A Cross-Cultural Study of Selected Leadership Principles

Reza Assadi

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A CROSS-CULTURAL STUDY OF SELECTED LEADERSHIP PRINCIPLES

by

Reza Assadi

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Submitted to the
Faculty of The Graduate College
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requirements for the
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Western Michigan University
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The intention of this study was to investigate whether leadership principles formulated by experts in the United States were applicable cross-culturally in extant leadership practices in Iran.

This study was designed to compare the attitudes of samples of American and Iranian graduate Engineering students from four state universities in Michigan—Western Michigan University, Wayne State University, Michigan State University, and the University of Michigan—toward some selected U.S.-based leadership principles pertaining to the leaders' use of authority, influence, and power. Specific comparisons were made between the two groups of graduate students majoring in Engineering in terms of their attitudes toward the "importance" of and "frequency" with which the particular leadership principles would be experienced in their respective countries.

To accomplish this study, a 36-item questionnaire was developed—with twelve principles for each of the three leadership variables, namely, authority, influence, and power—selected from the professional literature published in the United States. The self-administered questionnaire was pilot tested to determine its validity and reliability as well as response ease. Based upon the pilot test data and recommendations from experts in the area of educational leadership and evaluation, the questionnaire was then revised.

Since it was not feasible to collect the data by means of mail
survey, the questionnaires were distributed by campus representatives at the four respective universities. Of the 224 questionnaires which were disseminated, the usable response rate was 75 percent. Responses from a sample consisting of 85 Americans and 85 Iranians were analyzed for this study.

A *t* test of independent samples was used, because *t* tests are generally useful to determine whether two means are significantly different. The results indicated that there were statistically significant differences between the attitudes of American and Iranian graduate Engineering students in the State of Michigan in terms of the importance of and frequency with which principles representing each of the three leadership variables might be observed in their respective countries. However the range of the mean scores of the two groups for each of the three variables was not extreme, varying between one and four points. Americans who participated in this study tended to be more homogeneous in their responses than did Iranians.

For this study, the hypothesis was postulated that there would be statistically significant differences between the attitudes of American and Iranian graduate Engineering students toward selected U.S.-based leadership principles related to authority, influence, and power. Based on the statistical findings, the hypothesis was supported. It was concluded that there were significant differences in the attitudes of prospective leaders—specifically, of American and Iranian graduate Engineering students in the State of Michigan—toward some selected American leadership principles.
For decades, the theoretical orientation to leadership postulated in the United States has been acclaimed and unquestioningly accepted as the universal yardstick for leadership in Western and non-Western countries. The correlation between leadership effectiveness and cultural variables remains a moot point. There is a growing trend to try to determine whether the U.S.-based theories and principles are applicable to various cultures.

Since biculturality continues to be delegated to the non-Western prospective leaders through requiring them to assimilate U.S.-based leadership orientation, this cross-cultural study attempted to determine the generalizability of three dozen U.S.-based leadership principles.

The data from the two samples showed that the prospective Iranian Engineering leaders who participated in this study did not unanimously agree with the American prospective leaders about the applicability of the selected American leadership principles. Further comparative cross-cultural research to investigate the generalizability of U.S.-based leadership theories and principles seems warranted.
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Habib and Shaehzad
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ii
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. THE PROBLEM AND ITS BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Hypothesis</td>
<td>1</td>
</tr>
<tr>
<td>Pertinent Assumptions</td>
<td>3</td>
</tr>
<tr>
<td>Background of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Significance of the Problem</td>
<td>7</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>11</td>
</tr>
<tr>
<td>Summary</td>
<td>12</td>
</tr>
<tr>
<td>II. REVIEW OF THE RELATED LITERATURE</td>
<td>14</td>
</tr>
<tr>
<td>Culture</td>
<td>14</td>
</tr>
<tr>
<td>Leadership</td>
<td>17</td>
</tr>
<tr>
<td>Authority, Influence, and Power</td>
<td>21</td>
</tr>
<tr>
<td>Cultural Transposition</td>
<td>38</td>
</tr>
<tr>
<td>Theories of Culture and Management</td>
<td>41</td>
</tr>
<tr>
<td>Summary</td>
<td>50</td>
</tr>
<tr>
<td>III. DESIGN AND METHODOLOGY</td>
<td>52</td>
</tr>
<tr>
<td>Review of the Problem</td>
<td>52</td>
</tr>
<tr>
<td>Operational Definitions</td>
<td>53</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>55</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>56</td>
</tr>
<tr>
<td>Data Collection Procedures</td>
<td>60</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (continued)

Chapter

### III. DESIGN AND METHODOLOGY (cont'd.)

- Data Analysis ............................................................. 62
- Summary ................................................................. 62

### IV. RESULTS AND FINDINGS ........................................... 63

- Survey Response ........................................................ 63
- The Findings ............................................................. 66
- Summary ................................................................. 79

### V. SUMMARY, FINDINGS AND THEIR IMPLICATIONS, AND RECOMMENDATIONS ........................................... 80

- Summary of the Study .................................................. 80
- Discussion of the Findings .......................................... 81
- Implications .............................................................. 82
- Implications for Further Research .................................. 83
- Conclusion .............................................................. 86

### APPENDICES ............................................................ 88

- A SOURCES OF QUESTIONNAIRE STATEMENTS .................... 89
- B CORRESPONDENCE TO THE DEANS ............................... 95
- C LETTERS RECEIVED FROM THE UNIVERSITIES .................... 99
- D COVER LETTER AND LEADERSHIP PRINCIPLES QUESTIONNAIRE ... 103

### BIBLIOGRAPHY .......................................................... 108
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Return of Questionnaires</td>
<td>61</td>
</tr>
<tr>
<td>2</td>
<td>Survey Response Rates</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Engineering Enrollment</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>Non-Respondents</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>Summary Analysis of Importance Scale Ratings for Authority Statements</td>
<td>67</td>
</tr>
<tr>
<td>6</td>
<td>Summary Analysis of Importance Scale Ratings for Influence Statements</td>
<td>68</td>
</tr>
<tr>
<td>7</td>
<td>Summary Analysis of Importance Scale Ratings for Power Statements</td>
<td>69</td>
</tr>
<tr>
<td>8</td>
<td>Summary Analysis of Frequency Scale Ratings for Authority Statements</td>
<td>70</td>
</tr>
<tr>
<td>9</td>
<td>Summary Analysis of Frequency Scale Ratings for Influence Statements</td>
<td>71</td>
</tr>
<tr>
<td>10</td>
<td>Summary Analysis of Frequency Scale Ratings for Power Statements</td>
<td>72</td>
</tr>
<tr>
<td>11</td>
<td>Mean Scores for the Importance Scale</td>
<td>73</td>
</tr>
<tr>
<td>12</td>
<td>Mean Scores for the Frequency Scale</td>
<td>74</td>
</tr>
<tr>
<td>13</td>
<td>t-Value for Independent Groups, Attitudes toward Selected Leadership Principles</td>
<td>75</td>
</tr>
<tr>
<td>14</td>
<td>t-Value for Independent Groups, Attitudes toward Selected Authority Principles</td>
<td>77</td>
</tr>
<tr>
<td>15</td>
<td>t-Value for Independent Groups, Attitudes toward Selected Influence Principles</td>
<td>78</td>
</tr>
<tr>
<td>16</td>
<td>t-Value for Independent Groups, Attitudes toward Selected Power Principles</td>
<td>78</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE

1  Cultural Transposition Model........................................45
CHAPTER I

THE PROBLEM AND ITS BACKGROUND

This chapter presents a discussion of the problem followed by the hypothesis for this study. Included in this chapter is an enumeration of the assumptions related to this study, background information about the problem, discussion of the significance of the problem, and a listing of some limitations of the study. This overview concludes with a brief summary.

