

1974

A Study of Theory X-Theory Y Managerial Attitudes and Attitudes Toward Organizational Power of Managers in the Public Utilities Industry in the New Orleans Area.

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AND ATTITUDES TOWARD ORGANIZATIONAL POWER OF
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THE NEW ORLEANS AREA.

The Louisiana State University and Agricultural
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**A STUDY OF THEORY X-THEORY Y MANAGERIAL ATTITUDES AND
ATTITUDES TOWARD ORGANIZATIONAL POWER OF MANAGERS
IN THE PUBLIC UTILITIES INDUSTRY IN
THE NEW ORLEANS AREA**

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Department of Management

**by
Alma Louise Hammett
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December, 1974**

ACKNOWLEDGMENT

So many friends and family members have helped along the way to the completion of this dissertation that most must remain publicly unacknowledged. Others will not be mentioned because I promised them anonymity--the companies and their personnel officers who participated in the survey described herein.

My first thanks is to my Chairman, Professor Herbert G. Hicks, from whom I learned much. All Ph.D. students will appreciate the sincerity with which I thank him for being such a very fast reader.

In addition to my thanks to the other members of my committee for what I learned from them, I wish to thank them for some special contributions. I am grateful to Professors Raymond V. Lesikar and O. J. Harris for their good advice on many occasions. I am grateful to Professor Robert F. Smith for his insight and his editing. I am grateful to Professor Michael H. Peters for his cheerful willingness to accept a late appointment to the committee.

I am indebted to my faculty colleagues at the University of New Orleans for their encouragement and their consideration. Particular thanks must go to Dean John Altazan of the College of Business Administration, and to the two former and one present Chairmen of the Department of Management and Marketing, Professors John A. Reinecke, Ogden H. Hall, and Daniel S. Juhn.

My thanks for assistance with the problems of data processing

must go to Mrs. Rosary Bullard, Mr. Bill Bell, Mrs. Sally Haerer, Mr. Don Stansbury, and Professor John Wildgen, all of the University of New Orleans.

I am particularly grateful to Mr. Burt Keenan, President of Offshore Logistics Company, and to Dr. William Slaughter, Assistant Professor of Business Administration at Southeastern Louisiana State University.

To the friends, family, and past teachers who have given me encouragement and help of many kinds, I shall be always grateful.

Finally, I thank my typists, Mrs. Mary Mevers and Miss Marie Radosti, for their exceptional competence.

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ABSTRACT

An empirical study was conducted to test the relationship between the Theory X or Theory Y orientation of managers in the public utilities industries in the New Orleans area and their attitudes toward the exercise of power. Based on the theories of Douglas McGregor, it was hypothesized that managers with Theory X orientation would have significantly different attitudes toward such concepts as managerial authority, to direct, to advise, etc., than would managers with Theory Y orientation. Thirteen concepts were selected and attitudes toward them were measured by the semantic differential with nine bipolar, adjectival, seven-point scales.

There were 139 subjects in the study and 112 were classified as Theory Y oriented based on their agreement with a series of statements descriptive of Theory Y assumptions. The attitudes of the Theory Y managers were found not to differ significantly from the attitudes of the Theory X managers toward any of the concepts related to the exercise of power.

Three factors emerged from factor analysis of the semantic differential results. These factors were given names to encompass the polar adjectives of the scales with which they were most highly correlated. They were labeled the hero factor, the guillotine factor, and the ease factor. The hero factor correlated highly with the adjectival scales successful-unsuccessful, effective-ineffective, fair-unfair,

important-unimportant, and strong-weak. This factor accounted for 45.0 per cent of the total variance, and 64.6 per cent of the common variance in the scale ratings. The guillotine factor correlated with the scales severe-lenient, and fast-slow. The ease factor correlated only with the scale easy-difficult.

The semantic distances between the two pairs of concepts, managerial authority-managerial power and to coerce-to direct did not differ significantly for the two groups. Theory Y managers made a significantly greater distinction between the concepts to direct and to coerce than between the concepts to direct and to advise, indicating that the latter pair were closer in meaning. However, Theory X managers did not differ from Theory Y managers; they also perceived to direct to be closer in meaning to to advise than to to coerce.

Theory X and Theory Y managers did differ significantly in their attitude toward the concept worker. However, the semantic distances between higher-status and lower-status positions did not differ significantly for the two groups.

In summary, Theory X managers differed from Theory Y managers about the meaning of the concept worker, but not in their attitudes toward concepts related to the exercise of managerial power.

CHAPTER I

INTRODUCTION

McGregor contrasted two sets of managerial assumptions about human nature which he labeled Theory X and Theory Y. McGregor suggested furthermore that these personal beliefs of managers form the basis for differing patterns of managerial behavior.¹ According to McGregor, managerial behavior is based on the manager's conception of management's function, and this conception rests on underlying beliefs concerning the average man.²

McGregor described Theory X as the conventional view of human beings which is erroneous because of its confusion of cause and effect. Due to the manager's belief that human beings are indolent, ambitionless, and irresponsible, he sees his own task as that of "directing their efforts, motivating them, controlling their actions, modifying their behavior to fit the needs of the organization."³ The manager's behavior, a parent-child relationship in transactional analysis terms, stimulates worker behavior which fits the Theory X preconceptions.⁴

¹Douglas McGregor, The Human Side of Enterprise, McGraw-Hill Book Co., New York, 1960, pp. 33-57.

²Ibid., p. 6.

³Douglas McGregor, "The Human Side of Enterprise," in Gene W. Dalton and Paul R. Lawrence, Motivation and Control in Organization, Richard D. Irwin, Inc., Homewood, Ill., 1971, p. 305.

⁴Thomas A. Harris, I'm OK--You're OK, Avon Books, New York, 1969, pp. 38-59.

McGregor based the Theory Y view of human beings on Maslow's need hierarchy theory. In this view, the worker is capable of self-direction and self-control in the pursuit of objectives which satisfy his needs; the managerial task becomes that of creating opportunities, releasing potential, removing obstacles, encouraging growth, and providing guidance.⁵

McGregor's position on this issue can be summarized in the statements which follow. Supervisory style is dependent on one variable--the supervisor's view of human nature. Although authority is but one of the supervisory bases of power, the Theory X manager relies on authority to the exclusion of other forms of control. The Theory Y manager is more flexible in his use of bases of power. Although he does not relinquish his authority, he also relies on advice and persuasion.

No empirical studies were found to demonstrate a relationship between a Theory X-Theory Y orientation on the part of the manager and his conception of the manager's role. Because of the widespread interest in Theory X-Theory Y, a primary purpose of this research was to discover if these relationships exist. Because McGregor described supervisory behavior in terms of the kind of organizational power used, the next section is devoted to a brief review of the concept of organizational power in the literature.

⁵McGregor, The Human Side of Enterprise, p. 310.

BACKGROUND OF THE STUDY

Bertrand Russell described power as "the fundamental concept in social science, . . . in the same sense in which Energy is the fundamental concept in physics."⁶ Yet the concept of power has not been used as a fundamental variable in the literature of management. There are many possible reasons for this; some of the most salient will be briefly discussed below.

Power has connotations of inequity and even of evil in a society with the ideal of democratic egalitarianism. Galbraith stated, "Power presents awkward problems for a community which abhors its existence, disavows its possession, but values its exercise."⁷ Votaw discussed historical concepts of power which evoke unpleasant connotations: "naked power," described by Plato and Machiavelli, and exercised by the Nazis; the concept that power is evil, and can only be acquired or retained illegitimately; the concept that power must inevitably corrupt the possessor. These views of power regard it as fixed in quantity, split among the "rulers and the ruled."⁸ These views of power are particularly offensive to the people of a society which values democratic egalitarianism.

The . . . growth of an 'egalitarian ethic,' moreover led to the conception of power over people, of any sort, as evil.

⁶Bertrand Russell, Power: A New Social Analysis, W. W. Norton & Co., London, 1938, p. 12.

⁷John Kenneth Galbraith, American Capitalism, Houghton Mifflin Co., Boston, 1956, p. 26.

⁸Dow Votaw, "What Do We Believe About Power?" California Management Review, Vol. VIII (Summer, 1966), 74.

At the same time there was also engendered the further belief that power over things was the proper pursuit for man. The exponents of rugged individualism failed to realize that power over things meant power over people.⁹

In early management literature, power in economic organizations was viewed primarily as economic power, and although all forms of power present methodological problems in theorizing about them, economic power is perhaps easiest to deal with because units of money exist in which to measure it. Furthermore, the problem of power was simplified because early management literature was greatly concerned with the normative organization in which all power, delegated downward from the property holders, was considered to be legitimate power, or authority. Finally, a reason for the neglect of power is the difficulty in dealing with it. It is so basic a concept in the study of human behavior in organizations that Dahl likened it to a "bottomless swamp."¹⁰ After ten years of study, March labeled power a "disappointing variable."¹¹ Weber rejected power as too "comprehensive" a concept, and chose to deal with authority instead.¹² In so doing,

⁹William V. D'Antonio and Howard J. Ehrlich (eds.), Power and Democracy in America, University of Notre Dame Press, Notre Dame, Ind., 1961, p. 146.

¹⁰Robert A. Dahl, "The Concept of Power," Behavioral Science, Vol. 2 (July, 1957), 201.

¹¹James G. March, "The Power of Power," paper read at American Political Science Association meeting, September, 1963, as cited in John Schopler, "Social Power," in Leonard Berkowitz (ed.), Advances in Experimental Social Psychology, Vol. 2, Academic Press, New York, 1965, 213.

¹²Max Weber, The Theory of Social and Economic Organization, The Free Press, Glencoe, Ill., 1947, pp. 152-153.

he failed to explain satisfactorily the process of legitimation, by which power becomes authority.¹³

In spite of the difficulties surrounding the concept of power, it is even more difficult to increase understanding of relationships in organizations without the consideration of a variable both basic and comprehensive. For example, Fiedler used "position power" of the leader as one of the three dimensions by which group-task situations can be characterized.¹⁴ Pelz found no relationship between employee satisfaction and style of supervision until an intervening variable was introduced--the amount of influence a supervisor has with his superior.¹⁵

The Bases of Power

Systematic study of power began in the 1950s. Many of the early studies were collected by Cartwright in his Studies in Social Power.¹⁶ Included in this collection is the classification by French and Raven of the bases of social power: reward power, coercive power, legitimate power, referent power, and expert power. Reward power is based on the knowledge of the subordinate that the leader has the means

¹³Peter M. Blau, "Critical Remarks on Weber's Theory of Authority," American Political Science Review, Vol. 57 (June, 1963), 305-316.

¹⁴Fred E. Fiedler, A Theory of Leadership Effectiveness, McGraw-Hill Book Co., New York, 1967, pp. 22-25.

¹⁵D. C. Pelz, "Influence: A Key to Effective Leadership in the First Line Supervisor," Personnel, Vol. 29 (1952), 22-25.

