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AN EXPLORATORY STUDY OF THE LEADERSHIP BEHAVIOR OF DEANS AND PRESIDENTS IN HIGHER EDUCATION INSTITUTIONS IN SAUDI ARABIA

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ABSTRACT

AN EXPLORATORY STUDY OF THE LEADERSHIP BEHAVIOR OF DEANS AND PRESIDENTS IN HIGHER EDUCATION INSTITUTIONS IN SAUDI ARABIA

By

Mulaihan Mueidh Athubaity

The purpose of this study was to assess the leadership behavior of the presidents and deans at the University of Riyadh and the University of Petroleum and Minerals as perceived by the deans and department chairmen at both institutions and to determine the impact of such variables as nationality, type of institution, academic position, and educational background on the respondents' perceptions of their superiors' leadership behavior.

The study population consisted of 22 deans and 80 department chairmen at both universities. The Leader Behavior Description Questionnaire--Form XII, which consists of 100 Likert-type items and is divided into 12 subscales, was selected as the survey instrument for the study. All the null hypotheses were tested at the .05 alpha level using the multivariate analysis of variance (MANOVA) procedures. Statistical tests resulted in the following findings:

1. No significant differences existed between Saudi and non-Saudi department chairmen in terms of their perceptions of the leadership behavior of the deans at the two universities.
2. Deans and department chairmen did not significantly differ in their perceptions of the leadership behavior of the presidents and deans at both universities.
3. There were significant differences between the two universities in terms of the perception of leadership behavior, though the univariate test has failed to identify the nature of the differences.
4. No significant differences were found in the referent groups' perception of leadership behavior due to educational background.

Based on the literature review and the findings of this study, a statement of conclusions and suggested recommendations was made.

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By

Mulaihan Mueidh Athubaity

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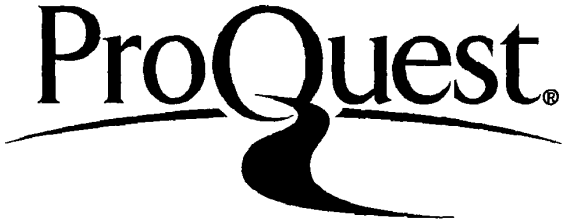

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CHAPTER I

INTRODUCTION

According to Edwin Ghiselli (1971), an organization can be defined as:

> A social group wherein the individual members are differentiated one from another with respect to the functions they perform in connection with attaining the common goals, their roles being arranged or structured so that their individual actions will be integrated into a total concerted effort.[1] (p. 5)

Organizations are one of the most common elements of almost all contemporary societies. They may be religious, governmental, educational, industrial, or of some other type. Of course, in a more industrial society such as the United States, formal organizations are more prevalent, larger, and much more complicated than they are in a developing country such as Saudi Arabia. However, regardless of size, complexity, orientation, or location of an organization, the fact remains that leadership actions and behaviors of high-ranking administrators are significant determinants of such organization's effectiveness and efficiency. In this regard, Fred Fiedler and Martin Chemers (1974) have stated that:

> . . . the impact of effective leaders is dramatically demonstrated over and over again on a national scale in every country's history and on a local scale in every organization's past.[2] (p. 1)

They add that "the organization without effective leadership is in trouble" (p. 1).

In his analysis, Michael Maccoby (1979) pointed out that there are two interrelated aspects of the leader's role. One has to do with the functions of leadership, while the other has to do with presenting an image or model that others want to emulate, if not imitate.[3] According to Charles Perrow (1970), one of the enduring truisms of organizations is that they are, after all, made up of people who have different needs, goals, and motives.[4] Thus, it can be concluded that without sound leadership which can give those individuals a sense of unity, direction, and common purpose, the effectiveness and productivity of the organization will be in doubt. This conclusion is supported by Maccoby when he stated that:

> . . . the primary tasks of leaders are to understand both motives and resistance to change and to establish operating principles that build trust, facilitate cooperation, and explain the significance of the individual's role in attaining the common purpose.[5] (1979, p. 20)

Few people who have been associated with institutions of higher education in Saudi Arabia would disagree with the statement that they are complex organizations in their structure and processes. These institutions are faced with numerous problems such as dependency on foreign professionals, replication of departments and programs, ambiguity in programs' goals and objectives, unpredictability in enrollment, and high

turnover among native Saudi professionals, etc. These problems are considered by many in the field as natural results of the tremendous growth and expansion which these institutions have witnessed during the last decade.

Despite the lack of research and empirical studies, conversations with people closely associated with colleges and universities in Saudi Arabia and the investigator's own experience and observation support the notion that providing a pattern or style of leadership that can effectively deal with these problems and issues, balance the concern for people with the concern for mission, and the concern for quality with the concern for quantity is a major challenge facing executive officers, presidents, and deans of these institutions. Although it is almost impossible to identify what kinds of paths lead people to such jobs as president, vice president, or dean, top leadership positions in higher education institutions in Saudi Arabia are extremely important because that is where the major policy decisions are made. Such decisions always have profound effects on the constituents of these institutions, particularly faculty and students. Occupants of those positions are expected to provide a pattern of leadership behavior that can meet the goals of the institutions and the needs of their constituents. Accomplishing such a task is not an easy job.

Statement of the Problem

Believing in the significance and cruciality of effective institutional leadership, this researcher intends to explore the leadership behavior of presidents and deans at two major universities in Saudi Arabia: Riyadh University and the University of Petroleum and Minerals. Such exploration would provide a clear picture of how leadership operates in those institutions and would serve as a basis for recommending change or improvement in the future.

Purpose of the Study

The main purpose of this study is to investigate the differences, if any, in presidents' and deans' leadership behavior at Riyadh University and the University of Petroleum and Minerals as perceived by two different groups: 1) department chairmen toward the deans, and 2) deans toward the presidents. This proposed study does not intend to introduce a new theory, but rather, it will attempt to provide higher education leaders in Saudi Arabia with an empirical framework within which they can better understand the patterns of their leadership behavior as measured by the subscales of the LBDQ-12 instrument. Such a framework should help top administrators in Saudi colleges and universities take a close look at the way leadership operates in their institutions and give them some insight for making any necessary adjustment or changes

in their leadership behavior in order to meet future demands and challenges.

Rationale for the Study

It is hoped that this study will help Saudi educators, particularly college and university top administrators, become more aware of the various patterns or styles of leadership behavior and their profound impact on individuals' behavior and institutional effectiveness. Furthermore, all of the research which the investigator has reviewed to date and the instruments which have been developed to explore leadership behavior have dealt with organizational phenomena in the Western industrial hemisphere. The investigator's review of the literature regarding higher education in Saudi Arabia for the last ten years revealed no such studies in that country. Thus, it is also hoped that the data, methods, and conclusions of this study will add a substantial piece of reference material to the slowly accumulating body of literature on higher education in Saudi Arabia and provide a solid base for further research in the future.

Significance of the Study

The research efforts, which are extremely limited in number and scope, pertaining to education in Saudi Arabia have been primarily concerned with the Ministry of Education and public schools. Far less attention has been given to

higher education administration, particularly the leadership behavior of the executive officers, presidents, and deans of these institutions. This places a major responsibility on Saudi researchers, who are very few, to direct their attention and efforts to this crucial segment of the national educational system in order to help university leaders become more aware of their strengths, weaknesses, and subsequently improve their effectiveness. In view of the current need for research and empirical studies, there is a special significance for this type of study. If major differences are revealed between referent groups on perceived leadership behavior ratings of presidents and deans, the study serves as a basis for recommending change.

Definition of Terms

For the purpose of this study, the following definitions were formulated:

President--The chief administrative officer of an institution of higher education who serves as the executive officer of the board of trustees or of other governing authorities.

Dean--The administrative officer of an independent college or of a division, college, or school of a university who is responsible, under direction of the president or other executive officer, for the administration and supervision of instructional activities or of student relations.

Chairman--A faculty member who, in addition to performing some teaching duties in a department, has been designated to carry on certain administrative responsibilities involved in managing the affairs of the department.

Leadership--The ability and readiness to inspire, guide and influence the behavior and activities of a group in efforts toward goal achievement.

Leadership behavior--The actions, conduct, and manners of an individual, who is in a leadership position, that influence the behavior of the group toward goal attainment.

Perception--A consciousness, awareness, or observation of external objects, conditions, acts and behaviors, relationships, etc., as a result of sensory and intellectual stimulation.

Research Questions

The investigator hopes that the findings and conclusions of this study will provide answers to the following questions:

1. How do department chairmen at the University of Riyadh and the University of Petroleum and Minerals perceive the leadership behavior of the deans?
2. How do the deans at the University of Riyadh and the University of Petroleum and Minerals perceive the leadership behavior of the president of these two institutions?

3. Do Saudi chairmen differ in their perception of the leadership behavior of the deans from the non-Saudi chairmen at the two institutions?
4. Do department chairmen at the University of Riyadh differ in their perception of the deans' leadership behavior from the department chairmen at the University of Petroleum and Minerals?
5. To the deans at the University of Riyadh differ in their perceptions of the presidents' leadership behavior from the deans at the University of Petroleum and Minerals?

Research Hypotheses

In order to determine the extent to which the two specified groups--department chairmen and deans--differ in their perceptions of the leadership behavior of deans and presidents at the University of Riyadh and the University of Petroleum and Minerals, the following hypotheses are posited:

Hypothesis 1

There are significant differences between the perceptions of the Saudi and non-Saudi department chairmen in regard to the leadership behavior of the deans at the two universities.

Hypothesis 2

There are significant differences between the deans' perception of leadership behavior of the presidents and the department chairmen's perception of the leadership behavior of the deans at the two universities.

Hypothesis 3

There are significant differences between the deans at the University of Riyadh and the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the presidents at both universities.

Hypothesis 4

There are significant differences between the department chairmen at the University of Riyadh and the department chairmen at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the deans at both universities.

Hypothesis 5

There are significant differences among the deans based on their educational background in regard to their perceptions of the presidents' leadership behavior at the two universities.

Hypothesis 6

There are significant differences among the department chairmen based on their educational background in regard to their perceptions of the deans' leadership behavior at both universities.

This group of hypotheses forms the basis for the proposed study.

Limitations and Delimitations

The findings of this study were limited by the motivation and objectivity of the participants to make accurate responses in reporting their perceptions of leadership behavior. Therefore, the degree of desirability of leadership behavior was subject to the degree of accuracy of the perceptions given.

Measurements of the deans' and presidents' leadership behavior were based on the perceptions of department chairmen

and deans as reported on the Leader Behavior Description Questionnaire--Form XII. The sources of the data for this study were limited to individuals from the University of Riyadh and the University of Petroleum and Minerals. Therefore, inferences, generalizations, and conclusions reached in this research are limited only to the specified institutions and populations.

Research Assumptions

It was assumed that the participants in this study would answer the survey instrument in all objectivity and honesty without fear of political pressure or any other constraints and that their perceptions of various leadership behaviors reflected their knowledge and understanding of the leadership function in the two Saudi universities. It was further assumed that this study was just a reflection of reality at the two selected institutions.

Design and Methodology

In order to investigate the leadership behavior of deans and presidents, two distinct Saudi universities were selected. The first was the University of Riyadh which represents a modern general, typical institution of higher education in Saudi Arabia. It is also considered the largest and most prestigious university in the country. The second was the University of Petroleum and Minerals which represents a

modern, but specialized, institution. This is a small university which is scientifically oriented and heavily influenced by the American system of higher education.

The study population from which the research data were collected consisted of two different groups at the two institutions: 1) all department chairmen, which totalled about 80 (64 at the University of Riyadh and 16 at the University of Petroleum and Minerals), and 2) all deans, totalling 22 (15 at the University of Riyadh and 7 at the University of Petroleum and Minerals.

Measurement of deans' and presidents' leadership behavior will be based on the perceptions of the two identified groups as reported on the Leader Behavior Description Questionnaire--Form XII (LBDQ-12). The LBDQ-12 instrument contains 100 items and is divided into twelve subscales. These subscales are: 1) representation; 2) demand reconciliation; 3) tolerance of uncertainty; 4) persuasiveness; 5) initiation of structure; 6) tolerance of freedom; 7) role assumption; 8) consideration; 9) production emphasis; 10) predictive accuracy; 11) integration; and 12) superior orientation.[6]

Because neither LBDQ-12 nor any comparable instrument exists in the Arabic language, it was necessary for the researcher to translate this questionnaire into Arabic. The translated version was given to some Arab professors and

graduate students at Michigan State University for reactions and criticisms in order to assure its accuracy and clarity before it could be administered. The instrument was also pilot-tested with a number of professors from King Abdulaziz University who visited the Saudi Arabian Educational Mission on different occasions; subsequently, necessary modifications were made. The collected data were punched and entered into a computer to facilitate the analysis procedures. Statistical techniques such as frequency distribution, reliability estimates, mean, standard deviation, analysis of variance, and multivariate analysis were used to test the postulated hypotheses. A more detailed description of the study design will be presented in Chapter III.

Organization of the Study

The introduction, Chapter I, presents the research problem, purpose, rationale for, and significance of the study, definition of terms, research questions and hypotheses, limitations and delimitations, and finally research design and methodology. Chapter II contains a brief background of higher education in Saudi Arabia and a literature review pertinent to leadership theories and leadership behavior. Presented in Chapter III is an overall methodology of the study, including the research design and techniques used to analyze the data. Chapter IV includes the actual data analysis and

test of hypotheses. Chapter V provides a summary of the study, conclusions, and recommendations.

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CHAPTER II

REVIEW OF THE LITERATURE

This chapter will present a systematic review of the related literature on leadership theory and leadership behavior. However, it is first necessary to give an overview of higher education in Saudi Arabia.

Higher Education in Saudi Arabia

The origins and development of higher education in Saudi Arabia cannot be fully understood without some consideration of that country's natural resources, particular oil. Saudi Arabia is the world's second largest producer of oil as of 1980.[1] The revenues from oil and other minerals have provided the financial base for the country's economic development and for the development of institutions of higher education. Although oil was discovered in Saudi Arabia in the 1930s, utilization of oil revenues for social services, in general, and education, in particular, has been historically somewhat recent. Frank J. Molek (1975) reported the following statistics:

> There were only 38,000 students enrolled at the elementary level, 1200 in secondary schools, and a few hundred receiving higher education abroad by 1952. Gradually, however, the oil industry expanded, providing the necessary

> monetary base upon which a public education was established in 1953, and education at all levels was declared free and open to all.[2] (p. 72)

As of 1978, there were approximately 700,000 pupils in elementary and secondary schools. At the same time there were 39,866 students enrolled in higher education at the six state universities.[3] This indicates that there has been a sizeable increase since 1953 in the number of students at all levels.

