is reflected in changing patterns of work, career choice, ...evolving lifestyles that take advantage of synergy, sharing, barter, cooperations and creativity...the transformation of the workplace, in business, industry, professions, the arts... innovations in management and worker participation, including decentralization of power and congruent with nature rather than the mechanistics that have propelled us into our present crisis (p. 23).

The characteristics of the old and new paradigms are summarized below:

<u>Old Paradigm of Economics</u>	<u>New Paradigm of Values</u>
Promotes consumption at all costs, via planned	Appropriate consumption. Consumption, keeping,

obsolescence, advertising pressure, creation of artificial needs.

recycling, quality, craftsmanship, innovation, invention to serve authentic needs.

People to fit jobs.

Jobs to fit people.

Rigidity. Conformity.

Flexibility. Creativity.

Form and Flow.

Imposed goals, top-down decision-making, hierarchy, bureaucracy.

Autonomy encouraged. Self-actualization. Worker participation, democratization. Shared goals, consensus.

Fragmentation, compartmentalization in work and roles. Emphasis on specialized tasks. Sharply defined job descriptions.

Cross-fertilization by specialists seeing wider relevance of the field of expertise. Choice and change in job roles encouraged.

Identification with job, organization, profession.

Identity transcends job description.

Clockwork model of economy, based on Newtonian physics. Recognition of uncertainty in economics.

Aggression, competition.
"Business is Business". Cooperation. Human values transcend winning.

Manipulation and dominance of nature. Cooperation with nature; taoistic, organic view of work and wealth.

Struggle for stability, station, and security. Sense of change, becoming, willingness to risk.
Entrepreneurial attitude.

Quantitative: quotas, status symbols, level of income, profits, "raises", Gross National Product, tangible assets. Qualitative as well as quantitative. Sense of achievement. Mutual effort for mutual enrichment. Values intangible assets (creativity, fulfillment) as well as tangible.

Strictly economic motives, material values. Progress Spiritual values transcend material gain; material

judged by product, content.	sufficiency, process as important as product.
	Context of work as important as content--not just what you do but how.
Polarized: labor versus management, consumer versus manufacturer, etc.	Transcends polarities. Shared goals, values.
Short-sighted: exploitation of limited resources.	Ecologically sensitive to ultimate costs.
"Rational", trusting only data.	Stewardship. Rational and intuitive. Data, logic augmented by hunches, feelings, insights, nonlinear (holistic) sense of pattern.
Emphasis on short-term solutions.	Recognition that long-range effectiveness must take into account harmonious work environment, employee health, customer

relations.

Centralized operations.

Decentralized operations wherever possible. Human scale.

Runaway, unbridled technology.

Subservient to technology.

Appropriate technology.

Technology as a tool, not a tyrant.

Allopathic treatment of "symptoms" in economy.

Attempt to understand the whole, locate deep underlying causes of disharmony, disequilibrium.

Preventive "medicine".

Tesconi and Morris (1971) described the old paradigm of economics as a bitter harvest for a bureautechnocratic culture. They point out several forces which led to a sense of social degradation and a loss of self-esteem. Among these are the following:

1. the instrumental conception of man inherent in bureautechnocracy, and the functional-commodity -exchange patterns of personal and interpersonal evaluations which follow;

2. cultural cues which suggest to man that he is functionally expendable, and thereby, in danger of becoming personally as well as functionally obsolescent;
3. bureautchnocratic demands that require men to engage in (i.e., work at) activities and jobs which they have little interest in doing and which are non-rewarding in terms of the human qualities persons bring into these activities;
4. bureautchnocratic pressures for seeking and finding personal identity in the symbolic value attached to our posessions;
5. bureautchnocracy's need to produce vast quantities of waste in the face of human need and misery.

Eric Fromm (1955) puts it another way:

Man has created a world of man-made things as it never existed before. He has constructed a complicated social machine to administer the technical machine he has built. Yet this whole creation of his stands over and above him. He does not feel himself as a creator, but as a servant, a Golem which his hands have built. The more powerful and gigantic the forces are which he unleashes, the more powerless he feels himself as

a human being. He confronts himself with his own forces embodied in things he has created, alienated from himself. He is owned by his own creation, and has lost ownership of himself (p. 68).

3. The Importance of Values in the Organization

A concern with values in organizations is not entirely new. What is new is the way in which this concern must express itself. In the past, values have been passed from workforce generation to generation. This passing of corporate values cannot suffice for the future.

Employees of today confront many more choices than did employees of yesterday. They are surrounded by a bewildering array of alternatives. Modern organizations have made employees less provincial and more sophisticated, but the complexity of these times has made the act of choosing infinitely more difficult (Kirschenbaum & Simon, 1974).

Traditionally, organizations have most often taken an informal common approach to help employees develop the appropriate values. This approach has been called inculcation, imposition, indoctrination and in its most extreme form brainwashing. Deal and Kennedy (1982) suggest that organizations with strong cultural values

create the rites and rituals which convey that: This is the way we do things around here.

The rites and rituals are sometimes very explicit and coercive; at other times they are subtle and barely noticeable. In all cases, they are based on a common assumption that a certain set of organizational beliefs, values, and behaviors is better than another. Therefore, rather than have employees go through the pain of discovering this for themselves, and rather than risk the chance that they might develop a different set of values, the organization will do its best to convince them that its set of values is the most desirable (Kirschenbaum & Simon, 1974).

However, there is a growing awareness within organizations that no one set of values imposed upon employees can solve the dilemmas of an unknown future. That is, change is so rapid, and new alternatives arise so quickly in every area of organizational life, that no one set of specific beliefs and values could possibly answer all the choice situations of the future.

Employees must learn the process for sorting out and making sense of all the inputs and alternatives they have been exposed to, and will be increasingly exposed to in the future and how to turn them into values that they personally own (Kirschenbaum & Simon, 1974).

Louis Raths (1966) provided a basic framework for a process of values clarification. He first defined a value as an area of our lives which meets seven criteria. If organizations wish to prepare their employees to meet the unknown challenges of the future ahead, then they must consciously facilitate the use of at least the following seven processes:

1. Prizing and cherishing
2. Publicly affirming
3. Choosing from alternatives
4. Choosing after considering consequences
5. Choosing freely
6. Acting
7. Acting with a pattern, repetition, and consistency (Raths, 1966)

These seven processes, when used to prepare employees, can be defined in organizational terms:

1. Prizing and Cherishing

Organizations need to find ways to help employees discover what is important to them, and learn to set priorities. So much of employee conditioning forces them to deny their feeling, to distrust their inner experience. Valuing is not only a cognitive process, but an affective process also. The future will hold many surprises. Employees must be capable of

tuning into their own feelings to make the decisions required.

2. Publicly Affirming

One way for employees to show their values is for them to stand up for what they believe, to voice their opinions, to openly affirm their positions. Organizations can encourage this rather than creating an atmosphere in which employees keep their thoughts and feelings to themselves. As trust builds, so does self-understanding, creativity, and productivity. Groups, including organizations, increase their effectiveness in decision-making as more information, supplied by the members, gets thrown out on the table. To deal with the decisions of the future, organizations need employees who have openly learned to affirm their values.

3. Choosing From Alternatives

Many employees take the first choice available or the first good choice they are presented.

This is the way I was taught to do it, this is the way I teach others to do it. Many employees are really not aware that other good ways may exist. The future will offer employees new alternatives for their personal, social, and work lives. Whether they embrace the first alternative to come along, or take

the time to choose from several alternatives, could mean the difference between enormous disappointment and waste or more effective decisions.

4. Choosing After Considering Consequences

This valuing process goes hand in hand with the former process. It is essential that employees learn to examine the consequences of the alternatives under consideration, and thus illuminate the pros and the cons. Employees will not be able to predict the future or all outcomes of their decisions. But by proceeding with eyes open, having weighed the pros and cons of the various alternatives, their chances for good decisions will be increased.

5. Choosing Freely

Most employees' choices are so proscribed and limited that they never have the chance to learn to guide their careers; they are just thrown in the water and told to swim. Organizations need learning environments in which employees can test their beliefs and values. These environments would provide opportunity to look at alternatives and to weigh consequences--a kind of dry run before going through the process a final time. There is no shortcut. Employees can't learn to make responsible

choices unless they are given the chance to make real choices. All else is to impose values, which simply will not help them deal with the future.

6. Acting

Acting is a valuing process. Employees have limited time and energy. How they spend their time and energy reveals what they value. Employees are continually formulating beliefs, goals, and ideals. As part of their career development, they should be encouraged to act on those beliefs, goals, and ideals. As the barrier between the organization and the outside world breaks down, employees can become increasingly involved in community work, in helping relationships, and in other experiences that encourage personal growth and value development. Many employees rarely get (or make) the chance to act on their beliefs, to achieve their goals, actualize their values, or realize their potential. An organization that encourages action, as well as contemplation, will help create a future in which employees will increasingly close the gap between what they say and what they do, between what they want and what they achieve.

7. Acting With A Pattern, Repetition, and Consistency

This valuing process is an extension of the previous

one. As employees collectively become clearer about their values, they begin to develop patterns of action, and repeat their most valued activities--this is the culture. In addition, they eliminate those behaviors that are contradictory to those cherished values. They also envision alternative patterns of action by continuing to go through the intelligent choosing process, and acting on their beliefs to achieve their most preferable futures.

Rescher (1969) distinguished between two types of values: a) individual values which focus on the person and are expressed in a private sphere; and b) institutional values which are defined from the point of view of the institution and therefore become manifest in a more public sphere. For this research, it has been necessary to divide institutional values into two kinds: organizational - relating to the organization; and global - relating to society.

Values are the essence of the corporate culture (Deal & Kennedy, 1982). They provide the basis for common employee direction and action. Companies succeed because their employees can identify, embrace, and act on the values of the organization. Values must be shared by all the people who work in a company. These shared values define the fundamental character of the

organization, the attitude that distinguishes it from all others.

As in individuals, the values that operate in the life of the organization are expressed through the behavior of the organization (Hall & Thompson, 1980). Values change as awareness changes. That is, values that give meaning to organizational life and that motivate behavior change over time. These shifts seem to relate to levels of awareness development within the organization.