¹⁶Dorwin Cartwright (ed.), Studies in Social Power, Research Center for Group Dynamics, The University of Michigan, Ann Arbor, 1959.

to reward the subordinate for compliance. Coercive power is based on the subordinate's perception that the power-holder may punish him for non-compliance. Legitimate power rests on the belief of the subordinate that the command is just, or that the supervisor has the right to issue the order. Referent power derives from feelings of liking, admiration, and desire for identification with the supervisor. Expert power is based on the perception by the subordinate that the supervisor has access to and mastery of information which the subordinate does not have.¹⁷

This classification scheme of bases of power is useful in the characterization of supervisory styles. Scientific management stressed the bases of reward and coercion, with differential piece rates, and fines for machinery breakdowns. Referent power became important in the human relations movement, as the effect of the feelings of the individual toward his superiors and his work group was recognized. Management by objectives, as described by Drucker and McGregor, depends on expert power--the supervisor as trainer and teacher.

Power and Managerial Assumptions

McGregor viewed the managerial choice among power bases as directly related to the manager's belief in either Theory X or Theory Y.

¹⁷John R. P. French, Jr., and Bertram Raven, "The Bases of Social Power," in Dorwin Cartwright, *op. cit.*, pp. 150-167. For other classifications of power bases, see: Herbert G. Hicks, Organizations: A General Analysis, Unpublished manuscript, Louisiana State University, Baton Rouge, La., 1973; Alan C. Filley and Robert J. House, Managerial Process and Organizational Behavior, Scott, Foresman and Company, Glenview, Ill., 1969, p. 60.

He associated managerial belief in Theory X with a heavy reliance on legitimate power:

The central principle of organization which derives from Theory X is that of direction and control through the exercise of authority.¹⁸

Conventional organization theory teaches us that power and authority are coextensive.¹⁹

McGregor asserted that the Theory Y manager believes that work is a natural activity to which man may bring his endowments of imagination, ingenuity, and creativity. Because of this managerial assumption, McGregor concluded, the Theory Y manager is not constrained in his reliance on positional power alone. Without abdicating authority,²⁰ he also uses other forms of influence, such as persuasion, and "help," defined as placing the "knowledge and skill" of the superior at the disposal of the subordinate for the accomplishment of individual and organizational goals.²¹ The latter form of influence is described as "a particularly important form of social influence."²²

Cartwright pointed out that McGregor offered no evidence for the theory that supervisory style is dependent on the supervisor's

¹⁸McGregor, The Human Side of Enterprise, p. 49. McGregor seems to use authority in its hierarchical sense, based on position and on access to rewards and punishments, rather than as power legitimized by subordinates.

¹⁹Ibid., p. 31.

²⁰Ibid., p. 56.

²¹Ibid., pp. 18-19.

²²Ibid., p. 19.

assumptions about human nature, and he cited Gilman's theory that the general "social and cultural environment" of an organization is a major determinant of the type of influence used within it.²³

In Haire's study of 3,641 managers from 14 countries, he did not find a relationship between belief in Theory X and belief in an authoritarian leadership style. While most managers surveyed disagreed with the belief that the average human being is capable of leadership and initiative, they tended to agree with statements descriptive of a democratic, participative leadership style.

Despite the wide variety of cultures represented in our sample, there was considerable similarity among the managers from these various countries on the major finding from this part of the questionnaire: The tendency to disagree with the belief that the average individual has a capacity for initiative and leadership, and, at the same time, a tendency to agree that the best methods of leadership are the democratic-participative methods. . . .

What is the meaning of this finding? In purely logical terms, positive attitudes in the first of our four areas of attitudes . . . --capacity for initiative and leadership-- would seem to be an essential foundation for positive attitudes in the other three areas dealing with leadership practices. The basic reason for adopting shared objectives, participation, and individual-oriented self-control is the argument that subordinates fully possess the necessary capabilities for leadership and responsibility.²⁴

Haire suggested two possible reasons for this disbelief in the capacity of human beings combined with belief in democratic leadership.

²³Dorwin Cartwright, "Influence, Leadership, Control," in J. G. March (ed.), Handbook of Organizations, Rand McNally & Co., Chicago, 1965, p. 14.

²⁴Mason Haire, Edwin E. Ghiselli, and Lyman W. Porter, Managerial Thinking: An International Study, John Wiley & Sons, Inc., New York, 1966, pp. 21-24.

First, the combination may result from superficial executive development programs, based on a cookbook approach to management which leaves untouched basic underlying assumptions about human nature. The second possibility is that although managers do not expect that subordinates have a substantive, ideological contribution to make, they may believe that a democratic style will reduce opposition to the supervisor. Thus, managers would be implementing what Raymond Miles labeled the "human relations" approach in contrast to the "human resources" approach.²⁵

Haire's finding is based on the first part of his instrument which had a high degree of face validity. Face validity is less in the second part of the instrument which uses a form of semantic differential to get cognitive descriptions of managerial concepts. Considerable intercultural differences were exhibited in descriptions of two concepts related to the exercise of power: to direct and to persuade. However, there was no attempt to relate this difference to the Theory X or Theory Y orientation of the manager as revealed by answers to Part I of the instrument, nor were the intercultural differences tested for statistical significance. Haire found that only about 28 per cent of the differences in attitudes of managers was associated with national origin; the differences among individuals were over twice as large as the differences among national groups.²⁶

²⁵Raymond E. Miles, "Human Relations or Human Resources," Harvard Business Review, Vol. 43 (July-August, 1965), 148-175.

²⁶Haire, Ghiselli, Porter, op. cit., p. 8.

The present study, based on a survey of public utilities managers in the New Orleans area, attempts to relate differences in the meaning of managerial concepts to assumptions about the nature of human beings.

STATEMENT OF HYPOTHESES

The purpose of this empirical study is to clarify the relationship between belief in Theory X or Theory Y and attitude toward the supervisory role. As described above, McGregor theorized that the Theory X manager views managerial authority as the "central, indispensable means of managerial control."²⁷ If managerial attitudes toward authority and other forms of power are based on Theory X assumptions as opposed to Theory Y assumptions concerning man's capacities, there should be a measurable difference in the attitude of these two groups of managers toward concepts concerned with the exercise of managerial power on adjectival scales such as effective-ineffective, important-unimportant. The Theory X manager should differ significantly from the Theory Y manager in attitudes toward the different forms of managerial power. Managers who believe in Theory X should make little distinction between managerial authority and managerial power, since managerial authority is viewed as the most important form of managerial power. Managers who believe in Theory Y should make a greater distinction between managerial authority and managerial power, because managerial authority is only one form of managerial power.

²⁷McGregor, The Human Side of Enterprise, p. 18.

Hypothesis 1: The attitudes toward power concepts of managers who believe in Theory X assumptions about human beings differ significantly from the attitudes of managers who believe in Theory Y assumptions.

Hypothesis 2: Managers who believe in Theory X assumptions will make a significantly smaller distinction between managerial authority and managerial power than will managers who believe in Theory Y assumptions.

Since, according to Theory X, man is by nature lazy and will avoid work when he can, the supervisor may have to use coercion to get the work of the organization done.

Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.²⁸

The Theory Y manager, on the contrary, expects that man will exercise self-direction and self-control in the pursuit of objectives to which he is committed. The supervisor's role need not be coercive; instead, it is theorized to be helpful.²⁹

Hypothesis 3: Managers who believe in Theory Y assumptions will make a significantly greater distinction between coercion and direction than will managers who believe in Theory X.

Theory Y is much more egalitarian than is Theory X. The Theory Y manager does not separate himself from the rest of mankind because of his assumed possession of rare qualities; he believes that creativity and imagination are common human qualities. He believes

²⁸McGregor, The Human Side of Enterprise, p. 34.

²⁹Ibid., p. 132.

that all men experience the same types of needs. His relationship with his subordinates is adult to adult rather than parent to child.³⁰

Hypothesis 4: Managers who believe in Theory X will make a significantly greater distinction between higher-status positions and lower-status positions than will managers who believe in Theory Y.

McGregor stated that managers who believe in Theory Y will rely on their knowledge as a power base. They will render help to their subordinates by placing this knowledge at the disposal of subordinates. This will be an important means of influence. Thus it is hypothesized that the Theory Y manager sees the managerial function of direction as related to the giving of advice. The Theory X manager believes that managerial direction is related to coercion.

Hypothesis 5: Managers who believe in Theory Y assumptions will make a significantly greater distinction between direction and coercion than between direction and advice.

Hypothesis 6: Managers who believe in Theory X will make a significantly greater distinction between direction and advice than between direction and coercion.

To summarize, the study was designed to determine the relationship, if any, between managerial attitudes toward human beings and managerial attitudes toward status and power concepts, and to test the following hypotheses:

Hypothesis 1: The attitudes toward power concepts of managers who believe in Theory X assumptions about human beings differ significantly from the attitudes of managers who believe in Theory Y assumptions.

³⁰Harris, op. cit., pp. 89-122.

- Hypothesis 2: Managers who believe in Theory X assumptions will make a significantly smaller distinction between managerial authority and managerial power than will managers who believe in Theory Y assumptions.
- Hypothesis 3: Managers who believe in Theory Y assumptions will make a significantly greater distinction between coercion and direction than will managers who believe in Theory X.
- Hypothesis 4: Managers who believe in Theory X will make a significantly greater distinction between higher-status positions and lower-status positions than will managers who believe in Theory Y.
- Hypothesis 5: Managers who believe in Theory Y assumptions will make a significantly greater distinction between direction and coercion than between direction and advice.
- Hypothesis 6: Managers who believe in Theory X will make a significantly greater distinction between direction and advice than between direction and coercion.

LIMITATIONS

The first limitation of this study is that the sample represents only the public utilities industry in the New Orleans area, and is not necessarily representative of managers of other industries and other areas. Therefore caution should be exercised in generalizing without replication.

The study seeks to clarify the relationship between attitudes toward the managerial task, and attitudes toward human beings. Factors in the organizational environment which might affect the manager's conception of the managerial role are not explored.

Finally, because the study is designed to explore attitudes

rather than to observe behavior, the relationship between managerial attitudes and actual practice is outside the scope of this study.

PREVIEW

Chapter II describes the experimental design, the instrument, and the methodology used in analysis of the data. The results of the study are presented in Chapter III. In Chapter IV, the findings are analyzed and compared with the hypotheses, and conclusions are drawn. Implications for managers and suggestions for future research are discussed.

CHAPTER II

PROCEDURAL OVERVIEW

In order to test the hypotheses listed above, the respondents were divided into Theory X and Theory Y groups based on the extent of their agreement with a series of statements representing Theory X or Theory Y assumptions. Next, attitudes toward thirteen managerial concepts concerned with power and status were explored with the use of the semantic differential. Raw scores on nine adjectival scales were factor analyzed to extract the semantic dimensions of meaning. The rotated factor matrix was used to convert raw scores into factor scores, which were then compared to determine the differences between the two groups in the meanings of the concepts.

The effect of familiarity with McGregor's Theory X-Theory Y concept was tested to determine if familiarity with the concept caused subjects to give a "correct" Theory Y response.

THE SUBJECTS

Questionnaires were distributed to all managers in the local offices of the non-governmental public utilities companies. Thus the conclusions reached are valid only for utilities managers in this area. Replication is advisable before generalization to managers in other areas and other industries.

The personnel departments of the four public utilities were

contacted by telephone. An appointment for a personal visit was made with the personnel director, or his delegated representative. In the interview, participation was requested for a survey of managerial attitudes toward leadership concepts. Three of the firms gave immediate approval and offered full cooperation in distribution of the questionnaires to managers in the central offices. The fourth firm also offered full cooperation after approval of the chief operating officer was secured.