Statement of the Problem

Iranians, like other international students, have been involved in assimilating Western cultural norms in the area of leadership. Are the prescribed leadership norms emanating from the United States cross-cultural? Considering the number of prospective Iranian leaders who come to the United States for their graduate studies, the generalizability of the U.S.-based leadership principles needs to be empirically substantiated. The focus of this study was on the problem: Are selected U.S.-based leadership principles about the leaders' use of authority, influence, and power generalizable to extant leadership practices in Iran?

Hypothesis

The hypothesis to be tested in this study was:

There will be significant differences in the attitudes of Iranian and American graduate Engineering students toward selected U.S.-based leadership principles about the leaders' use of authority, influence,
and power in their respective countries.

The specific questions considered in this study were:

1. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, about the importance of some selected U.S.-based principles about authority for leaders in their respective countries?

2. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, toward the importance of some selected U.S.-based principles about influence for leaders in their respective countries?

3. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, about the importance of some U.S.-based leadership principles about power for leaders in their respective countries?

4. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, about the frequency with which they would experience, in their respective countries, the U.S.-based authority principles?

5. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, about the frequency with which they would experience, in their respective countries, the U.S.-based influence principles?

6. What are the attitudes of Iranian and American graduate Engineering students, in the State of Michigan, about the frequency with which they would experience, in their respective countries, the U.S.-based power principles?
Pertinent Assumptions

The design and methodology of this study were based on the following pertinent assumptions:

1. A majority of Iranian graduate students at the United States higher education institutions are enrolled in Engineering programs (Echo of Iran, 1977; Elkan, 1977; Nyrop, 1978).
2. Engineering students are representative of their respective cultures.
3. Iranian students' perceptions of leadership principles will not be contaminated by their having come to the United States for their graduate studies. Laurent (1980, p. 45) reports that leaders being trained in other countries "hang on to their national characteristics."
4. Graduate students in Engineering are obliged to review U.S.-based leadership principles as part of their leadership training.
5. The leadership process involves the leader exercising authority, influence, or power (Stogdill, 1974; Boles, 1980).
6. The Americans and Iranians who participated in this study were prospective leaders, that is, at a future time, they will become leaders in their respective countries.
7. Iranian graduate Engineering students participating in this study were proficient in reading and comprehending English.

Background of the Problem

The word "leader", which is translated into myriad languages, is used to designate a minority of individuals in organizations, countries
and civilizations. There is no universally accepted definition for the word "leader." Although leadership is an international phenomenon, Stogdill (1974, p. 7) found that there exists a preoccupation with the leadership phenomenon in countries predominantly with "an Anglo-Saxon heritage."

Most of the empirical studies, discussions, and professional publications about leadership emanate from Western countries, primarily from the United States, United Kingdom, West Germany, and France (Farris & Butterfield, 1973).

Interest in the leadership phenomenon has markedly increased in the United States since 1911. A perusal of current resources reveals numerous documents, media materials, and experts on the topic of leadership. In 1911 the paucity of leadership data and information was drastically altered by Fredrick Taylor, an American. Taylor postulated a number of management principles referred to as The Principles of Scientific Management. His principles were intended for broad applications at all levels and functions of business for production efficiency (Koontz & O'Donnell, 1968).

Consequently, the discovery and use of leadership principles have preoccupied American scholars and writers. Implicitly, U.S.-based principles and theories are considered as "universal" ones transferable to different countries and cultures (Al-Tuhaih, 1977).

For decades, the theoretical orientation to leadership postulated in the U.S. has been acclaimed and unquestionably accepted as the universal yardstick for Western and non-Western countries. The majority
of the U.S. higher education curriculums and professional literature do not stress the cultural boundaries of U.S.-based management and organization theories and research (Whyte, 1969; and Harris & Moran, 1979).

Although multi-national companies, agribusinesses, and international organizations want to hire "cosmopolitan leaders" who are able to function with followers from different cultures and countries, the correlation between leadership and cultural variables remains a moot point. For example, Selznick (1957) and Boles (1980) recognized that leadership is an intercultural process with possible minor variations attributable to cultural differences. On the other hand, Bruner (1958), Getzels, Lipham, and Campbell (1968), Whyte (1969), and Hofstede (1980) asserted that leader behavior is inextricably linked to the culture.

In 1959, Harbison and Myers completed a comprehensive comparative analysis of managerial phenomena. Their comparison set a precedent for intercultural research about the relationship between leadership and culture (Al-Tuhaih, 1977). Their precedent has led to the postulation of comparative management theory.

Schollhammer (1969, p. 87) described comparative management theory as an in-depth "evaluation of similarities and differences in managerial phenomena in different countries." Kerr et al. (1964, p. 10) stated that the intent of comparative management was to provide "interpretation" between principles and extant practices in various countries. Past and contemporary intercultural research about relations between leadership and culture tend to be primarily prescriptive rather than descriptive (Lowin, 1961; Korman, 1966; Sales, 1967; Hofstede,
Whyte (1969), Ajiferuke and Boddewyn (1970), Barrett and Bass (1970), and Farris and Butterfield (1973) advocated testing the reliability and validity of U.S.-based principles and theories in non-Western countries. For decades, the U.S.-based research findings regarding leadership have been implicitly assumed as universally applicable to leaders in different countries. For example, American researchers Lippitt and White (1943) concluded from their study of American youths that democratic leader style promotes productivity and morale while authoritarian leader style reduces productivity and morale.

These findings went unquestioned until Meade (1967) replicated the study of leader styles with a sample of non-Western youths and found that their productivity peaked with authoritarian leaders but stagnated with democratic leaders. Hofstede (1980) explains that the majority of non-Western countries have authoritarian leadership traditions and experiences. In contrast, democratic and participative leader styles are predominantly indigenous to the United States and other Western countries. Yet, democratic leader style is preferred and recommended in many leadership principles and theories.

Hofstede (1980) finds that some American theories and principles have validity and reliability primarily in the United States, the United Kingdom, Canada, Australia, and Northern European countries, but not in non-Western countries. He reports that incumbent leaders and subordinates from non-Western countries maintain different perceptions and values regarding power distance, uncertainty avoidance,
individuality/collectivity, and masculinity/femininity than do Americans and natives of other Western countries.

Laurent (1980) also concludes that the behavior and perceptions of leader incumbents assigned to various countries tend to be culture-bound in theory and practice despite their intensive formal leadership training.

Significance of the Problem

Throughout the United States students from Western and non-Western countries are participating in formal leadership programs. These prospective leaders are introduced to American management and organization theories and principles. In most programs, no empirical evidence is cited to support or refute the applicability of such leadership principles to other cultures (Al-Tuhaih, 1977; Dennis, 1979).

Many international students also experience difficulty in applying U.S.-based knowledge and skills in their professions within their respective countries (Dennis, 1979; Klineberg & Hull, 1979). What is perceived as relevant for leaders in the U.S. academic setting is frequently considered as irrelevant for leadership practices in non-Western environments (Hofstede, 1980).