Brian Hall (1976) describes four phases of awareness through which individuals move. These, with some modification, provide a useful framework for understanding awareness development within organizations. In Phase One Awareness, the organization perceives its environment as a mystery over which it has no control. It is a hostile and turbulent environment in which the organization merely seeks to exist. Phase One values are based on instincts of survival, self-preservation and safety.

In Phase Two Awareness, the environment is no longer perceived as hostile and alien, but rather as a community of organizations to which it must belong and succeed. The environment is a problem with which the organization must cope. By experiencing belonging and

success within the corporate community the organization comes to realize a sense of identity and self worth. To become a useful participant in the corporate community, the organization must contribute in a productive way to the community's well-being. Still, there is much emphasis on we as distinctly separate from they. The organization merely conforms or adapts to its environment.

Phase Three Awareness is distinguished from Phase Two by a pattern of organizational behavior called integration. Paulo Freire (1971) defines integration as the capacity to not only adapt to reality, but to make choices and change that reality. Critical choice is more frequently obstructed by things found within an organization's culture than by the external environment. Organizations must escape the internal bonds produced by the crusty rigidity and stubborn complacency of the status quo (Gardner, 1964).

The Phase Three organization perceives an environment that is created, takes responsibility for revitalizing, even reshaping it. In this phase, a sense of power and authority replaces environmentally controlled behavior. The organization seeks actualization by transcending its own self-interests and by becoming sensitive to the needs of others within the

corporate community. Such organizations value service, innovation and people.

At Phase Four Awareness, the organization's perception of the environment expands to include the society-at-large. Even the needs of the corporate community are transcended and hooked to global needs. The organization seeks to work in conjunction with other like-minded organizations, groups, and persons in common interdependent action aimed at harmonious balance. This harmonious balance seeks to see things in their wholeness and to understand the interrelatedness of parts, frequently opposing parts, to each other and to the whole. Such organizations understand and view corporate competition with the same wholistic wisdom. This concept of harmony applies to the inner life (culture) of the organization as well as to the external environment. Inner harmony must be integrated with environmental harmony, thus, an organization realizes itself.

B. The Search for Value Measures

1. The Feasibility of Values Study

Values, as the basis of moral judgements, have long been thought to be impossible to study empirically. It

seems that empirical inquiry is limited to existential propositions concerning means-ends relationships.

Because the ends cannot be chosen on empirical grounds, they cannot be chosen on empirical grounds, they cannot be the object of scientific inquiry (Scott, 1965).

Scott, however, suggests that while ultimate values themselves, are in principle, not subject to evaluation. However, the human process of evaluation and moral judgement, of arriving at ultimate values against which means are assessed, is a matter amenable to empirical inquiry.

2. Evaluation of Existing Scales

There are only a few scales in the values literature that are sufficiently well-developed and empirically tested to merit evaluation. The three considered here have been chosen because they represent major efforts at scale development and are relatively frequently employed by others researching values development.

(a) The Value Survey (see Appendix A)

Rokeach (1973) postulated that values are multifaceted standards that guide conduct in a variety of ways. They (a) lead us to take particular positions on social issues, and (b) predispose us to favor one

particular political or religious ideology over another. They are standards employed (c) to guide presentations of self to others, and (d) to evaluate and judge, to heap praise and fix blame on ourselves and others. Values are central to the study of comparison processes.

To support these postulations, Rokeach's Value Survey consists of two lists of 18 alphabetically arranged instrumental and terminal values. The 36 items which are single words with a brief definition (in parentheses) are subjected to a ranking method wherein the respondent is to "arrange them in order of their importance to YOU, as guiding principles in YOUR life (Rokeach, 1973, p. 358). The ranking method assumes that it is not the absolute presence or absence of a value that is of interest, but their relative ordering.

Rokeach reports that he made an effort to represent values that were assimilated from various sources: A review of the literature mentioning various values found in American society and in other societies; the writers own terminal values; those obtained from 30 graduate students in psychology; and those obtained by interviewing a representative sample of about 100 adults in Lansing, Michigan.

While Rokeach did factor analytic studies on the results, the procedure he employed in selecting the

survey items, by his own admission, was an intuitive one. There is no reason to think that others working independently would have come up with precisely the same lists of values.

Factor analysis of the item pool revealed seven factors:

1. Immediate vs. delayed gratification
2. Competence vs. religious morality
3. Self-constriction vs. self-expansion
4. Social vs. personal orientation
5. Societal vs. family security
6. Respect vs. love
7. Inner- vs. other-directed.

From three to eight items loaded significantly (.30 or more) on each subscale. A study of the factorial structure of the Value Survey is informative despite the fact that a majority of the variance is not accounted for by the seven factors. No factor accounts for more than eight percent of the variance.

Facotr 2 (competence vs. religious morality) consists primarily of instrumental values, those loading at one pole reflecting a concern with competence (logical, imaginative, intellectual, and independent) and at the other pole a concern with a religious kind of morality (forgiving, salvation, helpful, clean). Factor

4 (social vs. personal orientation) includes only terminal values. Those having positive loadings being being social in nature (a world at peace, national security, equality, freedom), while those having high negative loadings being personal in nature (true friendship, self-respect).

The reliability estimates (coefficients of stability) for the Value Survey, Form D, on a 250 subject sample are reported as ranging from .51 to .70. The respondents showed a median test-retest reliability of .71 for terminal values and .66 for instrumental values.

Despite the fact that Rokeach has done ample analysis of survey results, the Values Survey must be regarded as not being an acceptable instrument for widespread use by corporate value researchers without extensive modification to the scale.

Not only were the scale development procedures inadequate because of the limited dimensional representation of values relating to corporate cultures, but the task of ranking two sets of 18 items has been reported to be a very difficult one. It is one which respondents have little confidence in having completed in a reliable manner. It is also one on which respondents cannot be certain that they have accurately

ordered the items (Rokeach, 1973). It can be argued that the level of stability of the Values Survey does not support the existence of an actual random response set among subjects. Nevertheless, this does not negate the fact that respondents' beliefs about the accuracy or the validity of the measurement instrument could significantly affect the level of confidence that respondents have in utilizing the results to bring about meaningful change.

(b) The Managerial Values Profile Inventory (see Appendix B)

Schmidt and Posner (1982), using Rokeach's list of 18 basic instrumental values, sought to determine what personal traits managers value most in themselves and others. From this process Schmidt and Posner derived 22 value questions which they felt were relevant to the American Manager. The Managerial Values Profile Inventory has 6 categories into which the 22 questions are placed. The categories are:

1. Organizational values and priorities
2. Work and home
3. Bosses and subordinates
4. Personal values
5. Ethical and unethical behavior
6. The future

Schmidt and Posner (1982) asked respondents to rate each question on a seven-point scale, a "1" indicating of "little or no importance to me" and a "7" indicating "very to me." the questions focussed on:

1. Organization effectiveness
2. Organization leadership
3. Organization reputation
4. Employee morale
5. Profit maximization
6. Service to the public
7. Organization growth and stability

The analysis of the results focussed on rank ordering based on mean averages of each individual question, a process much less laborious to the respondent than that used by Rokeach.

An analysis was performed wherin three clusters were found. Organization effectiveness was set off from all others. Indeed, this term may welll serve as a catch-all for many other values, nevertheless, it is the phrase that was most appealing to managers today.

A clustering of the next-most important items included high productivity, organization leadership, high employee morale, and organization reputation. Actually, each of these would contribute in a significant way to making an organization effective

(Schmidt & Posner, 1982).

The next-highest cluster included profit maximization and organization growth and stability. At the bottom of the list is service to the public.

Not much else has been published on the statistical analysis performed on the Managerial Values Profile Inventory. Schmidt and Posner did state that managerial values were highly intercorrelated (the average intercorrelation among the variables was .43, which is statistically significant at the .001 level of chance probability).

Although Schmidt and Posner have developed a questionnaire which has found some use in the context of corporations, the instrument has several obvious limitations. First, it has been designed specifically to look at values of managers. This restricts its use with other employee groups. Second, although the subscales seem logically sound, they do not represent a robust and parsimonious set of dimensions such as would be discerned from a factor analysis. A logically and statistically sound corporate values scale is needed.

(c) The Organizational Value Dimensions Questionnaire (see Appendix C)

Shartle and Stogdill (1966) selected a battery of 335 items from more than 500 items collected from

students, faculty members, and from the literature on business organizations. The items were selected to describe a wide variety of item analysis procedures.

A frequency distribution was tabulated for each item. Also, an information measure "I" (Garner & Hake, 1951) was computed to measure variability of responses. Sixty items were selected for factor analysis. Seven orthogonal factors emerged. An additional cluster analysis produced 17 clusters of items.

On the basis of this analysis, 175 new items were developed. These and 140 items from the first battery were sorted by staff members into 17 clusters in an effort to ensure a wide variety of descriptive context in the items. The 17 hypothesized clusters were assigned the following labels:

1. Change
2. Social responsibility and ethics
3. Organizational efficiency
4. Member identification and paternalism
5. Structure
6. Cleverness and politics
7. Personal employee control
8. Consideration
9. Individual achievement
10. Quality

11. Safety
12. Organizational achievement
13. Growth
14. Status
15. Ethics and legality
16. Happiness and congeniality
17. Organizational control

The revised questionnaire was administered to 395 college students. Another factor analysis was performed and nine orthogonal factors emerged:

1. Organizational magnitude and structure
2. Internal consideration
3. Competition and strategy
4. Social responsibility
5. Quality
6. Change
7. Member identification and control
8. External political participation
9. Member equality and participation

Although Shartle and Stogdill include data detailing means and standard deviations of the nine subscales, they provide no information on the pattern of intercorrelations among the subscales. No internal consistency or stability coefficient data are reported. Validity data were beginning to be accumulated at the

time of development.

