" A STUDY OF LEADERSHIP
BEHAVIOUR IN TURKISH
PRIVATE AND PUBLIC SECTOR .

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1986

CONTENTS

INTRODUCTION

The study is undertaken to provide a review of major leadership styles and techniques from a theoretical perspective, on the one hand, and a survey of managers from public and private sectors to determine the style of leadership they exercise on the other.

In Part One a theoretical survey of leadership theory is provided to set the background. No evaluative comparison is made in this section. The choice of the "leadership's styles" approch as the focus of this study is not based on any such theoretical comparison but on the writer's interest to learn more about the theory and practical extensions of this approach. Hence a more detailed study of the Michigan approach is offered.

Part Two describes the survey conducted and the findings thereof. It is realized that the limited scope of the sample render the results less scientific and less generalizeable than desired. However, financial, time and language barriers were formitable constraints.

It is hoped that this work will be useful as an adept summary of theory and a pioneering attempt to measuring leadership styles of Turkish managers.

PART ONE

THEORETICAL BACKGROUND

The process of directing people in organizations has always been considered vital to effective management. It is generally recognized that leadership can spell the difference between success and failure, whether in a war, in a basketball game, or especially in attaining the goals of an organization. Yet despite this recognized importance, the characteristics of a good leader still partly remains a mystery. Good leadership is known to exist and have a tremendous influence on organizational performance, but the inner workings and specific traits of an effective leader cannot be presicely spelled out.

The idea that leadership is a synonym for management is not completely valid. Leadership is a narrower concept than management. A manager in a formal organization is responsible and entrusted to perform such functions as planning, organizing, and controlling. However, leaders also exist in informal groups. Informal leaders are not always formal managers performing managerial functions which are required by the organization. Consequently, leaders are only in some instances actually managers.

In the formal organization, roles often have specific responsibilities associated with them. Exactly how the supervisor fulfils the responsibilities involves the occupant's style. Some first line supervisors rely

on the authority of the position to secure compliance
with performance standards, while others use a more
participate approach which involves joint decision making
on the part of the leader (manager) and followers (subor-
dinates).

A hierarchical of roles also exists in informal
groups. The informal leader is accepted as the person
to carry out the duties of the position. Once again, how
the leader brings about compliance from followers will
largely depend on the leadership style used. What is
effective for one leader may not be for another. This,
in essence is the crux of the leadership issue:

"What makes for effective leadership?"

There is no simple or single answer to this
important question. Two important considerations involve
power and acceptance by followers.

Generally, power includes the personal and
positional attributes that are the basis for a leader's
ability to influence others. In managerial terms, power
involves the ability to mobilize resources, to get and
use whatever it is that people need for the goals that
they are attempting to accomplish. It is important to
note that power involves personal and positional
attributes to influence roles, processes, and/or things,
while the concept of authority involves the use primarily
of position-related power. It is the formal power granted
to a person by the organization.

Power in an organization is largely a function of being in the right place, at the right time, with the right resources, and working efficiently. Position in the organization, workflow, or communications network all involve the notion of place.

In work organizations, the ability to influence, persuade, and motivate followers, in addition to place, timing, information access, and efficiency, is also based upon the perceived power of the leader. French and Raven identify forms of perceived power a leader may possess as follows:

Coercive _____ power based upon fear. A follower perceives that failing to comply with the request initiated by a leader could result in some form of punishment: a reprimand or social ostracism from a group.

Reward _____ power based upon the expectation of receiving praise, recognition, or income for compliance with a leader's request.

Legitimate _____ power derived from an individual's position in the group or organizational hierarchy. In a formal organization, the first line supervisor is perceived to have more power than operating employers.

In the informal group, the leader is recognized by the members as having legitimate power.

EXPERT _____ Power based upon a special skill, expertise, or knowledge. The followers perceive the person as having relevant expertise and believe that it exceeds their own.

REFERENT _____ power based on attractiveness and appeal. A leader who is admired because of certain traits possesses referent power. This form of power is particularly referred to as charisma. The person is said to have charisma to inspire and attract followers.

Power in organization is a Two-way phenomenon flowing from one individual (leader) to other people (subordinates) and back. Zaleznik, a consultant and organizational researcher, assumes that power is inevitable in organizations. He states:

"Whatever else organization may be ... there are political structures. This means that organizations operate by distributing authority and setting a stage for the exercise of power. It is no wonder, therefore, that individuals who are highly motivated to secure and use power find a similar and hospitable environment in

business."

Since power and politics are used in organizations, it is important for managers to understand the manner in which both are applied. Individuals do not like to have power used on them. The use of expert and referent power is not usually restricted by subordinates or followers. However, when coercive power is used, there is often some resistance. Furthermore, it is important to understand that people seek power through such political maneuverings as joining ranks with individuals with power, developing expertise in an importance field or area, controlling crucial information, displaying loyalty and committment, and making the immediate superior look good.

Figure I summarizes the key sources and perceived basis of power. It also presents some of the possible moderating factors between the sources and perceived basis of power and outcomes (goals). The model suggests that:

(1) a successful leader is one who is aware of the sources of power and the importance of perceived power.

(2) the accomplishment of goals will depend not only on power sources and perceptions but also on follower needs, the situation, and experience of the leader.

REFERENCES

1. "Introduction to Management: A Contingency Approach" by Fred Luthans. Publishers: McGraw-Hill, 1978.

FIGURE I

A LEADERSHIP MODEL EMPHASIZING THE ROLE OR POWER

POWER OF SOURCES AND PERCEPTIONS	POSSIBLE MODERATING FACTORS	GOALS: OUTCOMES
SOURCES OF LEADER POWER . place . timing . information . efficiency **PERCEIVED POWER TYPES** . legitimate . Reward . expert . referent	. The leader's style and experience . The followers needs and experience . The situation	Performance (organizational and individual) Satisfaction (individual)

Leader   Leaders, followers

                                            situational

Source: "Organizations" by Gibson, Ivancevich, Donnelly. Fourth Edition 1982

    Publishers: Business Publications, Inc., Plano, Texas.

pp. 126. "The process of directing people" ... to

effective management".

pp. 126-127. "It is generally recognized ... cannot

be precisely spelled out."

2. "Organizations" by Gibson, Ivancevich, Donnelly.

Fourth edition, 1982. Publishers: Business Publica-

tions, Inc. Plano, Texas 75075 Irwin-Dorsey Limited

Georgetown, Ontario L764B3.

pp. 230 "The idea that leadership ... leaders are

only in some instances actually managers".

"In the formal organization, ... associated

with them"

"Exactly how the supervisor ... joint decision

making on part of the leader and followers."

"A hierarchy of roles ... to this important

question".

"Generally, power involves ... to accomplish

them".

pp. 231 "It is important to note ... granted to a

person by the organization."

"Power is an organization ... notion of place".

pp. 232 "In the work organizations ..... The person

is said to have charisma to inspire and

attract followers."

pp. 233-234-235 "Power in organization ... to other

people and back."

Zaleznik, a consultant and organiza-

tional. Researcher, ... and making

the immediate superior look good."

(A) LEADERSHIP THEORY, STYLES AND TECHNIQUES

Leadership has long been a focus of theorists, researchers, and practitioners. Nevertheless, it appears that despite numerous theories and research studies of leadership, there is no universally accepted approach. Effective leadership is necessary for organizational effectiveness and that the performance of employees is typically poorer when it is absent.

Contingency theory of management and organizations is the modern theory on leadership behaviour. However, other theories are also important and have some element of truth in them. Consequently, contingency theory is discussed first followed by other theories.

(a) CONTINGENCY THEORY OF MANAGEMENT AND ORGANIZATIONS

CONTINGENCY VIEWS OF ORGANIZATIONS

Systems concepts provide the broad framework for understanding organizations. One of the consequences of this approach is a rejection of simplistic statements concerning universal principles of organization design and management practice. Modern organization theory reflects a search for patterns of relationships, congruencies among subsytems, and a contingency view.

Systems concepts provide us with a macro paradigm for the study of organizations, but they involve a relatively high degree of generalization. Contingency views tend to be more concrete and to emphasize more

characteristics and patterns of interrelationships among
subsystems. This trend toward more explicitly under-
standing of relationships among organizational variables
is essential if the theory is to facilitate and improve
management practice.

Using the systems perspective, we can describe
the contingency view of organizations as follows:

"The contingency view of organizations and their
management suggests that an organization is a system
composed of subsystems and delineated by identifiable
boundaries from its environmental suprasystem. The
contingency view seeks to understand the interrelation-
ships within and among subsystems as well as between
the organizations and its environment and to define
patterns of relationships or configurations of variables.
It emphasizes the multivariate nature of organizations
under varying conditions and in specific circumstances.
Contingency views are ultimately directed toward
suggesting organizational designs and managerial actions
nost appropriate for specific situations."

Systems concepts are directed toward providing
a broad model for understanding all organizations.
Contingency views recognize that the environment and
internal subsystems of each organization are somewhat
unique and provide a basis for designing and managing
specific organizations. Contingency views represent a
middle ground between

(1) The view that there are universal principles of
organization and management

(2) The view that each organization is unique and that
each situation must be analyzed separately.

An underlying assumption of the contingency view
is that there should be a congruence between the organi-
zation and its environment and among the various sub-
systems. The primary managerial role is to maximize this
congruence. The appropriate fit between the organization
and its environment and the appropriate internal organi-
zation design will lead to greater effectiveness,
efficiency, and participant satisfaction.

The contingency view suggests that there are
appropriate patterns of relationships for different
types of organizations and that we can improve our
understanding of how these relevant variables interact.
Contingency analysis thus may lead us to general conclu-
sions about these patterns of relationships, such as:

The stable mechanistic organization form is more
appropriate when:

(1) The environment is relatively stable and certain.

(2) The goals are well defined and enduring.

(3) The technology is relatively uniform and stable.

(4) There are routine activities and productivity is
the major objective.

(5) Decision making is programmable and coordination and
control processes tend to make a tightly structured,

hierarchical system possible.

The adoptive-organic organizational form is more appropriate when:

(1) The environment is relatively uncertain and turbulent.

(2) The goals are diverse and changing.

(3) The technology is complex and dynamic.

(4) There are many nonroutine activities in which creativity and innovation are important.

(5) Heuristic decision-making processes are utilized and coordination and control occur through reciprocal adjustments. The system is less hierachical and more flexible.

CONTINGENCY VIEWS OF MANAGEMENT

Nothing the multivariate nature of organizations, it is no wonder that managers often say,

"The theory may be appropriate in general, but our organization is different."

The trust of contingency views of management practice is to offset such claims by providing appropriate guidelines for action. Contingency views recognize both similarities and differences among organizations but still emphasize that the primary managerial role is to seek congruence between the organization and its environment and among its various subsystems. Systems and contingency concepts facilitate more through understanding of complex situations and increase the likeli-

hood of appropriate managerial actions.

Although we think that some managers have
utilized these concepts intuitively, most have not.
Application of contingency concepts requires increased
understanding and sophistication on the part of managers.

According to Denis J. Moberg and James L. Koch
(A critical appraisal of integrated treatment of
contingency findings),

"An applier of contingency views must recognize
more and different kinds of goals and needs for his
organization, consider more factors bearing on a deci-
sion, employ a wider variety of ways of making and
carrying out decisions, and evaluate decisions not on a
one-by-one basis, but in relation to each other.
Therefore, practioners must be aware that they must
learn new approaches in solving organizational problems
if they choose to use contingency views."

Systems concepts and contingency views cannot
provide general principles for managing all organiza-
tions, but they can provide important guidelines for
organizational diagnosis and managerial actions in
specific situations.

Source (1) "Organization" by Gibson, Ivancevich, Donnelly.
        Fourth edition 1982. Publishers: Business
        Publications, Inc., Plano, Texas. pp.
        "Leadership has long been .... when it is
        absent".

(2) "ORGANIZATION AND MANAGEMENT": A System

    and Contingency Approach" by Fremont E.

    Kast and James E. Rosenzweig. Third edition.

    <u>Publishers</u>: McGraw-Hill Kogakuska, Ltd.

pp. 115-116 "Systems concepts provide the broad

        framework .... of how these relevant

        variables interact.

        "Contingency analysis thus may lead

        us to .... The system is less

        hierarchical and more flexible".

pp. 118 "Noting the multivariate nature of orga-

        nizations .... organizational problems

        if they choose to use contingency views".

(b) TRAIT THEORIES

Much of the early work on leadership focused on identifying the traits of effective leaders. This approach was based on the assumption that a finite number of individual traits of effective leaders could be found. Thus, most research was designed to identify intellect- ual, emotional, physical, and other personal character- istics of successful leaders. The personnel testing component of scientific management supported to a significant extent the trait theory of leadership. Besides personnel testing, the traits of leaders have been studied by observing behaviour in group situations, choice of associates (voting), and by analysis of biographical data.

Among some of the traits studied most frequently were;

(1) Intelligence
(2) Personality
(3) Physical characteristics
(4) Supervisory ability

(I) INTELLIGENCE

In a view of 33 studies, Stogdill found that there is a general trend which indicates that leaders are more intelligent than followers. One of the most significant findings is that extreme intelligence differences between leaders and followers may be

dysfunctional.

(2) PERSONALITY:

Some research results suggest that such personal-
ity traits as alertness, originality, personal integrity,
and self-confidence are associated with effective
leadership. Ghiselli reported several personality traits
which tend to be associated with leader effectiveness.
For example, he found that initiate and the ability to
act and initiate action independently were related to
the level in the organizations of the respondent. The
higher the person went in the organization the more
important this trait become. He also found that self-
assurance was related to the hierachical position in the
organization. Finally, he found that individuals who
exhibited individuality were the most effective leaders.
Some writers argue that personality is unrelated to
leadership. This view is too harsh if we consider how
personality has been found to be related to perception,
attitudes, learning, and motivation. The problem is
finding valid ways to measure personality traits. This
goal has been difficult to achieve, but some progress,
although slow, is being made.

(3) PHYSICAL CHARACTERISTICS

Studies of the relationship between effective
leadership and physical characteristics such as age,

height, weight, and appearance provide contradictory
results. Being taller and heavier than the average of
the group is certainly not advantageous for achieving
a leader position. However, many organizations believe
that it requires a physical large person to secure
compliance from followers. This notion relies heavily
on the coercive or fear basis of power. On the other
hand, Truman, Gandhi, Napoleon, and Stalin are examples
of individuals of small stature who rose to the positions
of leadership.

(4) SUPERVISORY ABILITY

  Using the leader's performance ratings, Ghiselli
found a positive relationship between a person's super-
visory ability and level in the organizational hierarchy.
The supervisory's ability is defined as the

> "effective utilization of whatever supervisory's
> practices are indicated by the particular
> requirements of the situation."

Once again, a measurement of the concept is needed and
this is difficult problem to resolve.

SHORT COMINGS OF TRAIT THEORIES:

  Although some traits appear to differentiate
effective and ineffective leaders, there still exist
many contradictory research findings. There are a number
of possible reasons for the disappointing results.

(1) The list of the potentially important traits is end-less. Every year new traits, such as the sign under which a person is born, handwriting style, and order of birth are added to personality, physical character-istics, and intelligence. This continual "adding on" results in more confusion among those interested in identifying leadership traits.

(2) Trait test scores are not consistently predictive of leader effectiveness. Traits do not operate singly, but in combination, to influence followers. This interac-tion influences the leader-follower relationship.

(3) The patterns of effective behaviour depend largely on the situation. The leadership behaviour which is effective in a bank may be ineffective in a laboratory.

(4) The traits approach does not provide insight into what the effective leader does on the job. Observations are needed that describe the behaviour of effective and ineffective leaders.

CONCLUSION

Despite these short-comings the trait approach is not completely invalid. Stogdill concisely captures the value of trait approach in the following statement. " .... the wiew that leadership is entirely situational in origin and that no personal characteristics are predictive of leadership .... seems to overemphasize the situational and underemphasizing the personal nature of

leadership."

Source: "Organizations" by Gibson, Ivancevich, Donnelly.

    Fourt edition 1982. Publishers: Business

    Publications Inc. Plano, Texas. 75075 Irwin-

    Dorsey Limited Georgetown, Ontario L7G 4B3.

pp. 235, 236, and 237. "Much of the early work on

               leadership .... The situational

               and underemphasize the personal

               nature of leadership."

(c) ATTRIBUTION THEORY OF LEADERSHIP

Attribution theory suggests that understanding and predicting how people will react to events around them is enchanced by knowing what their causal explanation for those events are. <u>Kelly</u> stresses that it is mainly concerned with the cognitive processes by which a person interprets behaviour as being caused by (or attributed to) certain cues in the relevant environment. The emphasis of attributes leadership theory is on "why" some behaviour has occurred. Most causes of subordinate or follower behaviours are not directly observable, therefore to determine causes requires reliance on perception. In attribution theory individuals are assumed to be rational and concerned about the causal linkages in their environment.

The attributional approach starts with the position that the leader is essentially an information processor. In other words the leader is searching for informational cues that explains "why" something is happening. From these cues leaders attempt to construct causal explanations that guide his or her leadership behaviour. The process in simple terms appears to be follower behaviour _____ leader attributions _____ leader behaviour.