The history of modern higher education in Saudi Arabia is brief by Western standards. Beginning in 1957, six state universities have been established. These six universities, their locations, and dates of founding are as follows:

1. University of Riyadh in Riyadh--1957;
2. University of Petroleum and Minerals in Dhahran--1963;
3. King Abdulaziz University in Jeddah--1967;
4. Islamic University in Al-Madina--1961;
5. Islamic University of Imam Mohammad Ibn Saud in Riyadh--1974; and
6. King Faisal University in Dammam--1975.

A seventh university is currently under construction in Mecca. This new university will be called the University of Om Al-Qura and is scheduled to open in 1981. A general discussion of each of the six established universities will be given later in this chapter.

The general purpose or orientation of the six existing universities seems to be teaching rather than research or community service. This is documented in part by the fact that only within the past six years have graduate programs been offered at any of the universities. The graduate programs, so far only in certain areas such as Arabic, Islamic Studies, and Education, also do not yet seem to have a strong research emphasis.

The organization and hierarchical structure of higher education institutions in Saudi Arabia are somewhat similar to American universities. The chief administrator of the university is called the Rector. Under the Rector are two Vice-Rectors and a Secretary General. One Vice-Rector handles administrative affairs while the other handles academic affairs. The Secretary General has general responsibilities which are administrative in nature. Each of these administrators is appointed by the Ministers' Cabinet of the central government based on the recommendations of the Minister of Higher Education. The position of Rector is considered a political appointment and carries no fixed term. The other administrators serve terms of three years, but they may be reappointed.

The instructional departments of each university such as physics, geography, and history are grouped under various colleges. While the specific colleges vary somewhat from university to university, generally each university has

colleges such as College of Science, College of Arts and Humanities, and College of Education. The administrative head of each college is called the dean. The administrative head of each department within the college is called the chairman. The dean and all chairmen are nominated by the college faculty through an election process. The university Rector must approve the nominations. If approved, the dean serves a three-year term which can be renewed only once, while the chairman serves a two-year term that is renewable unlimited times. If the Rector does not approve a particular nominee, the faculty must elect another candidate.

The administrative responsibilities of the chairman include the usual daily operations of the department. The deans are responsible for administrative and financial decisions for the college at large. The chairmen have responsibility over academic matters such as faculty teaching loads and scheduling of all departmental courses. However, even these decisions must be approved by the dean. The deans and chairmen, while serving at the discretion of the Rector, are relatively autonomous in their day-to-day administrative duties.

Each university also has a University Council consisting of the Rector, Vice-Rectors, Secretary General, deans of colleges, and an elected faculty member from each college. The University Council is responsible for general university

decisions such as degree requirements, approving new courses, scheduling of final semester examinations, admission of students, and appointing and promoting faculty members.[4]

When specific issues or problems of importance for a particular university must be resolved, such as establishing new graduate programs or new departments, the Higher University Council makes the policy decisions. This council is chaired by the State Minister of Higher Education. The other members of the council are the Rector of that particular university, two or three Rectors from other universities, and three or four government officials at the ministerial level.

All six universities in Saudi Arabia are state universities. The central government exercises rather close control over each university on important policy matters. For example, appointment of Rectors and university budget allocation, as well as establishing a college, are decided on at the central governmental level. The particular central government members and groups concerned with higher education are the Minister of Higher Education, the Supreme Council of Universities, and the Ministers' Cabinet.

All education in Saudi Arabia is financed completely by the central government. The central government is quite wealthy, primarily because of the country's oil revenues. Of the estimated 71 billion dollars Gross National Product (GNP)

in 1979, approximately 10 percent was spent on education. In terms of GNP, this amount is quite comparable with what other countries spend. For example, the percent of the GNP spent on education for certain selected countries in 1976 was as follows: France 5.8%; Iraq 4.3%; Iran 5.4%; Kuwait 2.8%; and Sweden 7.7%.[5]

Complete funding of education by the central government has removed the necessity of public taxation to support education. In a society that cannot afford to pay taxes, this can be considered a positive aspect of governmental financing. However, the absence of local control over financial expenditures on higher education seems to have limited public input into the decisions affecting education. This lack of public involvement and public accountability is, at least in the author's opinion, possibly the most negative aspect of the current educational system.

The central government of Saudi Arabia establishes, maintains, and, of course, accredits all universities in the country. Degrees awarded by universities in Saudi Arabia are recognized and accepted by universities and governments in other Arabic countries. The acceptance of degrees for advanced work at universities in non-Arabic countries seems to be increasingly common. For example, in 1980 there were about 3,000 students from Saudi Arabia pursuing graduate degrees at universities in non-Arabic countries. Most of these

students were studying in the United States or Europe. Of these graduate students, about 90% received their undergraduate degrees from universities in Saudi Arabia.[6]

The first university degree awarded by universities in Saudi Arabia, as in the United States, is the bachelor's degree. Most bachelor's degree programs are four-year programs. However, engineering and pharmacy are five-year programs, and medicine is an eight-year program. As previously noted, master's degree programs have only been offered during the past six years. The programs selected so far seem to be in areas somewhat unique to the needs of the country, such as Arabic, Islamic Studies, and Education. These programs have generally not been available outside Arabic universities or, as in education, have not met the local needs of the country even when available at foreign universities. However, in view of the universities' emphasis on teaching as opposed to research in Saudi Arabia, it remains to be seen whether the new master's degree programs overextend the universities' faculties and physical resources.

The faculties of the six universities are quite varied in their educational training and experience. At the present time, more than 60 percent of these faculties are foreign. Since instruction is generally in Arabic, about 90 percent of the foreign faculty is from Arabic countries. The largest number of faculty from other Arabic countries comes from Egypt.[7]

Admission to undergraduate degree programs in each university requires first that a prospective student graduate from a secondary school, either a high school or technical institute. While not all graduates from secondary schools seek university enrollment, those graduates who do apply generally are admitted, although not necessarily in the particular degree program that they selected as their first preference. In 1978, there were approximately 28,125 full-time students in undergraduate degree programs at the six universities. Of these students, 23,296 were male and 4,829 were female.[8]

An applicant to a graduate degree program must have completed a bachelor's degree program. Each university selects and admits students into its own graduate program. The degree of selectivity depends to a great extent on the program and university.

Until 1974, the school term at the universities was September through June. After 1974, the semester system was adopted. Under this plan, the first semester starts in early September and terminates toward the end of December. The second semester then lasts until early June. All universities begin and end at the same time. However, the newer semester system has caused some problems with respect to the registration process. Since the universities follow the Islamic

calendar, certain holidays influence the starting and ending dates, and these vary somewhat from year to year.

The six universities in Saudi Arabia bear the primary responsibility for training the skilled and technical workforce needed to industrialize and modernize the country. Therefore, the universities have increasingly been pressured by the central government to increase the number of university graduates. Unfortunately, the effort to increase the number of graduates by expanding the number of university students and faculty seems to have lowered the perceived quality of higher education in Saudi Arabia. Reasons frequently cited or given for this perceived decline in quality include outside interference and nepotism, rapid change in leadership, poor quality of foreign instructors, unexpected rate of expansion and the general policy of emphasizing quantity rather than quality.

Next, a brief description of each of the six universities in Saudi Arabia will be given. These descriptions will document the diversity of programs and goals of the various universities.

The University of Riyadh was established in 1957. During the first year there were 9 instructors and 21 students.[9] This was the first general institution of higher education in Saudi Arabia. The university curriculum and organization were initially modelled after Egyptian universities which were,

in turn, modelled, at least in part, on universities in the West, primarily in France and England. Since 1957, the University of Riyadh has grown considerably. It currently has the following colleges: Arts, Science, Pharmacy, Graduate Studies, Agriculture, Engineering, Education, Medicine, Administrative Science, Dentistry, Nursing and Public Health, and Arabic Language Institute. Today, the University of Riyadh is the largest university in the country. It has a faculty of 1,400 and an enrollment of over 14,500 students.[10] It is also considered the most prestigious university in the country.

The Islamic University was established in Al-Madina in 1961. This is a religious university and has as its purpose the promotion of the Islamic faith. The university provides training and scholarships for students throughout the Islamic world who are interested in university-level training in Islamic Studies. Of the six universities, the Islamic University has the largest enrollment of international students, most of whom come from Islamic countries. These foreign students generally return to their native countries as preachers or scholars of the Islamic faith. Today, the Islamic University has six colleges, with an enrollment of 1,655 students and a faculty of 201.

The University of Petroleum and Minerals was established in 1963. Initially it was a college and had less than

100 students. In 1975 it became a university and now has the following colleges: Science, Engineering, Industrial Management, and Graduate Studies. This university seems to be modelled after American universities in terms of its curriculum and organization. The main focus of this institution is on the petroleum industry and related technical fields. The language of instruction is English, and there are a large number of faculty members from Western countries. Although the university primarily is an undergraduate institution, a master's degree program in engineering has been established. This university currently has an enrollment of over 3,000 students and a faculty of 470.[11]

King Abdulaziz University was founded in Jeddah in 1967. Initially it was a private institution with the college of Economics and Administration. In 1971, it became a public institution with two campuses, one in Jeddah and one in Mecca. The Jeddah campus currently consists of the following colleges and institutes: College of Engineering, College of Medicine, Institute of Applied Geology, Institute of Meteorology, and the Institute of Oceanography. The Mecca campus currently has two colleges: the College of Sharia and Islamic Studies and the College of Education. In 1981, the Mecca campus will become an independent university called the University of Om Al-Qura.

King Abdulaziz University has a rather broad, general curriculum. This university was one of the first to offer graduate programs, and it was the first to grant the Ph.D. degree. It was also the first university to grant an honorary doctorate degree. However, it does not have the reputation of being the best university. Today, King Abdulaziz University has an enrollment of 20,182 students and a faculty of about 1,055.[12]

The Islamic University of Imam Muhammad Ibn Saud was established in Riyadh in 1974. This university developed from three earlier colleges: the College of Sharia established in 1953, the College of Arabic Language established in 1954, and the Higher Judicial Institute established in 1965. Since these three institutions were combined in 1974 to form the university, there has been rapid growth in the number of programs offered. In addition to the original three colleges, the university currently has the following colleges: the College of Social Sciences, the College of Religious Foundations, the Higher Institute of Islamic Dawa, and a number of colleges located outside Riyadh. The university also offers master's degree programs in Islamic Studies and in Arabic Language. This university has a religious orientation and is traditionally managed, but it is an influential institution. It has an enrollment of about 5,299 students and a faculty of 425.[13]

King Faisal University was authorized in the Fall of 1975 by a royal decree. The university was opened in 1975 in Dammam in the Eastern Province of the country with 120 students.[14] These students were enrolled in three colleges: the College of Architecture, the College of Veterinary Medicine, and the College of Agriculture. In the future, this university will expand to include another campus at Al-Hasa. The new campus will consist of a College of Medicine, a College of Education, and a College of Management Sciences. The university currently has an enrollment of 614 students and a faculty of 200.[15] The faculty is composed predominantly of foreigners.

Additionally, there are a number of military colleges in Riyadh and community colleges which are scattered all over the country. All are financed and controlled by the government of Saudi Arabia.

Brief Comparison of Saudi and American Universities

This study is not meant to compare the Saudi university system with any other university system. However, the principal research instrument to be used in the study, LBDQ-XII, was developed and evaluated primarily through research conducted in American institutions. This instrument and related research will be discussed in some detail in the following sections. However, in this section it will be

useful to briefly compare the organizational structure and administration of Saudi universities and American universities. While there are differences, the purpose of the comparison is to argue that sufficient similarities exist to warrant the use of a leadership assessment instrument developed with American institutions in a study of leadership of higher education institutions in Saudi Arabia.

The previous sections of this chapter detailed the history and nature of the six Saudi universities. In this section, the organizational structure and administration of these universities will be considered and related to their counterparts in American universities. Several important characteristics of the Saudi universities seem particularly important in any comparison between Saudi and American universities. These characteristics, which have been briefly mentioned in the previous discussions, are as follows:

1. The six Saudi universities are all state universities, completely funded and controlled by the central government.
2. The Saudi universities are all primarily concerned with teaching, not with research.
3. Saudi Arabia, like any other developing country, has an acute shortage of trained, professional personnel, and the universities are the primary institutions in the country to train the needed personnel for

administrative, economic, and social development of the society.

Each of these three characteristics will be considered separately to show how each likely affects the Saudi university organizational structure and/or administration.

Because all universities are state funded by the central government in Saudi Arabia, the diverse private and religious universities existing in America have no counterpart in Saudi Arabia. Thus, the comparisons made in this section will primarily apply to the major state-supported American universities. When compared with the major state-supported American universities, certain similarities immediately become apparent between the Saudi and American university systems. For example, there seems to be continual efforts by the central government to limit or cut university funding. There also seems to be a lot of bureaucratic work and red tape in these institutions. The present organizational structure of the Saudi universities has been patterned largely after that used in major American state universities. This organizational structure will be discussed in somewhat more detail later in this section. However, there are certain differences in the organizational structures of the two university systems. Because the central government completely funds the universities, there is no student tuition. Therefore, Saudi universities to not require special administrative units in the

organizational structure concerned with matters such as student financial support, fund raising from alumni or institutions, or grant solicitation. In addition, the financial support of a particular Saudi university is not tied directly to the number of students enrolled. Saudi universities are less concerned with the recruitment of students than American universities. Also, there is little student transferring between Saudi universities. Thus, they do not have the elaborate organizational units that exist in American universities for the recruitment of students or for the handling of transfer students.

There are several additional consequences of direct funding of Saudi universities by the central government that need to be noted. The universities are under little, if any, economic pressure to respond quickly to any new student interests or new social needs of the local community. Thus, new degree programs and new emphasis in existing programs are influenced little by student input. For example, students serve on no university committees. The Saudi central government is also concerned with planning for the entire country's needs, but there is often little planning for the specific needs and programs of any particular university. In short, the planning is centralized, and input by the individual universities is somewhat limited when compared with the input major American universities seem to have in the planning of

future programs and committments. Finally, in terms of the faculty, the central government funding also considerably limits the degree of genuine academic freedom that exists within a Saudi university. This is perhaps the major difference from the American system brought about by the nature of the funding.