Rizzo (1964) correlated the nine factored value scores with observed performance in a simulated executive performance task. Observed willingness to change was correlated $-.39$ with value scores on Factor VI (Stability; lack of change). Correcting and reprimanding subordinates was correlated $-.59$ with Factor IX (Member equality), $-.34$ with Factor II (Condideration of employee welfare) and $-.32$ with Factor III (Strategy, shrewdness, and ruthlessness).

For the most part, however, important data on The Organizational Value Dimensions Questionnaire are not available. Although existing documentation suggests that an extensive item pool was utilized to develop questions, it appears that minimal attention was given to the selection of subjects representing businesses and corporations (e.g., 395 college students). The degree of generalizability of the factor pattern to the corporate environment may be somewhat limited. Also, the questionnaire in its final form contains 100 items. This is an extremely lengthy questionnaire. Berdie and Anderson (cited in Zemke, 1981) suggest that the practical length for a questionnaire of this kind should range from 25 to 40 items.

3. The Need for a New Scale

The three values scales discussed are the best available that have applicability to organizational development according to the literature. Each has some of the required qualities that were used in this study as criteria by which a scale worthy of use within business and industry could be chosen. Unfortunately, none of them meets all the requirements. A standard which has proven to be the most difficult one to meet is the requirement for a theoretical approach underlying the development of the instrument that integrates the data collection, factor analysis, and interpretation in ways that lead to meaningful future use of the data (Gorsuch, 1983). Gorsuch believes "this lack of integration is undoubtedly the reason why so few hypothesis-testing factor analyses are done relative to the number of exploratory - or even 'shotgun' - analyses" (p. 372).

Other value instruments may have identified dimensions that are usefull in prediction, but do they parsimoniously describe a set of value dimensions based on solid theoretical as well as practical grounds? It is the contention of this study that a relevant and meaningful factor structure for organizational values can only be obtained through the empirical verification

of salient dimensions derived from a broad base of literature and research.

The theoretical model derived from the literature reviewed in this research is described below:

The Theoretical Model

Peters and Waterman's Dichotomies

Left	vs.	<u>Right</u>
(1) Control	vs.	People
(2) Cost	vs.	Service
(3) Operations	vs.	Innovation
(4) Formal	vs.	Informal
Communication		Communication

Other relevant research on organization values, corporate cultures and excellence resulted in four distinct categories:

- | |-----
 - (1) People and Human Resources
 - (2) Competitive Service and Quality
 - (3) Innovation and Change
 - (4) Communication, Information, and Knowledge
-

Figure 2. Deriving the Theoretical Model

The value categories represent a synthesis of the dichotomies rather than either/or choices where possible. For example, in deriving the Innovation and Change category from the Operations vs Innovation dichotomy, the intention is not to diminish the importance of maintaining a stable and healthy operational system. Innovation and change is, however, that dimension which "Excellent Companies" tend to emphasize in addition to the norm. The same is true of Formal vs Informal Communication. One cannot be emphasized at the expense of the other. However, informal communication channels tend to be used in "Excellent Companies" above, beyond, and around formal communication channels.

On the other hand, the Control vs People dichotomy is one in which the components do indeed tend to be mutually exclusive. This is true in much the same sense as the locus of control descriptors, i.e., other-directed and self-directed. Where one exists the other cannot. This is relatively true of Cost vs Service also. For the most part the highest quality product is not generally the least expensive. What is emphasized instead is the best (or most competitive) value for the money.

In summary, the process used in deriving the model

and the associated categories is inately different from the process that was used to empirically test the model. The emphasis is on synergy rather than parsimony.

Chapter III

SCALE DEVELOPMENT

The purpose of this study was to empirically test a set of dimensions that theoretically describe the value orientations reflecting organizational excellence and to develop a scale to measure these dimensions. The research suggests that there is a great need for such a scale.

A four-factor model was hypothesized for the study:

Dichotomous Forms of

Value Dimensions

Value Expression

(a) People and Human Control versus People

Resources (PHR)

(b) Competitive Service Cost versus Service

and Quality (CSQ)

(c) Innovation and Operations versus

Change (IC)

Innovation

(d) Communication, Informal versus Formal

Information,

Communications

and Knowledge (CIK)

Twenty items were developed for each of the four value dimensions. Semantic statements were constructed which were conceived as being specific to the respective value dimensions.

The resulting item pool was narrowed from 80 to 66 on the basis of ratings (14 management consultants within AT&T) of the extent to which the items indexed the value dimensions of an excellent organization. The scale, called the Corporate Values Questionnaire, was field-tested on a random sample of 101 employees of AT&T. The respondents were asked to complete the questionnaire and to make comments regarding the clarity and relevance of the survey questions.

Modification was made to the questionnaire in response to suggestions made by the respondents, and the number of items was narrowed to 48. The resulting pool of 48 descriptors was judged to be qualitatively sufficient to describe organization value dimensions. However, it was recognized that they had been derived essentially on a priori grounds without empirical confirmation. Therefore, confirmatory factor analysis (Nunnally, 1978; Gorsuch, 1983) was selected as the method to empirically test the descriptors.

A. Development of the Item Pool

The first step in constructing the value items of the instrument was to develop a set of descriptors to frame each value dimension. The task was to define the most important value orientations which guide thought about organizational excellence.

The four-dimensional set of descriptors compiled by Peters & Waterman (1982) seemed to represent the most comprehensive investigation, though others (i.e., Bradford & Cohen, 1984; Davis, 1984, Deal & Kennedy, 1982; Hickman & Silva, 1984) have done similar research. Peters and Waterman interviewed hundreds of employees in over 60 major companies about various characteristics of excellence and successful performance, values-driven, hands-on being one. Utilizing this research and the research of others mentioned previously, together with perspectives gained on-site at AT&T, the item pool was developed.

B. The Confirmatory Factor Analysis

1. Subject:

The population from which the samples were drawn for this study was restricted to the Operator Services

Division of AT&T Communications, Eastern Region. Eight hundred fourteen employees in 30 regional offices were administered the questionnaire. Five hundred forty-seven were operators and 267 were managers.

2. Procedure:

The 48 organizational value items were administered to these subjects as a self-report inventory with a Likert scale format. The employees were asked to respond to the questionnaire as part of a comprehensive employee development program. The questionnaire was randomly and proportionately distributed to employees within the 30 offices by members of an AT&T task force. Task force members were given the appropriate instructions for administration of the questionnaire. Of the 814 questionnaires distributed 747 were returned and useable (i.e., without substantial amounts of data missing). It was determined that those questionnaires not used because of missing data, were evenly distributed across the sample; therefore the remaining data was not skewed.

3. Analysis:

The data analyzed in this study were collected through the use of an instrument developed on the assumption that there were four underlying dimensions or factors to which the value items related. In this

context, multiple-group confirmatory factor analysis (Nunnally, 1978; Gorsuch, 1983) was considered the appropriate method to employ for resolution of the items which theoretically related to the primary dimensions.

One of the basic assumptions of factor analytic techniques is that a battery of intercorrelated variables has common factors running through it and that scores of an individual can be represented more economically in terms of these reference factors (Fruchter, 1954). Factor analytic techniques accomplish the job of indicating which variables group together to form the same underlying dimension. Hence, such techniques are principally concerned with the linear resolution of a set of variables in terms of a small number of factors (Nunley, 1978). Resolution is accomplished by the analysis of the intercorrelations among variables.

Confirmatory factor analytic techniques provide an approach to understanding the meaning of constructs by examining the relations between constructs. A specialized type of confirmatory factor analysis, multiple-group analysis, can be used to test the validity of a measurement scale's underlying factor structure. Multiple-group factor analysis is particularly well-suited for hypothesis testing where a

theory states that certain variables will load on the same factor and others on another factor (Nunnally, 1978). Multiple-group factor analysis is an appropriate procedure for item analysis when there are several subscales in a total scale (Gorsuch, 1983).

In the confirmatory factor analysis performed in this study a theoretical model was specified, against which sample statistics were compared for goodness of fit (Bentler, 1980; Joreskog, 1969; Joreskog & Sorbom, 1979). Item loadings on each factor and the relationship among factors (communality) were considered to be parameters of the theoretical model. Parameters were at a value dictated by the theoretical model. For example, if an item was expected to load on one of the four factors, then it was compared against a theoretical value of .50 [a firmly salient loading (Gorsuch, 1983)]. Loadings on the 3 non-primary factors were compared to theoretically non-significant loadings of .25.

Confirmatory factor analysis leads to an assessment of the goodness of fit of the theoretical model. A chi-square statistic was used to determine whether the observed data differ significantly from values specified in the theoretical model. The null hypothesis was that the model did not fit the data (i.e., that there was a difference). A significant chi-square indicates that

there is a difference between the expected and the observed data and thus that the theoretical model does not fit. Rejection of the null hypothesis results in acceptance of the alternative hypothesis and confirmation of the theoretical model.

4. Results

The items which were selected to constitute the revised subscales measuring the four factors are presented in Table 1 in the order of descending magnitude of their loadings. Together these items comprise the Corporate Values Questionnaire - Version 2.