Questionnaires were personally delivered to the designated contact in the personnel department. Each questionnaire contained a pre-addressed return envelope to protect the anonymity of the individual respondent. Address labels were coded so that the firm of the respondent could be identified.³¹

Company size ranged from less than 500 to over 5,000 employees. One of the companies had fewer than 500 employees, and one had more than 5,000. The remaining two companies each employed between 500 and 4,999 people. The number of questionnaires distributed to each company ranged from 23 to 60.

Of the 177 questionnaires distributed, the useable response rate was 78.5 per cent. Of the 80.2 per cent return rate, 2.1 per cent of the total distributed were incomplete and therefore were not used. The response rate was unusually high, perhaps because of a deliberate

³¹The firm was not used as a variable in this study because of a promise by the researcher that results would not be tabulated by individual organization.

intent of the researcher to increase the response rate by reducing the amount of biographical data requested.

The biographical data which was furnished by the subjects is shown in Tables I through IV.

TABLE I
LEVELS OF SUPERVISION ABOVE THAT OF THE RESPONDENT

Levels above respondents	0	1	2	3	4	5	6	7
Frequency	1	14	40	53	18	6	3	4

TABLE II
AGE OF RESPONDENTS

Age	Under 30	30-39	40-49	50-59	60 or more
Frequency	13	27	54	39	6

TABLE III
SPECIALTIES OF SUBJECTS

Specialty	Frequency
No undergraduate university or technical school	23
Accounting	20
Management	5
Other business majors, including Economics	19
Scientific and Technical	54
Miscellaneous	18
Total number of subjects	139

TABLE IV
GRADUATE SPECIALTIES OF SUBJECTS

Specialty	Frequency
No graduate education	107
Accounting	2
Management	4
Other business, including M.B.A.'s	15
Scientific and Technical	6
Law	3
Miscellaneous	2
Total number of subjects	139

THE QUESTIONNAIRE

The data in this study were collected by means of the questionnaire shown in Appendix A. Each subject received a copy of the questionnaire prefaced by the cover letter which requested the subject's participation, explained the time demands and the purposes of the survey, and assured the confidentiality of the replies.

Part I of the instrument is the Robinson-Turner set of statements representative of Theory X or Theory Y assumptions about human beings.³² Statements representative of the Theory X position are:

³²This part of the instrument was adapted from that used by James W. Robinson and James T. Turner, "An Empirical Investigation of the Theory Y Management--Theory X Union Hypothesis," in Mississippi Valley Journal of Business and Economics, Vol. 8 (Spring, 1973), 77-84. Instructions for completion of this section are from a similar questionnaire used by Haire, Ghiselli, Porter, op. cit., p. 186.

1. The average human being has an inherent tendency to avoid work.
4. People will accept rewards and demand continually higher ones, but these alone will not produce the necessary effort to get a job done. There must be some sort of threat of punishment.
6. The average human being has relatively little ambition and wants job security above all else.
8. The average human being wishes to avoid responsibilities at his place of work.
10. The average human being probably prefers to be directed in his work.

Statements representative of the Theory Y position are:

2. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
3. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.
5. Commitment to organizational objectives is a function of the rewards associated with their achievement.
7. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.
9. The expenditure of physical and mental effort in work is as natural as play or rest.
11. The average human being learns, under proper conditions, not only to accept but to seek responsibility.

This part of the instrument was used to determine the orientation of the manager toward Theory X or Theory Y by his expression of agreement or disagreement with each statement. A Likert-type scale

was used with five positions: Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree.

The Robinson-Turner questionnaire was used here instead of the similar and more widely-known Haire, Ghiselli, and Porter instrument because the latter includes questions concerning leadership style as well as questions concerning attitudes toward people.³³ This study was designed with attitudes toward people as the independent variable elicited in Part I of the instrument, and attitudes toward types of leadership as dependent variables elicited in Part II.

Part II of the instrument uses a form of the semantic differential to measure managerial attitudes toward concepts of power. The semantic differential was selected because of two of its advantages: it is difficult for respondents to attempt to answer "correctly;" and responses give multidimensioned measures of attitudes or meanings.³⁴

Thirteen concepts were selected for rating on nine bipolar adjectival, seven-point scales. The number of scales and concepts was limited by the desired maximum time of twenty minutes for a respondent's completion of the questionnaire. The guidelines recommended by Osgood were followed in the selection process.³⁵

Ten of the concepts represent managerial power and uses of power:

³³Ibid.

³⁴Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning, University of Illinois Press, Urbana, Ill., 1957.

³⁵Ibid., pp. 1-30 for a discussion of the logic of semantic differentiation.

to persuade
to direct
to reprimand³⁶
to reward
to coerce

managerial influence
managerial authority
managerial power
rules and regulations

One concept was selected to represent power exerted up the organizational hierarchy:

employee influence

Two concepts represented low- and high-status positions in an organizational hierarchy:

worker

boss

The nine scales were chosen to represent the three most significant factors revealed in Osgood's analyses: the evaluation, potency, and activity factors:³⁷

Evaluation

fair-unfair
 important-unimportant
 successful-unsuccessful

Potency

strong-weak
 severe-lenient
 effective-ineffective

Activity

active-passive
 difficult-easy
 fast-slow

The typical semantic differential format with seven steps per scale was used. In order to reduce the thickness of the questionnaire, and thus increase the response rate, the concepts were typed two per page.

The third and last section of the instrument requested

³⁶The concepts to persuade, to direct, and to reprimand were used by Haire, op. cit., p. 41.

³⁷Osgood, Suci, and Tannenbaum, op. cit., pp. 53-61. Instructions for the completion of this part of the questionnaire were adapted from those used by Haire, Ghiselli, and Porter, op. cit., p. 190.

biographical data from the subjects. A minimum of biographical data was requested in the hope that the response rate would thereby be increased. Questions were asked concerning the subject's hierarchical position in the organization, approximate age, educational background, and prior exposure to the Theory X-Theory Y concept. Possibly identifying information not requested included sex, exact age, department, and job title or classification.

PROCESSING THE DATA

As each questionnaire was received, it was assigned a three-digit number, of which the first digit represented the respondent's organization and the remaining two digits were sequential for each organization. Responses to the questions were coded and recorded in the margins of the questionnaires.

Responses to the five-step scale in Part I of the questionnaire were scored from one to five so that the smaller score denoted a Theory X response and the larger score a Theory Y response. Total score on Part I was obtained by summarizing the scores on each answer for each respondent. The results are reported in Chapter III.

Part II of the questionnaire was scored by attributing integer values ranging from one to seven to the seven steps of the nine adjectival scales. The larger values were assigned to the following poles: fair, important, successful, strong, severe, effective, active, difficult, and fast. The nine ratings by a subject for one concept were punched on one card. The last card for each subject contained the coded data from Parts I and III of the questionnaire. Thus the data

for each subject were contained in a fourteen-card deck, one card for each concept, the fourteenth containing biographical information and responses to the questions on Part I of the instrument. The three-digit control number, and the total score on Part I were punched on all cards in a subject's deck.

The three-dimensional data matrix of 1,807 observations from Part II was used as input to a factor analysis program which summed over subjects and concepts. First, a correlation matrix was computed, showing the relationship between the nine scales. The principal component method of factor analysis was used to obtain a matrix of factor loadings. Unity was used as an estimate of communality in the principal diagonal of the correlation matrix.³⁸ The criterion used for cessation of factor extraction was the eigenvalue-one criterion.³⁹ The factor matrix was rotated using the varimax method to yield an orthogonally rotated factor matrix.

The rotated factor matrix was used to compute common factor score regression estimates.⁴⁰ A data file was made containing the three factor scores for each subject on each concept.

The mean and median factor scores for each group of subjects on each concept were computed.⁴¹ The semantic distances between

³⁸R. J. Rummel, Applied Factor Analysis, Northwestern University Press, Evanston, 1970, pp. 318-320.

³⁹Ibid., p. 356.

⁴⁰Ibid., pp. 437-441.

⁴¹The computer program used for this part of the data analysis was the Stat Pack V3 developed at Western Michigan University.

concepts were calculated using Osgood's formula.⁴² The data were analyzed to determine the following:

1. The significance of association between exposure to McGregor's Theory X-Theory Y concept and belief in Theory Y.
2. The significance of association between belief in Theory X or Theory Y and the meaning of each concept.
3. The significance of association between belief in Theory X or Theory Y and the semantic distance between the concepts managerial authority and managerial power.
4. The significance of association between belief in Theory X or Theory Y and the semantic distance between the concepts to coerce and to direct.
5. The significance of interaction between belief in Theory X or Theory Y and the semantic distance between the concepts worker and boss.
6. The significance of the difference in distances between the concepts to direct and to coerce and the concepts to direct and to advise for each group.

The results of these analyses are reported in the next chapter.

⁴²Osgood, Suci, Tannenbaum, op. cit., p. 91.

CHAPTER III

THE RESULTS OF THE STUDY

Using the procedures described in the previous chapter, each subject received a score on Part I, indicating belief in Theory X or Theory Y, and a thirteen by three matrix of scores, containing three factor scores on each of the thirteen concepts. In this chapter, the results of an analysis of these data are presented. Interpretations of the results and conclusions drawn from them are presented in the next chapter.

THEORY X-THEORY Y ORIENTATION

In Table V in the appendix to this chapter are shown the mean scores for the items on Part I of the questionnaire. Items were scored so that larger values indicate greater agreement with Theory Y assumptions; smaller values indicate greater agreement with Theory X assumptions. The item having the largest mean score is Item 3:

3. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.

From the frequency distribution, it can be seen that 91 subjects received a score of "4" on this item, meaning "Agree," and 35 subjects received a score of "5," meaning "Strongly Agree." Three subjects were undecided, while only ten expressed disagreement with this statement.

The median score for most items was 4.00, indicating that the

majority of the subjects agreed with Theory Y assumptions, or disagreed with Theory X assumptions. There were two statements on which the majority took Theory X positions. Most subjects disagreed with Item 2:

2. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organization problems is widely, not narrowly, distributed in the population.

The second item on which the most of the sample agreed with Theory X assumptions is Item 10:

10. The average human being probably prefers to be directed in his work.

Of 139 useable replies, 112 subjects scored 34 or more, indicating a Theory Y orientation. Six subjects were undecided, and 21 had a Theory X orientation.

FACTOR ANALYSIS

As a preliminary step in factor analysis, the product moment correlation matrix was computed and is shown in Table VI in the appendix to this chapter. It can be seen from the first column of the table that the variables important, strong, fair, successful, and effective correlate significantly. It will be shown below that these adjectives describe the first factor.

The unrotated factor loading matrix is shown in Table VII, and the orthogonally rotated factor loading matrix in Table VIII.

Using the criterion that eigenvalues had to have a minimum value of one, three factors emerged from the analysis. These three factors account for 71.08 per cent of the total variance among the variables. It can also be seen from Table VIII that the first factor

is much more influential than the other two. The first factor accounts for more than three times as much variance as do either of the remaining two factors.

The factor loadings are the correlations between the variables and the factors. The square of the loading gives the proportion of the variance of a variable that is accounted for by the factor. For example, the highest loading is that for the scale difficulty-easy on the third factor, where the factor loading is -0.9355 . The square of the loading indicates that 87.5 per cent of the variance in the difficult-easy scale can be explained by the third factor. Since the difficult-easy scale was initially scored with seven for the difficult end of the scale, and one for the easy end, the negative loading shows that the factor is associated with the adjective "easy."