There is one positive aspect, however, that should be noted when the Saudi universities are compared with American universities. Because the Saudi universities are under little, if any, pressure to recruit additional students for the financial health of the institution, there is no pressure to recruit less qualified students if enrollments in some programs fall at a university.

The second characteristic to note in this comparison is that Saudi universities are primarily devoted to teaching rather than research. Qubain (1966) stated that "for all practical purposes, universities in the Arab world are still transmitters rather than producers of knowledge. Their main function has been the training of students at the undergraduate level. Comparatively speaking, very little graduate work and research is undertaken" (p. 53).[16] This characteristic of Saudi universities affects the students also. Khayat (1981), in a study of students in Saudi universities, found that " . . . students perceived the least emphasis to be on scholarship. There is little indication that rigorous and vigorous

pursuit of intellectual knowledge exists on the campus. Emphasis on competitive academic achievement and scholarship is not perceived as very evident by students" (p. 121).[17] The specific reasons for the teaching and non-research orientation of the Saudi universities are not clear. However, the reasons likely involve some or all of the following:

1. The relative newness of these universities;
2. The lack of adequate research facilities such as libraries and laboratories;
3. The lack of indigenous qualified professionals in the areas of research; and
4. The lack of a perceived need by the society for research and the resulting lack of reward for any research efforts that have been attempted.

Because there are few graduate programs and little, if any, research, the faculty serves either as teachers or administrators. There is no separate faculty with major interest in research. Thus, Saudi universities do not have the research facilities and support units that exist in American universities. For example, there are no organizational units devoted to fund raising for research, evaluating or monitoring research activities, or to assisting in the writing or publishing of research results. In terms of administrators, a less obvious aspect of the lack of research in Saudi universities is that administrators are not selected on the basis of their research

contributions. In American universities, research is usually one of the most important criteria in the selection of personnel for administrative positions or university committees.

The third characteristic noted in this comparison is that Saudi Arabia is a developing country with a critical shortage of trained, professional personnel in almost all technical fields. In the universities, this shortage of professionals is apparent, as almost 60 percent of the university faculty are non-Saudi. As administrators tend to be native Saudis, many administrators hold lower academic ranks than their American counterparts since rank is, in part, a function of the length of time in university teaching. For example, in the sample of this study (see Chapter IV), 40 percent of the deans had the academic rank of assistant professor. This could hardly occur at a major American university. Another aspect of the shortage of trained personnel in the universities is in terms of job security for Saudi faculty. This shortage implies that at the present time job security is not a major problem, except in the most unusual circumstances. There is no problem with tenure for Saudi faculty members. Clearly, tenure is a major problem for most American university faculty. For foreign faculty, however, there is a desire by the government to replace these faculty when possible with Saudi nationals. Thus, the foreign faculty members in the universities tend to be concentrated at the

higher faculty levels although, as noted, the highest level administrators are native Saudis. Since American universities do not have a comparable faculty composed of foreigners in such high percentages as the Saudi universities, it is not clear how this difference affects differences in leadership between the two university systems.

One final aspect of the shortage of trained professional personnel in the university should be noted. In the technical fields that have industrial applications, particularly those relating to the oil industry, it is economically very difficult for the universities to compete with the private sector companies. Thus, there is a rather high turnover in the universities among trained native faculty who leave the university to work in the private sector for considerably higher pay.

In spite of the differences cited between the American and Saudi universities, the two university systems are very similar in many ways, particularly in terms of organizational structure and administration. Figure 1 summarizes the organization of the Saudi universities. The specific organizational units are, with some exceptions, similar to those in an American state-supported university. The major exceptions appear to be that the Higher Council of each university is chaired by the Minister of Higher Education. Also, the Supreme Council of Universities, which is presided over by the crown prince,

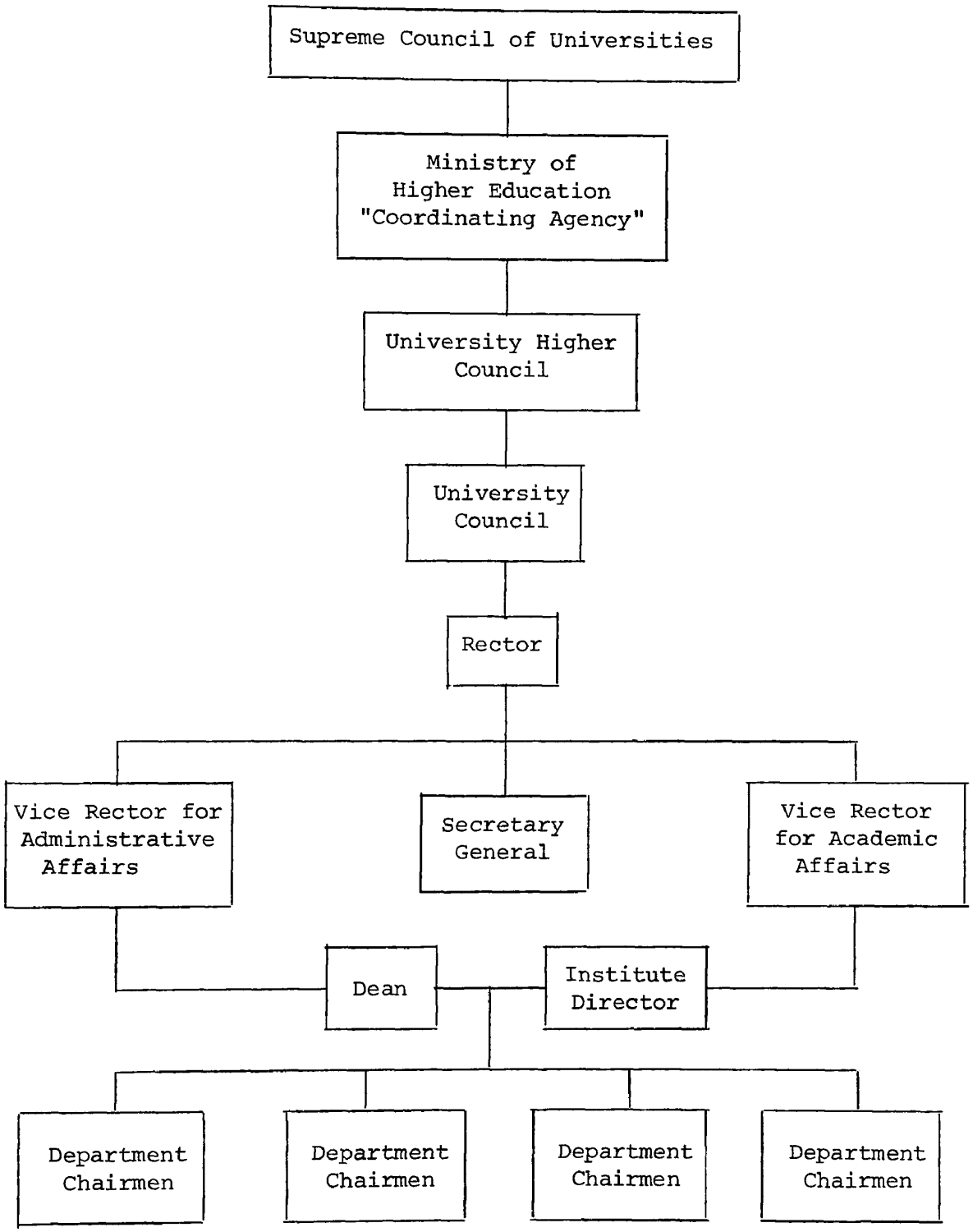

Fig. 1. Organizational structure of higher education in Saudi Arabia.

is the central organizational unit for major decisions of all universities in the country and recommends state policies of higher education for the entire university system. The functions and responsibilities of these governing bodies and the other organizational units have been discussed earlier in this chapter. However, it is important to note the similarities between the American and Saudi university organizations. Knowles (1978) commented on this similarity and noted that the Saudi university organization consists of "colleges, institutes, and departments; a university council, a college council, and departmental meetings; university presidents (always called rectors) who preside over the university council, deans who chair the college council, and directors of institutes and chairmen of departments" (p. 365).[18] This organization is quite similar to that of the major American universities, with the board of trustees, president, vice presidents, deans, and department chairmen.

From the administrative viewpoint, there used to be a great deal of centralization in the decision-making process in higher education institutions in Saudi Arabia, with top administrators and senior professors making all decisions. Such centralized authority in decision making assured the consistency with which major decisions were reached, but it also delayed decisions and made them less responsive to specific institutional problems.[19]

However, it became apparent that such an administrative practice would not be appropriate in meeting the growing needs, demands, and problems of rapidly expanding institutions. Therefore, since the early 1970s the trend has been to decentralize the decision-making process in Saudi colleges and universities and to delegate responsibility and authority to various units in each institution. The model being followed in this respect, at least theoretically, has been the American model, which is organized on a line-staff basis. In this type of organization, decision-making responsibility and authority are delegated to decision-making entities, with professional members making recommendations on decisions to be made by the line officers of the university.[20]

This movement has given faculty members a good opportunity to participate and get involved in the decision-making process and is considered a good step in the right direction toward democratization of Saudi higher education at all levels.

In spite of the organizational differences which exist between the state-supported American universities and the Saudi universities, and in spite of the differences which exist between the two countries, there remains a great deal of organizational similarity between the two university systems. Thus, the leadership roles and responsibilities in the two university systems should have much in common. Verification of the specific similarities and differences would,

of course, come only from a true cross-cultural study of the two university systems. However, the common organizational structure and administrative aspects of the two systems would seem to indicate that it is reasonable to attempt to study leadership in the Saudi universities using a leadership assessment instrument, LBDQ-XII, developed in large part by American researchers through studies on American institutions. A more complete review of the research on the actual instrument used in this study will be given in the following sections of this chapter.

All of the research related to the LBDQ-XII has been conducted in American institutions. As this study attempts to use the LBDQ-XII in a non-American institution, some attention must be given to the question of whether such a use of the instrument seems likely to yield valid data on the perception of leadership behavior. Ralph Stegdill (1963), in his discussion of the conditions under which it is reasonable to use the LBDQ-XII (see page 57), placed no cultural or national restrictions on where the LBDQ-XII can be used. The actual research data to date also supports the belief that the LBDQ-XII can be used in non-American institutions to produce valid data on the perception of leadership behavior. Some specific research studies done in non-American institutions using the LBDQ-XII include the following: Mustafa Aydin (1974) in Turkey; Meed (1976) in Jamaica; Cinco (1975) in

the Philippines; and Paul (1978) in Sweden. The author personally contacted Dr. Ignatovich at Michigan State University and Drs. Podsakoff and Tedor at Ohio State University. Each researcher has worked extensively with the LBDQ-XII and expressed the belief that to date no evidence exists that indicates that the LBDQ-XII is culturally biased, and they saw no reason to question the use of the instrument in a study of leadership in a Saudi university. The evidence then seems to support the belief that the LBDQ-XII is an appropriate research instrument to use in an initial study of leadership in Saudi universities. Any stronger endorsement of the use of the instrument in this setting would seem dependent on the result of the analysis of the actual data obtained from a study actually done in Saudi Arabia. This study will also attempt to provide such evidence regarding the usefulness of the LBDQ-XII in this non-American setting.

Leadership

"Leadership" is certainly not a recent addition to the English language. For example, the Oxford English Dictionary of 1933 indicates that the word "leader" appeared in the English language about 1300, while the word "leadership" did not appear until the late 1700s (p. 7).[21] In spite of the age of the words, the concept of leadership has generated considerable research from behavioral scientists in the past half century. Andrew Durbin (1974) indicated that no other

single topic, except for worker motivation, has received as much attention from organizational behavior writers as leadership.[22] The writers and researchers on leadership have proposed numerous theories in an attempt to answer the important question of what the differences are between successful and unsuccessful leaders. However, to date none of the proposed theories have provided an entirely satisfactory answer. Part of the problem may be an empirical one. Specifically, it is often very difficult to quantify the numerous variables likely to relate to effective leadership. It is also difficult to compare various studies, as many of these variables vary considerably from study to study. However, a more fundamental problem is possibly the lack of a commonly accepted definition for leadership. Different definitions stress different aspects of leadership. Thus, different researchers study different variables and use different factors in their theories on leaderhsip. In the following section, some of the more common definitions of leadership are given. Then, the major theories of leadership are discussed.

Definitions of Leadership

Early writers define and consequently attempt to explain leadership predominately in terms of personality variables. For example, C. M. Cox (1926) defined a leader as a person in a group who possesses the greatest number of

"desirable traits" such as originality, imagination, alertness, knowledge, and persistence.[23] In a similar way, E. S. Bogardus (1934) defined leadership simply as the possession of exceptional personal characteristics to which people respond.[24]

Other writers have preferred not to view leadership simply in terms of the characteristics of the leader. Rather, they have concentrated on the specific actions or behaviors of the leader. Andrew Halpin (1958) defined leadership as the behavior of an individual who is directing the activities of a group toward achieving shared goals.[25] More recently, this same perspective was taken by Rensis Likert (1967) who defined leadership as the leader's behaviors and actions which are perceived by the followers as being supportive of their efforts and of their sense of self-worth.[26]

However, even when writers consider the specific actions or behaviors of the leader, the group and the common group goal(s) are often included, though usually indirectly, as a part of the definition of leadership. Some writers have elected to make the ability of a leader to influence group behavior in order to attain the common group goal(s) the central element in their definitions of leadership. F. S. Haiman (1951) simply defined leadership as a process by which an individual influences the behavior of others in order to attain some given end or goal.[27] This view was echoed by E. P. Hollander and W. B. Webb (1955) who defined a leader as

an individual with the status to influence other individuals.[28] In a similar manner, R. M. Bellows (1959) defined leadership as the coordination of activities that are necessary to achieve common group goals with an efficient use of both time and effort.[29] K. Davis (1967) defined leadership as "the human factor which binds a group together and motivates it toward its goals" (p. 3).[30] In a more theoretical statement, D. Katz and R. Khan (1966) argued that organizational leadership is essentially determined by the amount of influence of a supervisor on the group for attaining organizational goals and objectives.[31]

Other writers have attempted to define leadership as a persuasive process. For example, N. Copeland (1944) defined leadership as the management of individuals by persuasion and inspiration rather than by coercion.[32] Similarly, H. Koontz and C. O'Donnel (1968) considered leadership as a process by which the leader attempts to persuade people to cooperate in order to attain group goals and objectives.[33] Such definitions seem to require that the group accepts or is persuaded to accept the goal(s). None of the definitions permit the goal(s) to be externally imposed by threats or by coercion on the group.