According to Forbis (1980), for decades Iranian students studying abroad have outnumbered the other international students. Yet Nassefat (1970) reported a high frequency of misconceptions and prejudices among Americans and Europeans related to extant Iranian habits, customs, and culture, etc. As Moyer (1981) comments, Americans, despite the media coverage about Iran, tend to be "culturally

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illiterate" about Iranians. "Cultural illiteracy" about Iranians has been prevalent even among American educational leaders. As an illustration, Doerr (1968), one of the several American educational consultants who helped set Pahlavi University in Iran, made the following comments about Iran:

Much of the form of an "American type" university has been captured, but the substance seems to be missing. The priorities at the university are all askew, e.g., it is considered more important to keep the students happy with scholarships, good food, and extra-curricular activities than to see to it that they are getting an education characterized by real excellence. (p. 520)

Doerr (1968, p. 520) mentioned that the Iranian administrators were "inept" as well as "uneducated" regarding the purpose and function of the university. Relatedly, Seitz (1980) asserts that deficiencies prevail in administration within Iran. Forbis (1980, p. 248) describes Iran as an "irrational" place. These subjective statements represent a sample of culture-bound bias on the part of some Western leaders.

The observation made by Doerr (1968) and Forbis (1980) reflects the incongruency of the Western perception and the Iranian, or non-Western perception. Although Doerr (1968) rated the Iranian educational leaders' behavior as incompetent, based on the United States leadership standards, Iranians would regard the administrators in Iran as acting in accordance with Iranian values and culture (Blair, 1975).

Harris and Moran (1979) advise Americans not to expect Iranians to conform to Western standards. With each of their mini-case studies about Iran, the aforementioned authors stress that each leadership
problems needed to be resolved in terms of cultural practices indigenous to Iran—not to the United States.

Dorman and Omeed (1979) attribute the misconceptions about Iranians and their homeland to the strict censorship imposed in Iran. For over half a century, the facts and information were regulated by the Pahlavi dynasty. After the change of government in 1979, the new top ranking governmental officials also took control of censorship.

As Moyer (1961) explains, despite the increase in media coverage of events in Iran since 1978, some Americans still are not aware that Iranians have their own cultural norms different from Americans. Jansen (1979) claims that the misunderstandings about Iran are part of a long story of polemics between the Christian West and the Islamic East which dates back over a millennium.

Nassefat (1970) and Klineberg and Hull (1979) pointed out that a high percentage of Iranians who participated in their survey also had misconceptions about the United States. A strong case could be made that neither Americans nor Iranians have been adequately informed about each others' country, population, institutions, or leaders.

The strategy adopted by American and other Western leaders, as well as the Soviet leaders, has been to alter, as much as possible, physical settings as well as ideological beliefs of Iranians and other non-Western populations to conform to, or at least be imitative of the West or the Communists. The aforementioned approach does not attempt to facilitate understanding about non-Western cultures. Implicit in this approach is the assumption that Iranians and other non-Western populations need to change to conform to the standards of the
West or of the communists.

Galtung (1971) postulated that the aforementioned strategy exemplified "cultural imperialism", which he described as a form of imperialism experienced throughout the world. In the case of Iran, Iranians have had to learn and assimilate Western cultural patterns, dress, language, and technology. As he explained:

The Center [the superpowers] always provides the teacher and the definition of that worthy of being taught (from the gospels of Christianity to the gospels of Technology), and Periphery [non-Western countries] always provides learners, then there is a pattern . . . of imperialism. (p. 276).

With "cultural imperialism", the theories and principles indigenous to one culture are prescribed as norms for other cultures.

According to Dennis (1979), the commitment made by various higher education institutions throughout the United States to grant admission to international students involves the responsibility of providing learning opportunities for those students to acquire relevant knowledge and skills. Instead of merely assuming that the U.S.-based leadership theories and principles are generalizable to all countries and all leaders, Whyte (1969) advocated re-evaluating the U.S.-based leadership rhetoric and research to determine whether U.S.-based leadership information can be generalized to other countries.

Farris and Butterfield (1973) and Hofstede (1980) asserted that, to fully understand leadership phenomena, empirical proof of the applicability of leadership information to more than the American situation is necessary. Awareness of cultural limitations is beneficial for academicians, for professionals involved with international organizations, and for prospective international leaders (Hofstede, 1980; and Laurent,
Edwards (1978) reported that recently considerable investments have been made in the development of cross-cultural orientation and training programs, due mainly to the high rate of failure in the preparation of American leaders for functioning abroad. The statistical data regarding the rate of failure among Iranian leaders were not available.

Since biculturality continues to be a burden delegated to the non-Western prospective leaders through requiring them to assimilate and adopt the U.S.-based leadership orientation, it is imperative to conduct cross-cultural re-evaluation of the American versions of leadership (Hofstede, 1980). This cross-cultural study attempted to investigate whether leadership principles formulated by experts in the United States were applicable cross-culturally in extant leadership practices in Iran.

Limitations of the Study

Some limitations were anticipated with this study. First, at the time this study was conducted, it was not possible to survey Iranian leaders within their homeland due to the domestic instability in Iran. Consequently, only prospective leaders from Iran were available to participate in this attitudinal research. Second, only a paucity of empirical studies have been published about Iranians and their extant leadership practices. Nyrop (1978) and Dorman and Omeed (1979) explained that information emanating from Iran tended to be inaccurate and unreliable, especially the statistical data.
Third, it was anticipated that Iranian graduate Engineering students who participated in the survey might be reluctant to complete the self-administered questionnaire. In order to obtain their cooperation in providing attitudinal information about Iranian leaders' use of authority, influence, and power, no personal data were elicited.

Lastly, some limitations were anticipated as a result of the severing of diplomatic relations between Iran and the United States. It was anticipated that political conflict between the two countries might adversely influence the respondent rate, especially among Iranians. Although diplomatic relations between the two countries remained unchanged at the time this study was conducted, no controversial political event in Iran or in the United States interrupted the completion of this study.

Summary

As the title indicated, this study was a cross-cultural empirical investigation to ascertain whether some selected U.S.-based leadership principles pertaining to the leaders' use of authority, influence, and power are regarded by prospective leaders (Iranian and American Engineering students) in the State of Michigan, as prevalent in and important to extant practices of leaders in their respective countries.

This chapter provided an overview of the problem, hypothesis, assumptions, background information, significance of the study, and various limitations endemic to this cross-cultural research.
Chapter II includes a review of related literature. Chapter III is devoted to a description of the procedures for the collection and analysis of data. In Chapter IV the results of the study are reported. A summary of the major findings and conclusions, as well as recommendations for possible future research, is included in Chapter V.

The next chapter will review the relevant literature related to this study.
CHAPTER II

REVIEW OF THE RELATED LITERATURE

This chapter begins with a brief review of definitions of major terms; namely, culture and leadership. It includes a review of literature and research findings about the three leadership variables of authority, influence, and power. A review of cross-cultural studies pertaining to leadership in the United States and Iran is also presented. The chapter concludes with an overview of the related literature.

Culture

Before discussing the leadership process cross-culturally, it is relevant to consider culture and leadership, which are the key concepts in this study. Despite the attention given to both words, there is little consensus about what culture and what leadership encompass. It is difficult to define culture due to the fact that it is one of those terms used by the general public as well as by professionals in various academic disciplines. Ajiferuke and Boddewyn (1970, p. 154) concluded that culture was defying "a single all-purpose definition." Kroeber and Kluckholm (1952) did not find a single all-purpose definition for the word culture in their perusal of literature—instead they found more than a hundred definitions and statements about culture.