The communality, or h^2 , shows the proportion of the variance of a variable that is attributable to the three common factors. The uniqueness of a variable is $(1-h^2)$. The scales strong-weak and active-inactive have the smallest communalities.

The matrix of regression coefficients used to calculate factor scores is shown in Table IX. The matrix is the product of the inverse of the correlation matrix (Table VI) and the rotated factor loading matrix (Table VIII).⁴³ Factor scores for each subject on each concept were obtained by multiplying the matrix of regression coefficients by the standardized data matrix.⁴⁴

⁴³Rummel, op. cit., pp. 437-441.

⁴⁴Ibid.

EFFECT OF FAMILIARITY WITH THEORY X-THEORY Y

Table X shows a contingency table used to test whether groups exposed to McGregor's Theory X-Theory Y concept differed significantly in their assumptions of Theory X or Theory Y. With a chi-square of 3.712, the difference between the groups exposed to the concept, not exposed to the concept, and with no memory of exposure is not significant at the .10 level of confidence. Therefore the contingency table was collapsed into two groups, Group X and Group Y for the remaining tests of hypotheses.

The mean factor scores on each concept for Groups X and Y are shown in Tables XI and XII. In order to test the significance of the difference in meaning of the concepts to the two groups, the chi-square test was used. Since the factors, the three dimensions of semantic space, are independent due to orthogonal rotation, the chi-squares computed for the separate dimensions using factor scores were summed into an overall chi-square test of significance.⁴⁵ These results are presented in Table XIII; contingency tables for each concept on each factor are shown in Tables XIV through LII in the appendix to this chapter.

COMPARISON OF THE MEANING OF ALL CONCEPTS TO GROUPS X AND Y

The first objective of this study was to determine if a significant difference existed in attitudes toward power concepts between

⁴⁵Osgood, Suci, Tannenbaum, *op. cit.*, p. 100.

managers who believed in Theory X and those who believed in Theory Y. This difference was hypothesized because McGregor wrote that assumption of Theory X or Theory Y would result in different patterns of managerial behavior. If the results of the study substantiated Hypothesis 1, the chi-squares summed over the three factors should indicate a significant difference in the meaning of each concept to the two groups.

Table XIII shows first that the two groups do differ significantly in the meaning of the concept worker. The difference is significant at the .01 level of significance.⁴⁶ However, the two groups do not differ in the meaning of any other concept at the .05 level of significance.

The difference in meaning of the concept to direct approached a level of significance with a probability of .096. Two other concepts, employee influence and to advise had probabilities of .152 and .124 respectively.

Thus, an overall comparison of the meaning of the concepts to the two groups shows only one significant difference, i.e., that which was the criterion for separation into two groups, a different attitude toward the concept worker.

⁴⁶Statistical tables used are from Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences, McGraw-Hill Book Co., New York, 1956.

COMPARISON ON THE DISTANCES BETWEEN THE CONCEPTS
MANAGERIAL AUTHORITY AND MANAGERIAL POWER
FOR THE TWO GROUPS

The distances between mean factor scores on each pair of concepts for each group are shown in Tables LIII and LIV. Hypothesis 2 suggested that Group X and Group Y would differ significantly in the semantic distance between the concepts managerial authority and managerial power. This was based on the theory that managerial authority, although just one kind of managerial power, is much more important to the Theory X manager than to the Theory Y manager who uses many types of managerial power. The significance of the difference in distances was tested using the median test. The results of this test are shown in Table LV. There was no significant difference in distances between the concepts for the two groups of managers.

COMPARISON OF THE DISTANCES BETWEEN THE CONCEPTS
TO DIRECT AND TO COERCE FOR THE TWO GROUPS

It was hypothesized that managers who believe in Theory X might find that the managerial role required the exercise of coercion in the supervision of subordinates. Hypothesis 3 stated that managers who believe in Theory Y would make a greater distinction between to coerce and to direct than would managers who believed in Theory X. Table LVI shows an almost identical distribution pattern in the two groups above and below the median distance of the combined groups. Thus, there is no significant difference in the distances between the concepts to direct and to coerce for the two groups.

COMPARISON OF THE DISTANCES BETWEEN THE CONCEPTS
WORKER AND BOSS FOR THE TWO GROUPS

The manager who believes in Theory X is more likely to believe that the distribution of characteristics such as intelligence, ambition, and creativity is narrowly, not widely distributed in the population. Therefore Hypothesis 4 suggests that the Theory X manager will make a greater distinction in the difference between the high- and low-status positions, worker and boss, than will the Theory Y manager. It was reported above that the two groups did differ significantly on the concept worker.

Table LVII shows that there was no significant difference in the distances between the concepts for the two groups.

COMPARISON OF THE DISTANCES BETWEEN THE CONCEPTS
TO DIRECT AND TO COERCE AND THE CONCEPTS
TO DIRECT AND TO ADVISE FOR THE TWO GROUPS

Hypotheses 5 and 6 both concern intragroup comparisons of the semantic distances between the pairs of concepts to direct and to coerce and the concepts to direct and to advise. Hypothesis 5 predicts that Group Y will make a smaller distinction between the concepts to direct and to advise than between the concepts to direct and to coerce. Hypothesis 6 predicts that the opposite will be true for Group X, i.e., the distance between the concepts to direct and to coerce will be smaller than the distance between the concepts to direct and to advise.

The results are shown in Table LVIII. The relative distances between the pairs of concepts was as predicted for those managers believing in Theory Y. The level of significance of the test approached 0.0.

For Group X, however, the relative distances between the pairs of concepts was in the opposite direction from that predicted. Like Group Y, the great majority of Theory X managers placed the concept to coerce farther from the concept to direct than they placed the concept to advise. Had Hypothesis 6 correctly predicted the direction of the difference for Theory X managers, the one-tailed probability of the results would be 0.004.⁴⁷

SUMMARY OF RESULTS

Hypothesis 1: The attitudes toward power concepts of managers who believe in Theory X assumptions about people differ significantly from the attitudes of managers who believe in Theory Y assumptions.

Results: There was no significant difference between the two groups on any of the concepts related to the exercise of power. Three concepts approached an acceptable level of significance: to direct, employee influence, and to advise. The two groups differed significantly about the concept worker.

Hypothesis 2: Managers who believe in Theory X assumptions will make a significantly smaller distinction between managerial authority and managerial power than will managers who believe in Theory Y assumptions.

Results: There was no significant difference in the meaning of the two concepts to the two groups.

Hypothesis 3: Managers who believe in Theory Y assumptions will make a significantly greater distinction between coercion and direction than will managers who believe in Theory X.

Results: There was no significant difference in the distances between the concepts for the two groups.

⁴⁷Ibid., p. 250.

Hypothesis 4: Managers who believe in Theory X will make a significantly greater distinction between higher-status positions and lower-status positions than will managers who believe in Theory Y.

Results: Although the groups differed significantly in the meaning of the concept worker, there was no significant difference in the meaning of the concept boss. The difference in the semantic distances between the concepts for the two groups was not significant.

Hypothesis 5: Managers who believe in Theory Y assumptions will make a significantly greater distinction between the concepts to direct and to coerce than between the concepts to direct and to advise.

Hypothesis 6: Managers who believe in Theory X will make a significantly greater distinction between the concepts to direct and to advise than between the concepts to direct and to coerce.

Results: The results supported the prediction of Hypothesis 5 that managers who believe in Theory Y make a significantly greater distinction between direction and coercion than between direction and advice. However, Theory X managers do also. Hypothesis 6 was not substantiated.

APPENDIX TO CHAPTER III

TABLE V
STATISTICS ON PART I

Item*	Frequency of Scores					Mean Score	Median Score	Mode	Standard Deviation
	1**	2	3	4	5				
Item 1	1	38	4	85	11	3.48	4.0	4.0	1.0
Item 2	21	78	11	24	5	2.38	2.0	2.0	1.05
Item 3	0	10	3	91	35	4.09	4.0	4.0	0.75
Item 4	4	37	9	70	19	3.45	4.0	4.0	1.11
Item 5	2	22	15	93	7	3.58	4.0	4.0	0.87
Item 6	3	25	8	86	17	3.64	4.0	4.0	0.99
Item 7	2	5	6	107	19	3.98	4.0	4.0	0.68
Item 8	2	38	8	80	11	3.43	4.0	4.0	1.02
Item 9	1	37	9	81	11	3.46	4.0	4.0	0.99
Item 10	7	86	11	33	2	2.55	2.0	2.0	0.96
Item 11	1	17	5	103	13	3.79	4.0	4.0	0.80

Mean of Sample	37.81	Standard Deviation	4.52
Median of Sample	38.0	Minimum Score	28.0
Mode of Sample	38.0	Maximum Score	51.0

*The items on Part I of the questionnaire are in Appendix A.
 **"1" indicates strong agreement with Theory X assumption or strong disagreement with Theory Y assumption.

TABLE VI
CORRELATION MATRIX

Scale	1	2	3	4	5	6	7	8	9
(1) important-unimportant	1.000								
(2) difficult-easy	-0.007	1.000							
(3) strong-weak	0.506	0.001	1.000						
(4) fair-unfair	0.654	-0.032	0.538	1.000					
(5) successful-unsuccessful	0.625	-0.087	0.582	0.709	1.000				
(6) severe-lenient	-0.109	0.171	0.016	-0.162	-0.090	1.000			
(7) fast-slow	0.256	-0.106	0.346	0.302	0.373	0.117	1.000		
(8) effective-ineffective	0.618	-0.079	0.571	0.692	0.799	-0.094	0.400	1.000	
(9) active-passive	0.359	-0.051	0.453	0.454	0.471	0.087	0.404	0.548	1.000

TABLE VII
 FACTOR LOADING MATRIX
 (UNROTATED)

Scales	Factor 1	Factor 2	Factor 3	h^2
important	0.7668	-0.1245	-0.2523	.6671
difficult	-0.0900	0.4988	-0.7881	.8780
strong	0.7460	0.1322	-0.0663	.5784
fair	0.8348	-0.1511	-0.1830	.7533
successful	0.8748	-0.0800	-0.0565	.7748
severe	-0.0841	0.8594	0.1377	.7646
fast	0.5289	0.3265	0.4888	.6252
effective	0.8845	-0.0496	-0.0220	.7853
active	0.6702	0.2706	0.2189	.5703
Per cent of Total Variance	45.92	13.69	11.47	71.08
Per cent of Common Variance	64.61	19.26	16.14	100.01*
Eigenvalues	4.13298	1.23187	1.03209	

*The sum exceeds 100% due to rounding error.