Finally, some writers have viewed leadership in terms of initiation of structure. For example, J. K. Hemphill (1954) defined leadership as the actions of the leader which initiate

a structure for group interaction to solve mutual problem(s) or to achieve common goal(s).[34] Ralph Stogdill (1959) defined leadership in a similar way. He argued that the leader is the individual who is able to stimulate the group and initiate a structure of interaction that leads to the achievement of group goals.[35]

It is possible to group the numerous definitions for leadership in other ways. For example, Ralph Stogdill (1974), who has done extensive research on leadership, argued that the various definitions of leadership can be placed into one of the following eleven categories: (1) group processes, (2) personality and personality effects, (3) processes of inducing compliance, (4) the exercise of influence, (5) an act or behavior, (6) a form of persuasion, (7) a power relation, (8) an instrument of goal achievement, (9) an interaction effect, (10) a differential role, and (11) the initiation of structure.[36] However, these eleven categories seem to have considerable overlap. For example, categories 1, 3, 4, 6, 7, and 8 are clearly interdependent and difficult to distinctly characterize.

The numerous definitions of leadership clearly demonstrate the variety of perspectives through which leadership can be and has been viewed. Leadership likely involves some aspect of most, if not all, of the definitions given. Considering the variety of different ways in which leadership

has been viewed, it is perhaps unlikely that any one single definition of leadership will ever become widely accepted.

Leadership Theory

The major theories of organizational leadership tend to concentrate on one of three different approaches. Using a somewhat simplified, general characterization, these approaches are leadership traits, leadership behavior and leadership situations. Each of these three general approaches to leadership theory will be considered.

Ralph Stogdill (1974) argued that the trait theory of leadership evolved from the great man theory. He felt that this approach attempts to identify the superior qualities that differentiate the leader from the followers.[37] Leadership trait theory in general is based upon the premise that there exist certain personality traits, intellectual abilities and physical attributes that characterize successful leaders.[38] Tead (1929) explicitly stated this view as follows " . . . leadership is a combination of traits which enables an individual to induce others to accomplish a given task" (p. 8).[39]

Using a similar theoretical position, Ross and Hendry (1957) saw leadership as "something that resides in an individual, something that he brings to the group, and something presumably that is capable, under almost any circumstances, of producing the same results in different situations" (p. 21).[40] Using this same perspective of leadership, Dowd

(1936) argued that whatever the masses do, they are always influenced and led by those individuals who are few in number but superior in their leadership characteristics.[41]

In general, leadership trait theory certainly has some intuitive appeal. However, research has failed to identify any universal set of traits essential to successful leadership. Litterer (1973) argued that "studying leadership by studying the traits of leaders has proven to be an intellectual dry well" (p. 168).[42] C. A. Cribb (1969) shared this pessimistic view of leadership trait theory and suggested the failure to identify a set of leadership traits is due to one or more of the following factors.

1. Personality studies are not complete. It may be the case that leadership research has not considered the really significant aspects of personality.

2. Leadership research has involved widely different groups. This wide diversity between groups may conceal relations that exist between personality and leadership for more homogeneous groups.

3. Situational factors may, and probably sometimes do, override personality factors.

4. Leadership is known to be a complex and probably inconsistent pattern of functional roles.[43] (p. 227)

The failure to find a consistent pattern of leadership traits has caused researchers to discard the leadership trait theory and search for alternative theories. The two most important alternative theories of leadership are the behavioral theory and the situational theory. While the

situational theory is more recent, it is yet to be resolved which theory is more successful at explaining and predicting leadership.

Beginning in the 1930s, some writers, e.g., Kurt Lewin (1939), began to develop a behavioral theory of leadership. This theory considered the specific behavior of the leader rather than the traits of the leader.[44] Supporters of this theory argue that specific behaviors rather than traits best describe a leader and best distinguish the leader from the followers. Robert Fulmer (1978), a current supporter of this theory, argued that the unique and special characteristics of a leader are the ways in which the leader accomplishes objectives and not the physical, mental, and personality traits of the leader.[45] Thus, the theory holds that the leader may be best characterized or understood by behavior patterns rather than by specific individual traits. The behavioral theory of leadership will be used as the theoretical basis for this study. A more detailed discussion of the leader behavior theory will be presented later in this chapter.

Beginning in the late 1950s, some researchers began to consider the situational factors surrounding the leader and the followers. The resulting theory is called situational theory of leadership.[46] This theory attempts to explain leadership by using the interactive relationships

between the leader, the followers, and the situational factors. For example, Weber and Weber (1955) argued that "leadership is a function of the situation with all its complexities; it is just as much a function of the complex situation as it is a function of the personality of the leader" (p. 51).[47] Gerth and Mills (1974) similarly argued that any understanding of leadership requires that attention be paid to the following: (1) the traits and motives of the leader, (2) the impressions the followers have of the leader and what motives they have for following the leader, (3) the characteristics of the role that the leader plays, and (4) the institutional setting in which the leader and the followers may find themselves.[48]

Fred Fiedler (1974) is perhaps one of the most persuasive advocates of the situational theory of leadership. He has identified three important situational variables that he feels influence the effectiveness of the potential leader. These three variables are: (1) the work group, (2) the needs structure of the leader, and (3) the general favorableness of the situation.[49] Fiedler (1974), who calls his theory the contingency model of leadership, argued that "the performance of a group is contingent upon the motivational system of the leader and the situational favorableness" (p. 73).[50] The main emphasis of the contingency leadership model is on the interaction between the leader's style and the situational

variables. The leader's style may be viewed as varying between a highly task-oriented approach and a highly relationship-oriented approach. The task-oriented leader tends to be more effective in easy and difficult situations. On the other hand, the relationship-oriented leader tends to be more effective in situations that require moderate leadership demands.[51]

Situational leadership theory, in essence, argues that leadership can be explained only if the interaction and the relationship between the leader and the many variables of the work situation are considered. This theory has, in part, helped researchers explain why some individuals are successful leaders in some organizations but not in others. It has also helped researchers study why leaders succeed on certain tasks but not on others, even within the same organization.

Leadership Behavior Theory

As noted in the previous section, the behavioral theory of leadership was initially proposed in the late 1930s, e.g., Kurt Lewin (1939).[52] Supporters of this theory argue that the specific behaviors of the leader of a group best explain leadership and not the traits of the leader or specific situational factors influencing the leader and the followers. Much of the writing by supporters of this theory has been devoted to identifying and categorizing the specific

behaviors or styles of behavior of the leader. As this is the theory upon which this study is based, a more complete analysis of the research on the leader's behavior theory will be given.

The first systematic study relating to leadership behavior seems to have been done by Lewin, Lippitt, and White (1939).[53] In this well-known study, which has been widely referenced by other researchers, an attempt was made to characterize leadership behavior or style as being either autocratic, democratic or laissez-faire. According to Lewin et al. (1939), the autocratic leader makes extensive use of power and authority when directing the group actions and activities. Subordinates thus have minimal, if any, input into the decision-making process and usually no control of the actual decisions that are made. An autocratic leader attempts to maintain complete control over the work environment and to assume full responsibility for the group's actions.[54]

Lewin et al. (1939) argued that the democratic leader tends to share the managerial responsibilities with the group members and opens up the decision-making process for their participation. The democratic leader attempts to develop some general sense of responsibility among his followers in order to achieve group goals and objectives. However, while the democratic leader attempts to facilitate group decisions, the

ultimate responsibility for the decision and for the overall effectiveness of the group remains with the leader.

For the laissez-faire style of leadership, Lewin et al. (1939) argued that the leader attempts to transfer almost completely the decision-making responsibility to the group. The laissez-faire leader usually attempts to join the group as a participating member and gives little or no direction or advise to subordinates. Consequently, the group members have considerable freedom with little or no formal organizational leadership. In a very real sense, the laissez-faire leader allows the group to operate in most decision-making situations without a leader. The designated leader attempts to relinquish and disperse all power and control back to the group.[55]

The laissez-faire style of leadership has received little attention from researchers interested in leadership. However, both the autocratic and democratic styles of leadership have generated considerable research. This research has tended to confirm the existance of these two leadership styles. For example, Rensis Likert (1961) and his associates at the University of Michigan conducted a series of empirical studies on leadership. Data relating to leadership styles was collected from a number of different organizations, e.g., business, government, and hospitals.[56] According to Likert (1961), these data suggest that leadership styles could be

sorted into two distinct styles. One style he terms "employee-centered" and the other "work-centered". Support for these two styles came in part from interview data from the actual leaders. The employee-centered leaders talked about the needs, hopes, aspirations, and problems of the members of the group, i.e., the employees. On the other hand, the work-centered leaders talked about work deadlines, operational efficiency, operating costs, and production.[57] Thus, there is a remarkable similarity between the employee-centered and work-centered styles of Likert (1961) and the democratic and autocratic styles of Lewin et al. (1939).

Other supporters of the leader behavior theory have suggested additional styles or categories for leadership. Working at the Midwest Administrative Center of the University of Chicago, Getzels and Guba (1957) have suggested that leadership styles can be characterized as either normative, personal, or transactional.[58] According to Getzels and Guba (1957), the normative style of leadership emphasizes a nomothetic dimension of behavior that concerns the requirements, roles, and expectations of the institution. On the other hand, the personal style emphasizes the idiographic dimension of behavior, and accordingly, the personality and the need dispositions of group members. The transactional leader attempts to maintain a flexible leadership style. This type of leader may use a normative style for some tasks or under

some conditions while using a personal style for other tasks or under other conditions.[59] While it is not always clear what actually causes a leader to select a particular style, the transactional style leader usually makes the decision as to which style to use. Studies in the field of educational administration have found this typology useful in analyzing and understanding leader behavior.

Robert Black and Jane Mouton (1964) have suggested a somewhat similar analysis of leadership behavior. They argued that leadership style can be conceptualized as a point in a two-dimensional grid, "the managerial grid."[60] One axis of the grid corresponds to the leader's concern for production, while the other axis corresponds to the leader's concern for people. A particular leader may be high on one scale or axis and low on the other scale, or he may be high or low on both scales. Black and Mouton (1964) argued that when the leader is high on both scales, the followers become highly motivated and the relationship between the followers and the leader tends to be characterized by mutual trust and respect.[61] However, the leadership typology suggested by the managerial grid has become extremely popular as a training model for leadership seminars and workshops sponsored by business, industry, and government for administrative personnel.

The most complete, systematic study of leadership styles is most certainly that done by Hemphill, Coons, Halpin, Stegdill, and their associates at the Personnel Research Board of Ohio State University. More than thirty years ago, Hemphill and Coons undertook a large number of empirical studies on leadership in an attempt to better understand and identify the various dimensions of leadership behavior.[62] A major contribution of the research efforts of this group has been the development of the first measurement instrument for the study of leadership behavior, the Leadership Behavior Description Questionnaire, or simply the LBDQ. This questionnaire, first developed about 1945, represents an attempt to quantify some of the complex aspects of the leader's behavior.[63] The questionnaire allows the leadership researcher, for the first time, to study leadership behavior in an empirical, and hence, more objective manner than was possible before the instrument was developed.

A few empirical studies were done immediately after the LBDQ was developed. However, Shartle (1957) strongly criticised these initial studies as lacking any theoretical framework or any satisfactory conceptualization or definition of leadership.[64]

In perhaps the first systematic and well-done study of leadership behavior using the LBDQ, Halpin and Winer (1957) used a factor analysis on questionnaire data obtained from

various groups. The factor analysis identified two factors that seemed to describe leadership style as measured by the LBDQ. They called the two factors "initiating structure" and "consideration."[65] The initiating structure factor refers to behavior of the leader that is designed to facilitate the completion of the group's task. This factor, in effect, refers to the specific actions or behaviors of the leader designed to ensure that the group effort, be it for the production of some product or for the rendering of some service, is satisfactorily completed. The consideration factor refers to behavior of the leader that is designed to show concern for the members of the group. Specific actions relating to this factor usually are characterized by warm, friendly, and supportive actions of the leader toward the group as a whole or toward specific members of the group.[66] In addition to identifying these two factors that seem to characterize leadership behavior, Halpin and Winer (1957) found that these two dimensions of leadership behavior were independent of each other. They found that some leaders extensively structure the activities of the group members but provide very little personal support or consideration for the group members. Other leaders seem very considerate of the group members but provide little structure for the group's activities. However, they also found that many leaders do not fit into these two simple categories. Many leaders were

high on both initiating structure and consideration. Many were low on both, and many were fairly average on both.[67]

However, Ralph Stogdill (1959) argued that even with the existing evidence, leadership behavior was not adequately characterized and explained satisfactorily by the two factors, initiation of structure and consideration. Therefore, in an extensive empirical study, Stogdill was able to modify and expand the initial LBDQ and demonstrate the existance of twelve dimensions of leadership behavior. The resulting modified questionnaire is called the Leader Behavior Description Questionnaire--Form XII and is often simply denoted the LBDQ-XII.[68] The twelve leadership behavior subscales of this modified questionnaire are as follows:

1. Representation--speaks and acts as the representative of the group. (5 items)

2. Demand Reconciliation--reconciles conflicting demands and reduces disorder to system. (5 items)

3. Tolerance of Uncertainty--is able to tolerate uncertainty and postponement without anxiety or upset. (10 items)

4. Persuasiveness--uses persuasion and argument effectively; exhibits strong convictions. (10 items)

5. Initiation of Structure--clearly defines own role, and lets followers know what is expected. (10 items)

6. Tolerance of Freedom--allows followers scope for initiative, decision and action. (10 items)

7. Role Assumption--actively exercises the leadership role rather than surrendering leadership to others. (10 items)

8. Consideration--regards the comfort, well being, status and contributions of followers. (10 items)

9. Production Emphasis--applies pressure for productive output. (10 items)

10. Predictive Accuracy--exhibits foresight and ability to predict outcomes accurately. (5 items)

11. Integration--maintains a closely knit organization; resolves inter-member conflicts. (5 items)

12. Superior Orientation--maintains cordial relations with superiors; has influence with them; is striving for higher status. (10 items)[69]