Two important linkages are emphasized in Figure II. At the first linkage point the leader attempts to make an attribution about poor qualify performance. These

FIGURE II

AN ATTRIBUTION MODEL OF LEADERSHIP

- Information cues
- Distinctiveness
- Consistency
- Consensus

Perceived source of responsibility

Observation for poor quality of production
• Rejects
• Excess Scrap
• Returned
• Products
• Excessive Production costs

Linkage No. 1 →

Causal Attribution of Poor Quality
Internal causes
• Low effort
• Low commitment
• Lack of Ability
External causes
• Improper equipment
• Unfair deadlines
• Illness of Production team members

Linkage No. 2 →

Leader behaviour in Response to Attributions
• Reprimand
• Transfer
• Demotion
• Redesign job
• Personnel concern
• Training

Source: Adapted from Terence R. Mitchell and Robert E. Wood, "An empirical test of an Attribution Model of Leaders Responses to Poor Performance," in Richard C. Huseman, ed, Academy of Management Proceedings, 1979, p. 94.

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attributions are moderated by the 3 information sources

_____ distinctiveness, consistency, and consensus.
The second linkage point suggests that the leader's

behaviour or response is determined by the type of

attributions he or she makes. The relationship between

attribution and leader behaviour is moderated by the

leaders perception of responsibility.

CONCLUSION

Attribution theory appears to offer a framework

for explaining leader behaviour in more insightful terms

than behavioral theories. It attemtps to explain why

behaviours are happening. The trait and personal

behaviour theories are more descriptive and do not

focus on the why issue. Furthermore, attributional theory

can offer some predictions about a leader's response to

a follower's behaviour.

Currently, the research support for attributional

theory of leadership is limited.

SOURCES: "ORGANIZATIONS" by Gibson, Ivancevich, Donnelly.
        Fourt edition, 1982. Publishers: Business
        Publications Inc. Plano, Texas 75075 Irwin-
        Dorsey Limited Georgetown, Ontario L7G 4B3
pp. 244, 246. "Attribution theory suggests that under-
            standing and predicting ..... The process
            in simple terms appears to be follower

behaviour _____ leader attributions _____

leader behaviour."

pp. 247. "Two important linkages are emphasized ....

by the leader's perception of responsibility".

(d) UNIVERSITALIST "PERSONAL-BEHAVIORAL" THEORIES

A number of theorists argue for the use of a particular style to bring about high performance levels in areas such as production and satisfaction. The style, or personal approaches that have been the most widely used in practice are based on Research conducted at the University of Michigan, the Ohio State, and by Blake and Mouton. These approaches have been widely publicized, researched, and applied in organizational settings. Each of the approaches attempts to identify what leaders do when leading.

(i) THE OHIO STATE STUDIES: INITIATING STRUCTURE AND CONSIDERATION

Among the several large research programs on leadership that developed after World War II, one of the most significant was Ohio's State's, which resulted in a two factor theory of leadership. These studies isolated two leadership factors referred to as initiating structure and consideration. The definition of these factors are as follows:

Initiating structure involves behaviour in which the leader organizes and defines the relationship in the group, tends to establish well-defined patterns and channels of communication, and spells out ways of getting the job done.

<u>Consideration</u> involves behaviour indicating friendship, mutual trust, respect, warmth, and rapport between the leader and followers.

These dimensions are measured by 2 separate questionnaires. The leadership opinion questionnaire (LOQ) attempts to assess how leaders think they behave in leadership roles. The leader behaviour description questionnaire (LBDQ) measures the perception of subordinates, peers, or superiors.

The initiating structure and consideration scores derived from the responses to the questionnaires provide a way to measure leadership style.

Since the original research undertaken to develop the questionnaire, there have been numerous studies of the relationship of these 2 leadership dimensions and various effectiveness criteria. Many of the early results stimulated the generalization that leaders above average in both consideration and initiating structure were more effective. In a study at International Harvester, however, the researchers began to find some more complicated interpretations of the 2 dimensions. In a study of supervisors, it was found that those scoring higher on structure had higher proficiency ratings (ratings received from superiors), but also had more employee grievances. The higher consideration score was related to lower proficiency ratings and lower absences.

A study of Research and development departments
introduced the issue of organizational climate to the
leadership-effectiveness question. The focus of this
study was research, development, and engineering personnel
in 3 large organizations: a petroleum refinery, a
business machine manufacturer, and an air frame
manufacturer. The results indicated that leadership
behaviour had differential effects on employee satisfac-
tion depending upon different organizational climates.

This study also found positive relationships
between initiating structure and satisfaction. These
relationships were weakest in the highly structured
air frame company. Perhaps these results are explained
by the fact that the air frame company is already highly
structured and the leader initiating more structure is
engaging in an effort which is not required.

The Ohio State Personnel-behavioral theory has
been criticized because of simplicity, lack of general-
izability, and reliance on questionnaire responses to
measure leadership effectiveness. The critique of
Korman is perhaps the most publicized. He has criticized
the Ohio State research on leadership in the following
manner:

(1) The researchers have made little attempt to concept-
ualize situational variables and their influence on leader-
ship behaviour.

(2) Most of the research studies yield generally insignificant correlation between leader behaviour measures and effectiveness criteria.

(3) The theory has not provided any answer to the question tof causality.

Some of the problems have been partially corrected. For example, it has been pointed out in recent research that many variables affect the relationship between leadership behaviour and organizational effectiveness. Some of these include employee experience, competence, job knowledge, expectations for leader behaviour, the upward influence of the leaders, degree of autonomy, role crality, and urgency of time.

SOURCE: "Organizations" by Gibson, Ivancevich, Donnelly. Fourth edition, 1982. Published by: Business Publication Inc., Plano, Texas 75075 Irwin-Dorsey Limited Georgetown, Ontario L7G 4B3.

pp. 238 A number of theorists argue ..... to identify what leaders do when leading"

pp. 240-241 "Among several large research programs ..... proeficiency ratings and lower absences"

pp. 242.

(ii) MANAGERIAL GRID: CONCERN FOR PEOPLE AND CONCERN

   FOR PRODUCTION

The conceptual framework for the managerial grid
assumes that there is an unnecessary dichotomy in the
minds of most leaders about the concern for people and
concern for production. It is Blake and Mouton's assump-
tion that people and production concerns are complement-
ary, rather than mutually exclusive. They further believe
that leaders must integrate these concerns to achieve
effective performance results.

The thoughts of Blake and Mouton resulted in
development of the grid chart. An example of the manage-
rial grid is provided in Figure II. The 9, 1 leader is
primarily concerned with production task accomplishment
and has little, if any, concern for people. The 1, 9
style reflects a minimal concern for production coupled
with a maximal concern for people. The 1, 1 style reflects
minimal concern for both people and production. The 5, 5
style reflects a moderate concern for both. 9, 9 style
is viewed as the ideal approach for integrating a
maximum concern for production with a maximum concern
for people.

According to Blake and Mouton, the grid enables
leaders to identify their own leadership styles. Further-
more, it serves as a framework for leaders to use in
assessing their styles before undertaking a training
program that is designed to move them to the 9, 9 style.

FIGURE III

MANAGERIAL GRID

9 (1, 9) Management Thoughts attention to needs of people for satisfying relation- ship leads to a comfortable friendly organization atmos- phere and work tempo

9, 9) Management Work accomplished is from committed people, interdependence through a "common stabe" in organization purpose leads to relationships of trust and respect

(5, 5 Management) Adequate organization performance is possible through balancing the necessity to get out work with maintaining morale of people at a satisfactory level

(1, 1) Management Exertion of minimum effort to get required work done is appropriate to sustain organization membership

(9, 1 Management Efficiency in operations results from arranging conditions of work in such a way that human element interfere to a minimum degree.

Concern for Production

Source: Robert R. Blake and Jane S. Mouton, The Managerial Grid
(Houston, Gulf Publishing, 1964, p. 10.

Although the managerial grid has not been thoroughly supported by research, it is still a popular theory of leadership among managers.

SOURCE: "ORGANIZATIONS", by Gibson, Ivancevich, Donnelly, Fourth Edition, 1982. Published by Business Publishing Inc. Plano, Texas.

pp. 243, 244.

(iii) THE UNIVERSITY OF MICHIGAN STUDIES: JOB CENTERED
AND EMPLOYEE CENTERED

Since 1947, Libert has been studying how best
to manage the efforts of individuals to achieve desired
performance and satisfaction objectives. The purpose of
the most of the leadership reserach from the University
of Michigan has been to discover the principles and
methods of effective leadership. The effectiveness
criteria used in many of the studies include:
- Productivity per work hour or other similar measures
of the organization's success in achieving its produc-
tion goals.
- Job satisfaction of members of the organization

- Turnover, absenteeism, and grievance rates

- Costs

- Scrap loss

- Employee and managerial motivation

The initial study was conducted on high and low
producing work groups in the Prudential life insurance
company. It was found that most of the high producing
groups were led by superions who had a general, employee-
centered style. The effective superiors did not give
detailed instructions and keep a close eye over their
employees but instead were concerned with end results
and were genuinely concerned with the welfare of their
people. In other words, effective style was ends oriented
rather than means oriented and gave precedence to the

welfare of the employee over task accomplishment.

Over the years the Prudential study has been extended by numerous other studies.

In 1967, Libert summarized the work of this Michigan group into the now famous four systems of Management.

Exploitative Atuhoritative (System 1): Managers who operate according to system 1 are very authoritarian and actually try to exploit their subordinates.

Bernevolent Authoritative (System 2): The system 2 manager is also authoritarian, but in a paternalistic manner. This benevolent autocrat keeps strict control and never delegates to subordinates but "pats them on the head" for "their best interests". In other words, a system 2 manager treats people like children.

Consultative (System 3): System 3 managers use a consultative style. They ask for and receive participative input from subordinates, but they maintain the right to make the final decision.

Participate group (System 4): System 4 managers use participative group or democratic style. They give some direction to subordinates, but there is total participation and decision by majority or consensus. In some cases an actual vote may be taken.

These four styles differ from one another in terms of:

(1) Character of motivational forces

(2) Character of communication process

(3) Character of Interaction Influence Process

(4) Character of Decision Making Process

(5) Character of goal setting or ordering

(6) Character of Control Process

(7) Performance characteristics

      In Table I, you will find a summary of the characteristics of the four styles with respect to the above dimension.

SOURCE: 1)"Organizations" by Gibson, Ivancevich, Donnelly.
        Fourth edition, 1982. Published by Business
        Publishing Inc. Plano, Texas.
pp. 238,239. "Since 1947, Libert has been studying .....
        Employee and managerial motivation".
    2) "Introduction to Management: A Contingency
        Approach" by Fred Luthans. Published by Mc-
        Graw Hill, 1978.
pp. 129, "The initial study was conducted on ..... In
        some cases an actual may be taken".

TABLE I

ORGANIZATIONAL AND PERFORMANCE CHARACTERISTICS OF DIFFERENT MANAGEMENT SYSTEMS BASED ON A COMPARATIVE ANALYSIS

OPERATING CHARACTERISTICS	SYSTEM OF ORGANIZATION			PARTICIPATIVE
	AUTHORITATIVE			PARTICIPATIVE GROUP
	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	
1. Character of Motivational Forces				
a) Underlying motives tapped	Physical security, economic security, and some use of status	Economic and occasionally ego motives, e.g. the desire for status	Economic, ego, and other major motives, e.g., desire for new experience	Full use of economic, ego, and other major motives, as, for example, motivational forces arising from group processes.
b) Manner in which motives are used	Fear, threats, punishment, and occasional rewards	Rewards and some actual or potential punishment	Rewards, occasional punishment, and some involvement	Economic rewards based on compensation system developed through particip- ation involvement in setting goals, improving methods, appraising progress toward goals, etc

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SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	AUTHORATATIVE		PARTICIPATIVE	
	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
c) Kind of attitudes developed toward organization and its goals	Attitudes usually are hostile and counter to organization's goals	Attitudes are sometimes hostile and counter to organization's goals and are sometimes favourable to the organization's goals and support the behaviour necessary to achieve them	Attitudes may be hostile but more often are favourable and support behaviour implementing organization's goals	Attitudes generally are strongly favourable and provide powerful stimulation to behaviour implementing organization's goals
d) Extent to which motivational forces conflict with or another	Market conflict of forces substantially reducing those motivational forces leading to behaviour in support of the organization's goals	Conflict often exists, occasionally forces will reinforce each other, at least partially	Some conflict, but often motivational forces will reinforce each other	Motivational forces generally reinforce each other, in a substantial and cumulative manner

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SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	AUTHORITATIVE		CONSULTATIVE	PARTICIPATIVE
	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE		PARTICIPATIVE GROUP
e) Amount of responsibility felt by each member of organization for achieving organization's goals	High levels of management feel responsibl-ity, lower levels feel less. Rank and file feel little and often welcome oppurtu-nity to behave in ways to defeat organization's goals	Managerial personnel usually feel responsibility, rank and file usually feel relatively little responsibility for achieving organiza-tion's goals	Substantial proportion of personnel feel responsibility and generally behave in ways to achieve the organization's goals	Personnel feel real responsibl-ity for organi-zation's behave in ways to implement them
f) Attitudes toward other members of the organization	Subservient attitudes toward superiors coupled with hostility, hostility toward peers and contempt for subordinates, distrust is widespread.	Subservient attitudes toward superiors, compe-tition for status resulting in hostility toward peers, condescen-sion toward subordinates	Cooperative, reasonably favourably attitudes toward others in organiza-tion, may be some competition between peers with resulting hostility and some condescension toward subordinates	Favourable, cooperative attitudes throughout the organization with mutual trust and confidence

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SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	AUTHORITATIVE EXPLOITATIVE AUTHORITATIVE	AUTHORITATIVE BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATE PARTICIPATE GROUP
g) Satisfaction derived	Usually dissatisfaction with membership in the organization, with supervision, and with one's own achievements	Dissatiscation to moderate satisfaction with regard to membership in the organization, supervision, and one's own achievements	Some dissatisfaction to moderately high satisfaction with regard to membership in the organization, supervision, and one's own achievements	Relatively high satisfaction throughout the organization with regard to membership in the organization, supervision, and one's own achievements
2. Character of Communication Process a) Amount of interaction and communication aimed at achieving organization's objectives	Very little	Little	Quite a bit	Much with both individuals and groups

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OPERATING CHARACTERISTICS	EXPLOITATIVE AUTHORITATIVE	AUTHORITATIVE BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE PARTICIPATIVE GROUP
b) Direction of information flow	Downward	Mostly Downward	Down and up	Down, up, and with peers
c) Downward communication	Downward	Mostly Downward	Down and up	Down, up, and with peers
i) where initiated	At top of organization or to implement top directive	Primarily at top or patterned on communication from top	Patterned on communication from top but with some initiative at lower levels	Initiated at all levels
ii) Extent to which communication are accepted by subordinates	Viewed with great suspicion	May or may not be viewed with suspicion	Often accepted but at times viewed with suspicion. May or may not be openly questioned	Generally accepted, but if not, openly and candidly questioned.