Insert Table 1

Table 2 presents the full factor matrix derived from a direct (unrotated) solution provided from the multiple-group confirmatory factor analysis. Results of the confirmatory factor analysis of the theoretical model showed the chi-square statistic to not be significant at the .01 probability level and all t-statistics for items retained in the second version were significant at either the .01 or the .05 level. (see appendices D & E)

Table 1

Items with Loadings $\geq .35$ on Four Value Subscales

Factor A: Competitive Service and Quality	<u>Loading</u>
The company expects work which is usually of less than excellent quality.....	-.83
The company conducts all aspects of its business in a way that reflects high standards of quality and excellence.....	.68
The company has the competitive know-how to meet the demands of the future.....	.52
Present job practices limit the employee's ability to provide high quality service to the customer.....	-.46
There is real dedication in the company to standards of excellence in customer service.....	.44
Employees believe that customer satisfaction is the company's primary focus.....	.38
 Factor B: Innovation and Change	
Employees feel computers are creating more problems than they are solving.....	-.71
Taking creative approaches to better serve customers is an accepted practice within the company.....	.64
The company rewards employees who use creative methods and techniques.....	.63
Employees are comfortable with making suggestions for changes in company practices and procedures.....	.61
Employees do not expect ideas or opinions they share to lead to any real change.....	-.61

The company has a discouraging and indifferent attitude toward employees making suggestions for change.....	-.43
Changes in the company are being introduced with good forethought and preparation.....	.42

**Factor C: Communication,
Information,
and Knowledge**

Most decisions governing how employees do their work come from the top with little opportunity for employee feedback.....	-.89
New plans are freely shared with all employees in the company.....	.80
The employees have a sense of ownership and feel personally accountable for the success of the company.....	.77
Employees deal with each other with integrity and openness.....	.67
The company values rigid job structure over informed employee judgement.....	-.61
Major decisions are made within the company with the appropriate participation of all employees.....	.60
Financial performance information is openly shared with all employees in the company.....	.47
The sharing of information is not restricted by excessive level-consciousness within the company.....	.40

Factor D: People and Human Resources

Non-job related general knowledge is not frequently shared between people in the company.....	-.88
The company is not concerned with the personal development of its employees.....	-.86
The company recognizes the growth and development needs of its employees.....	.76

The company has a positive attitude toward new ideas and concepts.....	.73
The company is concerned with the overall professional growth of its employees.....	.71
Employees are not afforded ample opportunity to reach their fullest potential.....	-.66
The recruitment and promotion practices bring and keep high performance people in the company.....	.47
Flexible work rules and policies are favored by the company.....	.42
Employees are told they are important to the company.....	.36

Table 2
Factor Loading Matrix for the 48 Items in the
Corporate Values Questionnaire

Items in:
Scale 1

		Factor		
	A	B	C	D
2	-.46	.17	-.14	.17
5	-.83	.34	.08	.05
6	.17	.20	-.48	.24
8	.52	-.03	.21	-.33
10	.44	-.14	-.06	.33
11	.41	.29	.37	.05
17	.09	-.05	.13	.11
27	.32	-.32	.28	.16
28	.04	.19	.53	.30
35	.68	-.12	.24	-.25
47	.38	-.38	-.27	-.15

Scale 2

4	.31	.30	.56	.27
7	.28	-.43	.25	.33
15	-.16	.61	.49	-.24
18	-.12	.63	.31	-.35
20	-.08	.25	-.35	.73
22	-.37	.64	.14	-.03
23	.15	.23	.26	-.49
25	.11	.42	-.06	.39
29	-.69	-.12	.09	-.54
30	.56	.05	-.13	.43
32	.17	-.71	.14	.13

Scale 3

3	.12	.34	.77	.02
9	.44	.15	.80	.17
19	.34	-.15	-.31	-.36
26	.20	.14	-.30	-.88
31	.31	-.15	.47	.10
33	-.12	.12	.40	-.33
36	.02	-.03	.60	.49
38	-.01	.03	-.89	-.21
39	.27	-.61	-.03	-.13
41	-.41	.22	-.08	.06
45	.21	-.21	-.03	.45

Scale 4

1	.08	.25	.20	.47
12	.24	.07	.62	-.19
13	.45	.22	-.61	-.28
14	-.23	.28	.21	-.62
16	-.23	.08	.18	.71
21	-.10	.19	-.42	.76
24	.04	.12	.26	-.10
34	.15	-.05	.19	-.86
37	.20	.00	.11	-.66
40	.29	-.19	.32	.42
42	.07	-.22	.57	.21
43	.54	-.49	.33	.36
44	-.29	-.34	.58	-.20
46	-.24	.08	.67	.10
48	-.46	.20	.33	.21

Chapter IV

CONTENT ANALYSIS AND VALIDATION RESULTS

This chapter is organized into two primary sections. In the first section, items retained in making up the four subscales and those discarded will be analyzed to explore and interpret item and factor relationships. The second section describes the results of a post-development critique of the content of the questionnaire.

A. Results of the Content Analysis

The literature, clinical evidence, and the results of factor analysis confirmed the fact that the questionnaire examines several different but moderately related factors that may be part of the more general construct of corporate excellence. Further logical analysis of the results also reveals that these several factors can be partitioned into the following sub-facets or attributes:

Factor A: Competitive Service and Quality

1. Work Quality

2. Competitive Mindset
3. Service Standards
4. Customer Satisfaction

Factor B: Innovation and Change

1. Creative Approaches/Methods
2. Idea Formulation/Processing
3. Receptivity to Change
4. Preparation for Change

Factor C: Communication, Information and Knowledge

1. Employee Input/Feedback
2. Work Relationships
3. Decision Making
4. Information Sharing

Factor D: People and Human Resources

1. Employee Development/Training
2. Employee Individuality
3. Work Rules/Policies
4. Personnel Practices

In this section, items used in making up the four factors and sixteen attributes will be analyzed to explore congruities and inconsistencies in content.

Factor A: Competitive Service and Quality

This factor was originally composed of eleven items which were subjected to the confirmatory factor analytic

process. The factor was designed to encompass company commitment to standards of excellence and "being the best".

Work Quality is a measure of how employees perceive the level of commitment within their company to "doing the best job" or "making the best product."

Competitive Mindset is a measure of how employees perceive the company's commitment to "being the best" relative to other companies. This includes market awareness, cost effectiveness, and collective pride.

Service Standards reflects the perceptions employees have of their company's commitment to providing on-going support services to the customers. Such support is not limited to service units or departments but is seen as the responsibility of each individual in the company.

Customer Satisfaction measures the extent to which employees believe the company understands, cares about, and responds to the real needs and wants of the customer. This includes perceptions about stability of the customer base, accuracy of customer assessments, and other feedback measures.

Retained Items

Item 2: Present job practices limit the employee's ability to provide high quality service to the customer.

This item loaded moderately high (-.49) on Factor A as expected. The negative loading is due to the item's negative phrasing. The extent to which this item explains or contributes to an understanding of Factor A (Competitive Service and Quality) is observed directly by its reference to "high quality service" and more indirectly by a probable vicarious relationship between job practices which allow employees freedom from unnecessary constraints and their ability to be competitive and to respond to customer needs. Loadings on all non-primary factors were negligible.

Item 5: The company expects work which is usually of less than excellent quality.

This item loads more highly (-.83) on this factor than on any other. The negative relationship is accounted for by the item's negative phrasing. The strength of this loading suggests that the concept of high quality (excellent-level) work underlies and may be the very foundation upon which the cohesiveness of this factor is built. Loadings on Factors C and D were

negligible. A low but nonsignificant relationship exists between this item and Factor B (Innovation and Change).

Item 8: The company has the competitive knowhow to meet the demands of the future.

As expected, this item loaded moderately high (.52) on Factor A. The use of the word "competitive" in phrasing the item probably accounts for the strong relationship. However, it may be assumed that use of the term "knowhow" suggests a quality of "preparedness" and readiness". These qualities are also inherent in a company's ability to successfully compete. Loadings on Factors B and C were negligible. A low negative but nonsignificant loading (-.33) occurred on Factor D (People and Human Resources).

Item 10: There is real dedication in the company to standards of excellence in customer service.

Item 10 loads moderately (.44) on Factor A as expected. This confirms that service standards play a definite role in understanding the nature of Factor A. Probably, the communication of standards is the primary vehicle through which a company shows its dedication to

high quality work and superior customer service. This item loaded negligibly on Factors B and C. A low but insignificant correlation (.33) was observed between this item and Factor D.

Item 35: The company conducts all aspects of its business in a way that reflects high standards of quality and excellence.

This item loaded, as expected, very strongly (.68) on Factor A. Again, this appears to support an inherent relationship between a dedication to high standards, high quality work, and competition. Negligible loadings were evident on all other factors.

Item 47: Employees believe that customer satisfaction is the company's primary focus.

This item loaded moderately (.38) on Factor A. This suggests that some relationship might exist between a company's level of attention to customer needs and the degree of success it enjoys competing in the marketplace. An equally high but negative loading (-.38) on Factor B (Innovation and Change) also suggests that an externally-focused customer orientation should probably be balanced by an internally-focused employee

needs orientation. It was felt that the potential for ambiguity due to equal loadings on Factors A and B was diminished because of the reciprocal relationships.

Negligible to low loadings occurred on Factors C and D.

Factor B: Innovation and Change

This factor originally contained eleven items before the final confirmatory procedures. The questions were designed to measure employee perceptions about the following: Creative Approaches and Methods; Idea Formulation and Processing; Receptivity to Change; and Preparation for Change.

Creative Approaches and Methods is a measure of the degree to which employees believe the company really is committed to the development and implementation of new approaches and methods to better serve customers.

Idea Formulation and Processing is a gauge of the company's ability to communicate to its employees. It represents a respect for employees opinions and ideas. This respect is evidenced by a clear process for collecting ideas and turning them into action plans.

Receptivity to Change is a measure of the degree to which employees perceive that the company not only deals effectively with changing technological and economic

change and advancement, but looks forward to and expects positive benefits to accrue as a result. This is associated closely with a company's ability to receive and process employees' ideas and suggestions for change.

Preparation for Change is a measure of how a company is perceived with respect to readiness to deal effectively with the future, i.e., new and ambiguous challenges. This includes whether employees feel that the company has devoted adequate analysis, planning, and forethought to the "futuring" process.

Retained Items

Item 7: The company has a discouraging and indifferent attitude toward employees making suggestions for change.

This item was confirmed to load at a moderate level (-.43) on the hypothesized Factor B. The negative phrasing of the item caused the loading to be negative. The item loaded low but nonsignificantly on the other three factors. The contribution this item makes to understanding Factor B revolves around the importance of the input process to effective change planning and preparation.

Item 15: Employees are comfortable with making suggestions for change in company practices and procedures.

As expected, this item loaded highly on Factor B (.61). It is very closely linked to item 7 in that both items emphasize the importance of input throughout the change process. The item also loaded positively at a moderate level (.49) on Factor C (Communication, Information, and Knowledge). This is not surprising given the "input" dynamic mentioned. The item loaded negligible to low on Factors A and D.

Item 18: The company rewards employees who use creative methods and techniques.