Wagner (1981) claimed that anthropologists have invented the word culture to identify uniform patterns of human behavior.
Originally, the word "culture" in the English language was derived from Latin to designate agricultural activity—the cultivation of soil (Morris, 1978). Long before Americans were using the term culture, Iranians had in their vocabulary the word farhang which is commonly translated into the English language as culture. The word farhang was initially used to identify quality, namely, good breeding, excellence (Haim, 1976).

Although the word culture appears in a number of leadership studies, rarely has the term been defined there (Ajiferuke & Boddewyn, 1970). Only a limited number of studies include a definition for culture. Moreover, the researchers investigating leadership tend to use a definition of culture formulated by experts in anthropology. The oldest definition of the term culture found by the present writer, from among the various definitions by anthropologists, was one devised by Kluckhohn and Kelly (1945) which specified that:

By culture we mean all those historically created designs for living, explicit and implicit, rational, irrational, and nonrational, which exist at any given time as potential guides for the behavior of men. (p. 97)

Some cross-cultural leadership studies cited Kluckhohn's (1951) anthropological definition for culture:

Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values. (p. 86)

In other leadership studies, the definition of culture suggested by Tylor (1871, p. 1), the father of cultural anthropology, has been
used: "Culture is that complex whole which includes knowledge, belief, art, morals, law, customs, and other capabilities or habits acquired by members of a society."

Still other studies included the definition by Mead (1953, p. 28) who proposed that culture is the term applied to the shared and learned "behavior of a society or a subgroup." According to Kroeber and Parsons (1958, p. 583), culture is "the transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in the shaping of human behavior and the artifacts produced through behavior."

Instead of using an anthropological definition for culture, some researchers investigating leadership have formulated their own definitions of culture. For example, Fayerweather (1959, p. 7) defined culture as "attitudes, beliefs, and values of a society." Whitehill (1964, p. 69) concluded that culture was "the whole complex of distinctive features characteristic of a particular stage of advancement in a given society." Triandis (1972, p. 4) specified that culture was "a group's characteristic way of perceiving the man-made part of its environment."

A perusal of the professional books about leadership revealed other definitions for culture. In recent years, Boles and Davenport (1975, p. 424) proposed that a "cultural system is a collectivity of people adhering to a common value held in such high esteem that its transmission to younger members or other systems is deemed desirable."

In their book entitled Managing Cultural Differences, Harris and Moran (1979, p. 32) define culture as "communicable knowledge
for human coping within a particular environment that is passed on for the benefit of subsequent generations." They go on to say that:

Culture helps us to make sense out of the planet or space inhabited by us. The place is foreign only to strangers, not to those who inhabit it. Culture facilitates living by providing ready-made solutions to problems, by establishing patterns of relations, and ways for preserving group cohesion and consensus. There are many roadmaps, or different approaches for analyzing and categorizing a culture to make it more understandable and less threatening. (p. 58)

Hofstede (1980) explains that the word "culture" is frequently reserved for societies while the term "subculture" is used for specific groups of people within a society. The term culture, according to Hofstede (1980, p. 25), means "the aggregate of common characteristics that influence a human group's response to its environment."

Implicit in each definition of culture was an assumption that culture was a variable which could be observed and objectively measured. For several decades, researchers from various academic disciplines have designed empirical studies to determine the extent of influence that culture has on human behavior. Some of the studies have focused on the impact of culture on leadership.

Leadership

The term leadership, like the word culture, also has numerous definitions. The word leadership has been traced to 1834 A.D. At that time, it was used by Fonblanque to refer to individuals who demonstrated the ability to lead (Murray et al., 1933). To the contemporary English speaker, rahbari may seem a strange combination of various consonants and vowels; however, rahbari is used by Iranians as a
noun to express the equivalent of the English word "leadership."

In English, the noun leadership is generally used in conjunction with various qualitative adjectives such as participative leadership, democratic leadership, authoritarian leadership, and achievement-oriented leadership. Leadership serves also as an adjective, i.e. leadership literature, leadership position, leadership communication, etc.

A perusal of the professional literature about leadership provided a clear indication of the confusion surrounding the term leadership. Boles (1980, p. 84) calculates that there are "at least twelve different types of definitions" for the term leadership. Stogdill (1974) insisted that there seemed to be little consensus about a universal definition.

In addition to different definitions and conceptions of leadership, various typologies have been proposed for the definitions of leadership (Fleishman, 1971; Stogdill, 1974; Filley et al., 1976; Boles, 1980).

Stogdill (1974, p. 5) explained that since the origin of leadership studies, "several different schools of thought" have prevailed. Fleishman (1971) claimed that it was actually possible to identify some major "shifts" in thinking regarding leadership. For example, in the earlier research, leadership was defined in terms of what leaders were. Leadership was considered a personality trait indigenous to a minority of individuals throughout the world. Substantial research has been based upon the identification of universal leader characteristics. However, proponents of the trait definition of
leadership have not concurred as to which personality traits were leadership traits.

Instead of identifying universal leader characteristics, attention shifted and focused on the interaction between leaders and variables in the work situation. Filley et al. (1976, p. 240) mentioned that a substantial amount of research has been conducted to discover "the situational variables which cause or permit leader behaviors and characteristics to be effective." The basis of this contention was that the situation and the behavior of leaders were inextricably linked. Some of the situational factors which have been identified were: personality, task requirements, subordinates' attitudes, needs, and expectations and the physical and organizational environment (Filley et al., 1976).

Another major conceptual orientation about leadership is toward defining leadership in terms of the leaders' behaviors. The research about leaders' behaviors has focused upon what leaders do that promotes productivity and morale among the followers. Filley et al. (1976, p. 253) reported that four specific kinds of leader behavior, namely, the leader's "supportive" actions, "participative" behavior, "achievement-oriented" actions, and "instrumental" actions were regarded as correlated with the performance of the followers; however, extant expectations and data about leaders' behavior did not unanimously support that such behavior would bring about the desired goal in all situations.

Others have adopted a definition of leadership which identified it as a unique social interaction process (Stogdill, 1974). There
were several versions of this definition. Perhaps one of the oldest was expounded by Bogardus (1929) who described leadership as:

A social process . . . that social interstimulation which causes a number of people to set out toward an old goal with new zest or a new goal with hopeful courage—with different persons keeping different places. (p. 377)

Merton (1969, p. 2614) suggested that leadership was "an interpersonal relation in which others comply because they want to, not because they have to."

Boles (1980) proposes that leadership is a process in which the leader exerts authority, influence, and power over one or more individuals as a means of achieving some group or organizational goal. The leader, in this process, is the person in a given situation who is recognized by others as exercising authority, influence, and power. As this definition specifies, the recognized leader manifests specific types of behavior demonstrating authority, influence, or power in a given situation for the attainment of some goal.

A predominant change in the "schools of thought" about the leadership phenomena has been an attitudinal shift among many researchers and scholars. Instead of expounding normative statements specifying what leadership should involve, the experts in the study of leadership favored the usage of an operationalized definition which actually specified forms of behavior or outcomes of behavior (Immegart, 1973; Boles, 1980; Hofstede, 1980).