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SYSTEM OF ORGANIZATION

| OPERATING CHARACTERISTICS | AUTHORITIVE | | | PARTICIPATIVE |
	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
d) Upward communication				
i) Adequacy of upward communication via line organization	Very little	Limited	Some	A great deal
ii) Subordinates feeling of responsibility for initiating accurate upward communication	Not at all	Relatively little, usually communicates "filtered" information but only when requested. May "yes" the boss	Some to moderate degree of responsibility to initiate accurate upward communication	Considerable responsibility felt and much initiative. Group communicates all relevant information
iii) Forces leading to accurate or distorted information	Powerful forces to distort information and decieve superiors	Occasional forces to distort, also forces for honest communication	Some forces to distort along with many forces to communicate accurately	Virtually no forces to distort and poweful forces to communicate accurately

SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	AUTHORITATIVE BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE PARTICIPATIVE GROUP
iv) Accuracy of upward communication via line	Tends to be inaccurate	Information that boss wants to hear flows, other information is restricted and filtered	Information that boss wants to hear flows, other information may be limited or cautiously given	Accurate
v) Need for supplementary upward communication system	Need to supplement upward communication by spy system, suggestion system, or some similar devices	Upward communication often supplemented by suggestion system and similar devices	Slight need for supplementary system, suggestion system may be used	No need for any supplementary system
e) Side ward communication, its adequacy and accuracy	Usually poor because of competition between peers and corresponding hostility	Fairly poor because of competition between peers	Fair to good	Good to excellent

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
f) Psychological closeness of superiors to subordinates (i.e. how well does superior know and understand problems faced by subordinates?)				
i) Accuracy of perceptions by superiors and subordinates	Often in error	Often in error on some points	Moderately accurate	Usually quite accurate
3) <u>Character of Interaction Influence Process</u>				

OPERATING CHARACTETISTICS	EXPLOITATIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATE GROUP
a) Amount of and character of interaction	Little interaction and always with fear and distrust	Little interaction and usually with some condescension and caution by subordinates	Moderate interaction, often with fair amount of confidence and trust	Extensive, friendly interaction with high degree of confidence and trust
b) Amount of cooperative teamwork present	None	Virtually none	A moderate amount	Very substantial amount throughout' the organization
c) Extent to which subordinates can influence the goals, methods, and activity of their units and departments				
1) As seen by superiors	None	Virtually none	Moderate amount	A great deal

SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	EXPLOITATIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
2) As seen by subordinates	None except through "informal organization" or via unionization	Little except through "informal" organization or via unionization	Moderate amount both directly and via unionization	Substantial amount both directly and via unionization
d) Amount of actual influence superiors can exercise over the goals, activity, and methods of their units and departments	Believed to be substantial but actually moderate unless capacity to exercise severe punishment is present	Moderate to somewhat more than moderate, especially for higher levels in organization	Moderate to substantial, especially for higher levels in organization	Substantial but often done indirectly, as, for example, by superior building effective interaction-influence system
e) Extent to which an adequate structure exists for the flow of	Downward only	Almost entirely downward	Largely downward but small to moderate capacity upward and	Capacity for information to flow in all directions from all levels and for influence to be

SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	EXPLOITATIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
information from one part of the organi- zation to another, there- by enabling influence to be exerted			between beers	exerted by a l units on all units
4) Character of decision making Process				
a) At what level in organization are decisions formally made?	Bulk of decisions at top of organization	Policy at top, many decisions within prescribed frame- work made at lower levels	Broad policy and general decisions at ton, more specific decisions at lower levels	Decision-making widely done throughout organization although well- integrated through process provided by overlapping groups

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OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
b) How adequate and accurate is the information available for decision making at the place where the decisions are made?	Partial and often inaccurate information only is available	Moderately adequate accurate information available	Reasonably adequate and accurate information available	Relatively omplete and accurate information available based both on measurement and efficient flow of information in organization
c) To what extent are decision makers aware of problems, particularly those at lower levels in the organization?	Often are unware or only partially aware	Aware of some, unware of others	Moderately aware of problems	Generally quite well aware of problems
d) Extent to which technical and professional knowledge is used in decision making	Used only if possessed at higher levels	Much of what is available in higher and middle levels is used	Much of what is available in higher, middle and lower levels is used	Most of what is available anywhere within the organization is used

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SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
e) Are decisions made at the best level in the organization so far as				
i) Having available the most adequate and accurate information bearing on the decision?	Decision usually made at levels appreciably higher than levels where most adequate and accurate information exists	Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists	Some tendency for decisions to be made at higher levels than where most adequate and accurate information exists.	Overlapping groups and group decision processes tend to push decisions to point where information is most adequate or to pass the relevant information to the decision making point
ii) The motivational consequences (i.e. does the decision making	Decision making contributes little or nothing to	Decision making contributes relatively little motivation	Some contribution by decision making to motivation to implement	Substantial contribution by decision making processses to motivation to implement

SYSTEM OF ORGANIZATION

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
process help to create the necessary motivations in those persons who have to carry out the decision?)	the motivation to implement the decision, usually yields adverse motivation			
f) Is decision making based on man to man or group pattern of operation? Does it encourage or discourage teamwork?	Man-to-man only, discourages team work.	Man-to-man almost entirely discourages teamwork	Both man-to-man and group, partially encourages teamwork	Largely based on group pattern, encourages teamwork

5) <u>Character of Goal Setting or Ordering</u>

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	SYSTEM OF ORGANIZATION BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
a) Manner in which usually done	Order issued	Order issued opportunity to comment major may not exist	Goals are set or orders issued after discussion with subordinates of problems and planned action	Except emergencies, gaols are usually established by means of group participation
b) To what extent do the different hierarchical levels tend to strive for high performance goals?	High goals pressed by ton, resisted by 'subordinates	High goals sought by top and partially resisted by subordinates	High goals sought by higher levels but with some resistance by lower levels	High goals sought by all levels, with lower levels sometimes pressing for higher goals than top levels
c) Are there forces to accept, resist or reject goals?	Goals are overtly accepted but are covertly resisted strongly	Goals are overtly accepted but often covertly resisted to at least a moderate degree	Goals are overtly accepted but at times with some covert resistance	Goals are fully accepted both overtly and covertly

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
6) Character of Control Processes				
a) At what hierarchical levels in organization does major or primary concern exist with regard to the performance of the control function?	At the very top only	Primarily or largely at the top	Primarily at the top but some shared feeling of responsibility felt at middle and to a lesser extent at lower levels	Concern for performance of control function likely to be felt throughout organization
b) How accurate are the measurements and information used to guide and perform the	Very strong forces exist to distort and falsify, as a consequence, measurements and information are	Fairly strong forces exist to distort and falsify, hence measurements and information	Some pressure to protect self and colleagues and hence some pressure to distort, inform-	Strong pressures to obtain complete and accurate information to guide own behaviour and behaviour of own and

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OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
control function, and to what extent do forces exist in the organization to distort and falsify this information?	usually incomplete and often incomplete and inaccurate	are often incomplete and inaccurate	ation is only moderately complete and contains some inaccuracies	related work groups, hence information and measurements tend to be complete and accurate
c) Extent to which the review and control functions are concentrated	Highly concentrated in top management	Relatively highly concentrated, with some delegated control to middle and lower levels	Moderate downward delegation of review and control processes, lower as well as higher levels feel responsible	Quite widespread responsibility for review and control, with lower units at times imposing more vigorous reviews and tighter controls than top management

OPERATING CHARACTERISTICS	EXPLOITIVE AUTHORITATIVE	BENEVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
d) Extent to which there in an informal organization present and supporting or opposing goals of formal organization	Informal organization present and opposing goals of formal organization	Informal organization usually present and partially resisting goals	Informal organization may be present and may either support or partially resist goals of formal organization	Informal and formal organization are one and the same, hence all social forces support efforts to achieve organization's goals

7) <u>Performance Characteristics</u>

a) Productivity	Mediocre productivity	Fair to good productivity	Good productivity	Excellent productivity
b) Excessive absence and turnover	Tends to be high when people are free to move	Moderately high when people are free to move	Moderate	Low

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OPERATING CHARACTERISTICS	SYSTEM OF ORGANIZATION			
	EXPLOITIVE AUTHORITATIVE	BENOVOLENT AUTHORITATIVE	CONSULTATIVE	PARTICIPATIVE GROUP
c) Scrap loss and waste	Relatively high unless policed carefully	Moderately high unless policed	Moderate	Members themselves will use measurements and other steps in effort to keep losses to a minimum
d) Quality control and inspection	Necessary for policing	Useful for policing	Useful for check	Useful to help workers guide own efforts

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Source: "The Human Organization: Its Management and Value," by Rensis Libert
Published by McGraw-Hill, Inc. (1967),
pp. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

In this research, we are going to test Michigan's University's model in Turkey. This modelhas been tested in many developed countries and the results have been encouraging.

Moreover, it is strongly recommended that Ohio state's model should also be tested in Turkey to see whether it is valid here.

(B) SOME IMPORTANT CONCLUSIONS FROM UNIVERSITY OF MICHIGAN STUDIES

Some important conclusions from Michigan's studies are presented below. The validity of these conclusions will be analyzed in part two.

(1) Many different groups of managers, totaling several hundred persons, have completed table (of organizational and performance characteristics of different management systems) describing both the highest and lowest producing departments which they know well. They have varied in their descriptions of the most productive departments, some are quite far to the right, being largely under system 4. For others, the most productive unit largely under system 3. The striking fact is that irrespective of where the high-producing unit fall in the table, the low producing department fall to the left. Quite consistently, the high producing department is seen as toward the right end of the table.

For the vast majority of managers, this has been
the pattern for every item in the table irrespective of
the field of experience of manager _____ production,
sales, financial, office, etc. _____ and regardless
of whether he occupies a staff of line position. In
about one case in twenty, a manager will place the low
producing unit to the right of the high on one or two
items. But with very few exceptions, high producing
departments are seen as using management systems more
to the right (toward system 4).and low producing units
as more to the left (toward system 1).

According to Miles, Parenthetically, some low
producing managers, although they display the same
pattern of answers as other managers, believe that a
manager should move toward system 4 after he has
achieved high levels of productivity. They feel that the
way to move from low to high productivity is to use a
management system well toward the left (e.g. system 1
or 2) and move toward system 4 only after high product-
ivity is achieved. Their view is essentially that of
the superior of a low producing unit who said:

"This interest-in-people approach is all right,
but it is a luxury. I have got to keep pressure on for
production, and when I get production up, then I can
afford to take time to show an interest in my employees
and their problems."

According to Likert, research results show that
managers who hold this view are not likely to achieve
high productivity in their units.

(2) Labour relations appear to be best in plants whose
management system falls toward the right (system 4 end),
they are poorest in plants whose management systems
fall toward system 1. These relationships improve when
the management system shifts toward system 4, they worsen
when a shift toward system 1 occurs.

(3) Libert examines the effect on performance of 3 basic
concepts of system 4 management:
> (a) The use by the manager of the principle of
> supportive relationships
> (b) his use of group decision making and group
> methods of supervision
> (c) his high performance goals for the organiza-
> tion

(a) The principle of supportive relationships is a
general principle which the members of an organization
can use to guide their relationships with one another.
The more fully this principle is applied throughout the
organization, the greater will be the extent to which

> (i) the motivational forces arising from the

noneconomic motives of members and from their economic
needs will be harmonious and compatible.

(ii) the motivational forces within each
individual will result in cooperative behaviour focused
on achieving organizational goals. The principle is
stated as follows:

"The leadership and other processes of the
organization must be such as to ensure a maximum
probability that in all interactions and in all relation-
ships within the organization, each member, in the light
of his background, values, desires, and expectations,
will view the experience as supportive and one which
builds and maintains his sense of personal worth and
importance".

In applying this principle, the relationship
between the superior and subordinate is crucial. This
relationship, as the principle specifies, should be one
which is supportive and ego-building. The more often the
superior's behaviour is ego building rather than ego-
deflating the better will be the effect of his behaviour
on organizational performance. In applying this principle,
it is essential to keep in mind that the interaction
between the leader and the subordinates must be viewed
in the light of the subordinate's background, values,
and expectations. The subordinate's perception of the
situation, rather than the superior's determines whether
or not the experience is supportive. Both the behaviour
of the superior and the employee's perceptions of the
situation must be such that the subordinate in the light

of his background, values and expectations sees the
experience as one which contributes to his sense of
personal worth and importance, one which increases and
maintains his sense of significance and human dignity.
(b) The use by the superior of group decision making and
supervision in the management of his work group was the
second fundamental concept of system 4 whose effect on
performance was examined by Likert.

The traditional organizational structure (system
1 and 2) does not use a group form of organization but
consists of a man-to-man model of interaction, i.e.,
superior to subordinate.

Figure IV   "Man-to-Man

                                             Pattern of

                                             Organization
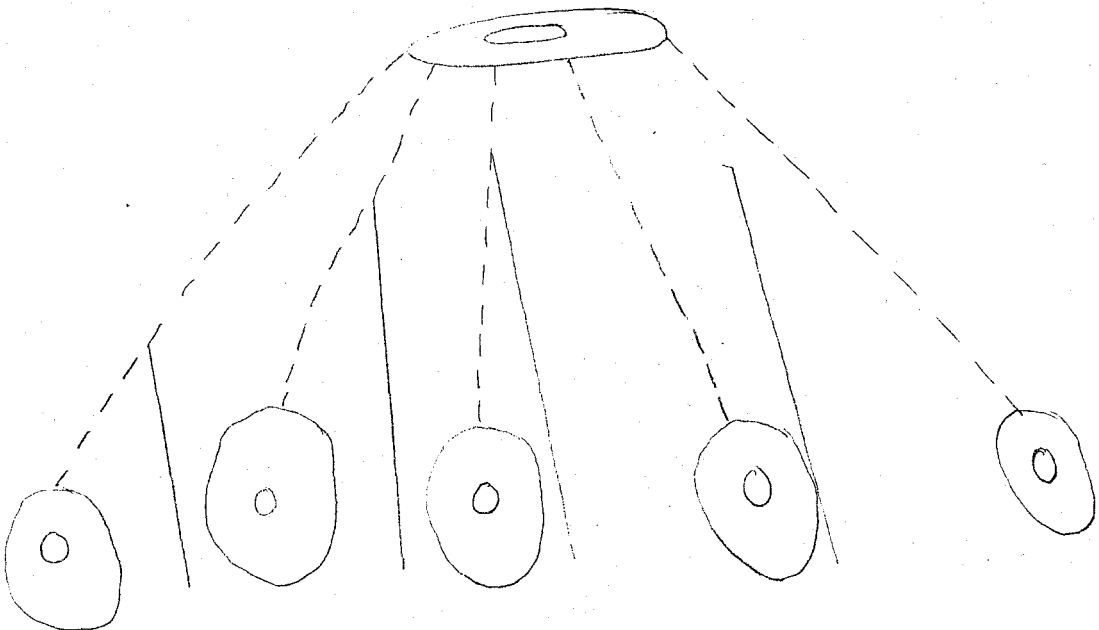
In this model, starting at the top of the firm, the president has full authority and responsibility. He delegates to each vice president specific authority and responsibility and holds each accountable. Each vice-president in turn does the same with each of his subordinates, and this continues down through the organization. The entire process _____ starting policy, issuing orders, checking, controlling, etc. _____ involves man-to-man interaction at very hierarchical level.

System 4 management, in contrast, uses an over-lapping group form of structure with each work group linked to the rest of the organization by means of persons who are members of more than one group.

Figure V   Group Pattern of
                                      Organization
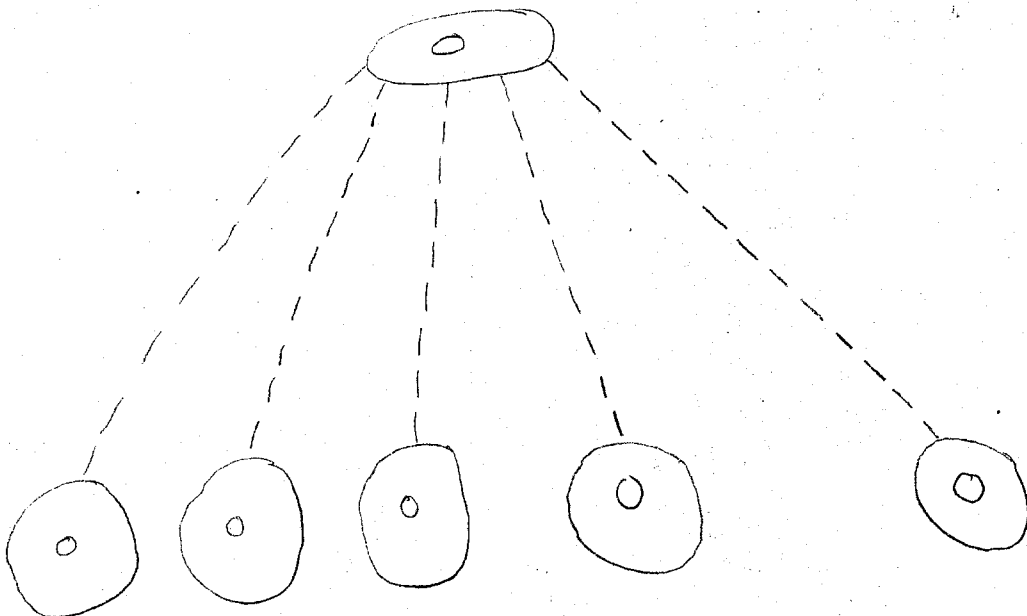
These individuals who hold overlapping group membership
are called "linking pins".

Figure VI   The Linking Pin
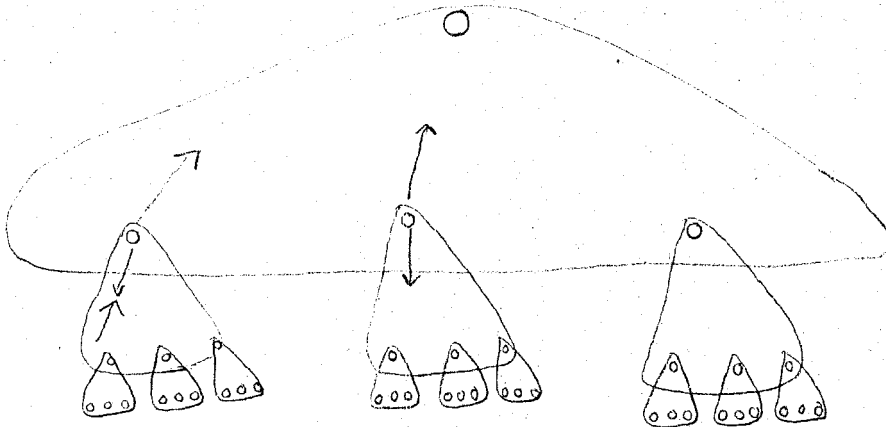
The interaction and decision making relies
heavily on group processes.

When the group process of decision making and
supervision is used properly, discussion is focused on
decisions to be made. There is a minimum of idle task.
Communication is clear and adequately understood.
Important issues are recognized and dealt with.

Confidence and trust pervade all aspects of
the relationship. The group's capacity for effective
problem solving is maintained by examining and dealing
with group processes when necessary.

(c) The third concept whose influence on organizational
effectiveness was considered by Likert deals with
performance goals.