This item loaded highly (.63) on Factor B, as anticipated, thereby contributing to an understanding of the factor. This relationship suggests that an integral part of the process of effective change must incorporate not only the necessary positive reinforcements, but also the freeing of employees to use their capacities for creativity and invention to the fullest. The item also loaded low but significantly (-.35) on Factor D (People and Human Resources). The reason for this, particularly the negative aspect of the correlation, does not readily

reveal itself. Nevertheless, it is felt that the contribution to Factor B is not compromised. Loadings on Factors A and C were negligible to low and nonsignificant.

Item 22: Taking creative approaches to better serve customers is an accepted practice within the company.

As anticipated, this item loaded highly (.64) on Factor B. The contribution that this item makes is seen in light of a necessary link between two dynamics: One, the need for a company to effectively serve its customers; and, two, the need for a company to understand the constantly changing needs of customers. That fundamental link is centered in the creativity of its employees.

A low but significant negative loading (-.37) of Item 22 on Factor A (Competitive Service and Quality) seems to present somewhat of a contradiction, since both factors refer to "customer service". However, Factor A refers more to "company-imposed" standards, whereas Factor B standards are derived more from the creative freedom of the individual. Loadings for this item of Factors C and D were both negligible.

Item 25: Changes in the company are being introduced with good forethought and preparation.

This item loaded moderately (.42) on the target Factor B. It contributed to an understanding of the factor in that it suggests that positive perceptions of change are directly linked to thorough analysis and planning. Strategically working through change appears to legitimize the process and reduce employee feelings of anxiety and aimlessness. This item also loaded in the low to moderate range (.34) on Factor D (People and Human Resources). This seems to confirm that a concern for preparation and forethought in the change process is a concern for people in general. The loadings for Factors A and C were negligible.

Item 32: Employees feel computers are creating more problems than they are solving.

Factor B was the target for this item. Question 32 loaded firmly (-.71) on this factor with no ambiguous loadings on any of the other factors. Loadings on Factors A, C, and D were all negligible. The contribution this item makes to understanding Factor B is unquestionably significant. It suggests that

technology, in this instance computers, is very highly associated with change in the workplace.

Item 39: Employees do not expect ideas or opinions they share to lead to any real change.

This item unexpectedly loaded moderately high (-.61) on Factor B. The original intent of the question was to measure perceptions and viability of employee input into the information-sharing process (Factor C). Evidently, use of the term "change" at the end of the statement weighed very significantly in the respondents interpretation of the item. In fact, the item loaded negligible to low and nonsignificant on all other factors. The negative loading on Factor B was due to the negative phrasing of the item.

Factor C: Communication, Information, and Knowledge

This factor orginally consisted of eleven items designed to assess some aspects of an organization's value system which relate to the employee's perception of the organization's openness and flow. This factor is a measure of the perceptions of a company's performance

in the areas of input and feedback, work relationships, decision-making, and the sharing of information.

Input and Feedback is a measure of how employees perceive the organization's commitment to providing and accepting information that is relevant to job performance.

Work Relationships reflects employees' view of how well the organization fosters dynamics in which employees interact with each other honestly and with integrity and trust.

Decision-making is a gauge of the employees' perception of organizational commitment to "participatory management", shared accountability, and ownership.

Information-sharing evaluates the degree to which employees perceive that the organization believes strategic and financial information is reserved solely for distribution to upper-management.

Retained Items

Item 3: The employees have a sense of ownership and feel personally accountable for the success of the company.

This item was confirmed to load very highly (.77)

on the primary factor theorized, Factor C. It contributed to an understanding of the factor in that it suggests a close association between participation in the decision-making process and an employee's sense of personal responsibility and investment in the company's future. Loading on Factors A and D were essentially negligible. A moderate correlation (.34) was observed with Factor B. This suggests a relationship between employee readiness for change and employee involvement in the preparation for change process.

Item 9: New plans are freely shared with all employees
in this company.

This item loaded very highly (.80) on the primary theoretical Factor C. It partially explains the factor through its direct relationship to the information-sharing attribute of the factor. Loadings on Factors B and D were negligible. A moderate loading (.44) was observed on Factor A. This is understandable given the strong general relationship between strategic planning and maintaining a competitive advantage. No question of primary and secondary factor ambiguity was raised in view of the very high primary loading.

Item 13: The company values rigid job structure over informed employee judgement.

This item was originally expected to load on Factor D. Actually it did load at the .45 level on Factor D. However, it loaded more significantly (-.61) on Factor C. Initially, it was considered to be too ambiguous to be retained. A closer examination revealed, however, that the word "informed" may have caused the item to be associated highly with the information aspect of the Communication, Information, and Knowledge factor (C). Logical analysis suggested that there was more to be gained in understanding Factor C than would be lost in ambiguity. Loadings for Factors A and B were negligible to low.

Item 31: Financial performance information is openly shared with all employees.

This item was confirmed to load moderately high (.47) on the primary Factor C, as theorized. It contributes to an understanding of the factor in that a specific type of information (financial) probably exists as a subset of a broader aspect of information in general. Item 31 loaded negligibly on Factors B and D and had a low but nonsignificant correlation (.31) to

Factor A.

Item 33: The sharing of information is not restricted by excessive level-consciousness within the company.

Item 33 was confirmed to load moderately (.40) on the hypothesized Factor C. It makes a direct contribution to more clearly understanding the relationship between the importance of sharing information in the communication process and in the processing of information for knowledge development (learning). The item loaded negligible to low/nonsignificant on Factors A, B, and D.

Item 36: Major decisions are made with the appropriate participation of all employees.

This item loaded moderately high (.60) on Factor C as expected. This high loading suggests that participation in the decision-making process is accomplished primarily through communication and information input/exchange channels. Loadings on Factors A and B were essentially negligible. A moderately high positive correlation (.49) was also found between this item and Factor D (People and Human

Resources). This relationship can probably be attributed to an underlying assumption that companies which allow or urge their employees to participate in the decision-making process are also making a strong value judgement about the importance of employees as people.

Item 38: Most decisions governing how employees do their work come from the top with little opportunity for employee feedback.

This item is the highest loading (.89) of the eight items retained in Factor C. It was hypothesized to load on Factor C and it did so squarely with little ambiguity. Loadings on all other factors were negligible to very low. This item cements the relationship between responsibility, i.e., ownership, accountability, commitment (Item 3), planning and decision-making (Items 9 and 36), and information processing and exchange. These are all concepts which underly the remaining items which were retained in the factor.

Item 46: Employees deal with each other with integrity and openness.

This item was hypothesized to load on Factor D (People and Human Resources). In fact, item 46 loaded on Factor D at a negligible level (.10) and at a high level (.67) on Factor C. One possible explanation for this is the "growth development" flavor of the People and Human Resources factor versus the emphasis on "employee relationships" and information-sharing (openness) aspects of Factor C.

Factor D: People and Human Resources

Prior to the confirmatory factor analysis, Factor D contained 15 items which concentrated on essentially four main aspects of the category: Employee development and training; employee individuality; workrules and policies, and personnel practices.

Employee Development and Training measures the degree to which employees perceive that the company is committed to helping them reach their highest personal and professional potential. Such commitment is emphasized through education, training, and other developmental activities.

Employee Individuality gauges a company's success in creating a value system that is responsive to its employees' individual needs and personal differences.

This attribute also measures how clearly a company seems committed to recognizing its people as its most important asset.

Work Values and Policies evaluates items which help to clarify organizational issues that center around a company's perceived flexibility with respect to the regulation of work duties and responsibilities. This sub-facet includes the employee's ability to use new ideas and concepts in his or her personal work space.

Personnel Practices measures how recruitment, promotion, salary, benefits, and other human resource functions, as a whole, are perceived by employees. A subjective evaluation is made as to a company's ability to acquire and retain high quality talent.

Retained Items

Item 1: The recruitment and promotion practices bring and keep high performance people in the company.

As intended, item 1 loaded moderately (.47) on Factor D. This reflects the human resources management flavor of the category as well as an emphasis on people reaching their highest potential (i.e., in work performance). The item loaded negligible on all other factors.

Item 16: The company is concerned with the overall professional growth of its employees.

This item loaded very strongly (.71) on Factor D, the target factor. This is not surprising in view of the direct association which must probably exist between this item (with its reference to "professional growth") and a factor which emphasizes people and their development. Loadings on all other factors were negligible.

Item 20: The company has a positive attitude toward new ideas and concepts.

In a surprising switch this item loaded strongly (.70) on Factor D. The original design of the item was to have it load on Factor B (Innovation and Change). The assumption was that a company's receptivity to change was undergirded by a positive attitude toward new ideas and concepts. In fact, there may very well be some relationship (.25). However, the significant showing on Factor D suggests that, for the sake of explanation, the more plausible relationship must exist between "new ideas and concepts" and the learning process which must be implied in the make-up of category D (People and Human Resources). The link that is suggested is that

learning is the acquisition of new ideas and concepts. The item also shows a low negative (-.35) relationship with Factor C (Communication, Information, and Knowledge). The reasons for this are not altogether clear to the researcher. Loadings on other factors are negligible.

Item 21: The company recognizes the growth and development needs of its employees.

By design this item loaded very strongly (.76) on Factor D. Again, given the human resource development bent of the factor, it is not surprising to find that a question concerned with employee growth and development would have a strong relationship with it. Somewhat surprising however is the moderate negative relationship (-.42) this item shares with Factor C (Communication, Information, and Knowledge). This is the second time an item loading strongly on Factor D has had an inverse relationship to Factor C. The reason thus far does not reveal itself in the data and the researcher could not hazard a firmly grounded guess. Loadings on all other factors for this item are negligible.

Item 26: Non-job related general knowledge is not

frequently shared between people in the company.

The strength of this item's loading (-.88) on Factor D was another unforeseen assist to interpreting the structure of the factor. Originally expected to load on Factor C (Communication, Information, and Knowledge), this item strengthens the notion that a shared existence in the workplace is an important aspect of the people development process inherent in Factor D. Further, it suggests that the strength of informal communications is a key to developing that sense of sharing. A low correlation (-.30) exists between this question and Factor C, as expected. Negative loadings are the result of negative phrasing. Negligible loadings were observed on all other factors.