As Corwin et al. (1975) explained:

Definitions not only provide a measure of logical precision to the particular theorist's constructs but they also protect him from others' meanings (which might be quite different) for the concepts he is using. (p. 78)
Immagart (1973, p. 223) also agreed that "without workable definitions and theory, there is difficulty for the researcher in knowing what to look for in studying leadership." Hofstede (1980) concludes that an operational definition successfully facilitates observability and measurability of the leadership phenomena.

Even with operationalized definitions, such as the one proposed by Boles (1980), no leadership definition yet conforms with the general standard of universality. As Hills (1975, p. 116) explained, the objective in defining terms was "to represent the broadest possible spectrum of environmental constraints with the least possible number of symbols."

Authority, Influence, and Power

To gain an understanding of the nature of leadership some researchers and scholars have investigated the relationship between leaders and followers. To accomplish this, attention has been focused on how one person can exercise authority, influence, and/or power. Authority, influence, and power are regarded as the core of leadership by some (Boles, 1980).

Although the terms authority, influence, and power were often used interchangeably in the professional literature, there were important distinctions between them. Atoriteh is the word used by Iranians to refer to the concept "authority." Tyler et al. (1978) found in their comparison of Iranians and Americans in their sample that each group had different attitudes toward the concept of authority. Iranians included in that study seemed to dislike formal
organizational authority because it infringed upon personal action. In contrast, Americans viewed authority as necessary for the smooth functioning of organizations and society.

Not surprisingly, laymen as well as professionals, political philosophers and social scientists from the United States also disagreed about what authority was (Peabody, 1962). There were numerous contradictory and conflicting statements about authority in the professional literature (Flathman, 1980). Some of the confusion that existed concerning the meaning of the term authority stemmed from a disagreement among scholars as to whether authority is a type of power or a concept distinct from power (Weldon, 1953; Khan, 1968; Friedrich, 1972; and Flathman, 1980).

Some influential scholars such as Roberto Michels, Talcott Parsons, Robert Bierstedt, and others considered authority to be formal power. Michels (1930, p. 319) defined authority as "a manifestation of power." Parsons (1969, p. 263) stated that authority was "institutionalized power." Bierstedt (1954, p. 79) concurred that authority was a "sanctioned power, institutionalized power." Merton (1957, p. 195) reiterated that "authority, the power of control which derives from an acknowledged status, inheres in the office and not in the particular person who performs the official role." Mills (1959, p. 316) proposed that "authority is power that is explicit and more or less voluntarily obeyed."

Based upon his seminal assessment of major trends and their significance for the Western civilization, Max Weber (1947), the renowned German social scientist, concluded that power could be
transformed into authority by three distinct means, namely by accept­
ing power as traditional authority, by virtue of it being bureaucratic authority, or being charismatic authority.

According to Bell (1975), authority was a concept distinctively different from power. The major difference, he contended, was a lin­guistic difference. Bell (1975, p. 37) argued that the "mood" of authority was expressed in the categorical or imperative, whereas the "mood" of power was conveyed with a hypothetical or contingent form of communication.

Pilley et al. (1976) claimed that the main difference between authority and power was that power could exist without authority but authority could not exist without power. Mills (1965, p. 317) made the distinction that "authority formally resides in the people, but the power of initiation is, in fact, held by small circles of men."

Thompson (1956) reported that the amount of authority could differ from the amount of power in an organization. He found that some military officers had more power while others had more authority.

The debate over the differences between authority and power has not yet been resolved, nor has agreement been reached concerning which behaviors exemplify authority behavior. Simon (1957) attri­buted some of the apparent confusion about authority to the failure of writers to define the word authority or to specify the set of beh­aviors representing authority.

In his book Vocabulary of Politics, T. D. Weldon used a linguis­tic approach to help reduce the confusion about authority. Weldon (1953, p. 50) suggested that there were, in fact, four different
kinds of authority, with the range from pure force to unquestioning confidence, and on that basis asserted that "force exercised or capable of being exercised with the general approval of those concerned is what is normally meant by 'authority'."

Weber (1947) defined authority as "the willing compliance of people based on the belief that it is legitimate for the designated leader to impose his/her will on subordinates." He considered authority to be behavior manifested by leaders—the right to act—as well as response behavior on the part of subordinates to willingly comply to the leader. Weber (1947) identified three types of authority, traditional, bureaucratic, and charismatic. He maintained that the particular group orientation regarding authority determined which kind of authority would be accepted or complied with.

Peabody (1962) argued that there were two types of authority, formal and functional. The major distinction between the two types of authority was their source. As Peabody (1962) explained, the source of formal authority was legitimacy, a position, or an office while the source for functional authority was human relations skills, professional competency, and experience.

Peters (1970) and De George (1976) proposed another classification for authority. They suggested that there were two major kinds of authority: "epistemic authority" and "deontic authority." "Epistemic authority" referred to someone who was an authority while "deontic authority" identified someone in authority.

Thus far, the various definitions and classifications for the concept of authority either specified a relation or a quality
attributable to a person, position, or documentation. As De George (1976, p. 77) concluded, "all authority is essentially a relation among a bearer, a subject, and a field, in virtue of a particular quality, attribute, or context."

Barnard (1938) stressed that authority did not exist without the willingness of subordinates to accept it. He insisted that authority originated with the rank and file rather than with those at the top of the organizational hierarchy.

Peterson et al. (1962) and Stogdill (1959) favored defining authority as the quantity of freedom which a member of an organization had in performing tasks. Stogdill (1974) concluded that authority was a unique type of interactional relationship.

Khan (1968), a non-Western scholar, suggested that authority was one means of behavior management. He further explained that a "way of regulating human conduct is by means of authority: People obey commands and accept pronouncements simply because they are the commands and pronouncements of certain persons" (p. 6).

Dalton et al. (1968), in their U.S.-based research, found that authority could be altered by changing the locus of authority within an organization. They reported mixed reactions to the alteration of authority. Those workers who lost authority resented it while the recipients of authority favored the change.

Pollett (1942) argued that authority tended to be ephemeral. She stressed that "you cannot take the authority you won yesterday and apply it today. . . . In the ideal organization authority is always distilled anew" (Pollett, 1942, p. 151). According to Khan (1968)
authority was subject to challenges. Authority could be gained, maintained, or lost.

Boles (1980, p. 157) perceives authority as currency: "Authority is like a fifty-dollar bill; not as many persons possess it [as influence, which he likened to a one-dollar bill] in as many situations, it is used less often, but it buys more."

Friedrich (1972, p. 45) reported that authority often was viewed with hostility. There was evidence in the professional literature which supported Friedrich's claim. For example, Brown and Keller (1979, p. 248) mentioned that "authority is necessary in order to have organization, but it unfortunately provides us with the source of much evil." Friedrich (1972, p. 46) concluded that "authority . . . has been made the basis of a pejorative adjective, authoritarian."

In his attitudinal survey study of the political elite in Iran, Zonis (1971, p. 258) pointed out that his sample showed a predilection for "authoritarian leadership." Halpern (1963) postulated that authoritarianism, predominant in Iran and other Middle Eastern countries, was based upon past traditions and habits of centralized authority. Tyler et al. (1978, p. 167) reported that Iranians admitted that "centralized authority is the practical way to rule" in their country. In contrast, Americans did not display a predisposition toward authoritarianism (Hofstede, 1980).