Many studies (Kahn 1958; Miller and Form, 1964)
show that employees rather generally want stable
employment, job security, opportunities for promotion,
and satisfactory compensation. They also with to be
proud of the company they work for and of its performance
and accomplishments. Since these needs and desires are
important to the members of the organization, the
principle of supportive relationship requires that they
be met. This can be done best by an organization which
is economically successful. A firm must succeed and grow
to provide its employees with what they want from a
job: pride in the job and company, job security,
adequate pay, and opportunities for promotion. According
to Likert, Economic success is a "situational require-
ment," which can be met only when the organization, its
departments, and its members have high performance.
goals.

Superiors in system 4 organization, consequently,
should have high performance aspirations, but this is
not enough. Every member should have high performance
aspirations as well. Since these high performance goals
should not be imposed on employees, there must be a
mechanism through which employees can help set the high-
level goals which the satisfaction of their own needs
requires.

System 4 provides such a mechanism through:

(i) group decision making

(ii) multiple, overlapping group stucture

As a consequence, system 4 organizations set objectives which represent an optimum integration of the needs and desires of the members of the organization, the shareholders, customers, suppliers, and others who have an interest in the enterprise or are served by it. Since economic and status needs are important to the members of an enterprise, the goal-setting processes of system 4 necessarily lead to high performance goals for each unit and for the entire firm. Any time these high performance aspirations do not exist, there is a deficiency in the interaction processes of the organization and failure to recognize the situational requirements.

The nature of the specific procedures for applying system 4 management in a particular firm will vary depending upon the nature of the work and the traditions of the company. The basic principles of the system 4 management, however, are the same for all situations.

The interrelations among some of these key variables can be portrayed graphically in a useful although oversimplified form (see next page).

The 3 kinds of variables shown in this figure are the causal, intervening, and end-result variables.

The causal variables have 2 essential characteristics:

(i) they can be modified or altered by members of the organization i.e. they are neither fixed nor controlled by external circumstances.

(ii) They are independent variables, i.e., when they are changed, they cause other variables to change, but they are not, as a rule, directly influenced by other variables.

The level or condition of the <u>intervening variables</u>, are produced largely by the causal variables. and in turn have an influence upon the end-result variables. Attempts by members of the organization to improve the intervening variables by endeavoring to alter these variables directly will be much less successful, usually, than efforts directed toward modifying them through altering the causal variables. Similarly, efforts to improve the end-result variables will usually be less effective than changing the causal variables.

The <u>end-result variables</u> reveal the final outcome and reflect the influence of the intervening variables upon them.

The Figure given below indicates the direction of causality and the influence of an especially important variable, time.

FIGURE 7

SEQUENCE OF DEVELOPMENTS IN A WELL-ORGANIZED ENTERPRISE, AS AFFECTED BY USE OF SYSTEM 2 OR SYSTEM 4

If a manager has: well-organized plan .
of operation,high performance, high
technical competence (manager or staff
standards) <u>and if the manager manages via</u>

Causal
variables

systems 1 or 2 e.g. uses
direct hierarchical pressure
for results, including the usual
contests and other practices of
the traditional systems

system 4 e.g. uses principle
of supportive relationships,
group methods of supervision,
and other principles of system 4

<u>his organization will display</u>

Intervening
variables

Less group loyalty, lower performance
goals, greater conflict and less coopera-
tion, less technical assistance to
peers, greater feeling of un-
reasonable pressure

Greater group loyalty, higher
performance goals, greater coop-
eration, move technical
assistance to peers, more favourable
attitudes toward manager

<u>and his organization will attain:</u>

End Result
Variables

Lower sales volume, higher sales
costs, lower quality of business
sold, lower earnings by salesmen

Higher sales volume, lower sales
costs, higher quality of business
sold, higher earnings by salesmen

<u>Reference</u>: "The Human Organization: Its Management and Value" by Rensis Likert.

<u>Published by</u> : McGraw-Hill Book Company (1967)

(4) The variable which appears to be particularly important is time. As so often happens in research, it was failure to obtain expected results in an experiment which called to the attention of the investigators the importance of this negleted variable. In two separate large scale field experiments, the institute for social research obtained findings contrary to the predictions which had been made when the research projects were designed. In both instances, evidence emerged in the analysis, or in subsequent developments, to show that the time intervals between the changes in the causal variables and the related changes in the intervening and finally in the end result variables took much longer than the investigators had expected.

These studies showed:

"Changes in the causal variables toward system 4 apparently require an appreciable period of time before the impact of the change is fully manifest in corresponding improvement in the end-result variables."

(5) Every component part of a particular management system fits well with each of the other parts and functions in harmony with them. Each system of organiza-tion has a basic integrity of its own. The communication processes of system 1 are compatible with all other aspects of system 1 but are not compatible with any aspects of system 3 or system 4. The same is true of the

decision making processes and the compensation plans.
The management system of an organization must have
compatible component part if it is to function
effectively.

This conclusion has a very important implica-
tion: experiments in organizations must involve intern-
ally consistent changes. A test of the effectiveness of
the upward communication process of system 4 will yield
misleading findings if all the rest enterprise is using
system 2 methods. The organic integrity of each system
must be maintained while experimental variations are
being made. In short,
(a) Maintain system integrity in organization change and
management development.
(b) Management training needs to be based on a single
system.

(6) The capacity of an organization to obtain accurate
measurements of the causal, intervening, and end result
variables is greatly influenced over time by the manner
in which these data are used. All levels of hierarchy
in an organization, except the very top, fear measure-
ments which are used in a punitive manner by their
superiors. To protect themselves they tend to resist
covertly, if not overtly, the collection of such data.
The also try, and often successfully, to distort the
measurements in ways to favour or protect themselves.

This occurs commonly with the end-result measurements
in system 2 organizations.

The primary purpose of measurements in system
4 organizations is to provide managers and non-super-
visory employees with information to help them guide
their own decisions and behaviour. These data aid the
members of the organization to accomplish both the
specific goals they have set for themselves and the
broad objectives they have helped to set for the
organization. Measurements of all 3 kinds of variables
i.e. causal, intervening, and end-result are eagerly
sought when they provide valuable information to help
guide decisions and actions and are not used punitively
by superiors. All members of the organization want the
data and clearly recognize the necessity for the
measurements to be accurate. These are strong motivation-
al forces among the members to do all they can to assure
that the data are accurate and correctly reflect condi-
tions and developments in the organization when the
measurements are used for self-guidance. These are,
therefore, impressive differences among the different
systems of management in their capacity to obtain
accurate and undistorted measurements of all variables.
System 4 can obtain significantly more accurate data
than can the other existing systems.

This general conclusion seems to apply equally
well to trends in an organization with regards to its

management system. If an organization is shifting toward

system 4 and its members are aware of this trend, their

motivational forces to assure accurate measurements are

increased. When, on the contrary, the trend in the

management system of an organization is toward system 1,

then motivational forces are to resist the collection

of the measurements and to seek to distort the data.

Moreover, the greater the trend in either direction

and the longer it persists, the greater the changes

appear to be in the motivational forces in the predicted

direction.

        The full potential power of accurate measurement

to guide decisions and actions are available to an

appreciable greater extent in system 4 organizations, or

in firms shifting in that direction, than in system 1

enterprises, or those shifting toward it. The latter

have sizeable motivational forces in their members to

distort the measurements to protect themselves. This

prevents the firm from benefiting from accurate inform-

ation. Moreover, in system 4 organizations, the high

levels of confidence and trust which exist enable

accurate measurements once obtained to flow to all

relevant parts of the enterprise to provide correct

information to all persons who have need for it.

(7) A science-based theory of organization, such as system 4, offers modern industrial society new resources to cope with complex organizational problems. It provides formal solutions to organizational difficulties which cannot be solved within the framework and concepts of traditional organizational theory. At present these problems are often handled by means of informal solutions which are at variance with the formal organizational theory of the firm.

A satisfactory solution requires an organization which can have extensive functionalization and which can resolve differences and achieve efficient coordination on a product or geographical basis. This usually will necessitate effective coordination horizontally as well as vertically. To meet these requirements, an organization will need to have two or more channels of decision making and coordination, with at least one occuring via the functional lines and the other via the product or geographical line. Many persons in such an organization will have 2 or more superiors.

This organization will need to have decision making and influence processes sufficiently effective to reach first rate decisions and to achieve highly motivated, coordinated behaviour directed toward efficiently attaining the organization's goals. These decision making and influence processes must be able to achieve coordination in spite of initial and often

substantial conflict coming through 2 or more channels
in lines.

At least 4 conditions must be met by an organiza-
tion if it is to achieve a satisfactory solution to the
coordination functional problem.

(1) It must provide high levels and especially among
peers. Favourable attitudes and confidence and trust
are needed among its members.

(2) It must have the organizational structure and the
interaction skills required to solve differences and
conflicts and to attain creative solutions.

(3) It must possess the capacity to exert influence
and to create motivation and coordination without
traditional forms of line authority.

(4) Its decision-making processes and superior-
subordinate relationships must be such as to enable a
person to perform his job well and without hazard when
he has 2 or more superiors.

These 4 conditions are not and cannot be met
by a system 1, 2, or 3 organization operating on the
basis of currently accepted organizational theory. This
is not to say that the highest-producing managers are
not operating within system 2 and system 3 companies
in such a way as to provide these conditions. They are.
But, in doing so, these high producing managers are
deviating in fundamental ways from the formal theory
upon which their company's organizational structure and

standard operating procedures are based.

INADEQUACIES OF SYSTEMS 1, 2, AND 3

The formal organization theory underlying
systems 1 through 3 fails to meet these 4 conditions
in that

(1) the theory specifies that a person can have only
one boss.

(2) it calls for managerial procedures and behaviour
which, on the average, tend to produce competition and
conflict between peers and apathy or resentment among
subordinates.

(3) if fails to make full use of those motivational
forces which must be employed if cooperative attitudes
and effective coordination are to be achieved.

Research shows, the highest producing managers
are, on the average, bound neither by the inadequate
motivational assumption of systems 1 and 2 nor by the
systems themselves. They do not reject motivation based
on economic needs. They seek to use it more fully than
present wage-and-salary plans by providing more clear-
cut economic rewards for behaviour which helps the
organization achieve its objectives. They seek to avoid
rewarding behaviour which fails to serve the company's
objectives or which defeats their attainment, as, for
example, salary plans which generously reward managers
for liquidating a firm's human assets. In addition to

making more effective use of economic needs, these
managers strive to use fully the non economic motives
which yield cooperative attitudes and behaviour.

       Using their experience and insights, these
managers are steadily developing more effective manager-
ial principles. An integration of these principles into
a management theory has yielded system 4. This science-
based system offers new and more promising solutions
to the complex problems of managing and coordinating
the highly complex enterprises required by modern
technology.

Reference: "The Human Organization: Its Management and
                 Value". by Renesis Likert. Published by:
                 McGraw-Hill Book Company (1967).

CONCLUSION

       To summarize according to Likert, the properties
and performance characteristics of the ideal highly group
are as follows:

(1) The members are skilled in all the various leader-
ship and membership roles and functions required for
interaction between leaders and members and between
members and other members.

(2) The group has been in existence sufficiently long
to have developed a well-established, relaxed working
relationships among all its members.

(3) The members of the group are attracted to it and are loyal to its members, including the leader.

(4) The members and leaders have a high degree of confidence and trust in each other.

(5) The values and goals of the group are a satisfactory integration and expression of the relevant values and needs of its members. They have helped shape these values and goals and are satisfied with them.

(6) Insofar as members of the group are performing linking functions, they endeavor to have the values and goals of the groups which they link in harmony, one with the other.

(7) The more important a value seems to the group, the greater the likelihood that the individual member will accept it.

(8) The members of the group are highly motivated to abide by the major values and to achieve the important goals of group. Each member will do all that the reasonably can _____ and at times all in his power _____ to help the group achieve its central objectives. He expects every other member to do the same. The high motivation springs, in part, from the basic motive to achieve and maintain a sense of personal worth and importance. Being valued by a group whose values he shares, and deriving a sense of significance and importance from this relationship, leads each member to do his best. He is eager not to let the other members

down. He strives hard to do what he believes is
expected of him.

(9) All the interaction, problem solving, decision
making activities of the group occur in a supportive
atmosphere. Suggestions, comments, ideas, information,
criticism are all offered with a helpful orientation.
Similarly, these contributions are received in the
same spirit. Respect is shown for the point of view of
others both in the way contributions are made and in
the way they are received.

These are real and important differences of
opinion, but the focus is on arriving and not aggrevating
the conflict. Ego forces deriving from the desire to
achieve and maintain a sense of personal worth and
importance are channeled into constructive efforts. Care
is taken not to let these ego forces disrupt important
group tasks, such as problem solving.

The group atmosphere is sufficiently supportive
for the members to be able to accept readily any
criticism which is offered and to make the most
constructive use of it. The criticism may deal with any
relevant topic such as operational problems, decisions,
supervisory problems, interpersonal relationships, or
group processes, but, whatever their content, the
member feel sufficiently secure in the supportive
atmosphere of the group to be able to accept, test,
examine, and benefit from the criticism offered. Also,

he is able to be frank and candid, irrespective of the
content of the discussion: technical managerial, factual,
cognitive, or emotional. The supportive atmosphere of
the group, with the feeling of securists it provides,
contributes to a cooperative relationship between the
members. And this cooperation itself contributes to and
reinforces the supportive atmosphere.

(10) The superior of each rank group exerts a major
influence in establishing the tone and atmosphere of
that work group by his leadership principles and
practices. In the highly effective group, consequently,
the leader adheres to those principles of leadership
which create a supportive atmosphere in the group and
a cooperative rather than a competitive relationship
among the members.

(11) The group is eager to help each member develop to
his full potential.

(12) Each member accepts willingly and without resentment
the goals and expectations that he and his group
establish for themselves. The anxieties, fears, and
emotional stresses produced by direct pressure for high
performance from a boss in a hierarchical situation is
not present. Groups seem capable of setting high
performance goals for the group as a whole and for each
member. These goals are high enough to stimulate each
member to do his best, but not so high as to create
anxieties or fear of failure. In an effective group,

each person can exert sufficient influence on the deci-
sion of the group to prevent the group from setting un-
attainable goals for any member while setting high goals
for all. The goals are adopted to the member's capacity
to perform.

(13) The leader and the members believe that each group
member can accomplish "the impossible". These expecta-
tions stretch each member to the maximum and accelerate
his growth. When necessary, the group tempers the
expectation level so that the member is not broken by
a feeling of failure or rejection.

(14) When necessary or advisable, other members of the
group will a member the help he needs to accomplish
successfully the goals set for him. Mutual help is a
characteristic of highly effective group.

(15) The supportive atmosphere of the highly effective
group stimulates creativity. The group does not demand
narrow conformity as to the work groups under authori-
tarian leaders.

(16) The group knows the value of "constructive"
conformity and knows when to use it and for what purposes.
Although it does not permit confirmity to affect advers-
ely the creative mechanical and administrative matters
to save the time of members and to facilitate the group's
activities.

(17) There is a strong motivation on the part of each
member to communicate fully and frankly to the group

all the information which is relevant and of value to
the group's activity.

(18) There is high motivation in the group to use the
communioation process so that it best serves the
interests and goals of the group. Members strive also
to avoid communicating unimportant information so as not
to waste the group's time.

(19) Just as there is high motivation to communicate,
there is correspondingly strong motivation to receive
communications. Each member is genuinely interested in
any information on any relevant matter that any member
of the group can provide.

(20) In the highly effective group, there are strong
motivations to try to influence other members as well
as to be receptive by them. This applies to all the
group's activities: technical matters, methods,
organizational problems, interpersonal relationships,
and group processes.

(21) The group processes of the highly effective group
enable the members to exert more influence on the leaders
and to communicate.

(22) The ability of the members of the group to
influence each other contributes to the flexibility and
adaptability of the group. Ideas, goals, and attitudes
do not become frozen if members are able to influence
each other continuously.

(23) In the highly effective group, individual members feel secure in making decisions which seem appropriate to them because the goals and philosophy of operation are clearly understood by each member and provide him with a solid base for his decisions. This unleashes initiative and pushes decisions down while still maintaining a coordinated and directed effort.

(24) The leader of a highly effective group is selected carefully. His leadership ability is so evident that he would emerge as a leader in any unstructured situation.

The role of the leader in these groups is particularly important. Certain leadership functions can be shared with group members, others can be performed only by the designated leader. The leader has full responsibility for the group's performance and for seeing that his group meets the demands and expectations placed upon it by the rest of the organization of which it is a part. Other members of the group may share this responsibility at times, but the leader can never avoid full responsibility for the adequate performance of his group.

Although the leader has full responsibility, he does not try to make all the decisions. He develops his group into a unit which, with his participation, makes better decisions than he can make alone.

Through group-decision-making each member feels fully identified with each decision and highly motivated

to execute it fully.