The Leader Behavior Description Questionnaire--Form XII is the principal measurement instrument used in this study. This instrument has been extensively used in leadership research. The research with LBDQ-XII has primarily been completed in military, industrial, governmental or educational organizations in the United States. This research study will use the LBDQ-XII in a foreign educational setting. The questionnaire provides a method of quantifying a particular leader's behavior in any organization on each of the twelve dimensions. The questionnaire asks specific questions about leader's behavior. The questionnaire is completed either by the members of the leader's group or by the leader's superiors. Thus, the only requirement for using the questionnaire is that the leader must have acted or served as the leader and that the people completing the questionnaire must have observed the leader in the leadership role. Stegdill (1963) made these same observations in the following manner:

> The Leader Behavior Description Questionnaire . . . can be used to describe the behavior of the leader, or leaders, in any type of group or organization, provided the followers have an opportunity to observe the leader in action as a leader of their group (p. 1). . . . However, the questionnaire can be used by peers or superiors to describe a given leader whom they know well enough to describe accurately (p. 12).[70]

An important property of the LBDQ-XII is pointed out by Halpin (1966). This property is that the questionnaire allows the researcher to quantify certain specific aspects of the leader's behavior.[71]

The reliability of the LBDQ-XII has been studied for several different populations. The specific studies and reliability estimates will be discussed in Chapter III. Stegdill (1963) found that each questionnaire item had a higher correlation with items on the same subscale than with items from different subscales. Buros (1978) evaluated the reliability and the validity of the LBDQ-XII as follows:

> The LBDQ-12 would seem to possess reasonably good internal consistency across all the twelve scales. The LBDQ-12 appears to possess concurrent validity and is capable of distinguishing between persons displaying behaviors corresponding to the dimensions. The instrument appears to be the best of the Ohio State Leadership Scales in that it provides a multifaceted measure of leader behaviors.[72] (p. 1751)

Thus, the LBDQ-XII seems to be both a reliable and valid instrument that can be used in a wide variety of institutions to quantify a number of dimensions that characterize a leader's behavior. It appears to be the best instrument that has been developed for quantifying the important dimensions of a leader's behavior.

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CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

After deciding upon the research problem to be investigated in this study (see Chapter I), an appropriate research design was selected. The research design, according to Kerlinger (1964), should do several things.

> Research designs are invented to enable the researcher to answer research questions as validly, objectively, accurately, and economically as possible. Any research plan is deliberately and specifically conceived and executed to bring empirical evidence to bear on the research problem.[1] (p. 276)

In this study, the survey research technique is used to obtain the data. Survey research is used because the focus of the study is on the behavior, perceptions, and opinions of people in a particular target population. Kerlinger (1964) argued that "survey research is primarily interested in what people think and what they do" (p. 394).[2]

In order to conduct survey research, it is necessary to select a method for systematically measuring the attitudes, perceptions, or actions of the population of interest. The principal methods of collecting survey data are, of course, by questionnaires, interviews, and direct observation, usually

by the experimenter. The questionnaire method was selected for use in this study. Sax (1968) described the questionnaire as "a means of eliciting the feelings, beliefs, experiences, or attitudes of some sample of individuals" (p. 234).[3] Although the personal interview permits the experimenter to ask the same questions as on a questionnaire, the questionnaire is more economical and less time consuming. Furthermore, the questionnaire gives the same information as the interview and minimizes the experimenter-subject interaction which can affect the data (Sax 1968). Finally, direct observation by the investigator was not feasible due to the time, cost and sensitive nature of the subject under investigation.

In the remainder of this chapter, the population of interest, the collection of the data, the questionnaire, the analyses of the data, and the research hypotheses will be presented.

Population

The site for this study is two institutions of higher education in Saudi Arabia. One is the University of Riyadh which is located in Riyadh, the capitol city of Saudi Arabia. This university represents a modern, general, typical institution of higher learning that was initially patterned after the Egyptian system which is, in turn, influenced by the British and French models. It is considered by many people

to be the oldest, largest, and most prestigious university in the country. It consists of eleven colleges and one institute, with about sixty-four departments providing a variety of programs and degrees. The other one is the University of Petroleum and Minerals which is located in Dhahran, the heart of the oil industry in Saudi Arabia. It represents a small modern institution that is scientifically oriented and highly influenced by the American system of higher education. It consists of four major colleges and about sixteen different departments. Both institutions are financed and controlled by the government of Saudi Arabia and represented in the Ministry of Higher Education.

The total population for this study consisted of 22 deans and 80 department chairmen. The names of participating deans and chairmen were obtained from the 1980 University Directory of each institution.

Data Collection Procedures

Prior to administration of the research instrument, the investigator made a few initial personal contacts with some officials from higher education institutions in Saudi Arabia while he was working at the Saudi Arabian Education Mission in Houston, Texas. The purpose of such contacts was to explore the feasibility of conducting such research in Saudi Arabia. Most of the responses were supportive and encouraging.

In Spring, 1981, the researcher traveled to Saudi Arabia and the questionnaire was administered in a five-week period to all deans and chairmen at the two selected institutions. The survey instrument was hand-delivered by the investigator to all the participants. The subjects were given a packet of material containing a cover letter which explained the nature and purpose of the study, a sheet requesting specific demographic information, and the LBDQ-12. In an effort to assure maximum responses, both deans and chairmen were assured that strict anonymity would be maintained, that at no time would the names of either persons, colleges or departments be mentioned, and that the instruments would be identified by number only to facilitate statistical analysis. Furthermore, participants were informed that the purpose of the study was not an evaluation of their colleges or departments.

A return of 60 percent of the population was considered desirable in order to provide the data necessary to achieve the purpose of the study. After the original distribution of the questionnaires, follow-up personal contacts were made to encourage a high rate of return. A total of 84 deans and chairmen responded, representing 82.4 percent of the total population. All of the returned questionnaires were usable. Of the total respondents, 17 were deans and 67 were chairmen. Table 3.1 shows the number and percentage of returns from each institution.

TABLE 3.1

PERCENTAGE OF RETURNS FROM EACH INSTITUTION

Population	Number Surveyed	Number Who Returned Questionnaire	Percentage
Deans at University of Riyadh	15	11	73.3
Deans at University of Petroleum and Minerals	7	6	85.7
Chairmen at University of Riyadh	64	53	82.8
Chairmen at University of Petroleum and Minerals	16	14	87.5
Total	102	84	82.4

As shown in Table 3.1, a total of 102 deans and chairmen were surveyed at both institutions. At the University of Riyadh, 73 percent of the deans and 83 percent of the chairmen responded, while at the University of Petroleum and Minerals 86 percent of the deans and 87 percent of the chairmen responded.

Instrumentation

Given the nature and purpose of this study, the instrument has to provide the necessary means of describing leadership behavior in numerical form. Differences in the number of dimensions that are used in different theories of leadership behavior document the diversity in the descriptive

power of each theory and related instruments. However, the review of the literature on leadership behavior (see Chapter II) strongly suggests that the Leader Behavior Description Questionnaire--Form XII (LBDQ-XII) provides a more comprehensive measure of leadership behavior. The LBDQ-XII was selected as the survey measurement instrument for this study. The LBDQ-XII used in this study is the fourth revision of the original questionnaire. It has one hundred Likert-type items, each of which is on one of twelve subscales. Thus, for each subject the questionnaire gives thirteen scores--the twelve subscale scores and the total questionnaire score. Each subscale measures an aspect or dimension of leadership behavior. The particular dimensions are as follows: (1) representation, (2) demand reconciliation, (3) tolerance of uncertainty, (4) persuasiveness, (5) initiation of structure, (6) tolerance of freedom, (7) role assumption, (8) consideration, (9) production emphasis, (10) predictive accuracy, (11) integration, and (12) superior orientation. A more detailed discussion of the LBDQ-XII and an explanation of each subscale is given in Chapter II. The actual questionnaire is given in Appendix A.

When completing the LBDQ-XII, each respondent was instructed to mark one of the five alternatives on each of the one hundred items. The five alternatives are designated (A) always, (B) often, (C) occasionally, (D) seldom, and

(E) never. Generally, the item score is 5, 4, 3, 2, or 1, respectively, depending on which of the alternatives are marked, i.e., alternative (A) usually received 5 points, while alternative (E) usually received 1 point. However, the scoring on some items was reversed so that alternative (A) received 1 point while alternative (E) received 5 points on these items. The subscale score is then computed as the sum of the item scores for the items making up the subscale.

Stogdill (1963) attempted to assess the reliability of the twelve subscales. In this study, a modified Kuder-Richardson formula was used to obtain internal consistency reliability estimates for each of the twelve subscales. The procedure used gives a conservative estimate of the true reliability. The average of the reliability estimates obtained for the twelve subscales was 75. Table 3.2 gives the actual reliability estimates for each subscale obtained by Stogdill (1963). In his discussion of the instrument, Oscar Buros (1978) said that "the LBDQ-12 would seem to possess reasonably good internal consistency across all the twelve subscales" (p. 1951).[4] Punch (1967) also attempted to study the reliability of the twelve subscales using a split-half procedure to estimate the internal consistency reliability of each subscale. The range of these reliability estimates was from 55 to 89.

TABLE 3.2

RELIABILITY COEFFICIENTS (MODIFIED KUDER-RICHARDSON)

Subscale	Army Division	Highway Patrol	Aircraft Executives	Ministers	Community Leaders	Corporation Presidents	Labor Presidents	College Presidents	Senators
1. Representation	.82	.85	.74	.55	.59	.54	.70	.66	.80
2. Demand reconciliation			.73	.77	.58	.59	.81		.81
3. Tolerance uncertainty	.58	.66	.82	.84	.85	.79	.82	.80	.83
4. Persuasiveness	.84	.85	.84	.77	.79	.69	.80	.76	.82
5. Initiating structure	.79	.75	.78	.70	.72	.77	.78	.80	.72
6. Tolerance freedom	.81	.79	.86	.75	.86	.84	.58	.73	.64
7. Role assumption	.85	.84	.84	.75	.83	.57	.86	.75	.65
8. Consideration	.76	.87	.84	.85	.77	.78	.83	.76	.85
9. Production emphasis	.70	.79	.79	.59	.79	.71	.65	.74	.38
10. Predictive accuracy	.76	.82	.91	.83	.62	.84	.87		
11. Integration	.73	.79							
12. Superior orientation	.64	.75	.81			.66		.60	

SOURCE: Ralph Stogdill, Manual for the Leader Behavior Description Questionnaire--Form XII (Columbus, Ohio: Ohio State University, Bureau of Business Research, 1963).

Stogdill (1969) also attempted to assess the validity of the LBDQ-XII through the use of filmed scenarios prepared for each of the twelve subscales. Professional actors were used to play the various roles, and this action was filmed. These movies were then viewed by observers who then rated the actors' behavior using the LBDQ-XII. The data indicated that when two different actors played the same role, there were no significant differences between the means of the subscales (p. 155). However, when a single actor was shown playing two different leadership roles, significant differences were observed in the subscale means (p. 157). Stogdill concluded that "the findings constitute evidence that the subscales of the Leader Behavior Description Questionnaire--Form XII measure what they are proported to measure" (p. 157).[5]

Analysis of the Data

The dependent variable for this study is the respondents' (the deans' and chairmen's) perceptions of their superiors' or leaders' leadership behavior. The perceptions are measured by the twelve subscales of the LBDQ-XII. The independent variables are the respondents' academic position (dean or chairman), university (University of Riyadh or University of Petroleum and Minerals), and nationality (Saudi or non-Saudi). The respondents' educational background (studied in Egypt, England, America, or other) was obtained and also considered to be an independent variable.

For each respondent, twelve dependent measures were obtained, one measure for each subscale of the LBDQ-XII. Rather than make separate analyses on each subscore, multivariate statistical analyses were used. For example, consider the null hypotheses relating to whether the means of any of the twelve subscale scores differed significantly between universities, between academic positions or between nationalities. These research hypotheses were tested using a multivariate analysis of variance procedure. In this case, a two-way multivariate analysis of variance was used since all deans were Saudis. Figure 2 graphically describes the design. One factor was the university with two levels--one for each university. The second factor has three levels (deans--all Saudi, Saudi chairmen, and non-Saudi chairmen). The two-way analysis of variance was made using the Statistical Programs for the Social Sciences (SPSS), multivariate program MANOVA. This program gives cell averages and cell standard deviations for each of the six cells for each of the twelve subscales. If significant differences are found by the multivariate analysis, univariate procedures are computed in the program to identify the nature of the differences and which subscale means differ. If there is a significant difference for the second factor (deans, Saudi chairmen and non-Saudi chairmen), linear contrasts were used to test for specific differences.

	DEANS (All Saudi)	CHAIRMEN Saudi	CHAIRMEN Non-Saudi
University of Riyadh			
University of Petroleum & Minerals			

Fig. 2. An illustrative figure of the analysis of the data

The Saudi chairmen and non-Saudi chairmen mean subscale scores were compared. Then, the deans and the chairmen mean subscale scores were compared.

All statistical tests were made at the .05 alpha level. This commonly used level of significance was selected, and not a more stringent one, because the study was intended to be exploratory in nature. All null hypotheses were tested using the multivariate analysis of variance procedure and at the $\alpha = .05$ level.

Null Hypotheses

The level of confidence was set at .05 to test the significance of the relationship between independent and dependent variables. The hypotheses stated in Chapter I were expressed in the following null form in order to test them statistically.

Null Hypothesis 1

There are no significant differences between the perceptions of the Saudi and non-Saudi department chairmen in regard to the leadership behavior of the deans at the two universities.

Null Hypothesis 2

There are no significant differences between the deans' perception of the leadership behavior of the presidents and the department chairmen's perception of the leadership behavior of the deans at the two universities.

Null Hypothesis 3

There are no significant differences between the deans at the University of Riyadh and the deans at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the presidents at both universities.

Null Hypothesis 4

There are no significant differences between the department chairmen at the University of Riyadh and the department chairmen at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the deans at both universities.