Item 34: The company is not concerned with the personal development of its employees.

As expected this item loaded very highly (-.86) on the intended Factor D. Item 34 reflects an underlying concern a company has for not only developing people but for accepting and helping people become better persons in general. This is a notion which is consistent with the subtle differentiation the researcher has made

between the terms "people" and "human resources." The term people reflects the concern for the inherent dignity of the individual and the term human resources expresses more of a concern for what employees, through their development, can contribute to the company. The negative loading is explained by negative phrasing. Loadings on all other factors are negligible.

Item 37: Employees are not afforded ample opportunity to reach their fullest potential.

As anticipated, this item loaded highly (-.66) on Factor D. This confirms that Factor D does indeed have a cohesive developmental underpinning, i.e., the enhancement of human capacities (resources). Loadings on all other factors were negligible. The negative effect on the Factor D loading is due to the negative phrasing of the item.

Item 40: Flexible work rules and policies are favored by the company.

The anticipated primary loading for this item was Factor D. Item 40 did load moderately (.42) on Factor D. This suggests that there is a nominal relationship between the flexibility employees are allowed in their

day-to-day work activities and in their growth and development. After all, growth requires the freedom to make and learn from mistakes. This item also loaded low but not significantly (.29 and .32, respectively) on Factor A (Competitive Service and Quality) and Factor C (Communication, Information and Knowledge). A relationship even exists at a lower level (.19) between Item 40 and Factor B (Innovation and Change). This strongly suggests that in an era of rapid change, complex communication, and a knowledge/information explosion, flexibility may be one key ingredient that is needed in all aspects of corporate life.

Item 43: Employees are told they are important to the company.

Item 43 was expected to load significantly on Factor D. It did load on this factor at a moderate level (.36). However, the potential level of ambiguity for this item is higher than for any of the retained items. Loadings for Factors A, B, and C were .54, -.49, and .33, respectively. Typically, with such loadings the item would have been switched to Factor A (Competitive Service and Quality). The contribution to understanding that factor is considerable in that the

"importance of people" must be the hallmark of a company that is dedicated to high standards of customer service and product quality. However, a more intuitively (logically) sound connection exists in the researcher's opinion between the importance a company places on and expresses to its employees and that company's commitment to developing them as a "most valued resource."

Discarded Items

The following items were discarded from the 48 which remained after the initial field test consisting of 90 items. They were discarded because of ambiguity resulting from multiple high factor loadings, or insignificant loadings on any factor. All were discarded empirically based on the factor analysis rather than qualitatively based on a logical analysis, as was the case in the field test. They are as follows:

Item 4: Employees view the company as one which is receptive to change.

Item 6: The company emphasizes customer satisfaction as the key to long-term financial stability.

Item 11: There is healthy competition among employees.

Item 12: Employee creativity and growth are stifled

within the company.

Item 14: Low value is placed on the development of its people to achieve company excellence.

Item 17: The company attempts to be better than outside competitors.

Item 19: There is a limited opportunity for employees to share their full storehouse of job knowledge with others in the company.

Item 23: Job-related change is enthusiastically received within the company.

Item 24: The company underutilizes its employees' talents.

Item 27: Employees are encouraged to update their technical knowledge to maintain the quality of their work.

Item 28: Service to the customer is an important part of the company's philosophy.

Item 29: The company is not properly preparing its employees for the future.

Item 30: The company encourages employees to meet change with a positive attitude.

Item 41: Employees are open and willing to become involved in helping to plan work related to their jobs.

Item 42: The company stresses self-sufficiency and individual effort by employees.

Item 44: The company is more concerned with individual time and efficiency than with employees' overall commitment and pride in themselves.

Item 45: Performance feedback to employees is used for constructive planning and management and not for destructive criticism.

Item 48: The company feels its management should lead by helping employees be effective and feel important.

B. Results of the Content Validation Study

A preliminary panel of experts was selected from within AT&T and utilized to evaluate the content of the questions. It was felt, however, that a more heterogeneous panel of experts might be useful in shaping the final format of the questionnaire in terms of its generalizability to a variety of organizations and occupational groups. Recognized HRD academicians and professionals were asked to respond to the following list of items:

1. Is the length of the questionnaire appropriate?
2. Are there any words that are unclear or biased?
3. Are there any questions which seem unclear or

leading?

4. Do any of the questions seem "silly," "embarrassing," "pointless," or otherwise "sensitive"? If so, list the questions and give your criticism of them.
5. Is there any other way the questionnaire could have been presented in order to make it more interesting?
6. Do you feel the questionnaire is overly susceptible to answers being faked?
7. Do you feel any of the questions might cause respondents to feel uncomfortable to the extent that they might not answer as they really feel but as they think they are expected to feel?
8. The purpose of the questionnaire is to discover how employees perceive the value system of the organization as reflected in the degree to which they accept or reject descriptions about policies, practices, and conditions which exist in the work environment. Do you believe these questions adequately describe the domain of relevant perceptions?
9. If you have any further thoughts, questions, or suggestions, please feel free to give them. Write anything you might think of about the

questionnaire that hasn't been covered by the previous questions. Your help is most useful and appreciated.

The responses from the post-development panel of experts resulted in a number of suggestions and recommendations. They are as follows:

1. All items that were negatively worded should be reworded in "equivalent positive terms." It is felt such could be accomplished without disrupting the basic factor structure of the instrument. For example, Item 2, which presently reads "Present job practices limit the employee's ability to provide high quality service to the customer", could be changed to "Present job practices enhance the employee's ability to provide high quality service to the customer."
2. Several respondents suggested that question 9, "The company values rigid job structure over informed employee judgement" is not really a fair question. The feeling was that "rigid structure" versus "informed judgement" is too highly charged. The recommendation is to remove the terms "rigid" and "informed" from the question. This change would create a simple choice between job structure and informed judgement.

3. Question 17 "Non-job related general knowledge is not frequently shared between people in the company" is considered awkward and somewhat confusing. It was suggested that the "non-job related general knowledge" phrase be changed to "general knowledge unrelated to work."
4. Several comments on the Background Information and Directions were made. They related to the objectives of the questionnaire. The comments indicated that the objectives seem overstated. Suggestions for a "two-tiered" approach were made. The primary objective of the survey might be "to identify organizational value problem areas" while the objectives listed could then be added as spinoffs, such as, "through this identification it is expected that (1)...etc."
5. The comment about confidentiality should be placed at the start of the questionnaire.
6. The middle descriptors displayed on the graph appear to be strongly judgemental and should be removed. A continuum from 1 to 6 suggesting the relative presence or absence of excellence seems all that is required or realistically discernible.

Chapter V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

A. Summary

The purpose of this study was two-fold. First, a confirmatory factor analysis was performed to test the validity of a theoretical model of corporate values. This model was hypothesized and supported by relevant research cited in the literature on corporate cultures, organizational change and values development. Second, based on the outcome of the factor analysis, a scale was devised and refined in an effort to present to the HRD community a valid and reliable instrument for measuring corporate values.

An analysis of previous attempts to conceptualize and measure corporate values indicated that the instruments used appeared to lack one or more of the features which might be necessary to arrive at a clear view of the domain of organizational values within corporate cultures. Some contained items which related more directly to the concepts of climate and organization behavior. In others, the underlying criteria did not appear to take into account some of the

salient features of organizational values as opposed to personal values. In a desire to employ values-based survey techniques with employees in companies, important perceptual elements were largely overlooked. Instruments that were measures of organizational behavior seemed to obscure the importance of the more basic elements of culture and values development.

This study took as its primary hypothesis the proposition that a scale of adequate construct validity and reliability could be devised to measure a set of corporate values supported by an appropriate cross-sectional review of professional literature.

Testing this hypothesis involved the following steps:

1. An item pool that totalled 90 value statements was compiled by the researcher. It was anticipated that out of the total pattern of "Likert-scaled" responses given by subjects to these items, it would be possible to arrive at a valid subset of survey items.
2. A panel of experts (internal consultants) agreed to a preliminary review of the items in the pool to confirm that each statement expressed the appropriate value dimension that the researcher designed it to express.
3. The pre-test version of the scale contained 60

items representing a total of four factors.

This version was administered to 101 respondents. On the basis of their responses and critique, item analysis of these items was performed.

4. The first actual version of the scale contained 48 items. Fifteen items represented the factor People and Human Resources, and 11 items represented each of the remaining factors: Innovation and Change; Communication, Information and Knowledge; Competitive Service and Quality. This version was administered to 814 respondents. A multiple-group confirmatory factor analysis was performed on this set of responses.
5. The factor analysis was performed to determine if those items which were hypothesized to represent a specific factor represented it empirically. Based on the factor analysis it was judged that 30 of the items adequately portrayed the four factors. The remaining 18 items were dropped from the instrument.
6. The 30 items which were retained were subjected to a logical and content analysis wherein the researcher detailed explanations for retaining

and discarding items. It was felt that such scrutiny lends further validity to the basic conceptualization of a model of corporate values.

7. The 30-item version of the scale was distributed to prominent professionals in the field of HRD. These persons were requested to do a final critique of the scale before its introduction as a measurement instrument in the field. The results of this critique suggested a broad applicability in the corporate environment, and nominal changes were made to item phrasing and questionnaire design.

Preliminary use of the instrument within AT&T has demonstrated that the instrument developed in this research has "practical" as well as "theoretical" validity. Although other instruments have been designed by investigators cited in Chapter II, none of them has been subjected to any criteria as rigorous as the ones set forth in the confirmatory factor analysis. In addition, items that were retained had to load at or above an acceptance level of .35. As such, this figure constitutes a level of acceptability and power fully on a par with other questionnaires and inventories currently being used to measure attributes of the

workplace.

B. Discussion

In this section the results will be discussed in terms of three salient features of the study: The questionnaire as an instrument; values theory and development; and corporate culture change.