The leader feels primarily responsible for establishing and maintaining at all times a thoroughly supportive atmosphere in the group. He encourages other members to share his responsibility, but never loses sight of the fact that as a leader of the work group which is part of larger organization his behaviour is likely to set the tone. The leader also tries to minimizing the influence of his hierarchical position. He is aware that trying to get results by "pulling ranks" affects adversely the effectiveness of his group and his relationship to it. Thus, he endeavors to deemphasize status. He does this in a variety of ways that fit his personality and methods of leading, as for example by:

- listening well and patiently
- not being impatient with the progress being mack by the group, particularly on difficult problems
- accepting more blame than may be warranted for failure or mistake
- giving the group members ample opportunity to express their thoughts without being constrained by the leader pressing his own views
- being careful never to impose a decision upon the group

- putting his contributions often in the form of questions or starting them speculatively
- arranging for others to help perform leadership functions which enhance their status

The leader strengthens the group and group processes by seeing that all problems which involve the group are dealt with by the group. Matters concerning one individual member and only that member are, of course, handled individually. Matters concerning only a subgroup are handled by that subgroup. The total group is kept informed, however, of any subgroup action.

In this way, he provides a linkage whereby communication and the exercise of influence can be performed in both directions.

The leader is what might be called "group centered", in a sense comparable with the "employee centered" supervisor.

Reference: "New Patterns of Management" by Rensis Likert. Published by: McGraw Hill Book Company (1961).
pp. 165, 166, 167, 168, 169, 170, 171.

RESEARCH METHODOLOGY

(1) To begin with I researched the various material
available on the topic. Ample material was
available in the library.

(2) Questionnaires was distributed to approximately
50 firms both in the private and public sector.
Unfortunately only 17 firms replied. The
questionnaire was taken from the book written
by Rensis Likert namely "THE HUMAN ORGANIZATION".
Because this research was conducted in Turkey,
the questionnaire was translated into Turkish
before distributing it to the firms.

Unfortunately, because of the small sample size,
the statistical techniques could not be applied. Had
they been applied, the results obtained could have been
very misleading. Consequently, emphasis was laid only
on the questionnairing technique.

FINDINGS

Findings will be discussed under the following headings:

A. Leadership Processes Used

B. Character of Motivational Forces

C. Charater of Communication Process

D. Character of Interaction - Influence

E. Character of Decision Making Process

F. Character of Goal-Setting or Ordering

G. Character of Control Processes

H. Performance Goals and Training

In integreting the tables, it should be noted that answers (a), (b), (c), and (d) correspond, respectively, to System 1, 2, 3, and 4.

LEADERSHIP PROCESSES USED

The results of the findings with respect to the leadership processes used are summarized in Table A-1.

TABLE A-1 : Leadership Processes Used

	Superiors		Subordinates	
	Number	%	Number	%
1. Extent to which superiors confidence and trust in subordinates				
a. Have no confidence and trust in subordinates				
b. Have considering confidence and trust such as master has in servant			1	5%
c. Substantial but not complete confidence and trust, still wishes to keep control of decisions	13	77%	12	71%
d. Complete confidence and trust in all matters	4	23%	4	24%
e. No answers				
2. Extent to which subordinates, in turn, have confidence and trust in superiors				

	Superiors		Subordinates	
	Number	%	Number	%
a. Have no confidence and trust in superiors				
b. Have subservient confidence and trust, such as servent has to master			2	12%
c. Display supportive behaviour quite generally	8	47%	8	47%
d. Display supportive behaviour fully and in all situations	8	47%	6	35%
e. No replies	1	6%	1	6%
3. Extent to which superiors display supportive behaviour toward others				
a. Display no supportive behaviour or virtually none			1	6%
b. Display supportive behaviour in condescending manner situations only	2	12%	2	12%
c. Display supportive behaviour quite generally	8	47%	7	41%
d. Display supportive behaviour fully and in all situations	7	41%	6	35%
e. No replies			1	6%

	Superiors		Subordinates	
	Number	%	Number	%

4. Extent to which superiors behave so that subordinates feel free to discuss important things about their jobs with their immediate superior

a. Subordinates do not feel at all free to discuss things about the job with their superior

			1	6%

b. Subordinates do not feel very free to discuss things about the job with their superior

	3	18%	4	24%

c. Subordinates feel rather free to discuss things about the job with their superior

	9	53%	10	59%

d. Subordinates feel completely free to discuss things about the job with their superior

	4	24%	2	11%

e. No answers

	1	5%		

5. Extent to which immediate superior in solving job problems generally tries to get subordinate's ideas and opinions and make constructive use of them

a. Seldom gets ideas and opinions of subordinates in solving job problems

			1	6%

b. Sometimes gets ideas and opinions of subordinates in solving problems

	Superiors		Subordinates	
	Number	%	Number	%
c. Usually gets ideas and opinions and usually tries to make constructive use of them	7	41%	7	41%
d. Always gets ideas and opinions and always tries to make contructive use of them	9	53%	9	53%
e. No answers	1	6%		

Table A-1 Leadership in Processes Used

The first variable measured by our questionnaire was "Leadership Processes Used".

The results show 4 important points to be noted:

(1) The superiors's answers indicate that they believe that their behaviour is "consultative or system 3" titled towards "system 4 or participative".

However the subordinates believe that the superior's style of management is also "consultative or system 3" but more inclined toward "system 2 or Benevolent Authoritative" rather than "system 4 or participative".

This result is significant because it shows difference in opinion between superior's and subordinates.

(2) The results show more wider range of responses as far as subordinates are concerned. The results given by superiors are generally less varied.

(3) It is interesting to note that subordinates feel
    more free than the superior's think they do in
    discussing the problems with respect to their jobs.
(4) Superiors consider themselves more supportive in
    behaviour than the subordinates believe them to be.

CHARACTER OF MOTIVATIONAL FORCES

    The results of the findings with respect to the
leadership processes used are summarized in Table A-2.

TABLE A-2 : Character of Motivational Forces

	Superiors		Subordinates	
	Number	%	Number	%
1. Underlying motives tapped				
a. Physical security, economic needs, and some use of the desire for status	1	6%	1	6%
b. Economic needs and moderate use of ego motives e.g. desire for status, affiliation, and achievement	8	47%	6	35%
c. Economic needs and considerable use of ego and other major motives e.g. desire for new experiences	5	29%	7	41%
d. Full use of economic ego, and other major motives, as, for example motivational forces arising from group goals	1	6%		

	Superiors		Subordinates	
	Number	%	Number	%
e. No answers	2	12%	3	18%
2. Manner in which motives are used				
a. Fear, threats, punishment, and occasional rewards	1	6%	2	12%
b. Rewards, and some actual or potential punishment	4	24%	1	6%
c. Rewards, occasional punishment, and some involvement	6	35%	1	6%
d. Economic rewards based on compensation system developed through participation, group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc	4	24%	6	35%
e. No answers	2	11%	7	41%
3. Kind of attitudes developed toward organization and its goals				
a. Attitudes usually are hostile and counter to organization's goals				
b. Attitudes are sometimes hostile and counter to organization's goals and support the behaviour necessary to achieve them	1	6%	2	12%

	Superiors		Subordinates	
	Number	%	Number	%

c. Attitudes usually are
   favourable and support
   the behaviour necessary
   to achieve them | 12 | 71% | 10 | 59%

d. Attitudes are strongly
   favourable and provide
   powerful stimulations to
   behaviour implementing
   organization's goals | 4 | 23% | 5 | 29%

e. No answers

4. Extent to which motivational
   forces conflict with or
   reinforce one another

a. Marked conflict of forces
   substantially reducing
   those motivational forces
   leading to behaviour in
   support of the organiza-
   tion's goals | | | 1 | 6%

b. Conflict often exists,
   occasionally forces will
   reinforce each other, at
   least partially | | | 3 | 18%

c. Some conflict, but often
   motivational forces will
   reinforce each other | 12 | 71% | 9 | 52%

d. Motivational forces
   generally reinforce each
   other in a substantial and
   cumulative manner | 4 | 24% | 4 | 24%

e. No answers | 1 | 5% | |

	Superior		Subordinate	
	Number	%	Number	%

5. Amount of responsibility
   felt by each member of
   organization for, achieving
   organization's goals

a. High levels of management
   feel responsibility, lower
   levels feel less, rank and
   file feel little, and
   welcome oppurtunity to
   behave in ways to defeat
   organization's goals ... 3 17% 1 6%

b. Managerial personnel
   usually feel responsibility,
   rank and file usually feel
   relatively little
   responsibility for
   achieving organization's
   goals ... 4 24% 4 24%

c. Substantial proportion
   of personnel especially
   at higher levels, feel
   responsibility and
   generally behave in ways
   to achieve the organization'
   s goals ... 7 41% 7 41%

d. Personnel at all levels feel
   real responsibility for
   organization's goals and
   behave in ways to implement
   them ... 3 18% 5 29%

e. No answers

		Superior		Subordinate	
		Number	%	Number	%

6. Attitudes toward other members of the organization

	Superior		Subordinate	
a. Subservient attitudes toward superiors coupled with hostility, hostility toward peers and contempt toward subordinates, distrust is widespread			3	18%
b. Subservient attitudes toward superiors, competition for status resulting in hostility toward peers, condescension toward subordinates	1	6%		
c. Cooperative, reasonably favourable attitudes toward others in organization, may be some competition between peers with resulting hostility and some condescension toward subordinates	3	18%	5	29%
d. Favourable, cooperative attitudes throughout the organizations with mutual trust and confidence	12	70%	8	47%
e. No answers	1	6%	1	6%

7. Satisfaction derived

a. Usually dissatisfaction with membership in the organization, with supervision, and with one's own achievements

	Superior		Subordinates	
	Number	%	Number	%
b. Dissatisfaction to moderate satisfaction with regard to membership in the organization, supervision, and one's own achievements			3	18%
c. Some dissatisfaction to moderately high satisfaction with regard to membership in the organization, supervision and one's own achievements	8	47%	5	29%
d. Relatively high satisfaction throughout the organization with regard to membership in the organization, supervision, and one's own achievements	9	53%	9	53%
e. No answers				

Character of Motivational Forces

The results of this variable i.e. "Character of Motivational Forces" were surprising in two respects

a. There was a wide divergence of opinion between superiors and subordinates in most of the questions.

b. The number of "no replies" was more in this variable than under any other variable.

The results show that 3 important points should be noted.

1. 47% of the superior's believe that they use system 2
   regarding "underlying motives tapped". Only 29% of
   the superior's believe that they use system 3.

   On the other hand, 41% of the subordinates
believe that the superior's use system 3 regarding
"underlying motives tapped". Only 35% of the subordinates
believe that superior's use system 2.

2. In reply to the question "manner in which motives
   are used", 41% of the subordinates abstained. 35%
   were of the opinion that system 4 is used.

   However, as far as superiors are concerned,
35% believe that system 3 is used and only 24% believe
that system 4 is used.

3. The management style is "consultative or system 3"
   as indicated by results. However, again the results
indicate that superiors consider their management
behaviour to be tilted towards system 4. On the other
h and, subordinates believe that superior's management
style is tilted toward system 2.

Table C-1

CHARACTER OF COMMUNICATION PROCESS

The results of the findings with respect to the character of Communication Process are summarized in Table C-1

Table C-1 Character of Communication Process

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
1) Amount of interaction and communication aimed at achieving organization's objectives.				
a. Very little			1	6%
b. Little	3	18%	5	29%
c. Quite a bit	8	47%	7	41%
d. Much with both individuals and groups	6	35%	4	24%
e. No Answers				
2) Direction of Information flow				
a. Downward	3	18%	2	12%
b. Mostly Downward	1	6%	1	6%
c. Down and un	5	29%	8	47%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
d. Down, up, and with neers	8	47%	5	29%
e. No Answers			1	6%

3) Downward communication

   i. Where initiated

	Superior		Subordinate	
a. At top of organization or to implement top **direc**tive	2	12%	4	24%
b. Primarily at top or natterned on communication from top	3	18%	5	29%
c. Patterned on communication from top but with some initative at lower levels	6	35%	2	12%
d. Initiated at all levels	6	35%	5	24%
e. No Answers			1	6%

   ii. Extent to which superiors willingly share information with subordinates

	Superior		Subordinate	
a. Provide mininum of information			1	6%
b. Gives subordinates only information superior feel they need.	4	24%	5	29%

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
c. Gives information needed and answers most questions	7	41%	7	41%
d. Seeks to give subordinates all velevant information and all information they want	6	35%	4	24%
e. No Answers				
iii. Extent to which communications are accepted by subordinates				
a. Viewed with great suspicion				
b. Some accepted and Some viewed with suspicion			1	6%
c. Often accepted but, if not, may or may not be openly questioned.	2	12%	5	29%
d. Generally acented, but if not, openly and candidly questioned	15	88%	11	65%
e. No Answers				
4) Upward communication				
i. Adequacy of upward communication via line organization				
a. Very little	1	6%	1	6%

		Superiors		Subordinates	
		Number	Percentage	Number	Percentage
b.	Limited	4	24%	4	24%
c.	Some	6	35%	8	47%
d.	A great deal	5	29%	4	23%
e.	No Answers	1			

ii. Subordinates
   feeling of
   Responsibilty
   for initiating
   accurate upward
   communication

a.	None at all				
b.	Relatively little, usually communicates "filtered" information and only when requested; may yes the "boss"	1	6%	3	17%
c.	Some to Moderate degree of Responsibility to initiate accurate upward communication	4	24%	4	24%
d.	Considerable Responsibility felt and much initiative; group communicates all relevant information	11	65%	10	59%
e.	No Answers	1	5%		

iii. Forces leading to
    accurate or distorted
    upward information

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
a. Powerful forces to distort information and deceive superiors				
b. Many forces to distort; also forces for honest communication				11%
c. Occasional forces to distort along with many forces to communicate accurately	5	29%	4	24%
d. Virtually No forces to distort and powerful forces to communicate accurately	12	71%	11	65%
e. No Answers				
iv. Accuracy of upward communication via line				
a. Tends to inaccurate				
b. Information that boss wanto to hear flows; other information is restricted and filtered			1	6%
c. Information that boss want to hear flows; other information may be initiated or cautiously given	5	29%	2	12%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
d. Accurate	12	71%	13	76%
e. No Answers			1	6%

v. Need for
supplementary
upward communication
system

a. Great need to spplement upward communication system; by spy system, suggestion system, and similar devices	2	12%		
b. Upward communication often supplemented by suggestion system and similiar devices	7	41%	10	59%
c. Sl ight need for supplementary system; suggestion system may be used	7	41%	7	41%
d. No need for any supplemenary system				
e. No Answers	1	6%		

5) Sideward Communication,
its adequacy and
accuracy.

a. Usually Poor
because of
Competition between
neers, corresnonding
hostility

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
b. Fairly Poor because of competition between neers	3	18%	4	24%
c. Fair to good	10	59%	12	70%
d. God to excellent	4	23%	1	6%
e. No Answers				

6) Psychological closeness of superi ors to subordinates (i.e. friendiliness between superiors and subordinates)

	Number	Percentage	Number	Percentage
a. Far apart				
b. Can be moderately close if proper voles are kept	2	12%	5	30%
c. Fairly close	7	41%	6	35%
d. Usually very close	8	47%	6	35%
e. No Answers				

i. How well does superior know and understand problems faced by subordinates?

	Number	Percentage	Number	Percentage
a. Has no knowledge or understanding of problems of subordinates			1	6%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
b. Has some knowledge and understanding of problems of subordinates	4	24%	2	12%
c. knows and understands problems of subordinates quite well	5	29%	8	47%
d. knows and understand problems of subordinates very well	7	41%	6	35%
e. No Answers	1	6%		
ii. How accurate are the perceptions by superiors and subordinates of each other?				
a. often in error			1	6%
b. often in error on some points	2	12%	1	6%
c. Moderately Accuvate	3	18%	6	35%
d. Usually quite accurate	12	70%	9	53%
e. No Answers				

Character of ·Communication Process

The management style is again system 3 as indicated
by questionnaires.results. However, there is a difference
of percentages. It is interesting to note that in those
questions (e.g. Subordinates feeling of Responsibility
for initiating accurate upward communication) where
subordinates integrity comes to be questiored their
responses have tilted towards system 4.

Table D-1

CHARACTER OF INTERACTION - INFLUENCE

The results of the findings with respect to the character of internaction-influence are summarized in Table D-1

TABLE D-1   CHARACTER OF INTERACTION - INFLUENCE

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
1) Amount and character of interaction.				
a. Little interaction and always with fear and disaster.			1	6%
b. Little interaction and usually with some condescension by superiors, fear and caution by subordinates				
c. Moderate Interaction, often with fair amount of confidence and trust	11	65%	7	41%
d. Extensive, friendly interaction with high degree of confidence and trust.	6	35%	8	47%

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
e. No Answers			1	6%
2) Amount of cooperative teamwors present				
a. None				
b. Relatively little			.4	23%
c. A moderate Amount	10	59%	9	53%
d. Very substantial amount throughout the organization	7	41%	4	24%
e. No Answers				
3) Extent to which subordinates can influence the goals, methods, and activity of their units and departments (i) As seen by superiors				
a. None				
b. Virtually None				
c. Moderate Amount	7	41%		
d. A great deal	10	59%		
e. No Answers				
ii. As seen by subordinates				
a. "None except through informal organization" or via unionizations			1	6%
b. Little except through "informal organization" or via unionization			2	12%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
c. Moderate amount both directly and via unionization			8	47%
d. Substantial amount both directly and via unionization (where it exists)			5	29%
e. No Answers			1	6%

4) Amount of Actual influence which superiors can exercise over the goals, activity, and methods of their units and departments

a. Believed to be substantial but actually moderate unless capacity to exercise severe punishment is present.			1	6%
b. Moderate to somewhat more than moderate especially for higher levels in organization	2	12%	2	12%
c. Moderate to substantial, especially for higher levels in organization	11	65%	8	47%
d. Substantial but often done i ndirectly, asfor example, by superior building interaction-influence system	4	23%	5	29%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
e. No Answers			1	6%

5) Extent to which an
   effective structure
   existis enabling
   one part of organization
   to exert influence upon
   other parts

	Superior		Subordinate	
a.Effective structure virtually not present	2	12%	3	18%
b.Limited capacity exists, influence exerted largely via vertical lines and parimarily downwards	2	12%	4	24%
c. Moderately effective structure exists, influence exerted largely through vertical lines	6	35%	3	18%
d. Highly effective structure exists of influence in all directions	7	41%	5	29%
e. No Answers			2	11%

Character of Interaction - Influence.