In the late 1950's American researchers focused their attention upon authoritarianism. Since then, numerous empirical studies have been conducted to evaluate and analyze the impact that authoritarian leaders have upon the functioning of organizations.
Of particular importance have been the empirical studies of Lewin, Lippitt, and White. Their findings have had a major impact upon the attitudes of American laymen, as well as professionals, toward the stereotype of an effective leader (Boles & Davenport, 1975). Although Lewin, Lippitt, and White did not replicate their studies with subjects from non-Western countries, their conclusions have been accepted as valid universally. Based on their conclusions, a normative image of a good leader has emerged which is that of a democratic leader. The authoritarian leader has been assumed to be ineffective.

In 1940, Lippitt defined "authoritarian" leader as a person who dictated policy and procedures and directed the interactions and behavior of group members. In contrast, the descriptor "democratic leader" was used to designate a person who demonstrated respect for group members, encouraging mutual goals and freedom to attain the goals.

Comparisons were made between authoritarian and democratic leader styles as well as with laissez-faire leader style. The latter characteristically did not make evaluative judgments but only responded when questioned by group members.

Lewin, Lippitt, and White (1939), Lippitt and White (1943), and White and Lippitt (1960) reported studies of American male youths. The main focus of this research was to investigate the effect of style on productivity, morale, and group cohesiveness. Their results suggested that democratic leader style promoted originality and satisfaction. Reportedly, there was no significant difference in productivity of the youth groups under democratic or authoritarian leaders.
However, there were low satisfaction and group unity among the group members with the authoritarian leader.

Subsequent research studies on authoritarian leader style, with few exceptions, have been primarily concerned about the reactions and interactions among adult American group members while under the supervision of authoritarian leaders. Comparisons have been made in terms of whether democratic, laissez-faire, or authoritarian leader style produced more positive or negative changes. In most of the later studies (Gibb, 1951; McCurdy & Eber, 1953; Shaw, 1955; Foa, 1957; Ziller, 1957; Lyle, 1961), the authoritarian leader behavior was not spontaneous but a rehearsed, learned behavior pattern based upon the stereotype of authoritarian leader style suggested by Lip-pitt. To ascertain the effects of authoritarian leadership, trained observers monitored the adult behavior.

The results of the subsequent studies on authoritarian leader style did not support significant differences in productivity rates due to authoritarian or democratic leader styles (Spector & Suttell, 1956; Lyle, 1961; Sales, 1964). Differences were found mainly in terms of morale and interaction patterns. Vroom and Mann (1960) reported that with large groups, authoritarian leader style was preferred, whereas in small size groups democratic leader style was favored.

In terms of group morale under democratic leaders, there tended to be more satisfaction and unity than with authoritarian leaders (Shaw, 1955; and Mullen, 1966).

Meade (1967) studied the effects of authoritarian and democratic

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supervision with Indian youths. Reportedly, the productivity as well as morale of the sample in Meade's study was higher under authoritarian leader style than with a democratic supervisor.

Following his perusal of research about authoritarianism, Stogdill (1974) discussed the findings of over fifty U.S.-based empirical studies of authoritarian leader style plus the results from only two research studies conducted in India.

The above studies have not been replicated in other non-Western countries. However, Stogdill (1974) concluded that:

Research results suggest a definite interaction between the personalities of leaders and followers. . . . High authoritarian followers tend to feel more comfortable in large, structured groups with directive leaders. The lows [low authoritarian followers] tend to react more favorably in small, less highly structured groups with egalitarian leaders. (p. 111)

Adorno et al. (1950) postulated that authoritarianism was a kind of personality syndrome. They devised a test to determine the presence or absence of authoritarian characteristics. Their F Scale has been used in numerous empirical studies to measure the propensity which American adults have toward authoritarianism in various organizational settings.

After administering the F Scale to samples of professionals, semi-professionals, and university students in Philadelphia, Courtney et al. (1952) reported that laborers in that particular city tended to have the highest authoritarianism scores, in contrast to middle management personnel who had the lowest scores.

In their literature review, Christie and Cook (1958) pointed out that the F Scale did not clearly discriminate between the person...
who tended to overtly exercise authority from the person who was in-
clined to have an authoritarian personality.

Subsequent research about authoritarianism has consisted primarily of comparative studies to investigate the compatibility between authoritarian leaders and followers. The U.S.-based research substantiated that the leader personality and follower personality affect the quality and quantity of interaction patterns (Bass et al., 1953; Haythorn et al., 1956; Vroom, 1960; Newcomb, 1961; Lipetz & Ossorio, 1967).

Anderson (1959) reported that, in the professional educational administration literature, the variable responsible for the difference between democratic and authoritarian leader styles was not personality traits of leader and followers but the goal which needed to be achieved. He found citations in the literature supporting the contention that group morale was high under democratic supervision for the achievement of social goals, but when the goal was task performance, authoritarian supervision produced high group morale.

In the professional literature, leader behavior tended to be depicted as a continuum, with authoritarian leader behavior at one extreme and democratic at the opposite extreme (Tannenbaum et al., 1959; McGregor, 1960; Likert, 1967; Hersey & Blanchard, 1977).

Influence is another leadership variable which has been considered as the basis of the leadership process. Nofuz (influence), parti (influence wielding), and parti bazi (pulling strings) are terms used in Persian to refer to the concept of influence. Bill (1972, p. 104) pointed out that such Persian terms "cannot be properly
translated into English for their closest equivalents carry a pejorative connotation that is not always present in the Persian usage."

Numerous definitions have been proposed equating leadership to influence. In the previous definitions, influence was used either as a noun or a verb. Some scholars considered influence to be implicit in leadership (Nash, 1929; and Katz & Kahn, 1966) while other writers defined influence as an activity which leaders perform (Tead, 1935). Another trend in the professional literature was to regard influence as a reciprocal process indigenous with leaders (Shartle, 1951; and Haiman, 1951). As Stogdill (1974, p. 10) suggested, "leadership is the process of influencing the activities of an organized group in its efforts toward goal setting and goal achievement."

Hollander and Julian (1968) maintained that influence in the leadership process represented a particular relationship between people. Filley et al. (1976) cogently argued that influence was behavior which altered the attitudes and performance of others.

Olsen (1970, p. 13) made the distinction that influence was an independent variable which attached to "an idea, a doctrine, or a creed, and has its locus in the ideological sphere."

Patchen (1974) claimed that the explanation for influence was either particular activities or individual characteristics. The above author explained that with social influence there was an expert who exerted influence and there was an "unexpert" who was the target of the influence. In his study of eleven American firms, Patchen found a definite lack of agreement as to who had the most influence.

Schutz (1966) maintained that influence represented one of the
basic human needs. Frost and Wilmot (1978, p. 48) stated that "it is impossible to communicate without making some attempt to either exert influence or deny . . . exerting influence."

Stogdill (1974) stated that incumbent American leaders tended to rate their superiors in terms of influence. Some scholars and researchers maintained that influence was actually a significant factor in determining who emerged as a leader. Bugenthal (1964) concluded that emergent leaders were successful in influencing others. Gray et al. (1968) claimed that the amount of influence exerted increased proportionately as it was used.

Levinger (1959) reported that influence was relative and subject to change. Boles (1980) proposes that influence can be perceived as an entity which everyone possesses and uses. He likens influence to a one-dollar bill, which buys relatively little. Boles (1980, p. 159) also concludes that influence has "both rational and emotional bases."