TABLE VIII
ORTHOGONALLY ROTATED FACTOR LOADING MATRIX

Scales	Factor 1	Factor 2	Factor 3	h^2
important- unimportant	0.8114	-0.0746	-0.0564	.6671
difficult- easy	0.0230	0.0489	-0.9355	.8780
strong- weak	0.7247	0.2294	-0.0248	.5784
fair- unfair	0.8660	-0.0522	0.0253	.7533
successful- unsuccessful	0.8707	0.0756	0.1046	.7748
severe- lenient	-0.2034	0.7903	-0.3140	.7646
fast- slow	0.3769	0.6119	0.3298	.6252
effective- ineffective	0.8697	0.1198	0.1206	.7853
active- inactive	0.5765	0.4663	0.1431	.5703
Per cent of Total Variance	44.05	14.44	12.59	71.08
Per cent of Common Variance	61.97	20.32	17.71	100.00

TABLE IX
 MATRIX OF REGRESSION COEFFICIENTS USED IN
 THE CALCULATION OF FACTOR SCORES*

Scales	1	Factors 2	3
important-unimportant	0.2423	-0.1643	-0.1369
difficult-easy	0.0943	-0.0076	-0.8594
strong-weak	0.1773	0.0982	-0.0845
fair-unfair	0.2466	-0.1487	-0.0662
successful-unsuccessful	0.2242	-0.0401	0.0123
severe-lenient	-0.1230	0.6610	-0.2300
fast-slow	-0.0030	0.4734	0.2946
effective-ineffective	0.2168	-0.0028	0.0293
active-passive	0.0896	0.3198	0.0961

*This matrix is the product of the inverse of the correlation matrix (Table VI) and the rotated factor loading matrix (Table VIII). See Rummel, op. cit., pp. 437-441.

TABLE X
X-Y ORIENTATION AND EXPOSURE TO X-Y CONCEPT

	Theory X Oriented*		Theory Y Oriented	
	Number of Responses	Percent of Total	Number of Responses	Percent of Total
Exposed to X-Y Concept	5	3.60	42	30.22
Not Exposed to X-Y Concept	15	10.79	51	36.69
No Memory of Exposure	7	5.04	19	13.67

*Includes all respondents with raw scores of 33 and below to Part I of questionnaire.

Chi Square = 3.712 which has a probability of .15. Therefore exposure to Theory X-Y is not significant.

TABLE XI
THEORY X ORIENTED GROUP MATRIX OF
MEAN FACTOR SCORES

Concept	Factor 1	Factor 2	Factor 3
Worker	-.1482	-.2521	-.1750
To persuade	.3751	-.2696	-.3232
To direct	.1801	.1500	-.2003
Rules and Regulations	.0449	.0124	-.1322
To reprimand	.1204	.1914	-.4480
Managerial influence	.4211	-.0918	.0362
To reward	.3612	-.1375	1.1137
Boss	.2854	.2915	-.1751
Managerial authority	.2015	.1514	-.1628
To coerce	-1.6741	.8530	-.0178
Managerial power	-.2362	.2998	-.1063
Employee influence	-.1360	-.4549	.0624
To advise	.2901	.0062	.3955

TABLE XII
THEORY Y ORIENTED GROUP MATRIX OF
MEAN FACTOR SCORES

Concept	Factor 1	Factor 2	Factor 3
Worker	0.0048	-0.2350	0.1655
To persuade	0.2208	-0.2316	-0.0771
To direct	0.2334	0.2168	0.2402
Rules and regulations	0.1268	-0.0458	-0.1944
To reprimand	0.0279	0.0747	-0.6176
Managerial influence	0.2894	-0.2003	-0.0773
To reward	0.3192	-0.0729	0.8597
Boss	0.2686	0.1780	-0.1582
Managerial authority	0.3779	0.0809	-0.1002
To coerce	-1.7624	0.5476	-0.1063
Managerial power	-0.1307	0.1894	-0.0450
Employee influence	-0.1407	-0.3733	0.1171
To advise	0.2199	-0.2425	0.2364

TABLE XIII
SUMMATION OF CHI-SQUARE TESTS OF SIGNIFICANCE FOR ALL CONCEPTS

Concept	Factor 1		Factor 2		Factor 3		Total	
	χ^2	p*	χ^2	p*	χ^2	p*	χ^2	p*
Worker	1.473	.23	0.349	.55	5.478	.02	7.300	.007
To persuade	0.006	.94	0.227	.63	0.906	.34	1.138	.286
To direct	0.002	.97	0.029	.87	2.2745	.10	2.775	.096
Rules and regulations	0.304	.58	0.105	.75	0.768	.38	1.178	.278
To reprimand	0.160	.69	0.058	.81	0.000	1.00	0.218	.640
Managerial influence	0.227	.63	0.105	.75	0.105	.75	0.437	.508
To reward	0.023	.88	0.059	.81	0.641	.42	0.723	.395
Boss	0.304	.58	0.227	.63	0.029	.87	0.560	.454
Managerial authority	1.056	.30	0.027	.87	0.006	.94	1.089	.297
To coerce	0.023	.88	0.160	.69	0.227	.63	0.410	.522
Managerial power	0.023	.88	0.000	1.00	0.001	.97	0.024	.876
Employee influence	2.039	.15	0.009	.92	0.006	.94	2.054	.152
To advise	0.160	.69	2.152	.14	0.059	.81	2.371	.124

*Exact probabilities associated with the chi squares were obtained using the program "PROB" from the Statistical Package of the Western Michigan University Computer Center, with one degree of freedom.

TABLE XIV
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT WORKER ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	13	53	66
No. of scores above combined median	7	59	66
Total	20	112	132

Chi Square = 1.473 with Degrees of Freedom = 1 and probability
of occurrence of 0.23.

*The median factor score on the concept worker is -0.0229.

TABLE XV
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT WORKER ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	12	52	64
No. of scores above combined median	9	58	67
Total	21	110	131

Chi Square = 0.3492 with 1 degree of freedom having a probability of 0.55.

*The median factor score for the concept worker is -0.3011.

TABLE XVI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT WORKER ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	16	51	67
No. of scores above combined median	5	61	66
Total	21	112	133

Chi Square = 5.478 with 1 degree of freedom having a
 probability of 0.02.

*The median factor score for the concept worker is 0.1192.

TABLE XVII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO PERSUADE ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	10	55	65
No. of scores above combined median	11	56	67
Total	21	111	132

Chi Square = .0057 with Degrees of Freedom = 1 and probability
of occurrence of 0.94.

*The median factor score for the concept to persuade is 0.2958.

TABLE XVIII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO PERSUADE ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	12	54	66
No. of scores above combined median	9	57	66
Total	21	111	132

Chi Square = 0.2265 with 1 degree of freedom having a
 probability of 0.63.

*The median factor score for the concept to persuade is -0.2243.

TABLE XIX
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO PERSUADE ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	13	53	66
No. of scores above combined median	8	58	66
Total	21	111	132

Chi Square = 0.9060 with 1 degree of freedom having a
 probability of 0.34.

*The mean factor score for the concept to persuade is -0.2844.

TABLE XX
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO DIRECT ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	10	55	65
No. of scores above combined median	11	55	66
Total	21	110	131

Chi Square = 0.00146 with 1 degree of freedom having a
 probability of 0.97.

*The mean factor score for the concept to direct is 0.2370.

TABLE XXI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO DIRECT ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	10	55	65
No. of scores above combined median	10	57	67
Total	20	112	132

Chi Square = 0.0286 with 1 degree of freedom having a
 probability of 0.87.

*The median factor score for the concept to direct is 0.1229.

TABLE XXII
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO DIRECT ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	14	49	63
No. of scores above combined median	7	62	69
Total	21	111	132

Chi Square = 2.7445 with 1 degree of freedom having a
probability of 0.10.

*The median factor score for the concept to direct is 0.0832.

TABLE XXIII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
 CONCEPT RULES AND REGULATIONS ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	12	53	65
No. of scores above combined median	9	58	67
Total	21	111	132

Chi Square = 0.3044 with 1 degree of freedom having a
 probability of 0.58.

*The median factor score for the concept is 0.2802.

TABLE XXIV
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
CONCEPT RULES AND REGULATIONS ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	12	56	68
No. of scores above combined median	9	55	64
Total	21	111	132

Chi Square = 0.1054 with 1 degree of freedom having a
probability of 0.75.

*The median factor score for the concept is -0.0953.

TABLE XXV
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
 CONCEPT RULES AND REGULATIONS ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	8	57	65
No. of scores above combined median	13	54	67
Total	21	111	132

Chi Square = 0.7678 with 1 degree of freedom having a
 probability of 0.38.

*The median factor score for the concept is -0.1852.

TABLE XXVI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO REPRIMAND ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	9	56	65
No. of scores above combined median	12	55	67
Total	21	111	132

Chi Square = 0.1602 with 1 degree of freedom having a probability of occurrence of 0.69.

*The median factor score for the concept is 0.2067.

TABLE XXVII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO REPRIMAND ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	11	57	68
No. of scores above combined median	8	53	61
Total	19	110	129

Chi Square = 0.0581 with 1 degree of freedom having a probability of 0.81.

*The median factor score for the concept is 0.2029.

TABLE XXVIII

THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO REPRIMAND ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	10	56	66
No. of scores above combined median	11	55	66
Total	21	111	132

Chi Square = 0.0000 with 1 degree of freedom having a
probability of 1.00.

*The median factor score for the concept is -0.6160.

TABLE XXIX

THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT MANAGERIAL INFLUENCE ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	9	57	66
No. of scores above combined median	12	54	66
Total	21	111	132

Chi Square = 0.2265 with 1 degree of freedom having a
probability of 0.63.

*The median factor score for the concept is 0.4014.

TABLE XXX
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT MANAGERIAL INFLUENCE ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	12	56	68
No. of scores above combined median	9	55	64
Total	21	111	132

Chi Square = 0.1054 with 1 degree of freedom having a
 probability of 0.75.

*The median factor score for the concept is -0.1623.

TABLE XXXI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT MANAGERIAL INFLUENCE ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	9	55	64
No. of scores above combined median	12	56	68
Total	21	111	132

Chi Square = 0.1054 with 1 degree of freedom having a
 probability of 0.75.

*The median factor score on the concept is -0.2302.

TABLE XXXII
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO REWARD ON FACTOR 1

	Group X	Group Y	Total
No. of scores below the combined median*	10	58	68
No. of scores above combined median	11	53	64
Total	21	111	132

Chi Square = 0.0230 with 1 degree of freedom having a
probability of 0.88.

*The median factor score for the concept is 0.4423.

TABLE XXXIII
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO REWARD ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	11	55	66
No. of scores above combined median	9	57	66
Total	20	112	132

Chi Square = 0.0589 with 1 degree of freedom having a
probability of 0.81.

*The median factor score for the concept is -0.0969.

TABLE XXXIV
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO REWARD ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	8	56	64
No. of scores above combined median	13	55	68
Total	21	111	132

Chi Square = 0.6413 with 1 degree of freedom having a
probability of 0.42.

*The median factor score for the concept is 0.9977.

TABLE XXXV
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT BOSS ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	12	53	65
No. of scores above combined median	9	58	67
Total	21	111	132

Chi Square = 0.3044 with 1 degree of freedom having a
 probability of 0.58.

*The median factor scores for the concept is 0.4309.

TABLE XXXVI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT BOSS ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	9	57	66
No. of scores above combined median	12	54	66
Total	21	111	132

Chi Square = 0.2265 with 1 degree of freedom having a
 probability of 0.63.

*The median factor score for the concept is 0.1082.

TABLE XXXVII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT BOSS ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	9	56	65
No. of scores above combined median	11	56	67
Total	20	112	132

Chi Square = 0.0286 with 1 degree of freedom having a
 probability of 0.87.

*The median factor score for the concept is -0.1451.