The results show system 3 (consultative.) style of Management. The sperior's answers are tilted towards system 4 whereas subordinates answers are tilted towards system 2.

TABLE E-1

CHARACTER OF DECISION MAKING PROCESS

The result of the findings with respect to the character of Decision Making Process are summarized in Table E- 1

TABLE E- 1	CHARACTER OF DECISION MAKING PROCESS			
	Superior		Subordinates	
	Number	Precentage	Number	Percentage
1) At what levels are decisions formally made?				
a. Bulk of decisions at top of organization	5	29%	8	47%
b. Policy at top, many decisions withim prescribed framework made at lower levels but usually checked with top before action	5	29%	4	24%
c. Broad Policy decisions at top, more specific decisions at lower levels	7	42%	4	24%

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
d.Decision Making widely done through out the organization, although well integrated. through linking process provided by overlapping groups			1	5%
e. None Answers				
2) How accurate and adequate is the information available for decision making at the place where decisions are made?				
a. Information is generally inadequate and inaccurate				
b. Information is often somewhat inadequate and inaccuvate			3	17%
c.Reasonably adequate and accurate information available	10	59%	10	59%
d.Relatively complete and accurate Information available available based both on measurements and				

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
efficient flow of information in organization	6	35%	4	24%
e. No Answers	1	6%		

3) To what extent are decision makers aware of Problems, particularly those at lower levels in the organization?

a. Often are unaware or only partially aware

b. Aware of some, unaware of others	1	6%	3	17%
c. Moderately aware of Probles	2	12%	2	12%
d. Generally quite well aware of Problems	14	82%	12	71%

e. No Problems

4) Extent to which technical and Professional knowledge is used in decision making?

a. Used only if Possessed at higher levels	1	6%	4	24%

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
b. Much of what is available in higher and middle levels is used	3	18%	8	47%
c. Much of what is available in higher, middle, and lower levels is used	5	29%	1	6%
d. Most of what is available anywhere with in the organization is used	8	47%	4	24%
e. No Answers				

5) Are decisions made
at the best level
in the organization
as far as of most
and inform (i)
Availability of the
most adequate
and accurate information
bearing on the decision

a. Decisions usually made at levels appreciably higher than levels where most adequate and accurate information exists	2	12%		

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
b. Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists	1	6%	4	24%
c. Some tendency for decisions to be made at higher levels than where most adequate and accurate information exists	9	53%	7	41%
d. Overlapping group and group decision processes tend to push decisions to point where information is most adequate or to pass the relevant information to the decision making point	5	29%	5	29%
e. No Answers			1	6%

ii. The motivational
   consequences (i.e.
   does the decision
   making process help
   to create the
   necessary
   motivations in those
   persons who have to
   carry out the decisions.)

	Superiors		Subordinate	
	Number	Percentage	Number	Percentage
a. Decision making contributes little or nothing to the mativation to implement the decision, usually yields adverse motivation				
b. Decision making contributes velatively little motivation			4	24%
c. Some contribution by decision making to motivation to implement	7	41%	7	41%
d. Substantial contribution by decision making to motivation to implement	10	59%	6	35%
e. No Answers				

6) To what extent are subordinates involved indecisions velated to their work?

a. Not at all			5	29%
b. Never involved in decisions; occasionlly consulted				

	Superiors		Subordinate	
	Number	Percentage	Number	Percentage
c. Usually are consulted but ordinarily not involved in decision making	9	53%	8	47%
d. Are involved fully in all all decisions velated to their work	7	41%	3	18%
e. No Answers	1	6%	1	6%

7) Is decision making based on man-to-man or group pattern of operation? Does it encourage or discourage teamwork?

	Superiors		Subordinate	
a. Man-to-man only , discourages teamwork	1	6%		
b. Man-to-man almost entively, discourages temwork			3	18%
c. Both man-to-man and group, partially encourages teamwork	**10**	59%	6	35%
d. Largely based on group pattern, encourages teamwork	5	29%	8	47%
e. No Answers	1	6%		

CHARACTER OF DECISION MAKING PROCESS

The answers to the variable "character of decision making process" have been surprising in some ways.

1- 42% of the superior's answered "Broad policy at top, more specific decisions at lower levels". 29% of the superior's answered that bulk of decisions are made on the top (system 1.) 29% of sepior's answered that system 2 is followed. On the other hand, 47% of the subordinates feel that decisions are made at the top. 24% of subordinates fell that system 2 is followed. Moreover 24% of subordinates feel that system 3 is followed.

2- In reply to the question, " Extent to which technical and professional knowledge is used in decision making".

47% of superiors favoured system 4

29% of superiors favoured system 3

As regards subordinates are concerned,

47% were of the opinion that system 2 is used.

24% were of the opinion that system 1 is used.

3- 29% subordinates felt that they were not at all involved in decision making related to their work.

On the other hand superior's answers were to the contrary

4- In veply to the question, " Is decision
Making based on man-to-man or group pattern

of operations? Does to encourage or discourage

team work?"

59% of superiors answered in favour of system 3.

29% of superiors answered in favour of system 4.

Whereas .47% of subordinates answered in favour

of system 4 and 35% subordinates favoured

system 3.

TABLE F-1

CHARACTER OF GOAL SETTING OR ORDERING

The result of the findings with respect to the character of goal setting or ordering are summarized in Table F.1

TABLE F-1   CHARACTER OF GOAL SETTING OR ORDERING

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
1) Manner in which usually done				
a. Orders issued			5	29%
b. High goals sought by top and often resisted moderately by subordinates	2	11%	1	6%
c. Goals are set or orders issued after discussion with subordinates of Problems and Planned action	11	65%	8	47%
d. Except in emergencies, established by means of group Participation	4	24%	3	8%

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
e. No Answers				

2) To what extent do
the different
hierarchial levels
tend to strive for
high performance
goals

a. High goals pressed
by top, generally
resisted by
subordinates

| | | | | |

b. High goals
sought by top
and often
resisted
moderately by
subordinates

| | | | 3 | 18% |

c. High goals
sought by
higher levels
but with
occasional
resistance by
lower levels

| 10 | 59 | 11 | 65% |

d. High goals sought
at all levels,
with lower levels
sometimes pressing
for higher goals
than top levels

| 7 | 41% | 3 | 17% |

e. No Answers

| | | | |

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
3) Are there forces tee accept, resist, orreject goals?				
a. Goals are overtly accepted but often covertly resisted **strongly**			2	12%
b. Goals are overtly accepted but often covertly resisted to at least a moderate degree				
c. Goals are overtly accepted but at times with some covert resistance	9	53%	11	65%
d. Goals are fully **accepted** both overtly and covertly	7	41%	4	23%
e. No Answers	1	6%		

CHARACTER OF GOAL SETTING OR ORDERING

The results indicate that system 3 (Consultative) is followed in Turkey.

TABLE G-1

CHARACTER OF CONTROL PROCESSES

The results of the findings with respect to the character of goal setting or ordering are summarized in Table G-1

TABLE G-1   CHARACTER OF CONTROL PROCESSES

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
1) At what hierarchial levels in organization does major or primary concern exist with regard to the performance of the control function				
a. At the very top only				
b. Primarily or largely at the top			4	24%
c. Primarily at the top but some shared feeling of Responsibility felt at Middle and to a lesser extent at lower levels	14	82%	9	52%

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
d. Concern for performance of Control functions likely to be felt throughout the organization	3	18%	4	24%
e. No Answers				

2) How accurate are the measurments and information used to guide and perform the control function, and to what extent do forces exist in the organization to distort and falsify this information?

a. Very strong forces exist to distort and falsify; as a consequence measurements and information are usually incomplete and often inaccurate.

			1	6%

b. Fairly strong forces exist to distort and falsify; hence information are often incomplete and inaccurate.

	1	6%	2	12%

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
c. Some pressure to protect self and collegues and hence some pressure to distort; information is only moderately complete and contains some inaccuracies	7	41%	5	29%
d. Strong Pressures to dotain complete and accurate information to guide own behaviour and behaviour of own and related work groups; hence information and measurements tend to be complete and accurate.	9	53%	9	53%
e. No Answers				
3) Extent to which the review and control functions are concentrated.				
a. Highly concentrated in top management	2	12%	2	12%
b. Relatively highly concentrated, with some delated control to middle and lower levels	3	18%	7	41%
c. Moderate downward delegation of review and control processes, lower as well as higher				

	Superior		Subordinate	
	Number	Percentage	Number	Percentage
levels perform these tasks	12	70%	4	24%

d. Review and Control
done at all levels
with lower units
at times imposing
mor e rigorous
reviews and tighter
controls than top
management

			4	23%

e. No Answers

4) Extent to which
there is an
informal organization
present and
supporting or opposing
goals of formal
organization

a. Informal organization
Present and opposing
goals of formal

organization	1	6%		

b. Informal organization
usually present and
partially resisting

goals	1	6%	2	12%

c. Informal organization
may be present and
may either support or
partially resist
goals of formal

organization	6	35%	2	12%

	Superiors		Supporting	
	Number	Percentage	Number	Percentage
d. Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals	7	41%	6	35%
e. No Answers	2	12%	7	41%

5) Extent to which control data(e.g. accounting, Productivity , cost,etc.) are used for self-quidance or group problem solving by managers and non-superoisory employees, or used by superiors in a punitive, policing manner.

	Superiors		Supporting	
a. Used for policing and in punitive manner			1	6%
b. Used for policing coupled with reward and punishment, sometimes punitively; used sometimes for guidance but in accord with others	3	18%	1	6%

c. Used for policing with emphasis usually on reward but with some punishment, used for guidance in

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
accord with others; some use also for self-guidance	2	12%	3	18%
d. Used for self-guidance and for coordinated problem solving and guidance; not used punitively.	12	70%	9	53%
e. No Answers			3	17%

CHARACTER OF CONTROL PROCESSES

The answers to this variable have not shown consistent pattern.

1- In veply to the question "Extent to which the review and control functions are concentrated."

70% of the superiors favoured system 3. Where as 41% of subordinates feel that system 2 is flowed

24% of subordinates feel that system 3 is followed.

23% of subordinates feel that system 4 is followed.

2- In veply to the question, " Extent to which there is an informal organization present and supporting or opposing goals of formal organization."

35% of superiors replied for system 3.

41% of superiors replied for system 4.
where as 35% of subordinates replied for system 4. and 41% of subordinates did not answer the question.

3- Another interesting feature is that in reply to the question,

" Extent to which control data are used for self-quidance or group problem solving by managers and non-supervisory employees, or used by superiors in a punitive, policing manner."

70% of superiors answered for system 4.

53% of subordinates answered for system 4.

TABLE H-1   PERFORMANCE GOALS   AND TRAINING

The results of the findings with respect to the
Performance Goals and Training are summarized in Table
H-1

TABLE H-1   PERFORMANCE GOALS   AND   TRAINING

	Superior		Subordinates	
	Number	Percentage	Number	Percentage
1) Level of Performance goals which superiors seek to have organization achieve.				
a. Seek average goals	1	6%	3	18%
b. Seek high goals	9	53%	10	59%
c. Seek very high goals	6	35%	3	17%
d. Seek to achieve extremely high goals	1	6%	1	6%
e. No Answers				
2) Extent to which you have been given the kind of Management training you desire.				

	Superiors		Subordinates	
	Number	Percentage	Number	Percentage
a. Have received no management training of kind and desire			3	18%
b. Have received some management training of kind and desire	4	24%	5	29%
c. Have received quite a bit of management training of kind and desire	11	65%	6	35%
d. Have received a great deal of management training of kind and desire	2	11%	1	6%
e. No Answers			2	12%
3) Andequacy of traini ng Resources provided to assist you training your subordinates				
a. Training Resources provided are only fairly good	1	6%	3	18%
b. Training Resources Provided are good	10	59%	8	47%
c. Training Resources Provided are very good	5	29%	4	24%
d. Training Resources Provided are excellent	1	6%		
e. No Answers			2	11%

PERFORMANCE   GOALS   AND   TRAINING

The pattern of Answering have been consistent.
Both supe riors and subordinates feel that system 3 is
being followed with regard to this variable.

C O N C L U S I O N

In conclusion, it can be said that System 3 is typical of
Turkish managers. However, superiors are inclined towards System 4
while subordinates are inclined towards System2

Within this framework, however, it must be pointed out that
managerial behavior seems to vary by organizational variables.
Different Systems are utilized for different organizational variables;
managers seem to shift from System 1 to System 4 freqvently. This
is in contradiction to Likert's basic assumption that managers'
behavior should follow a consistent pattern, and that they should
apply a system more or less in totality. Since Likert argues that if
the systems are not implemented in full, their advantages will not
be materialized, the broad range of switehing from one system to
another in Turkey promises a large degree of inefficiency and
ineffectiveness.

This study does not present any data to indicate directions
of change in managerial behavior. However, other studies have shown
authoritarian. The present findings indicate that some change has
and is occuring toward System 3. If this trend continues, as it has
happened in highly industrializerd countries, one may expect the shift
toward System 4. For managers and firms who are nearing that stage,
two recommendations are in order :

1) A sufficient time interval ought to be provided rather
than jumping into System 4 in fullspeed.

2) Not some but all organizational variables should eventually
be greared for System 4.

APPENDIX I

TABLE OF ORGANIZATIONAL VARIABLES

It is highly useful for research and operating purposes to have a framework for considering organizational variables. The following table has been prepared for this purpose and presents what is judged to be a common pattern.

In employing this table in an enterprise, the appropriateness of this classification of items into causal, intervening, and end-result categories should be tested by obtaining and analyzing periodic measurements from that firm or department. Such analysis will department the actual pattern of relationshins which exist among the organizational variables at that time. The highly interdependent, interacting character of most of the organizantional variables makes this testing from time to time of the intervelationships among them in a specific situation desirable.

I. CAUSAL VARTABLES

Each variable is a continuum from highly favourable to highly unfavourable. These variables apply to the organization as a whole , to departments or divisions, and, where indicated, to each superior.

(A) Policies, Philosoply, and values reflected in behaviour

1. Extent to which the principle of supportive relationships permeate your company

(a) In dealing with all relevant persons

(i.) Employees (Subordinates, peers , superiors, and)

(all others among whom interaction occur)

(ii) Customers and the public.

(iii) Unions

(iv) Suppliers

(v) Other organizations

(b) In every appropriate way and situation

(1) To what extent are measurements used throughout

your organization for self guidance in the total

organization (or any subdivision there of) and not

for punitive purposes or control by the superior?

(2) To what extent, within the limits of financial.

resources, does your organization (and each superior)

make available to each work group the equipment,

material, and resources required to do its job ?

(3) To what extent does your organization (and your

superior) have contagious enthusiasn regarding

the importance and significance of the organization's

mission?

(4) To what extent does your organization (and your superior.)

try to understand your problems and do something among

them?

(5) How interested is your organization (and your superior.)

in helping you with your personal and family problems?

(6) How free do you feel to approach your superior and

to communicate with him? Is he friendly and easily

approached?

(7)   How well does he listen to you?

(8)   To what extent are members of your of your organization
      interested in listening to you?

(i)   Are they (and your superior) interested in lenowing
      about your problems?

(ii) Are they (and your superior.) interested in suggestions?

(iii) Do **they** (and your superior) ask your opinions when
      a problem comes up which involves your work?

(iv) Do they (and your superior) value your ideas, seek
      them, and endeavor to use them?

(9)   Is your organization (and your sperior) eager to
      provide you with information important to you?

(i)   To what extent does your organization (and your
      superior) try to been you informed about matters
      related to your job?

(ii) How fully does your organization (and your superior.)
      share information with you about the company , its
      financial condition, earnings, etc., or do they been
      such information to themselves?

(iii) If there is information which you need or desire and
      your superior does not possess, does he try to obtain
      it for you?

(10) To what extent does confidence and trust permeate your
      organization?

(i)   To what extent does your organization (and your superior)
      give you opportunity to learn by doing, including the
      fredom to makes mistakes and to learn from them?

(ii)   If you make a mistake, to what extent is it treated
        as an opportunity for you to learn, or is it handled
        punitively?

(iii)   To what extent are you free to set your own pace, or
        are your activities circumscribed by controls which
        reflect little confidence and trust in you?

(iv)   To what extent are you under unreasonable hierarchial
        pressure to produce?