1. The Questionnaire as an Instrument

The questionnaire is a self-report Likert-scaled instrument which requires the respondents to choose one of six points on the scale which represents a range from "A very inaccurate statement" to "A very accurate statement". These responses are made to a series of 30 items. Some statements were descriptions of observable conditions or situations which the subject perceives are representative or not representative to some extent of his or her organization. Other items described characteristics or feelings which respondents believed, to varying degrees, either were or were not reflected in the organization's corporate philosophy.

Because it is a self-report instrument, it is heir to the difficulties inherent in the nature of this type of questionnaire. Some of these problems include

ambiguity, subjective interpretation, and response bias.

An attempt was made to deal with the problem of ambiguity of the items by carefully rewording items to make them as clear as possible following suggestions given by the panel of experts and the pilot study group. Questions were worded as simply as possible. Some of the items nevertheless may have been ambiguous to some of the subjects. Although qualifying terms such as "usually," "often," etc. were used to clarify the meaning of items, the manner in which each subject responded to them is necessarily subjective. Some of the items may have more relevance or be more emotionally charged to one person than another. An understanding of this phenomenon is gleaned only through the most effective in-depth questioning techniques.

Each item had equal weight (one point) in the calculation of item and category scores. The questionnaire is composed of four subscales. Communalitiy coefficients indicated that there was some correlation between the scales but that they were sufficiently independent of each other to be discriminating. This permits a profile to be drawn representing the organization's values development level in the 30 items as well as in the four major categories.

2. Values Theory and Development

The following discussion is an attempt to relate the results to the literature. In this study, organizational values development was viewed as the foundation for the development of a company's fundamental self-concept. How a company sees itself is contingent upon some notion of its core beliefs/values. These values were conceptualized as relating to four major areas: those having to do with competitive service and quality; innovation and change; communication, information, and knowledge; and people and human resources.

The researcher offers the following literature-related discussion of results derived from the course of this study which spanned the better part of two years.

Some question may arise as to whether the instrument developed in the process of this investigation contains the most effective 30 items which could be devised for universal corporate values assessment. The pool from which the 30 items were selected was constructed around an extant model or notion of how corporate values cluster. Though supported by other research literature, the primary origin of the model lay with Peters and Waterman's research on excellence within American companies. As is

the fate of most well-publicized research, aspects of their work have been challenged by the professional and academic community. Fortunately, these challenges dealt more with why several so-called "excellent companies" have fallen from grace in the past three to four years than with attacks on the fundamental premise that excellence within the successful companies is the function of a vision and philosophy built upon a specific set of core values. Significantly, Peters and Waterman never said, "once excellent, always excellent". In fact, given sufficient understanding and appreciation for the process of change and transition, they would probably have argued strongly to the contrary.

Psychometric instruments such as the Corporate Values Questionnaire are vulnerable to distortions and false interpretations when those who administer them attempt to evaluate the results in a vacuum or draw conclusions in accord with their own expectations or personal agenda. This study was an attempt to translate the in-depth and relatively extensive qualitative research on corporate culture change into more empirical and generalizable terms.

The impetus was that of augmentation, not replacement. Meaningful implementation of values research must include not only a breadth but depth of understanding.

Employees are people and people are multi-dimensional.

3. Corporate Culture Change

The values questionnaire should be used in the context of a comprehensive values awareness program designed to help organizations creatively monitor and manage cultural change. The program would take an organization through four phases. Within each phase, the organization uses diagnostic instruments, including the values questionnaire, to assess and analyze the information relevant to that phase; draw conclusions for action; and design an action strategy leading to the next phase of the program. Key issues that might effect the success or failure of the program are highlighted at critical steps.

Phase I is the initiation phase. It includes two major steps: team building and assessing preliminary values for planning. The purpose of this phase is to build employees' awareness of current corporate values and to highlight the relationships to current cultural assumptions (Schein, 1985). Schein outlines three levels of culture with the first having the greatest level of awareness. They are:

- (1) Artifacts and creations
 - (a) Technology

- (b) Art
 - (c) Visible and audible behavior patterns
- (2) Values
- (a) Testable in the physical environment
 - (b) Testable only by social concensus
- (3) Basic assumptions
- (a) Relationship to environment
 - (b) Nature of reality, time, and space
 - (c) Nature of human nature
 - (d) Nature of human activity
 - (e) Nature of human relationships

It is in this phase that "espoused values" are differentiated from those values which have undergone a process of cognitive transformation into a belief and, ultimately, an assumption. More on the process of uncovering cultural assumptions can be found in Organizational Culture and Leadership (Schein, 1985).

Phase II, planning, includes developing a written plan and outlining the methods for implementing the plan for values change. The structure of the plan is one which allows for realistic implementation and adequate evaluation of the process. Ideally, the plan should provide for the actualization of Raths (1966) values development criteria:

- (1) Prizing and cherishing

- (2) Public affirming
- (3) Choosing from alternatives
- (4) Choosing after considering consequences
- (5) Choosing freely
- (6) Acting
- (7) Acting with pattern, repetition, and consistency

It is in implementation, Phase III, that Rath's criterion seven is most significant to culture change and development. It is the power of acting with pattern, repetition, and consistency over time which transforms an espoused value associated with a corporate philosophy into a basic underlying assumption embodied in the cultural paradigms. Schein (1985) states:

Only those values that are susceptible of physical or social validation, and that continue to work reliably in solving the group's problems, will become transformed into assumptions. When a solution to a problem works repeatedly, it comes to be taken for granted. What was once a hypothesis, supported by only a hunch or a value, comes gradually to be treated as a reality. We come to believe that nature really works this way (p. 16). The final phase, evaluation, includes post-assessemnt and trend analysis of all data

collected through various interview, survey, and observational techniques. This process determines the outcome of the values development program and the extent to which it may have revealed or altered basic assumptions in the less observable and less confrontational process of corporate culture change.

C. Recommendations

Based on the results of the study the following recommendations are made:

1. In view of a dearth of research in this area, it is recommended that the dialogue on the use of survey instruments which measure true organizational values applied to organizational settings be brought into the arena of concern for the Human Resource Development community, especially that segment which relates to corporate culture and organization development.

As a result of such dialogue, new vistas of understanding could be achieved in the following three areas:

(a) the use of Quality-of-Work-Life and Socio-technical systems approaches as means of helping employees to effectively deal with change in a technology-based Information Society; (b) the

management of stress as it relates to compatibility of an employee's lifestyle and personal value system with that of an organization's corporate philosophy and corporate value system; and (c) the use of reality-testing as a gauge of an organization's perceived level of development, i.e., the extent to which an organization perceives itself as excellent, as compared to that organization's measured financial performance.

2. It is further recommended that, subsequent to such dialogue, more exploratory and confirmatory research be initiated in which the value systems of other self-contained groups and organizations be identified and compared, perhaps other companies in the so-called "Best-run American Company" studies. Such comparative research may not be limited only to American organizations, but with certain bias-reduction and interpretational devices, research may be undertaken globally. Many countries such as China, the Middle Eastern, and emerging African nations find themselves in the midst of socio-cultural transformations; so must their organizations.

Another benefit of further exploratory factor analytic study is the possibility that it might uncover other factors or dimensions which may only reveal themselves through a more global less structured approach. There may be some foundation also to believe that the 18 discarded items may have a common factor imbedded in them. Intuitive scrutinization suggests that the items might relate to some notion of "commitment to excellence".

3. Further, it is recommended that efforts to development HRD practitioners and organization development consultants take into consideration the future needs of organizations that are appropriate for an emerging paradigm of corporate culture and values development. Specifically, they must be educated, trained, coached, enlightened, or otherwise dragged kicking and screaming into the understanding so succinctly put by Lou Tice: "With organizations as with people all meaningful change begins first on the inside (organizational values) then slowly works its way outward (organizational behavior)".

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Appendix A*

Rokeach Value Survey

* Inquiries should be directed to the address on
the accompanying title page

VALUE SURVEY

BIRTH DATE _____ SEX: MALE _____ FEMALE _____

CITY and STATE OF BIRTH _____

NAME (FILL IN ONLY IF REQUESTED) _____

Appendix B*

The Organizational Value Dimensions Questionnaire

* Inquiries should be directed to the address on the
accompanying survey title page

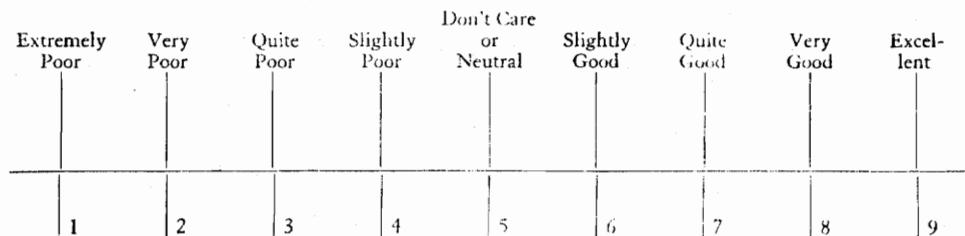
**ORGANIZATIONAL VALUE DIMENSIONS QUESTIONNAIRE:
BUSINESS FIRM**

**Developed at The Ohio State University
under the Supervision of Carroll L. Shartle**

Instructions:

Business and industrial firms in the United States vary in their characteristics and how they operate. We are interested in learning what is good and what is poor, as you see it.

Please evaluate each of the items in accordance with your own point of view about business firms in general. Use the following scale, which ranges from "extremely poor" to "excellent."



Please select a number from the above scale as your judgment of an item. Write your answer plainly after the number of the item on the ANSWER SHEET. Answer each item. Please do not write anything on the item sheets.

Published by

**Bureau of Business Research
The Ohio State University
Columbus, Ohio**

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Appendix C

List of Experts

List of Experts (Preliminary and Post Analysis)

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Oakton, VA

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Appendix D

Corporate Values Questionnaire

CVQ

CORPORATE VALUES QUESTIONNAIRE

**An Analysis Of The
Cultural Value Structure
Within Organizations**

by
Frank D. Hutchinson, Jr.