TABLE XXXVIII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
 CONCEPT MANAGERIAL AUTHORITY ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	13	52	65
No. of scores above combined median	8	59	67
Total	21	111	132

Chi Square = 1.0561 with 1 degree of freedom having a
 probability of 0.30.

*The median factor score for the concept is 0.4280.

TABLE XXXIX
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
 CONCEPT MANAGERIAL AUTHORITY ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	9	47	56
No. of scores above combined median	12	65	77
Total	21	112	133

Chi Square = 0.0271 with 1 degree of freedom having a
 probability of 0.87.

*The median factor score on the concept is 0.0461.

TABLE XL
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD THE
 CONCEPT MANAGERIAL AUTHORITY ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	11	54	65
No. of scores above combined median	10	57	67
Total	21	111	132

Chi Square = .0057 with 1 degree of freedom having a probability of 0.94.

*The median factor score on the concept is -0.2793.

TABLE XLI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO COERCE ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	11	57	68
No. of scores above combined median	10	54	64
Total	21	111	132

Chi Square = 0.0230 with 1 degree of freedom having a
 probability of 0.88.

*The median factor score on the concept is -1.9844.

TABLE XLII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO COERCE ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	9	56	65
No. of scores above combined median	12	55	67
Total	21	111	132

Chi Square = 0.1602 with 1 degree of freedom having a
 probability of 0.69.

*The median factor score on the concept is 0.4565.

TABLE XLIII
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO COERCE ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	12	54	66
No. of scores above combined median	9	57	66
Total	21	111	132

Chi Square = 0.2265 with 1 degree of freedom having a probability of 0.63.

*The median factor score on the concept is -0.3544.

TABLE XLIV
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT MANAGERIAL POWER ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	11	53	64
No. of scores above combined median	10	58	68
Total	21	111	132

Chi Square = 0.0230 with 1 degree of freedom having a
 probability of 0.88.

*The median factor score on the concept is -0.0759.

TABLE XLV
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT MANAGERIAL POWER ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	10	56	66
No. of scores above combined median	11	55	66
Total	21	111	132

Chi Square = 0.0000 with 1 degree of freedom having a
probability of 1.00.

*The median factor score on the concept is 0.1471.

TABLE XLVI
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT MANAGERIAL POWER ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	10	57	67
No. of scores above combined median	11	55	66
Total	21	112	133

Chi Square = 0.0014 with 1 degree of freedom having a
probability of 0.97.

*The median factor score on the concept is -0.0415.

TABLE XLVII
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT EMPLOYEE INFLUENCE ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	14	52	66
No. of scores above combined median	7	59	66
Total	21	111	132

Chi Square = 2.0386 with 1 degree of freedom having a
probability of 0.15.

*The median factor score for the concept is -0.1978.

TABLE XLVIII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT EMPLOYEE INFLUENCE ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	11	57	68
No. of scores above combined median	9	55	64
Total	20	112	132

Chi Square = 0.0092 with 1 degree of freedom having a probability of 0.92.

*The median factor score on the concept is -0.2867.

TABLE XLIX
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT EMPLOYEE INFLUENCE ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	11	54	65
No. of scores above combined median	10	57	67
Total	21	111	132

Chi Square = 0.0057 with 1 degree of freedom having a
probability of 0.94.

*The median factor score for the concept is -.0381.

TABLE L
THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
THE CONCEPT TO ADVISE ON FACTOR 1

	Group X	Group Y	Total
No. of scores below combined median*	9	56	65
No. of scores above combined median	12	55	67
Total	21	111	132

Chi Square = 0.1602 with 1 degree of freedom having a
probability of 0.69.

*The median factor score for the concept is 0.3017.

TABLE LI
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO ADVISE ON FACTOR 2

	Group X	Group Y	Total
No. of scores below combined median*	7	59	66
No. of scores above combined median	14	51	65
Total	21	110	131

Chi Square = 2.1522 with 1 degree of freedom having a
 probability of 0.14.

*The median factor score for the concept is -0.2182.

TABLE LII
 THEORY X-THEORY Y ORIENTATION AND ATTITUDE TOWARD
 THE CONCEPT TO ADVISE ON FACTOR 3

	Group X	Group Y	Total
No. of scores below combined median*	9	57	66
No. of scores above combined median	11	55	66
Total	20	112	132

Chi Square = 0.0589 with 1 degree of freedom having a probability of 0.81.

*The median factor score for the concept is 0.3251.

TABLE LIII
SEMANTIC DISTANCES BETWEEN CONCEPTS FOR THEORY X ORIENTED GROUP

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) worker	0.5442	0.5197	0.3303	0.5860	0.6280	1.3904	0.6954	0.5341	1.8907	0.5631	0.3124	0.7644
(2) to persuade		0.4788	0.4744	0.5413	0.4036	1.4430	0.5872	0.4828	2.3565	0.8631	0.6666	0.7745
(3) to direct			0.2046	0.2582	0.4153	1.3572	0.1782	0.0432	1.9914	0.4523	0.7313	0.6228
(4) rules and regulations				0.3708	0.4251	1.2941	0.3709	0.2115	1.9170	0.4028	0.5376	0.5820
(5) to reprimand					0.6365	1.6140	0.3343	0.2992	1.9604	0.5056	0.8625	0.8802
(6) managerial influence						1.0802	0.4582	0.3834	2.2991	0.7783	0.6656	0.3949
(7) to reward							1.3605	1.3184	2.5306	1.4270	1.2055	0.7358
(8) boss								0.1638	2.0445	0.5262	0.8895	0.6381
(9) managerial authority									2.0078	0.4656	0.7295	0.5837
(10) to coerce										1.5433	2.0206	2.1787
(11) managerial power											0.7797	0.7843
(12) employee influence												0.7108
(13) to advise												

TABLE LIV

SEMANTIC DISTANCES BETWEEN CONCEPTS FOR THEORY Y ORIENTED GROUP

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) worker	0.3248	0.5117	0.4246	0.8424	0.3757	0.7790	0.5873	0.5564	1.9518	0.4928	0.2065	0.2265
(2) to persuade		0.5494	0.2390	0.6505	0.0754	0.9552	0.4203	0.3505	2.1310	0.5494	0.4341	0.3137
(3) to direct			0.5188	0.8934	0.5271	0.6892	0.4018	0.3940	2.0525	0.4634	0.7094	0.4595
(4) rules and regulations				0.4509	0.2531	1.0719	0.2674	0.2966	1.9821	0.3794	0.5252	0.4827
(5) to reprimand					0.6602	1.5129	0.5289	0.6247	1.9210	0.6051	0.8768	0.9310
(6) managerial influence						0.9460	0.3874	0.2957	2.1841	0.5739	0.5027	0.3241
(7) to reward							1.0495	0.9739	2.3773	1.0439	0.9236	0.6535
(8) boss								0.1573	2.0650	0.4152	0.7398	0.5787
(9) managerial authority									2.1906	0.5230	0.7228	0.4928
(10) to coerce										1.6717	1.8783	2.1613
(11) managerial power											0.5857	0.6234
(12) employee influence												0.4017
(13) to advise												

TABLE LV
THEORY X-THEORY Y ORIENTATION AND SEMANTIC DISTANCE BETWEEN
THE CONCEPTS MANAGERIAL AUTHORITY AND MANAGERIAL POWER

	Group X	Group Y	Total
No. of scores below combined median*	9	56	65
No. of scores above combined median	12	55	67
Total	21	111	132

Chi Square = 0.1602 with 1 degree of freedom having a probability of 0.69.

*The median difference in distances between the concepts managerial authority and managerial power for the combined groups is 1.1071.

TABLE LVI
 THEORY X-THEORY Y ORIENTATION AND SEMANTIC DISTANCE
 BETWEEN THE CONCEPTS TO DIRECT AND TO COERCE

	Group X	Group Y	Total
No. of scores below combined median*	10	54	64
No. of scores above combined median	11	57	68
Total	21	111	132

Chi Square = 0.0075 with 1 degree of freedom having a probability of 0.88.

*The median difference in distances between the concepts to direct and to coerce for the combined groups is 2.7337.

TABLE LVII
 THEORY X-THEORY Y ORIENTATION AND DIFFERENCE IN SEMANTIC
 DISTANCES BETWEEN THE CONCEPTS WORKER AND BOSS

	Group X	Group Y	Total
No. of scores below combined median*	10	56	66
No. of scores above combined median	11	55	66
Total	21	111	132

Chi Square = 0.0566 with 1 degree of freedom having a
 probability of 1.000.

*The median difference in distances between the concepts worker
 and boss is 1.4144.

TABLE LVIII
 THE SIGN TEST OF THE SEMANTIC DISTANCES BETWEEN THE CONCEPTS
TO DIRECT AND TO ADVISE AND THE CONCEPTS
TO DIRECT AND TO COERCE

	Group X*	Group Y**
Frequency of negative distances***	4	18
Frequency of positive distances	17	94
Total	21	112

*Using the one-tailed probabilities associated with the binomial distribution for samples under 25, p exceeds .987.

**Due to the sample size of Group Y, the normal approximation to the binomial distribution was used. With a continuity correction of +.5, $z = -7.087$, and one-tailed p approaches 0.0. See Siegel, *op. cit.*, pp. 68-75.

***A negative distance means that the distance between to direct and to coerce is less than the distance between to direct and to advise.

CHAPTER IV

DISCUSSION, CONCLUSIONS, AND SUGGESTIONS FOR RESEARCH DIRECTIONS

The results of the factor analysis of the data and the statistical significance of the comparisons between the groups were presented in the last chapter. In this chapter, an interpretation of these results will be presented and conclusions will be drawn based on the interpreted results. The significance to management of this study will be discussed. Finally, directions for future research will be suggested.

FACTOR LABELS

The process of naming factors which emerge from factor analysis is a somewhat subjective activity dependent upon the perspective of the researcher. For the purposes of this study the descriptive approach to factor naming has been chosen rather than the causal. Although, as Rummel pointed out, descriptive labels contain surplus meaning into which readers may put irrelevant connotations,⁴⁸ this criticism can be made of the name of anything.⁴⁹ For the purposes of simplifying communication and stimulating interest, descriptive names

⁴⁸Rummel, op. cit., p. 474.

⁴⁹William V. Haney, Communication and Organizational Behavior, Richard D. Irwin, Inc., 1973, pp. 296-299.

are helpful. The three factors in this study have been named the hero factor, the guillotine factor, and the ease factor. These names were selected to be descriptive of the poles of the scales with which the factors are most highly correlated. Thus the hero factor correlates with the adjectives: successful, effective, fair, important, and strong. As shown in Chapter III, the three factors accounted for 71.08 per cent of the total variance among the scale ratings.

The hero factor is by far the most significant; it accounted for 44.05 per cent of the total variance. Since Part II of the instrument is concerned primarily with attitudes, it is not surprising that a factor evaluative in nature accounted for so much of the total variance. As Osgood pointed out, ". . . they [attitudes] are predispositions to respond, but they predispose toward an evaluative response."⁵⁰ The scales most highly loaded on this factor in the order of their loadings are: successful (.87), effective (.87), fair (.87), important (.81), and strong (.72). Since these loadings are all above 0.70, 50 per cent or more of the variance in these scale ratings is attributable to this first factor. The scales successful, fair, and important were chosen for inclusion to be representative of Osgood's evaluation factor. However, two other scales, strong and effective, which Osgood found to be highly loaded on the potency factor rather than on the evaluation factor were also highly loaded on the hero factor. The difference between the results of factor analysis in

⁵⁰Osgood, Suci, Tannenbaum, op. cit., p. 189.

this study, and in those of Osgood may be due to the process of concept-scale interaction which Osgood describes.⁵¹ Since attitudes about power concepts are being measured, the evaluative scale becomes more important while at the same time, scales usually associated with potency tend to interact with evaluative scales.