(v)   To what extent are you under general supervision
        rather than close, detailed supervision?

(vi)   To what extent is your superior employee-centered
        rather than process-centered?

(vii)   To what extent do you feel that your organization
        (and your superior) is sincere in dealing with you
        rather than being manipulative?

(viii) To what extent does it (he) display confidence in
        your integrity?

(11)   To what extent are you treated as a human beign
        rather than just another person to get the work out?

(12)   To what extent does your organization (and your
        superior) convey to you a feeling of confidence that
        you can do your job successfully?

(i)   Does your superior's behaviour convey to you that
        he has complete confidence in your capacity?

(ii)   Does your superior expect the "impossible" and
        fully believe you can and will do it?

(iii)   Does he give you candid, sincere criticism and
        suggestions for improvement but with an orientation

that you have greater potential than you have yet
realized?

(iv)   To what extent do you feel your organization (and
your superior) will back you and support you on any
matter?

(13)   How much help do you get from your organization
(and your superior) in doing your work?

(i)   How much is it (he) interested in training you and
helping you learn better ways of doing your work?

(ii)   How much does your superior help you solve your
problems constructively - not tell you the answers,
but help you think through your problems?

(14)   To what extent is your organization (and your superior)
interested in helping you get the training which will
assist you in being promoted?

(15)   How receptive is your organization (and your superior)
to being influenced by you?

(i)   will it (he) give serious considerations to matters
you present?

(ii)   Is it (he) inflexible, or will your proposals be
weighted in a reasonable manner?

(16)   To what extent does your organization (and your superior)
hold group meetings to make decisions and solve work-
related problems? Are such meetings worthwhile?

(i)   Does your organization (and your superior) help each
group, including yours, develop skill in reaching
sound solutions?

(ii)   Does your organization (and your superior) help each
         group, including yours, develops its skills in effective
         interaction and in becoming a well -knit team rather
         than developing hostile subfaction?

(iii)   Does your organization (and your superior) use the
         ideas and solutions which omerge, and does it (he)
         also help each group to apply its solutions?

(17)   To what extent does your organization (and your superior)
         strive to see that you receive equitable compensation
         for your work? Is it (he) interested in helping you
         to achieve and and maintain a good income?

(2)   Extent to which your organization (and your superior)
         has high standards; extent to which high standards are
         held with egard to

(a)   The company as a total institution and its general
         reputation (e.g. being a highly respected firm).

(b)   Performance levels (e.g.high productivity gools)

(c)   Quality of Product and services

(d)   Scrap and waste

(e)   Customer service

(f)   Goods from suppliers

(g)   Quality of equipment and technology

(h)   Quality equipment, plant, etc.

(i)   Quality of Personnel (selection)

(j)   Quality of Personnel development (training)

(k)   Level of "cooperative working relationships" (Cooperative
         working relationships are defined as the high level of
         confidence and trust, loyalties, and favourable and

highly effective groups and highly effective interaction-influence system)

(e) Creativity, innovativeness (e.g., seeks constantly through R and D to improve products, processes, marketing, etc).

(3) Extent to which the organization uses multiple overlapping group structure.

(a) The group rather than the individual is the building block

(b) The superior usually serves as vertical linking rin.

(c) Lateral coordination is facilitated through appropriate cross-function linking groups.

(4) Extent to which group decision making and group methods of supervision are used by your organization (and your superior)

(a) Extent to which your organization (and your superior.) uses group decision making in such cycles of activity as the following : Setting organizational objectives; establishing departmental and subunit goals; deciding upon equipment, technology, methods, job organization etc.; acting on selection and promotion, including peer participation in selection and use of peer and subordinate along with superior reactions in decisions on promotion; evaluating goals, procedures, etc. for a new cycle; deciding upon the compensation and reward system and the principles and procedures used in

subdivision there of) to guide decision making and
behaviour in most efficient manner; extent to which
your organization (and your superior) makes relevant
measurements available to each unit or subunit for
self-guidance and does not use them for punitive
purposes.

(7)   Extent to which your organization applies elementary
      principles of organization

(a)   Extent to which each member of your organization
      has a reasonably clear, unambiguous, and functionally
      appropriate role in the organization and concept of
      it.

(b)   Extent to which each person has a correct understanding
      to the roles of those other persons with whom his
      own role requires him to interact.

(c)   Extent to which person is well trained for his role
      and taks

(d)   Extent to which work and jobs are organized well,
      planning done well, etc.

(8)   Extent to which your organization seeks to be technologically
      well equipped and constantly seeks to improve via
      Research and development and emphasis on innovation.

(9)   Extent to which your organization expects each manager
      or superior in ways consistent with the organization's
      philosophy and values and encourages and faculitates
      productive problem solving to achieve this objective,
      including providing such resources as the relevant

measurements to assist such problem-solving activities.

(10) Extent to which there is sufficient stability in personnel assignments and investment in organization building to create highly effective cooperative working relationships, even though rotation is used for training purposes.

(11) Extent to which your organization seeks to minimize the adverse effect of size by taking such steps as

(i) Creating many small units (e.g plants) instead of a few large ones (within the limits of the technology and of low unit cost operation)

(ii) Using multiple overlapping group structure, group decision making, and principle of supportve relation ships.

(B)

(1) Technical matters

(i) Technical and professional problems and techology, including research and development.

(ii) Processes

(iii) Equipment

(iv) Raw material

(v) Finished Product

(vi) Marketing

(2) Administrative know how in relation to

(i) Organization Planning and Structure

(ii) Functionalization, etc.

(iii) Fiscal management

(3) Human Interaction Skills

(i) Interpersonal

(ii) Group Problem Solving and decision Making

(a) Group building and maintainence

    1. Leader and member roles

    2. Creative and integrative problem solving, not
       win-lose orientation

(b) Problem solving as cognitive process

(c) Situational requirements taken into account.

(d) Use of assisted problem solving and searching question.

(C) The adequacy of the selection process. The level of
aptitudes, qualifications, and intelligence among
members of your organization.

(D) The adequacy of the training resources

(E) The cultural and personality characteristics of
members of your organization with regard to such
variables as expectations of being involved in
decisions dealing with one's work and the skills for
doing so.

(F) The adequacy of capital and equipment

II. Intervening Variables

(A) Attitudinol, motivational, perceptual variables

(1) The extent of member loyalty to your organization and
identification with it and its objectives.

(2) The extent to which members of your organization at
all hierrarical levels feel that the organization's

objectives are consistent with their own needs and
goals and that the achieverment of the company's
objectives will help them achieve their own.

(3)   The extent to which the goals of units and of
individuals are felt to be of a character to facilitate
your organization's achieverment of its objectives;
the extent to which they actually facilitate the
achievement of its objectives.

(4)   The level of motivation and level of goals among
members of your organization (for entire organization,
for departments, and for each member of each unit,
including peers and superior) with regard to such
activities as

(a)   Performance, including both quality and quantity of
work done.

(b)   Elimination of waste and reduction of costs.

(c)   Improving the products.

(d)   Improving service to customers

(e)   Improving technological processes

(f)   Improving the organization, its procedures, the training
and skill of personnel, etc .

(5)   The extent to which members of your organization
feel that the atmosphere of the organization is
supportive and helps each individual achieve and
maintain his sense of personal worth and importance.

(6)   The level of expectations of members of your
        organization with regard to such variables as

(a)   Income and trends in income

(b)   Stability of employment.

(c)   Promotion, training, and development opportunities

(d)   Fringe benefits.

(e)   Working Conditions

(f)   Interesting and Psychologically rewarding work.

(g)   Being involved in decisions related to their work
        and conditions of employment.

(h)   All other aspects of their jobs and work.

(7)   The level of satisfaction of members of your organization
        with regard to the variables listed under 6 above
        and such other variables as

(a)   The company itself, their department, and their
        work group.

(b)   The treatment they receive including e.g. recognition
        for good work.

(c)   All aspects of the management system of the company.

(8)   The cognitive understanding of members of your
        organization e.g., the extent to which each member
        of the organization is correctly informed about the
        content of his job, his job role, etc.

(9)   The character of the interaction-influence system
        and the level of cooperative working relationships.

(a)   The extent to which cooperative attitudes exist

(i)   The degree of confidence and trust among peess,

among the different hierrarical levelS, and among
the different organizational units.

(ii)   The extent to which attitudes toward superiors, peers,

        subordinates, and other relevant persons in organization

        are favourable

(a)   The level of peer group loyalty (attitudes of subordinates

        members of work group toward each other).

(b)   The level of total group loyalty (attitudes of all

        members of work group toward each other i.e. peer

        group loyalty, attitude toward superior, and attitude

        and behaviour of superior toward subordinates)

(iii)   The level of cooperative attitudes within each unit of

        your organization , among units, among various parts

        of the organization, such as, line and staff, divisions,

        departments, and headguarters.

(b)   The perceived and actual efficiency and adequacy of

        the communication process upward, downward, laterally.

(i)   The extent to which each member (or unit) feels he

        has the information he needs to do his job well.

(ii)   The extent to which each superior (your) and each

        of his subordinates have the R same understanding

        as to responsibilities, authority, roles, goals,

        and deadlines

(iii)   The extent to which each (your) superior is correctly

        informed as to the expectations, reactions, and

        perceptions of each of his subordinates and conversely

(iv)   The extent to which each (your) superior is correctly

        informed of the obstacles, problems, and failures

        each of his subordinates is encountering in his work;

        the assistance each subordinate finds helpful or of

        little value; and the assistance each wishes he could

        get.

(v)   The extent to which members of your organization at

        all hierarchial levels are motivated to communicate

        fully and accurately all the important information

        to all persons for whom the information is relevant

        and valuable and to omit the irrelevant in order

        to ovoid overloading the communication system.

(vi)   The extent to which each member feels that the

        organization, his superior, peers, and subordinates

        earnestly endeavor.

(a)   To communicate to him information of value to him

(b)   To listen to him, to seek his ideas, views, experiences.

(vii)   Extent to which there is motivation to accept downward

        communication, not distort it, and to react favourably

        to it.

(viii) Upward communication

(a)   Extent to which upward communication via line organization

        is preceived as adequate.

(b)   Extent to which upward communication via line organization

        is preceived as accurate.

(c)   Extent to which subordinates feel responsible for

        initiating and maintaining accurate members are motivated

to call to the attention of the relevant persons information requiring action and to persist in doing so until the necessary action is taken.

(d) Extent to which there are forces leading to accurate or distorted information and nature of these forces.

(e) Extent to which there is a felt need for supplementary upward communication systems (e.g. suggestion systems, etc.). (The greater is this need, the poorer is the communication system).

(ix) Extent to which lateral communication is preceived as adequate and accurate.

(x) Psychological closeness of superiors to subordinates

(a) How close does each feel he is to the other in understanding and mutual trust? How close does the seek to be?

(b) How well does each (your) superior know and understand the problems faced by his subordinates and conversely?

(c) To what extent are erfeptions by superiors and subordinates of attitudes, roles, and problems of others accurate?

(xi) The extent to which each person feels that the formal organization provides him with all the channels for communication and interaction which he feels he needs.

(C) The perceptual and motivational consequences of the decision making process

(i) How do members of the organization **feel** about the decision making process ?

(a) To what extent do they feel that decisions are made made at the right level and by the right people?

(b)   To what extent do members feel that their ideas,
        information, knowledge of processes, and experience
        are being used?

(c)   To what extent do members feel that important problems
        are recogoized and dealt with promptly and well?

(d)   To what extent do they feel that the decision making
        process makes full use of all of the relevant information
        available within or to the organization

(e)   To what extent do they feel that the decisions adequately
        take into account the important situational requiremeonts?

(f)   To what extent do the members feel that the decision-
        making process of the organization is such that they
        can exert sufficient influence on the decisions to
        enable them to feel that their working situation is
        satisfactorily predictable, dependable, and controllable
        with regard to objectives, goals, evaluation and
        reward processes, and organizational performance and
        success?

(ii)   To what extent are the decision makers fully and
        correctly aware of problems, particularly those problems
        at lower levels in the organization?

(iii)   To what extent does the decision making process encourage
        efficient and accurate communication?

        a. Upward

        b. Downward

        c. Laterally

(iv)   To what extent are the decisions of your organization

made at the best level and in the best way with

regard to the motivational consequences?

(a)   Does the decision-making process help to create the

necessary motivations in those persons who have to

carry out the decisions?

(b)   What forces are created to accept, resist, or reject

goals?

(c)   Is every hierarchial level motivated to strive for

high performance?

(d)   What is the magnitude of the motivational forces created

in persons to carryout the decision or defeat its

intent and block its execution?

(e)   The perceptoal and motivational consequences of the

influence, control, and coordination processes in

each unit and thoughout the organization

(i)   The amount of influence that different members of

your organization and the different hierarchial levels

feel they exercise, and the amount of influence

others see them actually exercising, e.g., the extent

to which superiors feel they can influence the goals,

methods, and activities of their units and departments

and the extent to which their subordinates see them

as being able to do so; and, conversely, the extent

to which subordinates feel they can influence such

goals, etc., and the extent to which their superiors

see them as being able to do so

(a) As seen by superiors

(b) As seen by peers

(c) As seen by subordninates.

(ii)   The extent to which members of your organization at all hierarchial levels are motivated to try to discover the intent of a communication and to react to its true intent, instead of reacting to the letter of the communication and ignoring or actively defeating its intent.

(iii)   The extent to which members of your organization at all hierarchial levels are motivated to carry out to the best of their ability the objectives of the organization and the goals of their department, instead of blocking action and sabotaging these objectives and goals in every way they dore to.

(iv)   The extent to which members of your organization feel responsible for seeing that the organization as a whole, each work group, and each person achieve the established objectives and goals; the extent to which they are motivated to implement this felt responsibility.

(10)   The extent to which economic needs are effectively used to create motivational forces focused on helping your organization achieve its objectives

(i)   The extent to which the compensation system rewards and motivates behaviour oriented toward achieving organizational objectives and does not reward or motivate behaviour which is not so oriented.

(ii)   The extent to which the compensation system is seen

as equitable; the extent to which each person feels

his pay is too low, about right, or on the high side

    (a) In comparison with others in the organization.

    (b) In comparison with jobs elsewhere

    (c) In an absolute sense

(iii)   The extent to which the members of the organization

feel that the decision making procedure used by the

organization in deciding upon compensation is fair

and equitable.

(11)   The extent to which the motivational forces arising

from the noneconomic motives are consistent with and

reinforce those created by the economic needs; the

extent to which all the different motivational forces

are in harmony and are focused on cooperative efforts

seeking to achieve the organization's objectives.

(12)   The extent to which members of your organization

feel under "Reasonable pressure" to produce (and react

unfavoruably to it); the extent to which members

feel that pressure to produce is self-imposed instead

of imposed by others.

(13)   The extent to which members of the organization (or

of its units) seek to press for high productivity or

to restrict production-both individually and by work

groups; the extent to which members in your organization

have favourable attitudes toward high producers and

encourage , rather than discourage, them to produce

at a high level.

(14)   The extent to which there are good versus poor labour
        relati ons and the extent to which attitudes exist
        which provide an atmosphere in which differences can
        be resolved in a constructive problem solving manner
        versus attitudes inducing bilter, irreconcilable conflict.

(15)   Level of mental health

(i)   Level of hostile, resentful attitudes

(ii)   The amount of stress and anxiety felt by members of
        the organization and the sources of stress; extent
        to which members feel they have the organizational
        means to reduce stress and deal constructively with
        the couses of stress

(iii)   Levels of emotional maturity, self estem , and self-
        confidence.

(16)   The effect of any anxiety upon health, well being,
        and the capacity to function effectively as revealed
        by high rates of sickness, absence, accidents, and
        similar symptoms

(i)   Evidence from Psychological tests and reports

(ii)   Evidence from Physiological tests and health
        examinations and reports.

(17)   Level of shareholder confidence and loyalty

(18)   Level of customer confidence and loyalty

(19)   Level of supplier confidence and loyalty.

(B)   <u>Intervening Behavioral Variables</u>

(1)   The extent to which there is wide participation in decision making versus highly centralized decision making

(2)   The extent to which members of your organization apply principles of supportive relationships to subordinates, peers, superiors, customers, etc.

(3)   The extent to which members of your organization coach, counsel, and train their peers, share new knowledge on how best to do job, and in other ways help to perform leadership roles

(4)   The extent to which members of your organization constantly seek and actually carry out ways to improve methods, technology, and products, and to eliminate waste and unnecessary work; extent to which they are well trained to do so.

(5)   The extent to which members in your organization have high performance standards and goals and through group norms encourage peers and others to share equally high standards ("High standards" refer to the entire list under Causal I A2)

(6)   The extent to which the review and control functions are concentrated at the top of your organization or performed as coordinated and reciprocally responsible behaviour by work groups throughout the organization and at all levels.

(7)   The extent to which a highly effective interaction-influence system is used and is being strengthened

(i)   The operational character of the organizational structure: what it is in actual fact as compared with what it is supposed to be, e.g., who reports to whom about what, the number of superiors and subordinates each person has, the extent to which the structure consists of overlapping groups, the amount of multiple overlapping , the adequacy of linking pins and the strength of linkage provided by each linking pin, and the extent to which the informal organization and the formal organization are the same.