Belatedly, Zaleznik (1977) succinctly explained how business leaders use their influence:

The influence a leader exerts in altering moods, evoking images, and expectations, and in establishing specific desires and objectives determines the direction a business takes. The net results of this influence is to change the way people think about what is desirable, possible, and necessary. (p. 71)

Gerth and Mills (1953, p. 3) argued that "the leader influences more than he is influenced." Julian and Hollander (1966) also argued that acceptance of leaders' influence was contingent upon the emotional and rational bases of the influence; namely, concern for group members as well as competency. This research substantiated the notion that the amount of influence depends upon whether others perceived
its need or its availability.

Hamblin (1958) investigated the effect that crisis had upon influence. The American leaders who took part in his study wielded more influence for the duration of a crisis; however, new leaders emerged when a leader was unable to resolve a problem.

The various conclusions about influence in regard to leadership have been based upon data collected mainly from leaders as well as subordinates in the United States—not from Iran or other non-Western countries.

Olsen (1970, p. 3) explained that influence was regarded by some authors as synonymous with the word power, while many writers preferred to classify power as a concept distinctly separate from influence; yet others considered it to be a form of influence. According to Olsen (1970, p. 2), power was "perhaps the least studied and least understood—yet most fundamental—process in social life." Attention has not waned regarding this topic.

Qodrat is translated from Persian (Farsi) into English as the term "power." The interest in the concept of power has been traced to ancient times. As Westwood (1965) pointed out, long before Americans were defining the term power, Iranians were reacting and interacting in regard to power. He went on to say that Iranians seemed to distrust the source of power and also the exercise of power.

The word power is used frequently as a noun, but some writers tend to use powerful, its adjective form, to describe the leaders. In addition, there is a trend among writers to classify various kinds of power, such as social power, interpersonal power, interorganizational
power, coercive power, and others.

Before discussing the various kinds of power, it is relevant to investigate what American scholars and writers perceive power to be. Stogdill (1974), following his perusal of professional leadership literature, claimed that there were three general types of definitions for power; force, relation, and exchange definitions.

Bierstedt (1950, p. 730) defined power as "the ability to employ force." Simon (1957) advanced another view of power by proposing that it represented a relation; specifically, an asymmetrical influence relation. On the other hand, other writers have been more inclined to regard power as an exchange relation (Thibaut & Kelley, 1959; Gouldner, 1960; Blau, 1964).

In addition to a considerable number of definitions for power, numerous types of power have been described in the professional literature. Much of the confusion regarding power was due, in part, to the lack of consensus about how to classify the particular types of power (Filley et al., 1976). In general, the kinds of power were identified according to the base of power.

Perhaps the best known classification of the types of power was suggested by French and Raven (1959). They contended that their listing reflected the most important and prevalent types of power: reward power, coercive power, legitimate power, referent power, and expert power.

In contrast, Etzioni (1961) claimed that there were three distinct types of power: coercive power, utilitarian power, and persuasive power, plus combinations of these powers. He suggested that the major
differences among these types of power were the amount of assets de-

Hawley (1963) expressed the belief that there was only one major
type of power—social power. As Hawley (1963, p. 422) explained,
"every social act is an exercise of power, every social relationship
is a power equation, and every social group or system is an organiza-
tion of power."

According to Olsen (1970), the professional literature dealt with
two major kinds of power. He contended that the scientific bifurca-
tion on power is due to social psychologists who tended to study in-
terpersonal power relationships and sociologists who investigated
interorganizational power relationships.

Etzioni (1961) concluded that interorganizational power consist-
ed of three types of power which he named as coercive power, remu-
nervative power, and normative power. Guba (1960) suggested that nor-
mative power was actually comprised of two distinct types of power:
delegated power and ascribed power.

The aforementioned definitions and classifications of the types
of power represented only a small sample of extant conceptualizations
and typologies which have been developed to facilitate understanding
about the concept of power.

Empirical research regarding power was a hodgepodge of investi-
gations about the infrastructures of power, powerful and powerless
individuals, the distribution of power, applications of power, and
consequences of power in various settings such as within groups, or-
ganizations, communities, and countries.
One of the main questions researchers have attempted to answer is who has power. Lynd and Lynd (1929), Thompson (1956), Dahl (1961), Presthus (1964), Lowry (1968), and others used various methods such as lists, nominating techniques, surveys, and exercises to ascertain who were the core power figures.

Those who exerted power have been identified by different descriptors such as "veto group" (Riesman, 1953), "power elite" (Mills, 1959), "city boss" (Moos & Koslin, 1951), "superiors" (Walter, 1966), "high-power figures" (Jones & Jones, 1964) and others. The aforementioned descriptors reflected the implicit assumption that power was an entity possessed by a minority—the powerful people.

Another popular research problem found reported in the professional literature regarding power is what are the basic reactions to power. Kelman (1958) reported that generally there were three possible reactionary behaviors toward power which he labeled as compliance, identification, and internationalization.

Moreover, Lippitt et al. (1952), Ziller (1955), and Levinger (1959) argued that perception and power were highly correlated.

Power has variously been perceived as a negative force, a positive entity, and as a tool necessary for the attainment of certain goals in organizations.

Researchers have devised methods and measures to find out extant power infrastructures in the United States (Tannenbaum, 1956; Williams, 1965; Blankenship & Miles, 1968; Bachman, 1968; Dalton et al., 1968). Although Blake and Mouton (1964), Maier (1970), French and Bell (1972), Michell (1973), Likert (1974), and others
advocated decentralized power, some research substantiates that centralized power was preferred in college settings (Bachman, 1968) and in business settings in the United States (Dale, 1955; and Bachman et al., 1966). The data collected thus far in regard to centralized power versus decentralized power is inconclusive overall. Stogdill (1974) concluded that there was a lack of reliable data on the effects of decentralization of power as supporting any substantial changes in productivity and/or satisfaction.

Of particular interest to researchers have been the problems concerning power changes, such as: (a) What occurs when power shifts? (b) What reduces or increases power over followers? and (c) Do followers react differently to different sources of power? In reviewing the empirical findings, substantial evidence was found supporting the hypothesis that power was subject to change (Stogdill, 1974).

Perception is also a key behavioral determinant in power shifts and reactions toward power (Zander, 1953; Mausner, 1954; and Zander & Curtis, 1962). One research question bearing on the cross-cultural attitudinal study of such matters was posed by Etzioni (1970): Is power universal? He stated his opinion that power was common everywhere and that, as a fact of life, there was resistance to it.

Some researchers have taken a different approach to investigate the universal nature of power. Mulder (1966) proposed that between leaders and followers there was a distance which he referred to as the "power distance." Measurements of the power distance for Americans and Iranians have been made recently. According to Hofstede (1980, p. 45), power distance refers to a "measure of interpersonal
power as perceived by the least powerful in the relationship." The power distance rank of 40 for the United States is interpreted as meaning that the power distance in the United States tends to be medium, not an extreme in either the positive or negative range. On the other hand, the power distance rank of 58 for Iran is an index of high power distance. Hofstede (1980) concludes that leadership theories emanating from the United States are relevant to American expectations and values, not Iranian expectations and values. As he relates, Iran is one country where U.S.-based leadership skills and theories have failed to be assimilated (p. 380).

Cultural Transposition

Implicit in the professional literature is the notion that U.S.-based theories and principles, in regard to leadership—and to leadership variables such as authority, influence, and power—are applicable and generalizable to other countries and cultures by virtue of the fact that the theoretical orientation is American. Instead of accepting the universal nature of U.S.-based leadership concepts, some researchers have conducted cross-cultural studies to empirically investigate leadership concepts interculturally.