The second factor has been labeled the guillotine factor since the only two scales which have high loadings on this factor are the scales severe and fast. Only one scale has a high loading on the third factor, and since the loading is negative, the factor is associated with the "easy" end of the difficult-easy scale.

In the section which follows, the most significant factor scores will be interpreted with the help of the descriptive factor names.

INTERPRETATION OF MEAN FACTOR SCORES

A reexamination of Tables XI and XII shows that both groups rate three concepts negatively on the hero factor: to coerce, managerial power, and employee influence. This is interpreted to mean that both groups evaluated these concepts as unsuccessful, ineffective, unimportant, weak, unfair, i.e., as unheroic. The concept, to coerce, has the largest negative loading on this factor; coercion as a means of supervision is evaluated negatively. That managerial power is included in this group might be surprising were it not for the negative connotations of the word power referred to in Chapter I above.⁵²

⁵¹Ibid., p. 187.

⁵²Votaw, op. cit., p. 74.

Slaughter found similar differences in the rating of managerial power (negative) and managerial influence (positive), although the terms are used synonymously in the literature.⁵³

It might be expected that believers in Theory Y would evaluate employee influence more positively. This rating may be a pragmatic judgment of its small importance in the organizations involved in the study. This result is difficult to interpret without further research.

Group Y rated the concept worker at almost zero on the heroic factor; Group X rated worker negatively, although, as shown in Table XIII, the difference in the ratings of the two groups was not significant on this factor.

Both groups evaluated the following concepts positively on the first factor: to persuade, to direct, managerial influence, to reward, boss, managerial authority, and to advise. The concepts rules and regulations and to reprimand also had small positive mean factor scores. This can be interpreted to mean that both groups regard the different bases of managerial power as useful, and, as Table XIII shows, with no significant differences. As stated in Chapter III, there is no substantiation for Hypothesis 1.

The concept to coerce has much the highest score on the guillotine factor for both groups. Other concepts which both groups rated positively on this factor are: to direct, to reprimand, boss,

⁵³William S. Slaughter, III, A Study of Personal Value Systems of Managers in the Banking Industry as Related to Age and Position, Unpublished Ph.D. dissertation, Louisiana State University, Baton Rouge, La., 1973, p. 89.

managerial authority, and managerial power, meaning that all of these concepts are associated with the adjectives severe and fast. There were no significant differences between the two groups in rating any concept on the guillotine factor. However, the difference in the ratings of the concept to advise approached a significant level with $p = .14$. The Theory Y managers rated the concept negatively; Theory X managers rated the concept almost zero. An interpretation of this difference is conjectural; Theory Y managers rate the process of advising as more lenient and slower, perhaps meaning that they better understand its nature. Theory X managers on the contrary may find advising more similar to directing.

In regard to the third factor, it can be seen from Tables VII and VIII that one of the effects of rotating the factor matrix was to increase the absolute value of the loading of the difficult-easy scale on the third factor, while reducing its loadings on the first two factors. In the orthogonally rotated matrix shown in Table VIII, none of the scales that have high loadings on the first factor have loadings of any appreciable absolute size on the third factor. Furthermore, the difficult-easy scale has a negligible loading on the first two factors.

The interpretation of the loadings on the first two factors and the third factor is that the subjects did not find a relationship between the facility with which a form of managerial power is exercised and its effectiveness, its importance, its fairness, its severity, or its speed. Whether a concept is difficult or easy was perceived as irrelevant to its evaluation.

The only significant difference in the rating of a concept on the third factor by the two groups is in the rating of the concept worker. Group Y associates the concept worker with the adjective easy; Group X associates worker with the adjective difficult.⁵⁴ This seems to mean that Group X believes the worker is more difficult, to supervise or to relate to, than the managers in Group Y believe the worker to be.

MANAGERIAL ATTITUDES TOWARD THE WORKER'S PLACE IN THE ORGANIZATION

A profile of managerial attitudes toward workers and work can be sketched by synthesizing the answers of the majority of the subjects to Part I of the instrument. As Table V shows, while most managers believe that the capacity to exercise creativity and imagination is narrowly distributed in the population, they also believe that the organization uses even less of an individual's potentialities than he has available. Thus the organization is not viewed as an environment in which the average man can achieve self-actualization.

Most managers in the sample believe that the expenditure of energy in work is a natural function which the average man does not seek to avoid. They believe that he will exercise self-direction and self-control if he is committed to the objectives of the organization. However, since they also believe that he prefers to be directed, the inference is that the average man is not committed to the objectives

⁵⁴See Table XIII.

of the organization. The majority of the sample expressed faith in the Theory Y assumption: under "proper" conditions, workers will not only accept, but will seek responsibility.

As Table X shows, 80.58 per cent of the subjects tended to believe in Theory Y, while only 33.82 per cent of the subjects were familiar with the concept of Theory X-Theory Y. If Theory X is the conventional view of workers which has been largely replaced by Theory Y, these results seem to show that the human relations movement has influenced the thinking even of those managers with no formal training in its precepts.

It is also possible that managerial attitudes have been influenced by the nature of the industry. The public utilities industry is capital-intensive.⁵⁵ Thus labor costs tend to be a relatively small proportion of total costs. Capital-intensive industries are noted for high wages and large fringe benefits.⁵⁶ It is possible that managerial attitudes might be more Theory Y oriented in such a situation, although no studies supporting this relationship are known.

ATTITUDES TOWARD MANAGERIAL ROLE PERFORMANCE

Managerial attitudes toward workers seem to show the influence of the human relations movement; the origin of managerial beliefs about

⁵⁵William M. Capron (ed.), Technological Change in Regulated Industries, The Brookings Institution, Washington, D.C., 1971, pp. 3-5.

⁵⁶Roy B. Helfgott, Labor Economics, Random House, N. Y., 1974, pp. 259-262. See also Characteristics of Agreements Covering 1,000 Workers or More July 1, 1972, Bulletin 1784, Bureau of Labor Statistics, U. S. Dept. of Labor, 1973.

the exercise of managerial power can only be conjectured. If the assumption of the rational manager is made, then one would assume that beliefs about human nature would be an important determinant of attitudes toward the managerial role. As shown in Chapter III, this association was not significant. Before looking for an explanation of this inconsistency on the part of the manager, the assumption of his rationality will be temporarily relaxed.

Edward T. Hall, the anthropologist, pointed out the importance of the rational-technical in this culture in contrast to other cultures. He theorized that culture has three levels: the formal, the informal, and the technical. The technical is explicit, conscious, subject to logical analysis, explainable. In spite of the importance of this level, culture is transmitted on two other levels as well. The first is the formal level consisting of commands and admonitions of the "Do this," or "Don't do that," type. Formal patterns are usually learned by violating them and being corrected. The second level is the informal, the copying of a human model. The informal is so important that, "Entire systems of behavior made up of hundreds of thousands of details are passed from generation to generation. . . ."⁵⁷

According to this theory of levels of transmission of culture, the manager learns formally and informally, as well as technically, within his organization. The attitudes he adopts toward his role as a leader are strongly influenced by the organization's do's and don't's,

⁵⁷Edward T. Hall, The Silent Language, Fawcett Publications, Inc., Greenwich, Conn., 1966, pp. 63-92.

and by the superiors whose role performances he imitates. Regardless of the beliefs about workers of the Theory X manager, his attitudes toward his job and his performance of it are likely to be influenced by his peers. To return to the assumption of his rationality, his survival in the organization may be dependent on his adopting organizationally approved attitudes and behavior.

Further evidence for the importance of the relationship between the type of organization and managerial authority patterns will be presented in the next section.

CONTINGENCY THEORY AND MANAGERIAL AUTHORITY STRUCTURE

Stanley J. Udy, the sociologist, examined the relationship between technology variables and organization structure variables for over 400 organizations in 150 different non-industrial societies from data in the Human Relations Area Files. Udy found a strong association between technology and organization structure:

Thus there exists a striking relationship between technological complexity and authority structure, which appears to hold independently of type of process or social setting. Technological complexity seems to lead to bureaucratic structure in non-industrial systems in much the same way as in industrial systems.⁵⁸

From a knowledge of technological factors, Udy found it possible to predict organization and authority structure variables.

Comparable results were obtained by Joan Woodward and her

⁵⁸Stanley J. Udy, Jr., Organization of Work: A Comparative Analysis of Production Among Non-Industrial Peoples, Human Relations Area Files Press, New Haven, 1959, p. 38.

associates in showing the effect of production systems on successful management practices in an industrial society.⁵⁹

Lawrence and Lorsch related organizational variables to the environment of a firm, and the constraints imposed by the environment. Classical theory with its emphasis on centralized managerial authority and bureaucratic practices is associated with successful organizations having certain common characteristics: a relatively slow rate of growth, little innovation in products or processes, stability in the rate of change of sales, little price competition, and product similarity within the industry. Lawrence and Lorsch selected the container industry for their study, but the described characteristics seem as applicable to the public utilities industry, at least until the recent past.⁶⁰

Of the three industries studied by Lawrence and Lorsch, the successful organization in the container industry had the most inequitable distribution of influence from the top to the bottom of the hierarchy, with high influence on decisions at the top, and very little influence at low levels. The results described here are in agreement with those of Lawrence and Lorsch, as Tables XI and XII both show. Both groups rated employee influence negatively on the first, evaluation-potency factor, while rating managerial influence positively. As stated above, all concepts concerned with the exercise of managerial

⁵⁹Joan Woodward, Industrial Organization: Theory and Practice, Oxford University Press, London, 1965.

⁶⁰Paul R. Lawrence and Jay W. Lorsch, Organization and Environment, Richard D. Irwin, Inc., Homewood, Ill., 1969, pp. 85-96.

influence were rated positively on this first factor, with the exception of to coerce and managerial power. These results are interpreted to show the strong dependence on the managerial hierarchy of managers in a stable, non-competitive industry.

The implications for management of the results of this study will be discussed in the section which follows.

IMPLICATIONS FOR MANAGEMENT

The results of this study seem to indicate that basic assumptions about people are irrelevant to the manager's attitude toward his role performance, at least in the area of supervision. The implications of this irrelevance are that Theory X-Theory Y orientation can be ignored in the selection process. Furthermore, executive development programs can be designed which minimize attempts to change underlying assumptions of the trainees, and can focus instead on the encouragement of managerial practices associated with success in the specific organization.

The phrase "one best way" has had an influence on management thought since the time of Taylor and Gilbreth, and practicing managers often appear to be eager to apply indiscriminately the latest theory. This study offers indirect support for the multivariate approach recommended by Lawrence and Lorsch.⁶¹ McGregor postulated a univariate basis for managerial behavior. It appears likely today that individual and organizational relationships are far more complex than originally supposed.

⁶¹Ibid., pp. 2-3.