Null Hypothesis 5

There are no significant differences among the deans based on their educational background in regard to their perceptions of the presidents' leadership behavior at the two universities.

Null Hypothesis 6

There are no significant differences among the department chairmen based on their educational background in regard to their perceptions of the deans' leadership behavior at both universities.

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CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The statistical tests of the null hypotheses given in Chapter III are presented in this chapter. The results of these statistical tests are used to either reject or accept (not reject) each null hypothesis. If a null hypothesis is rejected by the statistical tests, additional statistical analyses are performed to attempt to determine the specific nature of the relationships between the independent and dependent variables in the null hypothesis.

Chapter IV is divided into three general sections. The first section contains an empirical summary of the background information on the respondents making up the sample for this study. The second section considers the reliability of the LBDQ-XII for the sample. The third section contains the statistical tests for the null hypotheses. This section also contains the results of the statistical tests and the subsequent decisions as to whether each null hypothesis is rejected or accepted.

Sample Distribution

A total of 102 deans and department chairmen in Saudi Arabia were asked to complete a background information form and the LBDQ-XII. Each of these deans and department chairmen was at the University of Riyadh or the University of Petroleum and Minerals. At the University of Riyadh, 73 percent of the deans and 83 percent of the department chairmen completed the information requested. At the University of Petroleum and Minerals, 86 percent of the deans and 87 percent of the department chairmen completed the information requested. A total of 84 information forms and leadership questionnaires were obtained. The overall rate of return was 82 percent. Table 4.1 gives a breakdown by university of the 84 respondents making up the sample for the study.

The requested background information was related to the respondent's nationality, educational background, and academic rank. The educational background information requested was the country in which the respondent was awarded a Ph.D. degree. As might be expected, all deans in the sample are native Saudis. The majority of chairmen at both universities are also Saudis. However, there are a number of foreign or non-Saudi chairmen in the sample. Specifically, about 33 percent of the department chairmen at the University of Riyadh and about 21 percent of the chairmen at the University of Petroleum and Minerals are non-Saudis. Table 4.1 gives a specific breakdown of the nationality of the sample.

TABLE 4.1

SAMPLE DISTRIBUTION

Variable		University of Riyadh				University of Petroleum & Minerals				Total	
		Deans	%	Chair-men	%	Deans	%	Chair-men	%	No.	%
Nationality	Saudi	11	13*	35	42	6	7	11	13	63	75
	Non-Saudi	0	0	18	21	0	0	3	4	21	25
Educational background	USA	6	7	31	37	6	7	13	15	56	67
	England	5	6	18	21	0	0	0	0	23	27
	Other	0	0	4	5	0	0	1	1	5	6
Academic rank	Professor	0	0	13	15	1	1	0	0	14	17
	Associate Professor	7	8	15	18	2	2	5	6	29	35
	Assistant Professor	4	5	25	30	3	4	9	11	41	49

*All percentages are for the total sample; that is, the number divided by 84.

The information on the educational background of the sample indicates that about 67 percent of the total sample received their Ph.D. degrees from universities in the United States. The respondents were not asked to identify the specific university awarding the degree. About 27 percent of the total sample received their Ph.D. degrees from universities in Great Britain. The remaining 6 percent of the total sample received their Ph.D. degrees from universities in Egypt or from universities in other countries. Table 4.1 gives the educational background by university for the deans and department chairmen in the sample. At the University of Petroleum and Minerals, all of the deans and all but one of the department chairmen were awarded Ph.D. degrees from American universities. The University of Petroleum and Minerals, as indicated in Chapter II, is based on the American university model, and the language of instruction is English. The educational background of the deans and department chairmen is likely influential in the university's being able to effectively follow the American university model.

Each respondent was asked to identify his academic rank. Table 4.1 gives a summary of the information on academic rank for the sample. Surprisingly enough, only one dean in the sample has the academic rank of professor. Seven of the deans in the sample have the academic rank of assistant professor. At the University of Riyadh, no dean has the

academic rank of professor, but 13 department chairmen have the academic rank of professor, and they are all foreigners with one exception.

Reliability of the LBDQ-XII for the Sample

The leadership measurement instrument used in this study, the LBDQ-XII, was developed and evaluated using research completed in American institutions. The reliability of the twelve subscales of the LBDQ-XII has been considered in a number of studies. Table 3.2 summarized the reliability estimates for the twelve subscales obtained in some of the research studies done with American institutions. As far as can be determined, this study is the first to use the LBDQ-XII with any institutions in Saudi Arabia. Therefore, reliability estimates for each of the twelve subscales of the LBDQ-XII were computed to insure that the instrument has sufficiently high reliability to permit valid group comparisons. Internal consistency reliability estimates were computed using the coefficient alpha procedure for each of the twelve subscales. The questionnaire data from all of the 84 respondents in the sample were used to compute these reliability estimates. Table 4.2 gives the reliability estimates for the twelve subscales. The smallest reliability estimate is .65. Each of the other estimates is above .70. Nunnally (1967) indicated that for basic research, reliability

TABLE 4.2

RELIABILITY ESTIMATES FOR THE LBDQ-XII SUBSCALES

Subscale	No. of Items	Coefficient Alpha
1. Representation	5	.74
2. Demand reconciliation	5	.78
3. Tolerance of uncertainty	10	.65
4. Persuasiveness	10	.91
5. Initiation of structure	10	.82
6. Tolerance of freedom	10	.87
7. Role assumption	10	.75
8. Consideration	10	.84
9. Production emphasis	10	.81
10. Predictive accuracy	5	.89
11. Integration	5	.85
12. Superior orientation	10	.75

coefficients between .70 and .80 are adequate to study group differences.[1] Thus, for the sample of this study, the twelve LBDQ-XII subscales seem to have sufficiently high reliability estimates to allow valid group comparisons.

Statistical Tests of Null Hypotheses

The statistical tests for the null hypotheses given in Chapter III will now be considered. For each hypothesis, "perception of leadership behavior" will be quantified by the twelve subscales of the LBDQ-XII. As previously noted, all statistical tests were made using SPSS computer programs. All statistical tests were made at the .05 alpha level.

Hypotheses 1, 2, 3, and 4

A two-way multivariate analysis of variance was used to test hypotheses 1, 2, 3, and 4. In the two-way design, one factor was university. The university factor had two levels since two universities were sampled, the University of Riyadh and the University of Petroleum and Minerals. The second factor was called position and had three levels. One level of the position factor consisted of the deans, the second consisted of the Saudi department chairmen, and the third consisted of the non-Saudi department chairmen. There were no non-Saudi deans in the sample. The six cells in this two-way design were shown in Figure 2. The number of respondents in each of the six cells were given in Table 4.1. The cell means and standard deviations for each of the twelve LBDQ-XII subscales for each of the six cells are given in Table 4.3.

TABLE 4.3
MEANS AND STANDARD DEVIATIONS OF LBDQ-XII SUBSCALES

Subscales	University	Deans		Department Chairmen: Saudis		Department Chairmen: Non-Saudis	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
1. Representation	Riyadh	19.000	3.376	20.171	3.436	20.958	2.711
	Petro-Min*	22.166	1.722	18.545	4.435	23.666	.577
2. Demand reconciliation	Riyadh	19.181	3.600	17.304	3.661	19.541	2.913
	Petro-Min	18.666	4.966	16.363	4.842	20.000	3.605
3. Tolerance of uncertainty	Riyadh	33.090	3.168	31.873	4.155	34.859	6.642
	Petro-Min	31.000	6.196	31.535	5.648	36.000	3.464
4. Persuasiveness	Riyadh	37.798	7.304	35.434	5.907	38.949	6.895
	Petro-Min	42.833	4.308	35.090	9.883	41.333	.577
5. Initiation of structure	Riyadh	38.808	4.791	37.766	5.933	40.986	5.612
	Petro-Min	39.500	4.037	34.828	7.254	39.666	4.932
6. Tolerance of freedom	Riyadh	39.869	4.679	35.539	6.215	39.586	6.110
	Petro-Min	35.500	7.943	36.181	10.571	40.333	4.163
7. Role assumption	Riyadh	38.363	4.610	37.204	5.472	39.674	5.583
	Petro-Min	41.000	4.857	35.896	7.595	40.666	5.131
8. Consideration	Riyadh	38.363	4.904	34.813	5.977	37.486	7.680
	Petro-Min	35.315	9.039	36.518	6.420	40.000	3.605
9. Production emphasis	Riyadh	37.431	4.098	35.972	5.460	37.418	6.209
	Petro-Min	40.036	5.566	31.938	7.192	38.666	6.658
10. Predictive accuracy	Riyadh	18.363	2.579	17.978	3.304	19.222	3.655
	Petro-Min	19.666	1.032	16.090	4.570	17.000	3.000
11. Integration	Riyadh	19.636	2.941	17.664	3.994	20.462	3.164
	Petro-Min	18.166	5.269	16.795	5.418	20.000	2.645
12. Superior orientation	Riyadh	41.375	4.723	36.994	5.569	39.762	5.507
	Petro-Min	40.296	3.417	35.636	5.408	43.333	2.081

*Petroleum and Minerals

The means given in Table 4.3 will be statistically compared in the following sections. However, certain interesting trends do seem to appear when the means are compared in certain ways. For example, if the mean for the Saudi department chairmen is compared with the mean for the non-Saudi department chairmen university-wise on each subscale, 24 pairs of means result, two universities and 12 subscales. On each of the 24 pairs of means, for each university and for each subscale, the mean for the non-Saudi department chairmen is higher than the corresponding mean for the Saudi department chairmen.

A visual comparison of the subscale means between the two universities does not seem to yield any consistent pattern. For example, consider comparing the two universities by making pair-wise comparisons of the means of the deans, pair-wise comparisons of the Saudi department chairmen, and pair-wise comparisons of the non-Saudi department chairmen on each subscale. Only for subscale 11 (integration) are the means always larger for one university on each of the three pair-wise comparisons. For this subscale, the University of Riyadh means are larger than the University of Petroleum and Minerals means for the deans, for the Saudi department chairmen, and for the non-Saudi department chairmen. On all other subscales, the three pair-wise comparisons have at least one pair-wise comparison for which the mean for the University

of Riyadh is larger and at least one pair-wise comparison for which the mean for the University of Petroleum and Minerals is larger.

Comparisons of the means for the deans and for the department chairmen also do not seem to give any apparent visual patterns. For example, consider for a particular subscale and a particular university the mean for the deans, the Saudi chairmen, and the non-Saudi chairmen. When these three means are ranked, only for subscale 9 (production emphasis) is the average for the deans greater than or less than both means for the two groups of department chairmen at both universities. Here, the mean for the deans is larger than the two means for department chairmen at both of the universities. Also, only for subscales 6 (tolerance of freedom) and 8 (consideration) is the average for the deans greater than the two means for the department chairmen at one university but less than the two means for the department chairmen at the other university. For these two subscales, the deans at the University of Riyadh have a larger average than either of the groups of department chairmen. The deans at the University of Petroleum and Minerals have a smaller average than either of the groups of department chairmen.

The comparison of the means identifies possible trends of interest. The statistical tests in the following sections

are necessary to confirm or deny whether any of the trends are significant, i.e., different from what would be expected by chance fluctuations.

Table 4.4 gives the multivariate analysis of variance for the two-way analysis of variance of the questionnaire data described in Table 4.3. All F-values in this multivariate analysis and in all other multivariate analyses in this study were computed using Wilks' Lambda procedure. See, for example, Timm (1975, pp. 372-415) for a discussion of this procedure.[2]

TABLE 4.4

MULTIVARIATE ANALYSIS OF POSITION AND UNIVERSITY FACTORS

Source of Variation	df	F	P
Position	24/134	1.16	.287
University	12/67	1.97*	.042
Position x University	24/134	1.516	.072

*Significant at the .05 level.

Null Hypothesis 1

> There are no significant differences between the perceptions of the Saudi and non-Saudi department chairmen in regard to the leadership behavior of the deans at the two universities.

The statistical analysis reported in Table 4.4 will be used to test null hypothesis 1. The statistical analysis indicates that no significant differences were found between

the Saudi department chairmen and the non-Saudi department chairmen in terms of their perceptions of the leadership behavior of the deans at the two universities. The particular statistical tests in Table 4.4 that indicate this are the F-tests for the position x university interaction and for the position factor. If there were significant differences between the Saudi and non-Saudi department chairmen's perception of leadership behavior, the second (Saudi department chairmen) and third (non-Saudi department chairmen) levels of the position factor would be significantly different. This difference would cause the interaction and/or the position factor F-test(s) to be significant in the multivariate analysis given in Table 4.4. However, neither of these F-tests were significant. Therefore, null hypothesis 1 is not rejected.

Null Hypothesis 2

> There are no significant differences between the deans' perception of the leadership behavior of the presidents and the department chairmen's perception of the leadership behavior of the deans at the two universities.

The statistical analysis in Table 4.4 indicates that there are no significant differences between the deans' perception of leadership behavior and the chairmen's perception of leadership behavior. As in the test of null hypothesis 1, the particular statistical tests that indicate this are the F-tests for the position x university interaction and for the

position factor. If there were significant differences between the deans' perception of leadership behavior and the chairmen's perception of leadership behavior, the first level of the position factor (the level associated with the deans' responses) would significantly differ from the average of the second (the level associated with the Saudi department chairmen's responses) and third (the level associated with the non-Saudi department chairmen's responses). Simply stated, the deans would have a different mean perception of leadership behavior than would the chairmen. This difference would cause the interaction and/or the position factor F-test(s) to be significant in the multivariate analysis. Table 4.4 showed that neither of these F-tests were significant. Thus, null hypothesis 2 is not rejected.

Null Hypothesis 3

> There are no significant differences between the deans at the University of Riyadh and the deans at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the presidents at both universities.

Null Hypothesis 4

> There are no significant differences between the department chairmen at the University of Riyadh and the department chairmen at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the deans at both universities.

Hypotheses 3 and 4 are considered together since the statistical test of null hypothesis 2 indicates that there

are no significant differences between the deans' perception of the presidents' leadership behavior and the department chairmen's perception of the deans' leadership behavior. Thus, any differences between universities in terms of the perception of leadership behavior will be the same for the deans and the department chairmen.

The statistical tests in Table 4.4 indicate that there is a significant university effect. This is shown by the significant F-test for the university factor. Thus, the multivariate analysis indicates that both null hypothesis 3 and 4 should be rejected.