Route 4, Box 811, Stafford, Virginia 22554 • Telephone: (703) 659-5470

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Background of the Corporate Values Questionnaire

The Corporate Values Questionnaire was developed from research on organizational excellence, i.e., those companies that have done an extraordinary job of competing in the marketplace. Research by Peters and Waterman (1982) illustrated that these companies share common dominant beliefs that emphasize the importance of people to bottom-line performance. These beliefs are as follows:

1. A belief in being the best.
2. A belief in the importance of the details of execution, understanding the nuts and bolts of doing a job well.
3. A belief in the importance of people as individuals.
4. A belief in superior quality and service.
5. A belief that most members of the organization should be innovators, and the corollary, the willingness to support failure.
6. A belief in the importance of informality to enhance communication.
7. An explicit belief in and a recognition of the importance of economic growth and profits.

Given the work of Peters and Waterman and a more extensive review of the literature, an attempt has been made to focus selectively on research that can be integrated into a framework for conceptualizing values development and values measurement within organizations.

The identifiable cultural values have been grouped into four categories as part of the Corporate Values Questionnaire. The categories are as follows:

- I. Competitive Service and Quality
- II. Innovation and Change
- III. Communication, Information, and Knowledge
- IV. People and Human Resources

The questions were developed to deal with these specific value categories. The questionnaire was field-tested on over 100 employees of the American Telephone and Telegraph Company (AT&T). The respondents were asked to critique the questions, and a panel of qualified judges were selected to appraise the validity of the questions as well as the fit of the questions to the respective categories. The questionnaire was appropriately modified and readministered to nearly 1,000 AT&T employees to establish instrument validity and dimensionality. All respondents recorded their answers on the questionnaires based on a Likert-type scale ("a very inaccurate statement" = 1; "a very accurate statement" = 6). Category and instrument reliability were established utilizing Cronbach's alpha. The four-dimension model was confirmed by multiple group factor analysis. Subsequent revisions have been made to the questionnaire in the interest of eliminating those items that were ambiguous and redundant.

The Objectives of the Corporate Values Questionnaire

The Corporate Values Questionnaire has been developed to:

1. Offer management an instrument that will enhance employee effectiveness in meeting new challenges in the marketplace;
2. Provide a reliable indicator with practical utility to assess management and employee concerns;
3. Offer an instrument that will allow an organization to interface across all levels;
4. Improve an organization's willingness to identify less than excellent trends in areas that require significant attention;
5. Create a climate that encourages employees to engage in discussion and problem-solving;
6. Enhance the quality of work life by emphasizing values awareness;
7. Improve an organization's ability to function in an environment of ambiguity, rapid change and turbulence;

The four categories of the CVQ address specific management and organizational issues in support of excellence:

- I. **Competitive Service and Quality** measures the organization's perceived orientation toward:

A. Customer satisfaction	C. Product quality
B. Standards of customer service	D. Competitive excellence
- II. **Innovation and Change** measures the organization's perceived orientation toward:

A. Creative approaches and methods	C. Innovative Ideas
B. Change in company practices	D. Suggestions for change
- III. **Communication, Information, and Knowledge** measures the organization's perceived orientation toward:

A. Employee Feedback	C. Open communication
B. Information sharing	D. Shared decision-making
- IV. **People and Human Resources** measures the organization's perceived orientation toward:

A. Personal and professional employee development	C. Importance of people
B. Flexible work rules	D. Recruitment and promotion practices

Each element of categories I, II, III, and IV yields a measure that enables the organization to assess what improvements are required to bring about healthy change leading toward excellence.

CVQ-A

Company _____ **Department** _____ **Position Level** _____

Division _____ **Unit** _____

Date of Survey _____ **Location of Survey** _____

QUESTIONNAIRE

INSTRUCTIONS: This is a questionnaire designed to gather data on your company's cultural values. After reading each item, please indicate the degree to which you feel that statement reflects values held within your company. Please read each choice carefully and circle the number of the response which best expresses your feeling.

There is no time limit for the questionnaire. Try not to spend too much time on any one item, however. Your first reaction to the question will usually be the most accurate.

							RESPONSES
							<input type="checkbox"/> VERY INACCURATE <input type="checkbox"/> GENERAL INACCURATE <input type="checkbox"/> MORE INACCURATE THAN ACCURATE <input type="checkbox"/> MORE ACCURATE THAN INACCURATE <input type="checkbox"/> GENERAL ACCURATE <input type="checkbox"/> VERY ACCURATE
1.	2	3	4	5	6		
2.	1	2	3	4	5	6	
3.	1	2	3	4	5	6	
4.	1	2	3	4	5	6	
5.	1	2	3	4	5	6	
6.	1	2	3	4	5	6	
7.	1	2	3	4	5	6	
8.	1	2	3	4	5	6	
9.	1	2	3	4	5	6	

10.	Employees are comfortable with making suggestions for changes in company practices and procedures	1	2	3	4	5	6
11.	The company is concerned with the overall professional growth of its employees	1	2	3	4	5	6
12.	The company rewards employees who use creative methods and techniques	1	2	3	4	5	6
13.	The company has a positive attitude toward new ideas and concepts	1	2	3	4	5	6
14.	The company recognizes the growth and development needs of its employees	1	2	3	4	5	6
15.	Taking creative approaches to better serve customers is an accepted practice within the company	1	2	3	4	5	6
16.	Changes in the company are being introduced with good forethought and preparation	1	2	3	4	5	6
17.	Non-job related general knowledge is not frequently shared between people in the company	1	2	3	4	5	6
18.	Financial performance information is openly shared with all employees in the company	1	2	3	4	5	6
19.	Employees feel computers are creating more problems than they are solving	1	2	3	4	5	6
20.	The sharing of information is not restricted by excessive level-consciousness within the company	1	2	3	4	5	6
21.	The company is not concerned with the personal development of its employees	1	2	3	4	5	6
22.	The company conducts all aspects of its business in a way that reflects high standards of quality and excellence	1	2	3	4	5	6
23.	Major decisions are made within the company with the appropriate participation of all employees	1	2	3	4	5	6
24.	Employees are not afforded ample opportunity to reach their fullest potential	1	2	3	4	5	6

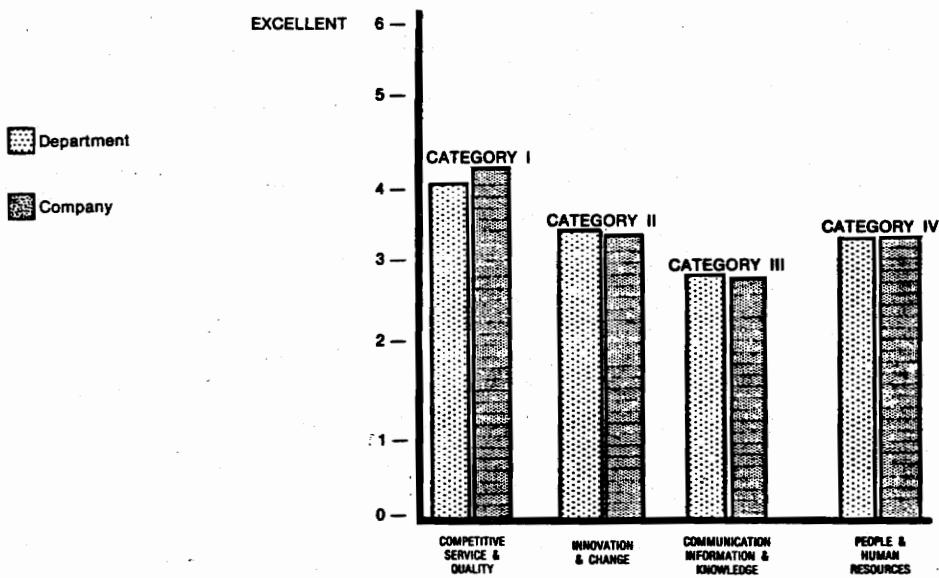
a VERY INACCURATE statement
 a GENERALLY INACCURATE statement
 a MORE INACCURATE THAN ACCURATE statement
 a MORE ACCURATE THAN INACCURATE statement
 a GENERALLY ACCURATE statement
 a VERY ACCURATE statement

	1	2	3	4	5	6	
25. Most decisions governing how employees do their work come from the top with little opportunity for employee feedback	1	2	3	4	5	6	a VERY INACCURATE statement
26. Employees do not expect ideas or opinions they share to lead to any real change	1	2	3	4	5	6	a GENERALLY INACCURATE statement
27. Flexible work rules and policies are favored by the company	1	2	3	4	5	6	a MORE INACCURATE THAN ACCURATE statement
28. Employees are told they are important to the company	1	2	3	4	5	6	a MORE ACCURATE THAN INACCURATE statement
29. Employees deal with each other with integrity and openness	1	2	3	4	5	6	a GENERALLY ACCURATE statement
30. Employees believe that customer satisfaction is the company's primary focus	1	2	3	4	5	6	a VERY ACCURATE statement

THANK YOU

The results of your individually completed questionnaire are strictly confidential!

Company, Department, or other composite results will be graphically reported as illustrated below:



VITA

PERSONAL DATA

Fall, 1986

Name Frank DuBois Hutchinson, Jr.
Birthdate June 26, 1949
Place of Birth Atlanta, Georgia

Marital Status Married

EDUCATION

1973 BA Morehouse College
 Psychology Atlanta, GA

1978 Ed.M Coppin State
 Vocational Rehabilitation Baltimore, MD

PROFESSIONAL EXPERIENCE

1983-Present Training and Development Research
 Consultant for the Human Resources and
 Operator Services components of AT&T
 Communications, Eastern Region,
 Oakton, VA.

1982-1983	Research Associate in Training for a national USDA educational project coordinated by Virginia Polytechnic Institute and State University. Coordinator: Dr. Jimmie Fortune
1981-1982	Graduate Assistant, Human Resources Development at the Northern Virginia Graduate Center of Va. Polytechnic Institute. Professor: Dr. Neal Chalofsky
1978-1981	Vocational Rehabilitation Counselor in Northern Virginia for the Dept. of Rehabilitative Services.
1973-1976	Director, Short-term Residential Treatment Programs for the Va. Dept. of Mental Health and Mental Retardation, Richmond, Virginia

Frank D. Hutchinson, Jr.