SUGGESTIONS FOR FURTHER RESEARCH

As a direct outgrowth of this study, its replication in industries with different characteristics would provide opportunities to test the contingency approach to managerial attitudes. Theory X-Theory Y orientation, as well as cognitive descriptions of managerial forms of influence, could be compared.

Because of the objectives of this study, the concepts used were all associated with power and status. Research directed at interindustry comparison of managerial attitudes might include as well such concepts as to create, to innovate, to compete, to bargain collectively, to arbitrate, etc.

Further research possibilities present themselves if the technique of Q-factor analysis is employed rather than the R-factor analysis used in this study.⁶² Basically, Q-technique involves a transpose of the data matrix resulting in an extraction of factors that represent clusters of similar concepts, or clusters of similar subjects, rather than clusters of variables (scales) as in R-technique. Q-factor analysis might be usefully employed in interindustry comparisons of managers.

Finally, this research has been directed at the relationship between attitudes toward people and attitudes toward supervising them. The relationship between attitudes and behavior has not been explored here. This area appears to be a fertile one for the development of research projects.

⁶²Rummel, op. cit., pp. 194-197.

SUMMARY

The primary objective of this research study was to test the relationship between Theory X or Theory Y orientation of managers and their attitudes toward the exercise of power. The subjects were 139 managers in the public utilities industry in the New Orleans area. The managers were drawn from four companies, and represented all hierarchical levels.

Theory X-Theory Y Orientation of the Managers

In spite of the fact that only 33.82 per cent of the managers were familiar with McGregor's Theory X-Theory Y concept, 80.58 per cent expressed more agreement with Theory Y than with Theory X. Exposure to the Theory X-Theory Y concept had no significant effect on Theory Y orientation. Although the median score showed a Theory Y skewness, the majority of the subjects agreed that imagination, ingenuity, and creativity are narrowly distributed in the population. The majority also believed that the average human being prefers to be directed in his work. However, the greatest concensus was with the statement that organizations underutilize the intellectual capacities of the average human being.

The Results of Factor Analysis

The semantic differential was used to measure attitudes toward thirteen power and status concepts which the subjects rated on nine bipolar, adjectival, seven-step scales. The raw data was factor analyzed using the principal component method, and orthogonal rotation

of the factor matrix. Three factors emerged from the analysis: the hero factor which correlated highly with the scales successful-unsuccessful, effective-ineffective, fair-unfair, important-unimportant, and strong-weak; the guillotine factor which correlated highly with the scales severe-lenient and fast-slow; the ease factor which correlated with the scale easy-difficult.

Comparison of the Attitudes of Group X and Group Y

Mean and median factor scores for each group on each concept were calculated. The only significant difference in the attitudes of the Theory X oriented managers was that they regarded workers as more difficult than did Theory Y oriented managers. The difference in attitudes of the two groups toward three concepts approached a significant level: to direct, employee influence, and to advise.

There was no significant difference in the attitudes of the two groups toward the concepts managerial authority and managerial power. Both groups evaluated managerial authority as heroic, and managerial power as unheroic. All other power concepts were evaluated positively by the two groups on the first factor except the concepts to coerce and employee influence, which both groups evaluated negatively.

Although there was a significant difference in the attitudes of the two groups toward the concept worker, there was no significant difference in the semantic distance between the pairs of concepts worker and boss for the two groups.

Both groups perceived a significantly greater semantic distance

between the concepts to direct and to coerce than between the concepts to direct and to advise.

In conclusion, no evidence was found to support McGregor's theorized relationship between assumptions about human beings and attitudes toward the supervisory role for managers in this sample. Implications for management are that basic assumptions about people do not significantly affect managerial concepts of supervision.

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APPENDIX A

LOUISIANA STATE UNIVERSITY IN NEW ORLEANS

LAKE FRONT

NEW ORLEANS, LOUISIANA 70122

Those of us who work or teach in the field of business often make assumptions and generalizations about managerial attitudes and thinking. This survey is designed to obtain more information about managerial attitudes toward people and the supervision of people.

Your participation in this survey will take about twenty minutes of your time. There are no right or wrong answers. I am interested only in your opinions in response to the questions asked.

This survey is part of a research project which is one of the requirements for the Ph.D. degree at Louisiana State University in Baton Rouge. I am a faculty member at Louisiana State University in New Orleans.

Your replies will be entirely confidential. Your name is not requested. In order to further preserve the confidentiality of your reply, a minimum of biographical data is requested.

Should you have any questions concerning the survey, I will be most happy to answer them. You may contact me in the Department of Management and Marketing, LSUNO, 288-3161, Extension 481.

Thank you very much for your assistance in the completion of this project. A stamped self-addressed envelope is enclosed.

Yours most sincerely,

Alma L. Hammett
Instructor in Management

Part I

In the section below you will see a series of statements. Please indicate your agreement or disagreement. Use the scale below each statement. For example:

It is easier to work in cool weather than in hot.

:_____ : X : _____ : _____ : _____ :
 Strongly Agree Undecided Disagree Strongly
 Agree Disagree

If you think it is easier to work in cool weather, put an (X) above "Agree"; if you think it is much easier to work in cool weather, put an (X) above "Strongly Agree." If you think it doesn't matter, put a mark above "Undecided" and so on. Put your mark in a space, not on the boundaries.

There are no right or wrong answers. We are interested in your opinion about the statements which follow.

1. The average human being has an inherent tendency to avoid work.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Undecided Disagree Strongly
 Agree Disagree

2. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organization problems is widely, not narrowly, distributed in the population.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Undecided Disagree Strongly
 Agree Disagree

3. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Undecided Disagree Strongly
 Agree Disagree

4. People will accept rewards and demand continually higher ones, but these alone will not produce the necessary effort to get a job done. There must be some sort of threat of punishment.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Undecided Disagree Strongly
 Agree Disagree

5. Commitment to organizational objectives is a function of the rewards associated with their achievement.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

6. The average human being has relatively little ambition and wants job security above all else.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

7. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

8. The average human being wishes to avoid responsibilities at his place of work.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

9. The expenditure of physical and mental effort in work is as natural as play or rest.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

10. The average human being probably prefers to be directed in his work.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

11. The average human being learns, under proper conditions, not only to accept but to seek responsibility.

:_____ : _____ : _____ : _____ : _____ :
 Strongly Agree Agree Undecided Disagree Strongly Disagree

Part II

The purpose of this questionnaire is to obtain your impressions of a variety of things or ideas. For example, at the bottom of this page is the word WORKER. You are to give your impression of what this means to you by placing an X on each of a series of scales which appear beneath it. Each of the scales is defined by a pair of words. Place an X on each scale in one of the seven spaces which most accurately describes the particular thing or idea, in your opinion. The following example illustrates how you might mark the scales for a particular thing or idea.

large : ____ : ____ : X : ____ : ____ : ____ : ____ : small
 unenjoyable : ____ : ____ : ____ : ____ : X : ____ : ____ : enjoyable

Please be sure to:

1. Place an X on every scale. Do not omit any scales.
2. Put only one X on each scale.

WORKER

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

TO PERSUADE

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

TO DIRECT

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

RULES AND REGULATIONS

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

TO REPRIMAND

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

MANAGERIAL INFLUENCE

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

TO REWARD

unimportant : _____ : _____ : _____ : _____ : _____ : _____ : _____ : important
 difficult : _____ : _____ : _____ : _____ : _____ : _____ : _____ : easy
 strong : _____ : _____ : _____ : _____ : _____ : _____ : _____ : weak
 unfair : _____ : _____ : _____ : _____ : _____ : _____ : _____ : fair
 successful : _____ : _____ : _____ : _____ : _____ : _____ : _____ : unsuccessful
 severe : _____ : _____ : _____ : _____ : _____ : _____ : _____ : lenient
 fast : _____ : _____ : _____ : _____ : _____ : _____ : _____ : slow
 effective : _____ : _____ : _____ : _____ : _____ : _____ : _____ : ineffective
 passive : _____ : _____ : _____ : _____ : _____ : _____ : _____ : active

BOSS

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

MANAGERIAL AUTHORITY

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

TO COERCE

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

MANAGERIAL POWER

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

EMPLOYEE INFLUENCE

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

TO ADVISE

unimportant : ____ : ____ : ____ : ____ : ____ : ____ : ____ : important
 difficult : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
 strong : ____ : ____ : ____ : ____ : ____ : ____ : ____ : weak
 unfair : ____ : ____ : ____ : ____ : ____ : ____ : ____ : fair
 successful : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unsuccessful
 severe : ____ : ____ : ____ : ____ : ____ : ____ : ____ : lenient
 fast : ____ : ____ : ____ : ____ : ____ : ____ : ____ : slow
 effective : ____ : ____ : ____ : ____ : ____ : ____ : ____ : ineffective
 passive : ____ : ____ : ____ : ____ : ____ : ____ : ____ : active

PART III

To help us with the statistical analysis of the data, please give us the following information about yourself.

1. How many levels of supervision are there in your organization from the first-level supervisor to the head of the organization? (Give the number):

2. How many levels of supervision are there above your position? (Give the number):

3. Approximately how many employees (management and non-management) are there in your company? (Check one):
 Less than 500
 Between 500 and 4999
 5000 or more
4. Your age (check one):
 Under 30
 30-39
 40-49
 50-59
 60 or more
5. If you attended an undergraduate university or technical school what was your major specialty?

6. If you attended graduate school, what was your major specialty?

7. Have you ever been exposed to McGregor's Theory X-Theory Y concept?
 Yes No Don't remember

VITA

Alma Louise Hammett was born in New Orleans, Louisiana, on June 18, 1924. She graduated from the Louise S. McGehee School in 1940. She attended Newcomb College, and received her Bachelor of Arts degree in Physics from Tulane University in 1944. She received the degree of Master of Business Administration from Tulane University in 1968.

She has held managerial and administrative positions in government, retailing, and university administration in this country and in Europe. She is currently an Assistant Professor of Management and Marketing at the University of New Orleans, a member of the Louisiana State University System.

EXAMINATION AND THESIS REPORT

Candidate: Alma Louise Hammett

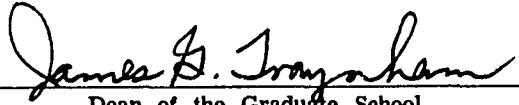
Major Field: Management

Title of Thesis: A Study of Theory X-Theory Y Managerial Attitudes and Attitudes Toward Organizational Power of Managers in the Public Utilities Industry in the New Orleans Area

Approved:

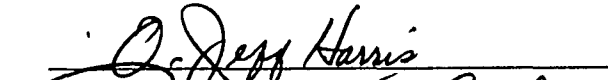


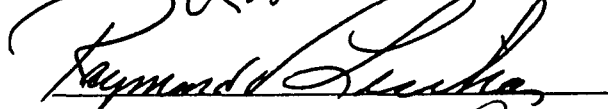
Major Professor and Chairman

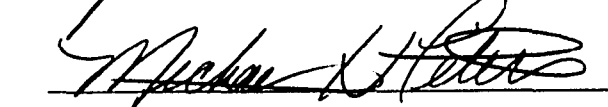


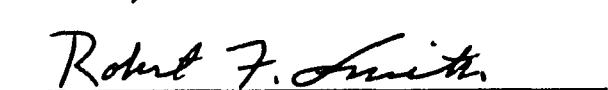
Dean of the Graduate School

EXAMINING COMMITTEE:









Date of Examination:

October 8, 1974