The multivariate analysis given in Table 4.4 indicates that there is a significant difference between the perception of leadership behavior at the two universities. To investigate the nature of the differences between the two universities in terms of the perception of leadership behavior as measured by the twelve subscales of the LBDQ-XII, univariate analyses were computed for each of the twelve subscales. Table 4.5 gives the resulting univariate analyses and the means and standard deviations by university for each subscale. The questionnaire data from all respondents at a particular university were used to compute the means and standard deviations.

Although the multivariate analysis in Table 4.4 indicates a significant university effect on the perception of

TABLE 4.5

UNIVARIATE ANALYSES FOR THE UNIVERSITY FACTOR

Subscale	University of Riyadh $\bar{X}$	University of Riyadh SD	University of Petroleum & Minerals $\bar{X}$	University of Petroleum & Minerals SD	M.S. Between Groups	F*	P
1. Representation	20.19	3.25	20.40	3.98	2.15	.197	.658
2. Demand reconciliation	18.26	3.56	17.60	4.73	5.11	.357	.552
3. Tolerance of uncertainty	32.92	4.95	32.04	5.58	4.33	.171	.680
4. Persuasiveness	36.83	6.53	38.35	8.38	35.07	.760	.386
5. Initiation of structure	38.85	5.75	36.95	6.35	43.18	1.286	.260
6. Tolerance of freedom	37.43	6.22	36.60	8.92	6.30	.135	.714
7. Role assumption	38.10	5.39	38.14	6.77	.23	.007	.933
8. Consideration	36.17	6.43	36.68	6.85	5.34	.126	.723
9. Production emphasis	36.63	5.45	35.38	7.45	28.20	.847	.360
10. Predictive accuracy	18.39	3.29	17.30	3.85	18.26	1.588	.211
11. Integration	18.79	3.78	17.69	4.99	13.54	.848	.360
12. Superior orientation	38.53	5.62	38.19	5.32	2.74	.099	.754

NOTE: For the university factor, the multivariate F = 1.965, df = 12/67, and P = .042. There were 64 respondents from the University of Riyadh and 20 respondents from the University of Petroleum and Minerals.

*df = 1/68 for each univariate test.

leadership behavior, none of the twelve subscales' univariate analyses has a significant F-test. Thus, on none of the twelve subscales does the univariate analysis indicate a significant university effect. From the researcher's viewpoint, this is due to the nature of the instrument, because these subscales seem to highly correlate with each other and that makes it difficult to identify the source of the difference between the two universities.

Hypotheses 5 and 6

Null hypotheses 5 and 6 are concerned with the effects of the respondents' educational background, i.e., the country where a respondent's Ph.D. degree was awarded. Educational background was not added to the two-way analysis used with null hypotheses 1 through 4 (see Figure 2) because empty cells would have resulted in a three-way design. However, the results of the statistical tests of these null hypotheses were used to determine the specific multivariate analyses used to test null hypotheses 5 and 6. Specifically, the statistical tests of null hypotheses 1 and 2 did not indicate any significant differences in the perception of leadership behavior between the Saudi and non-Saudi department chairmen or between the department chairmen and the deans. Thus, the department chairmen and the deans were combined in the remaining analyses. However, the statistical tests for null

hypotheses 3 and 4 indicate that there is a significant university effect on the perception of leadership behavior. The university factor was thus used in the analyses of the remaining null hypotheses.

Null Hypothesis 5

> There are no significant differences among the deans based on their educational background in regard to their perceptions of the presidents' leadership behavior at the two universities.

Null Hypothesis 6

> There are no significant differences among the department chairmen based on their educational background in regard to their perceptions of the deans' leadership behavior at both universities.

Null Hypotheses 5 and 6 are considered together in the analysis because the statistical tests of the previous null hypotheses indicate no significant differences in the perception of leadership behavior between the deans and chairmen. In the analysis of null hypotheses 5 and 6, only 79 of the 84 completed questionnaires were considered. A total of 5 questionnaires were deleted in the analysis because of lack of comparable groups at the two universities. The one respondent with a Ph.D. from an Egyptian university was at the University of Petroleum and Minerals, and there was no respondent with a Ph.D. from an Egyptian university at the University of Riyadh. Four respondents, all at the University of Riyadh, received Ph.D. degrees from universities in countries other than the United States, Great Britain, or Egypt. For

these four respondents, there was no comparable group at the University of Petroleum and Minerals. Thus, the five questionnaires were simply deleted in the analysis.

The 79 respondents used in the statistical tests of null hypotheses 5 and 6 were grouped into three groups. One group consisted of respondents at the University of Riyadh who received Ph.D. degrees from universities in the United States. A second group consisted of respondents at the University of Riyadh who received Ph.D. degrees from universities in Great Britain. The final group consisted of respondents at the University of Petroleum and Minerals. All of the 19 respondents in the third group received Ph.D. degrees from universities in the United States. These three groups were used to make up the three levels of a one-way multivariate analysis of variance design. It was anticipated that the three groups would significantly differ on the respondents' perception of leadership behavior because of the previously identified university effect. Specifically, the university effect should cause the means for the first and third groups to be significantly different. That is, the means of the respondents with Ph.D. degrees awarded by universities in the United States at the University of Riyadh should differ from the means of the respondents with Ph.D. degrees awarded by universities in the United States at the University of Petroleum and Minerals. If educational background had a

significant effect on the perception of leadership behavior, then the means for the first and second groups should differ. That is, the means of the respondents with Ph.D. degrees awarded by universities in the United States at the University of Riyadh should differ from the means of the respondents with Ph.D. degrees awarded by universities in Great Britain at the University of Riyadh. Table 4.6 gives the means and standard deviations for the three groups on each of the twelve subscales.

To statistically test whether there is a significant educational background effect on the perception of leadership behavior, linear contrasts were used in addition to the one-way multivariate analysis of variance of the three groups. For a LBDQ-XII subscale, let $\mu_{R\text{-}US}$, $\mu_{R\text{-}GB}$, and $\mu_{PM\text{-}US}$ denote mean scores for the University of Riyadh respondents with Ph.D. degrees from universities in the United States, for the University of Riyadh respondents with Ph.D. degrees from universities in Great Britain, and for the University of Petroleum and Minerals respondents (all of whom received Ph.D. degrees from universities in the United States), respectively. Consider the two (orthogonal) contrasts:

$$\Psi_1 = 1.\mu_{R\text{-}US} - 1.\mu_{R\text{-}GB} + 0.\mu_{PM\text{-}US}$$

and

$$\Psi_2 = 1.\mu_{R\text{-}US} + 1.\mu_{R\text{-}GB} - 2.\mu_{PM\text{-}US}$$

TABLE 4.6

MEANS AND STANDARD DEVIATIONS FOR UNIVERSITY AND EDUCATIONAL BACKGROUND

Subscale	University of Riyadh				University of Petroleum and Minerals	
	United States		Great Britain		United States	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
1. Representation	20.44	3.18	20.17	3.11	20.95	3.22
2. Demand reconciliation	18.46	3.51	17.84	3.83	18.10	4.27
3. Tolerance of uncertainty	32.21	3.71	34.35	5.85	32.36	5.54
4. Persuasiveness	36.56	6.93	36.72	5.87	39.47	6.89
5. Initiation of structure	38.51	6.60	39.29	4.30	37.80	5.27
6. Tolerance of freedom	37.50	5.74	37.12	7.21	37.89	7.00
7. Role assumption	38.26	5.25	38.12	5.82	38.83	6.19
8. Consideration	35.89	6.28	36.48	6.40	37.40	6.21
9. Production emphasis	36.12	5.60	27.29	4.76	36.08	6.93
10. Predictive accuracy	18.26	3.02	18.54	3.63	17.84	3.08
11. Integration	18.61	3.91	18.70	3.41	18.25	4.42
12. Superior orientation	38.90	5.84	37.82	5.46	38.78	4.75
Number of Respondents	37		23		19	

Because of the significant university effect, the second linear contrast Ψ_2 should be significantly different from zero; that is, the mean scores for the two universities should differ. If there is a significant educational background effect, then the first linear contrast Ψ_1 should be different from zero. Table 4.7 gives the one-way multivariate analysis on the three groups and the multivariate tests of the two linear contrasts.

TABLE 4.7

MULTIVARIATE ANALYSIS OF UNIVERSITY AND EDUCATIONAL BACKGROUND

Sources	df	F	P
Main effect	24/130	1.608*	.049
Ψ_1 (educational background)	12/65	1.167	.325
Ψ_2 (university)	12/65	2.098*	.029

*Significant at the .05 level.

The statistical analyses given in Table 4.7 indicate that, as expected, the main effect is significant. The statistical tests on the linear contrasts indicate that the linear contrast for educational background Ψ_1 is not significantly different from zero, but the linear contrast for university Ψ_2 is significantly different from zero. Thus, the significant main effect is due to the previously identified

university effect and not to any effect of the educational background of respondents. Therefore, neither null hypothesis 5 nor 6 is rejected.

Summary

The data collected for this study was transferred onto computer cards and analyzed using SPSS programs. Several different multivariate and univariate statistical techniques were used in tabulating and analyzing the data.

The first section of this chapter presented the distribution of the sample according to university, academic position (dean or department chairman), nationality, educational background, and academic rank.

The second section considered the reliability of the LBDQ-XII subscales for the sample used in this study.

The third section of the chapter presented the statistical tests of the null hypotheses. The null hypotheses were tested using multivariate analysis of variance (MANOVA) procedures. When a multivariate analysis rejected a null hypothesis, univariate analyses on the twelve LBDQ-XII subscales were used to attempt to identify the subscales causing the multivariate analysis to be significant. The results of the statistical tests revealed the following findings:

1. No significant differences existed between the perception of leadership behavior of the Saudi department

chairmen and the perception of leadership behavior by the non-Saudi department chairmen. Null hypothesis was not rejected.

2. No significant differences existed between the perception of leadership behavior by the department chairmen and the perception of leadership behavior by the deans. Null hypothesis 2 was not rejected.
3. Significant differences existed between the two universities in terms of the perception of leadership behavior. Null hypotheses 3 and 4 were rejected.
4. No significant differences existed in the perception of leadership behavior because of educational background. Null hypotheses 5 and 6 were not rejected.

References

[1]J. C. Nunnally, Psychometric Theory (New York: McGraw-Hill Book Co., 1967).

[2]Neil H. Timm, Multivariate Analysis (Monterey, California: Brooks/Cole, 1975).

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, a summary of the study is presented together with a statement of conclusions and recommendations.

Summary

For decades, organizational leadership has been a major concern of researchers in various fields. One group of researchers has focused its attention on leadership behavior, its assessment, and its impact on the organization. Such focus has led to the development of certain instruments that can be used to assess such behavior.

The purpose of this study was to investigate the differences, if any, in presidents' and deans' leadership behavior at the University of Riyadh and the University of Petroleum and Minerals as perceived by deans and department chairmen and to determine the impact of such variables as nationality, type of institution, academic position, and educational background on the respondents' perceptions of their superiors' leadership behavior.

Presented in the first chapter of this study were: the statement of the problem; the purpose of, the rationale

for, and the significance of the study; the definition of terms; the research questions and hypotheses; and finally, the limitations and research assumptions.

The hypotheses, initially presented in Chapter I, served as guidelines for this study and were restated in null form as follows:

Null Hypothesis 1

> There are no significant differences between the perceptions of the Saudi and non-Saudi department chairmen in regard to the leadership behavior of the deans at the two universities.

Null Hypothesis 2

> There are no significant differences between the deans' perception of the leadership behavior of the presidents and the department chairmen's perception of the leadership behavior of the deans at the two universities.

Null Hypothesis 3

> There are no significant differences between the deans at the University of Riyadh and the deans at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the presidents at both universities.

Null Hypothesis 4

> There are no significant differences between the department chairmen at the University of Riyadh and the department chairmen at the University of Petroleum and Minerals in terms of their perceptions of the leadership behavior of the deans at both universities.

Null Hypothesis 5

> There are no significant differences among the deans based on their educational background in regard to their perceptions of the presidents' leadership behavior at the two universities.

Null Hypothesis 6

> There are no significant differences among the department chairmen based on their educational background in regard to their perceptions of the deans' leadership behavior at both universities.

Chapter II presented a review of the literature and was divided into two major sections. The first section provided an overview of the system of higher education in Saudi Arabia along with a brief comparison with its American counterpart. The second section presented a selective review of literature on leadership and leadership theories with an emphasis on the behavioral approach and the development of the LBDQ-XII, the instrument being used in this research.

Chapter III described the procedures and techniques used to collect and analyze the research data. The site for the study was two institutions of higher education in Saudi Arabia: the University of Riyadh and the University of Petroleum and Minerals. The total study population consisted of 22 deans and 80 department chairmen at both institutions. The Leader Behavior Description Questionnaire (LBDQ-XII), which consists of one hundred Likert-type items and is divided into twelve subscales, was selected as the survey instrument for the study.

Chapter IV presented the analysis of the data and the major findings of the study. All the null hypotheses were tested using the multivariate analysis of variance (MANOVA)

procedures. When a null hypothesis was rejected by the multivariate analysis, univariate analyses on the twelve LBDQ-XII subscales were used to identify the subscales causing the multivariate analysis to be significant. Statistical tests resulted in the following findings:

1. No significant differences existed between the Saudi and non-Saudi department chairmen in terms of their perceptions of the leadership behavior of the deans at the two universities.
2. Deans and department chairmen did not significantly differ in their perceptions of the leadership behavior of the presidents and deans at both universities.
3. There were significant differences between the two universities in terms of the perception of leadership behavior, though the univariate test has failed to identify the nature of the differences.
4. No significant differences were found in the referent groups' perception of leadership behavior due to educational background.

Conclusions and Implications

The following conclusions concerning the leadership behavior of presidents and deans at the University of Riyadh and the University of Petroleum and Minerals as perceived by the referent groups were derived from the analysis and interpretation of the data obtained in this study.