(ii)   Extent to which this system employs group rather than man-to-man interaction.

(iii)   Extent to which this system sets and modifies its own objectives, goals, and procedures

(a)   Extent to which these objectives are a creative integration of needs, desires, and aspirations of the members of the organization and of all persons functionally related to the organization or served by it, such as

    Shareholders

    Customers

    Suppliers

(b)   Extent to which the goals of each department , unit, and subunit of the organization reflect a constructive

integration of the needs and desires of its members,
the gools of other departments, and the objectives
of the entire organization; the extent to which the
members of the department or unit are involved in
the decision-making processes used in establishing
the department's goals.

(c)   Extent to which departments and other parts of the
organization, evaluate progress toward their objectives
and goals at appropriate intervals and make appropriate
modifications in the objectives of the entire organization
and goals of departments and units; extent to which
this is done also with regard to the strategies,
methods, and technologies to be used for the achievement
of these objectives and goals.

(d)   Extent to which this interaction influence system
evaluates, builds, and maintains its multiple
overlapping group structure and cooperative working
relationships and thereby maintains a highly effective
interaction - influence system.

(e)   Extent to which the organization through the group
decision pocedures of its interaction influence
system establishes, maintains, evaluates, and operates
in an equitable manner (as seen by the members of
the organization and by persons served by the organization)
its compensation, pricing, and dividend processes and
policies; extent to which these processes and policies
are reviewed and evaluated at appropriate intervals

and adjusted to maintain their equitable character

(f)   The character of the decision-making process of

the interaction-influence system

(i)   which individuals and which groups at which levels

make what decision?

(ii)   What facts are used in making these decisions, and

how accurate and adequate are these facts?

(iii)   To what extent is the technical and professional

knowledge existing in the organization or available

to it used in decision making?

(iv)   To what extent do members of the organization skillfully

use group problem solving and decision making processes

both cognitively to solve problems and for group

building and group maintcumence?

(1)   Extent to which they seek to use integrative,

constructive problem solving rather than a win-loose

approach

(2)   Extent to which differences and conflicts are accepted

as necessary and desirable and are worked through

to constructive innovative solutions.

(3)   Extent to which the abilities, knowledge, and expreence

of each individual member are used fully; the extent

to which each member gives advice, counsel, and support

to other members while recognizing invidual

accountability and specialization

(4)   The extent to which each member accepts responsibility

for keeping

discussions relevant and for the integrity of the
team operation.

(5) The extent to which individual differences and
individuality are desired, used, and respected.

(6) The extent to which diversity in outlook and
differences of point of view are welcomed and used
in an innovative and constructive manner in
decision making.

(7) Extent to which all members in your organization
perform communication processes well

(i) Extent to which they communicate to others (peers,
superior, subordinates), in a candid, frank, and
sincere manner because of an atmosphere of confidence,
trust, and support - rather than being cautious and
guarded in their communication.

(ii) Extent to which they try to (and do) communicate
rapidly and efficiently to others all relevant
information by emphasizing the important information
and filtzing out the trivia; extent to which knowledge
and action on essential matters are assured by repeating
important information and even relaying it when
necessary through alternate channels.

(8) Level of cooperative behaviour among the members of
your organization oriented toward helping the organization
achieve its objectives.

(9) Extent to which such variables as the following are
at a level optimum for the organization and its members

(i) Turnover rates

(ii) Absence rates

(iii) Manhower development rates

(iv) Growth rate of the firm

(10)   Extent to which accident and sickness rates are
       at a minimum.

III.   End Result   Variables

       (This list is illustrative and is incomplete)

(A)   Performance Variables

       (1) Level of Productivity

       (2) Level of quality of Product and service

       (3) Level of Scrap loss and waste

       (4) Level of share of market

(B)   Financial Variables

       (1) Level of costs

       (2) Level of sales and income

       (3) Level of profit

       (4) Level of Compensation

       (5) Level of financial reserves

       (6) Current value of investment in Plant, equipment,
           inventories, R and D, markets, etc.

       (7) Current value of investment in human organization.

       (8) Current value of investmend in customer poyalty.

APPENDIX II

RELATIONSHIPS AMONG CAUSAL, INTERVENING, AND END-RESULT

VARIABLES

The various dimensions of a firm's human organization
and its operations can be placed in a conceptual framework
which contributes to their interpretations and helps guide
directions _on what to measure. This frame aids in the analysis
of the data:, it contributes appreciably to the rapid and
accurate di agnosis of problems in system 4 organizations,
and its indispensable to firms seeking to shift system 4 since
it focuses their efforts on the key places to introduce change.
The variables are grouped into 3 broad categories, namely,
causal, intervening, and end result. Grouping variables into
thes ecategori e s aids greatly in the correct interpretation
of the data and their use for diagnostic and other organization
purposes.

The interrelationships among the three categories of
vari ables in system 2 and system 4 organizations are shown
schematically in figure 7. This figure, while grossly
oversimplifying the relationships, helps to make clear the
pattern among the variables. Ir system 4 organizations, as
the figure shows, the principle of supportive relationship
is applied, and group methods of decision making are used
in a multiple overlapping group structure. These two key
variables lead (as arrow (1) portrays) to intervening variables
such as favourable attitudes toward superior, high confidence
and trust, high reciprocal influence, excellent

The presence of these variables yields these variables which, in turn, lead to these variables

Causal
variables

Intervening
variables

End-result
variables

System 4

Principle of supportive
relationships } 1

Favorable attitudes toward superior
High confidence and trust
High reciprocal influence
Excellent communication: up,down,
        lateral
High peer-group loyalty

6

Low absence and turnover

Group decision making in
a multiple, overlapping
group structure } 2

10

High productivity
Low scrap
Low costs
High earnings

3

High peer performance goals at all
levels re:
        productivity,quality,scrap

7

System 1 or 2

High performance goals]

Compliance based on fear

5

High productivity
over short run
Low productivity
and earnings over
long run

High pressure via:tight
work standards,
personnel limitations,
tight budgets - imposed } 4

Unfavorable attitudes,e.g.,little
confidence and trust
Poor communication
Low levels of influence
Low levels of cooperative motivation
Low peer performance goals
Restriction of output

8
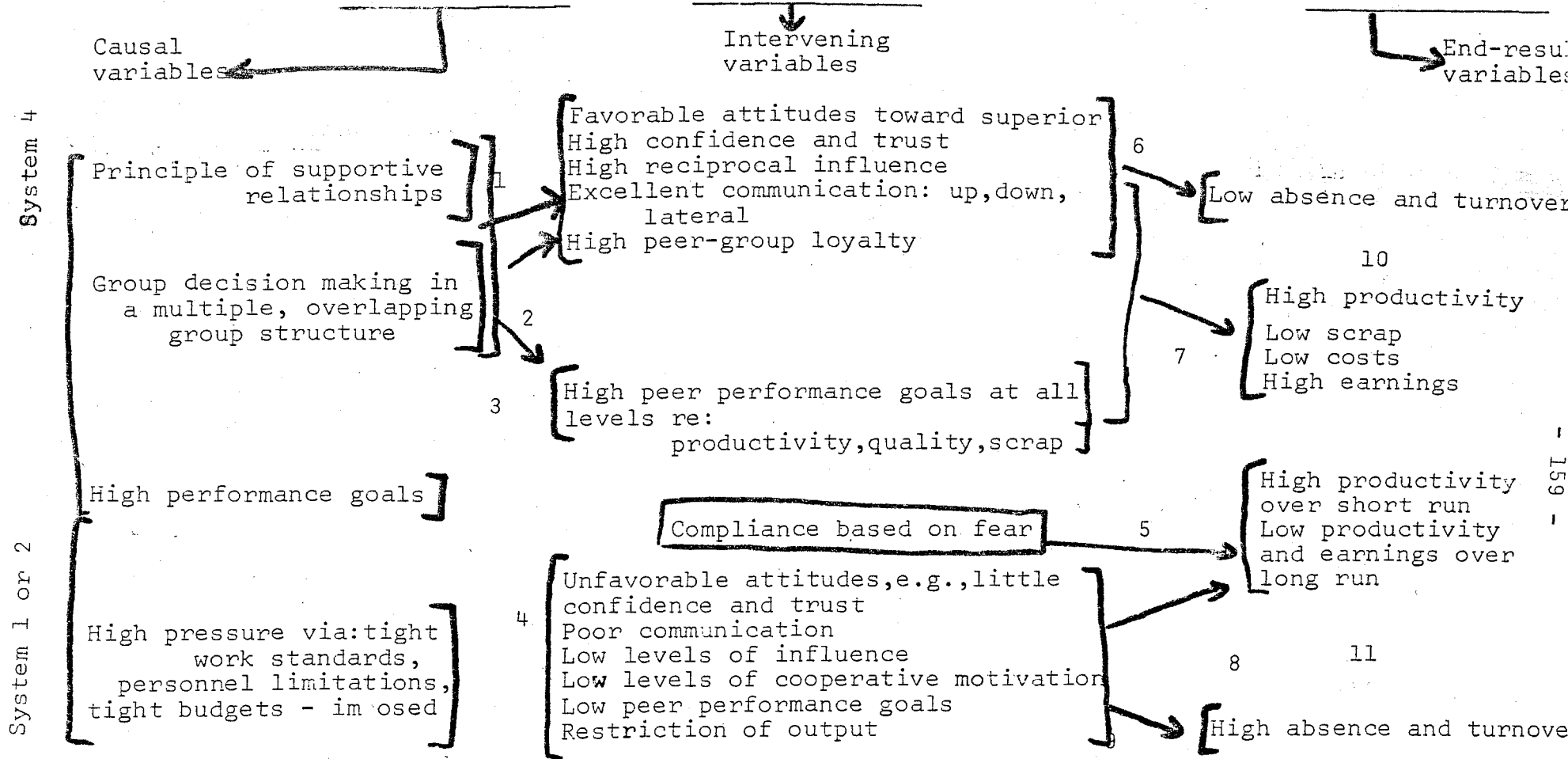
11

High absence and turnover

Fig. 8-1 Simplified diagram of relationships among variables for System 1 or 2 and System
4 Operation

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Reference: - "The Human Organization: Its Management and Value" by Rensis Likert p.p. 137
Published by   McGraw HillBook Company (1967)

communication, and high peer -group loyalty. These and similiar intervening variables, in turn, lead to low absence and turnover (arrow (6)).

To achieve high productivity, low costs, and high earnings, however, superiors must also have high performance goals. When a manager's behaviour reflects the principle of supportive relationships and high performance goals, and when he uses the group as the decision-making unit, then the members of the organization will display the intervening variables shown, namely, favourable attitudes toward superior, etc., and high neer performance goals for them selves and the organization. This is depicted by arrous (2) and (3). In turn, these intervening variables will result in low turnover and costs and high productivity and earnings, as is respresented by arrows (6) and (7).

Absence and turnover probably should be thought of as intervening behavioral variables which influence productivity, costs, and earnings (arrow (10)). For this reason, they are slightly to the left in figure 7 of the productivity, costs, and other end-result items.

In systems 1 and 2 organizations, as figure 7 indicates, high performance goals by superiors, coupled with high-pressure supervision using high budgets and controls, yield high productivity initially be c ause of campliance based on fear (arrow (5)). But these variables also yield (arrow (4)) unfavourable altitudes, distrust, poor communication, low peer performance goals, and restriction of output. These,

in turn, result over the long run in high absence and tu rnover and low productivity (arrow (8) and (9)). High absence and turnover contribute to high costs and low earnings (arrow (11)).

The variables shown in figure 7 are only a few of the many dimensions which can and should be measured. A much much more extensive list is presented in Appndip I. The purpose of this list is to provide a general conceptual framework for all these major dimensions of a firm's human organization and its output. As will be observed, several of the items in Appendix I are concerned primarily with system 4 organizations.

It is valuable to recognize in any diagnosis or analysis of an enterprise which variables are cousal, which intervening, and which end-result. Thus, if one wishes to diagnose a problem involving production or earnings (end-result variables) in terms of causal and intervening variables, it is obviously necessary to measure all g kinds. II the relevant causal variables are not measured, as all too often happens, it is, ofcourse, impossible to analyze the problem in terms of such variables. One is then at a loss to know what are the key causal variables which must be changed to improve the situation.

CONCLUSION

CAUSAL VARIABLES : THE KEY TO ORGANIZATIONAL IMPROVEMENT

Figure 7 and Appendix I are useful guides in all attempts to help an organization shift toward system 4. When an organization is seeking to make such a shift, the efforts to change should be focused initially on the causal variables. Changes brought about in the causal variables will lead in turn to changes in the intervening and end-result variables. Attempts to bring the desired shift in the management system by concentrating on the intervening on the intervening variables directly will result usually in disappointment and failure.

Efforts to change an organization toward system 4 also need to deal with all those organizational procedures which bind an organization to its present management system Traingng in group interaction skills and similiar efforts to more an organization toward system 4 are likely to yield disappointing results if steps are not taken to shift all operating procedures toward a system 4 pattern. A company using system 2management is firmly bound to that system by all of its operating proceduses, such as its pattern of setting objectives and budgets, the use of measurement for punitive control, the customary performance appraisal and re view process, and its compensation plan with regard to both the way the plan is established and the way it is administered. These and all the other system 2 operating procedu res need to be changed to a system 4 model to

enable the entire organization to mare to system 4.

SOURCE :   " THE HUMAN ORGANIZATION " by p.p. 136-141

              Rensis Likert

Published by: McGraw Hill Book Company 1967

APPENDIX III

STATISTICAL TESTS

TEST FOR SIGNIFICANCE OF A PROPORTION

The significance test (Z-tes) for the obtained proportion is computed by use of the following formula:

$$Z = \frac{P - P}{\sqrt{\frac{P(1-P)}{N}}}$$

A significant Z would mean that the value is significantly different from the P value.

(1)

(a) $Z = \frac{0-0}{0} = 0$

(b) $Z = \frac{0-.05}{\sqrt{\frac{.05(1-.05)}{17}}} = \frac{-.05}{\sqrt{\frac{(.05)(.95)}{17}}} = \frac{-.05}{.0528592} = -.9459091$

(c) $Z = \frac{.77-.71}{\sqrt{\frac{.71(1-.71)}{17}}} = \frac{.06}{.1119348} = .5360263$

(d) $Z = \frac{.23-.24}{\sqrt{\frac{.24-(1-24)}{17}}} = \frac{-.01}{-.0305882} = .3269234$

(e) $Z = \frac{0-0}{0} = 0$

$$Z = \frac{P - P}{\dfrac{P(1-P)}{N}}$$

(2)

(a) $\dfrac{0-0}{0} = 0$

(b) $\dfrac{0-2.12}{\sqrt{\dfrac{.12(1-.12)}{17}}} = \dfrac{-.12}{.0062117} = -19.318383$

(c) $\dfrac{.47-.47}{\sqrt{\dfrac{.47(1-.47)}{17}}} = 0$

(d) $\dfrac{.47-.35}{\sqrt{\dfrac{.35(1-.35)}{17}}} = \dfrac{.12}{.0133823} = 8.9670684$

(e) $\dfrac{.06-.06}{\sqrt{\dfrac{.06(1-.06)}{17}}} = 0$

(3)

(a) $\dfrac{0-.06}{\sqrt{\dfrac{.06(1-.06)}{17}}} = \dfrac{-.06}{.0575986} = -1.0416919$

(b) $\dfrac{.12-.12}{\sqrt{\dfrac{.12(1-.12)}{.17}}} = 0$

(c) $\dfrac{.47-.41}{\sqrt{\dfrac{.41(1-.41)}{17}}} = \dfrac{.06}{.0142294} = 4.2166219$

(d) $\dfrac{.41-.35}{\sqrt{\dfrac{.35(1-.35)}{17}}} = \dfrac{.06}{.0133823} = 4.4835342$

(e) $\dfrac{0-.06}{\sqrt{\dfrac{.06(1-.06)}{17}}} = \dfrac{-.06}{.0575986} = -1.0416919$

(4)

(a) $\dfrac{0-.06}{\sqrt{\dfrac{.06(1-.06)}{17}}} = \dfrac{-.06}{.0575986} = -1.0416919$

(b) $\dfrac{.18-.24}{\sqrt{\dfrac{.24(1-.24)}{17}}} = -.06$

(c) $\dfrac{.53-.59}{\sqrt{\dfrac{.59(1-.59)}{17}}} = \dfrac{-.06}{.119287} = -.5029885$

(d) $\dfrac{.24-.11}{\sqrt{\dfrac{.11(1-.11)}{17}}} = \dfrac{.13}{.0056941} = 22.830649$

(e) $\dfrac{.05-0}{\sqrt{\dfrac{0(1-0)}{17}}} = .05$

(5)

(a) $$\frac{0-.06}{\sqrt{\frac{.06(1-.06)}{17}}} = \frac{-.06}{.0575986} = -1.0416919$$

(b) 0

(c) $$\frac{.41-.41}{\sqrt{\frac{.41(1-.06)}{17}}} = 0$$

(d) $$\frac{.53-.53}{\sqrt{\frac{.53(1-.53)}{17}}} = 0$$

(e) $$\frac{.06-0}{\sqrt{\frac{0(1-0)}{17}}} = .06$$