1. Apparently, there was a substantial congruency between the deans and department chairmen with respect to their perceptions of the leadership behavior of their superiors, presidents, and deans at the two universities. Thus, it can be concluded that these deans and presidents tended to display consistent patterns of leadership behavior with a great deal of similarity between them.
2. Saudi and non-Saudi department chairmen manifested a high degree of agreement in their perceptions of the deans' leadership behavior. Surprisingly enough, though statistical tests showed no significant differences between the two groups, non-Saudis had maintained higher mean scores on the LBDQ-XII subscales than the Saudis at both universities.
3. Factors such as academic position and educational background did not seem to affect the respondents' perception of their superiors' leadership behavior.
4. The type of institution (working environment) seemed to affect respondents' perceptions of the leadership behavior of their superiors, though univariate tests did not identify the nature of the differences between the two universities.
5. Respondents scored relatively low on the "tolerance of uncertainty" subscale. Given the nature of the

system in which things are structured and prescribed, this was no surprise to the researcher.

6. Respondents at both institutions scored relatively high on the "tolerance of freedom" subscale which denotes the willingness of the leader to delegate authority and give group members a chance to take initiative and make decisions on their own. This came as a surprise to the researcher because of the nature of the administrative system in higher education in Saudi Arabia.

In summation, based on the perceptions of the referent groups as reported on the LBDQ-XII, presidents and deans at the University of Riyadh and the University of Petroleum and Minerals tended to display a leadership behavior that is characterized by:

1. Strong representation of their followers.
2. Strong orientation toward their superiors.
3. More concern for production than for people.
4. Strong emphasis on initiation of structure and role assumption.
5. Moderate tolerance of freedom.
6. Strong emphasis on group integration and demand reconciliation.
7. Low tolerance of uncertainty.

The findings and conclusions of this research have several implications concerning the perceived leadership behavior at the University of Riyadh and the University of Petroleum and Minerals. The fact that statistical tests showed no significant differences between the Saudi and non-Saudi department chairmen in their perceptions of their superiors' leadership behavior implies that these institutions have an effective socialization process that seems to mold the behavior and perceptions of their members in one direction. Consequently, this socialization process has resulted in an apparent monolithism in the members' view of leadership in these institutions.

However, though statistically there were no significant differences between the perceptions of Saudis and non-Saudis, non-Saudis obtained higher mean scores on the LBDQ-XII subscales than the Saudis. The implication of this is that the non-Saudis, due to their marginality in the system, are inclined to show their loyalty by projecting a favorable image of their superiors since they are on contracts and consequently do not have much job security. Furthermore, it implies that the non-Saudis are also inclined toward maintaining the status quo in these institutions rather than demanding change of leadership.

Furthermore, although this study was not designed to determine the leadership philosophy of participants, the

general nature of their perceptions suggests that a "task-centered" approach to leadership seems to prevail at the two universities. Closer observation of the responses of the referent groups leads the researcher to believe that leadership in the two universities is more organization-oriented than people-oriented. Such an approach to leadership is characterized by an emphasis on the requirements, roles, and expectations of the institution rather than the needs and dispositions of people.

Recommendations

The following recommendations are made on the basis of the review of literature and the findings derived from this study.

1. It is recommended that research be conducted in order to further explore the nature of leadership behavior of deans and presidents in Saudi universities. Any additional studies of this nature should be expanded in scope and design to include groups and institutions of higher education in Saudi Arabia other than those examined in this study.

2. It is recommended that Saudi researchers and writers focus their attention on the needs and demands of Saudi higher education, especially in the areas of planning, management, and leadership.

3. It is recommended that universities in Saudi Arabia initiate inservice, professional development programs for top administrators, aimed at improving their knowledge and skills in the fields of leadership and administratively-related behaviors and functions.

4. The author recommends that Saudi colleges and universities give high priority to the establishment of educational administration departments and to the creation of integrated degree programs that are professionally designed to meet the growing needs of our educational institutions for qualified administrators and leaders.

5. In the final analysis, organizations are comprised of people who have different needs and interests and who form the productive unit in any organization. Higher education institutions in Saudi Arabia are no exception. Thus, the author strongly recommends that top administrators in Saudi colleges and universities capitalize on their faculty expertise and provide them with concern, support, and recognition so that the faculty can be happy, satisfied, and productive.

6. Furthermore, it is recommended that appointments of top administrators and leaders in Saudi colleges and universities be based on professional qualifications and merit rather than on personal connections, friendships, and nepotism that characterize insecure and ineffective administration.

APPENDIX A

LETTERS AND QUESTIONNAIRE

APPENDIX A

LETTERS AND QUESTIONNAIRE

March 4, 1981

Dear Participant:

I am a graduate student pursuing my doctoral degree in administration of higher education at Michigan State University. For my dissertation, I intend to conduct a survey research at two Saudi universities in order to explore the leadership behavior of the presidents at these institutions as perceived by the deans.

As a dean, you have been chosen to participate in this study. Thus, I would appreciate your completing the enclosed questionnaire and background information. In answering the questionnaire pertaining to leader behavior, please do so as you perceive the leadership behavior of the president of your university. Please note that there are no right or wrong answers to individual items on the questionnaire.

In participating, you have my assurance that all information will be kept strictly confidential. In reporting the findings, no mention will be made of the names of individuals or colleges involved. Upon request, I will send you a copy of the findings.

I am most grateful for your cooperation.

Sincerely yours,

Mulaihan Athubaity
Ph.D. Candidate
Michigan State University

March 4, 1981

Dear Participant:

I am a graduate student pursuing my doctoral degree in administration of higher education at Michigan State University. For my dissertation, I intend to conduct a survey research at two Saudi universities in order to explore the leadership behavior of the deans at these institutions as perceived by the department chairmen.

As a chairman, you have been chosen to participate in this study. Thus, I would appreciate your completing the enclosed questionnaire and background information. In answering the questionnaire pertaining to leader behavior, please do so as you perceive the leadership behavior of the deans of your university. Please note that there are no right or wrong answers to individual items on the questionnaire.

In participating, you have my assurance that all information will be kept strictly confidential. In reporting the findings, no mention will be made of the names of individuals or colleges involved. Upon request, I will send you a copy of the findings.

I am most grateful for your cooperation.

Sincerely yours,

Mulaihan Athubaity
Ph.D. Candidate
Michigan State University

BACKGROUND INFORMATION ON DEANS

The following questions are about you as an individual participating in this study, so please put a check mark (✓) by the appropriate answer for each of these questions.

1. From where did you get your Ph.D. degree?

   A. The United States of America _____
   B. Great Britain _____
   C. Egypt _____
   D. Other countries _____
      Please specify _____

2. What is your academic rank?

   A. Professor _____
   B. Associate Professor _____
   C. Assistant Professor _____

3. What is your university?

   A. Riyadh University _____
   B. University of Petroleum and Minerals _____

BACKGROUND INFORMATION ON DEPARTMENT CHAIRMEN

The following questions are about you as an individual participating in this study, so please put a check mark (√) by the appropriate answer for each of these questions.

1. What is your nationality?

   A. Saudi _____
   B. Non-Saudi _____

2. From where did you get your Ph.D. degree?

   A. The United States of America _____
   B. Great Britain _____
   C. Egypt _____
   D. Other countries _____
      Please specify _____

3. What is your academic rank?

   A. Professor _____
   B. Associate Professor _____
   C. Assistant Professor _____

4. What is your university?

   A. Riyadh University _____
   B. University of Petroleum and Minerals _____

LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE--FORM XII

DIRECTIONS:

a. READ each item carefully.

b. THINK about how frequently the president of your university engages in the behavior described by the item.

c. DECIDE whether he (A) always, (B) often, (C) occasionally, (D) seldom, or (E) never acts as described by the item.

d. DRAW A CIRCLE around one of the five letters (A, B, C, D, E) following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

		Always	Often	Occasionally	Seldom	Never
1.	He acts as the spokesman of the group	A	B	C	D	E
2.	He waits paitiently for the results of a decision	A	B	C	D	E
3.	He makes pep talks to stimulate the group	A	B	C	D	E
4.	He lets group members know what is expected of them	A	B	C	D	E
5.	He allows the members complete freedom in their work	A	B	C	D	E
6.	He is hesitant about taking initiative in the group	A	B	C	D	E
7.	He is friendly and approachable . . .	A	B	C	D	E
8.	He encourages overtime work	A	B	C	D	E
9.	He makes accurate decisions	A	B	C	D	E

		Always	Often	Occasionally	Seldom	Never
10.	He gets along well with the people above him	A	B	C	D	E
11.	He publicizes the activities of the group	A	B	C	D	E
12.	He becomes anxious when he cannot find out what is coming next	A	B	C	D	E
13.	His arguments are convincing	A	B	C	D	E
14.	He encourages the use of uniform procedures	A	B	C	D	E
15.	He permits the members to use their own judgment in solving problems . .	A	B	C	D	E
16.	He fails to take necessary action	A	B	C	D	E
17.	He does little things to make it pleasant to be a member of the group	A	B	C	D	E
18.	He stresses being ahead of competing groups	A	B	C	D	E
19.	He keeps the group working together as a team	A	B	C	D	E
20.	He keeps the group in good standing with higher authority . . .	A	B	C	D	E
21.	He speaks as the representative of the group	A	B	C	D	E
22.	He accepts defeat in stride	A	B	C	D	E
23.	He argues persuasively for his point of view	A	B	C	D	E
24.	He tries out his ideas in the group	A	B	C	D	E

	Always	Often	Occasionally	Seldom	Never
25. He encourages initiative in the group members	A	B	C	D	E
26. He lets other persons take away his leadership in the group	A	B	C	D	E
27. He puts suggestions made by the group into operation	A	B	C	D	E
28. He needles members for greater effort	A	B	C	D	E
29. He seems able to predict what is coming next	A	B	C	D	E
30. He is working hard for a promotion	A	B	C	D	E
31. He speaks for the group when visitors are present	A	B	C	D	E
32. He accepts delays without becoming upset	A	B	C	D	E
33. He is a very persuasive talker . . .	A	B	C	D	E
34. He makes his attitudes clear to the group	A	B	C	D	E
35. He lets the members do their work the way they think best	A	B	C	D	E
36. He lets some members take advantage of him	A	B	C	D	E
37. He treats all group members as his equals	A	B	C	D	E
38. He keeps the work moving at a rapid pace	A	B	C	D	E

		Always	Often	Occasionally	Seldom	Never
39.	He settles conflicts when they occur in the group	A	B	C	D	E
40.	His superiors act favorably on most of his suggestions	A	B	C	D	E
41.	He represents the group at outside meetings	A	B	C	D	E
42.	He becomes anxious when waiting for new developments	A	B	C	D	E
43.	He is very skillful in an argument	A	B	C	D	E
44.	He decides what shall be done and how it shall be done	A	B	C	D	E
45.	He assigns a task, then lets the members handle it	A	B	C	D	E
46.	He is the leader of the group in name only	A	B	C	D	E
47.	He gives advance notice of changes	A	B	C	D	E
48.	He pushes for increased production	A	B	C	D	E
49.	Things usually turn out as he predicts	A	B	C	D	E
50.	He enjoys the privileges of his position	A	B	C	D	E
51.	He handles complex problems efficiently	A	B	C	D	E
52.	He is able to tolerate postponements and uncertainty	A	B	C	D	E
53.	He is not a very convincing talker	A	B	C	D	E

		Always	Often	Occasionally	Seldom	Never
54.	He assigns group members to particular tasks	A	B	C	D	E
55.	He turns the members loose on a job and lets them go to it	A	B	C	D	E
56.	He backs down when he ought to stand firm	A	B	C	D	E
57.	He keeps to himself	A	B	C	D	E
58.	He asks the members to work harder	A	B	C	D	E
59.	He is accurate in predicting the trend of events	A	B	C	D	E
60.	He gets his superiors to act for the welfare of the group members	A	B	C	D	E
61.	He gets swamped by details	A	B	C	D	E
62.	He can wait just so long, then blows up	A	B	C	D	E
63.	He speaks from a strong inner conviction	A	B	C	D	E
64.	He makes sure that his part in the group is understood by the group members	A	B	C	D	E
65.	He is reluctant to allow the members any freedom of action . . .	A	B	C	D	E
66.	He lets some members have authority that he should keep	A	B	C	D	E
67.	He looks out for the personal welfare of group members	A	B	C	D	E
68.	He permits the members to take it easy in their work	A	B	C	D	E

		Always	Often	Occasionally	Seldom	Never
69.	He sees to it that the work of the group is coordinated	A	B	C	D	E
70.	His word carries weight with his superiors	A	B	C	D	E
71.	He gets things all tangled up . . .	A	B	C	D	E
72.	He remains calm when uncertain about coming events	A	B	C	D	E
73.	He is an inspiring talker	A	B	C	D	E
74.	He schedules the work to be done . .	A	B	C	D	E
75.	He allows the group a high degree of initiative	A	B	C	D	E
76.	He takes full charge when emergencies arise	A	B	C	D	E
77.	He is willing to make changes . . .	A	B	C	D	E
78.	He drives hard when there is a job to be done	A	B	C	D	E
79.	He helps group members settle their differences	A	B	C	D	E
80.	He gets what he asks for from his superiors	A	B	C	D	E
81.	He can reduce a madhouse to system and order	A	B	C	D	E
82.	He is able to delay action until the proper time occurs	A	B	C	D	E
83.	He persuades others that his ideas are to their advantage	A	B	C	D	E

		Always	Often	Occasionally	Seldom	Never
84.	He maintains definite standards of performance	A	B	C	D	E
85.	He trusts the members to exercise good judgment	A	B	C	D	E
86.	He overcomes attempts made to challenge his leadership	A	B	C	D	E
87.	He refuses to explain his actions	A	B	C	D	E
88.	He urges the group to beat its previous record	A	B	C	D	E
89.	He anticipates problems and plans for them	A	B	C	D	E
90.	He is working his way to the top	A	B	C	D	E
91.	He gets confused when too many demands are made of him	A	B	C	D	E
92.	He worries about the outcome of any new procedure	A	B	C	D	E
93.	He can inspire enthusiasm for a project	A	B	C	D	E
94.	He asks that group members follow standard rules and regulations . .	A	B	C	D	E
95.	He permits the group to set its own pace	A	B	C	D	E
96.	He is easily recognized as the leader of the group	A	B	C	D	E
97.	He acts without consulting the group	A	B	C	D	E

	Always	Often	Occasionally	Seldom	Never
98. He keeps the group working up to capacity	A	B	C	D	E
99. He maintains a closely knit group	A	B	C	D	E
100. He maintains cordial relations with superiors	A	B	C	D	E

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