Empirical studies investigating the universality of leadership are quite recent in origin. This research has been classified as comparative management research (Schollhammer, 1969). Comparative management research is also commonly referred to as cross-cultural research, intercultural research, cross-national research, and international research.
Characteristically, this type of research is concerned with comparisons endeavoring to discover the similarities or differences among phenomena. What makes this comparative research unique is that the focus of interest as well as of curiosity is upon the behaviors or attitudes of prospective and incumbent leaders and subordinates in various countries to discover their reactions toward foreign theories and practices. The core purpose of comparative management research is to investigate whether there are cultural parameters to leadership training techniques and materials.

Comparative research is not without critics who argue that the incomparable cannot be compared (Hofstede, 1980). Proponents of comparative management research—such as Fayerweather (1959), Whyte (1969), Schollhammer (1969), Ajiferuke and Boddewyn (1970), and others—affirmed that comparisons between cultures were possible. Although critics would consider that there would be no basis for comparing prospective or incumbent American leaders with Iranian counterparts, comparative management research would proceed to measure and analyze major similarities or differences between the two groups of leaders.

The majority of the comparative management studies (McClelland, 1961; Bass, 1966; Maier et al., 1966; Parks, 1966; Sirota & Greenwood, 1971; Farris & Butterfield, 1973; Sekaran, 1981) are attitudinal comparisons between leaders from various countries.

It perhaps is relevant to review the various types of comparisons which have been reported in the professional literature. Aspects of leadership have been compared in terms of similarities or
differences at the macrocosmic level as well as at the microcosmic level (Filley et al., 1976). Harbison and Myers' (1959) was a classical example of macro-micro comparison. Initially, they determined the macrocosmic level similarities and differences among 12 countries by measuring their economic, educational, and social institutions as compared with advanced nations such as the United States. Their microcosmic level comparison consisted of qualitative data collected on management processes in the dozen countries.

Another comparative strategy is to focus on the marginal phenomena. This strategy has been borrowed from the anthropologists. Bovenkerk and Brunt (1976) related that in recent years anthropologists have tended to study a marginal fraction of people within a society to highlight the activity endemic to the marginal group.

Hofstede (1980) claims that marginal comparisons on some phenomena statistically differentiate more between cultures than macro-level comparisons. Tannenbaum's et al. (1974) investigation of the organizational hierarchy in five countries best illustrated the marginal type comparison. Instead of selecting a random sample of all organizational hierarchies from all kinds of major institutions within the five countries, Tannenbaum et al. (1974) limited their research to analyzing only a margin. They focused their attention only on business hierarchies within five countries. Marginal comparison is often regarded as the microcosmic level comparison.

In essence, Windelbrand's (Lammers, 1976) classification for comparative scientific inquiry could be equated to macrocosmic and microcosmic levels of comparisons. Windelbrand preferred to make
the distinction between the level of comparisons as "idiographic" (concern for the specific) and "nomothetic" (concern for general schema). Hofstede (1980) contends that the choice of data treatment is directly affected by the type of comparison made. Hofstede (1980) explains:

The pure idiographer will probably shy away from quantitative data and the use of statistics. Those collecting comparative data that lend themselves to statistical analysis will be attracted to different statistical methods according to the degree of nomotheticity. A greater idiographic concern will express itself in a focus on relation between variables within cultures, followed by a comparison of the patterns found from one culture to another; this can be used for a type of approach. Looking at the variance and covariance of variables between cultures is a step more toward the nomothetic side. (p. 42)

Galtung (1971) suggested another comparative strategy. As is the case for most of the comparative management research, comparisons are made between the "Center" and the "Periphery." It is generally presupposed in these studies that the American theoretical orientation and practices represent the Center. The leaders and subordinates from the various countries comprise the Periphery. This type of comparison lends itself to in-depth comparative analysis of interactions within the Periphery between other peripheral entities and within the Center.

Theories of Culture and Management

In addition to various comparative strategies, there are also different theories regarding culture and management (leadership) practices. One of the oldest of such theories was formulated by Harbison and Myers (1959). They proposed that managerial beliefs were correlated
with stages of industrial development. Implicit in their theory was that Western countries, especially the United States, was the standard to which all other countries were compared.

There has been a continuing dispute between those stressing that management is culture-bound and those stressing transferability of management skills. The latter viewpoint was succinctly expressed by Likert (1969). He related:

There is a growing body of data which indicate that the same fundamental principles yield the highest productivity and best performance in widely different countries and cultures. Managers in all industrialized nations, consequently, can improve their performance by basing their management on these principles. (p. 136)

Likert (1969) thus limited his belief in the transferability of leadership practices to practices in "industrialized countries." On the other hand, Harbison and Myers (1959, p. 117) insisted that there was "a general logic of management development which has applicability both to advanced and industrializing countries in the modern world."

In contrast, Gonzalez and McMillan (1961) concluded from their analysis of a two-year study of American management in Brazil that:

Our uniquely American philosophy of management is not universally applicable but is rather a special case ... that aspect of management which lacks universality has to do with interpersonal relationships, including those between management and workers, management and suppliers, management and the customer, the community, competition and government. (p. 41)

Oberg (1963) argued that the generalizability of management principles has cultural parameters, so principles are not universally adaptable to other cultures.
It was Bedeian's (1975, p. 897) contention that "different cultures possess different organizational norms and behavior standards and they recognize these as legitimate forms of influence."

Farmer and Richman (1965) proposed a model depicting their hypothesis that culture was a major variable in determining both managerial and organizational effectiveness. For them, culture was implied in their model as an external constraint which regulated and effected management processes as well as results within an organization. According to Farmer and Richman (1965), management philosophy was only a product of the cultural environment.

Subsequently Negandhi and Estafen (1968) proposed a different model which showed culture to be a significant independent variable. They suggested that management philosophy was comprised of certain elements which could be generalized from culture to culture. Furthermore they modified Farmer and Richman's model to include management philosophy—the overt and implied attitudes or agent relations between institutions and personnel.

Koontz and O'Donnell (1968) concluded that the two models discussed above were similar except for the fact that the Negandhi and Estafen model included managerial philosophy as an important independent variable.

Recently, Hofstede (1980) proposes another model to explain the impact of culture on leadership behavior. Based on the empirical data he collected from leaders and subordinates from 40 countries, Hofstede (1980) concludes that there are four main dimensions on which national cultures differ; namely, Power Distance, Uncertainty
Avoidance, Individualism, and Masculinity.

Hofstede (1980) also specifies that there are mechanisms which operate to maintain the stability in cultural patterns across generations. According to Hofstede (1980, p. 27), the mechanisms flow in the direction from outside influences to origins, societal norms, and to consequences. Feedback is provided via consequences, societal norms, and origins. Although there is no special division for leadership within his model, the concept of leadership is implied in it.

Each of the aforementioned models illustrated the relationship between culture and leadership philosophy as a step by step flow from one point to another. However, the comparative research to date lends itself more to another kind of model, depicting the relationship between culture and leadership.

Past and contemporary management research have concentrated on determining whether cultural transposition is possible or has successfully occurred. Cultural transposition refers to a process in which leadership ideas and skills from one culture are transferred and assimilated by individuals in another culture (Hofstede, 1980). As Hofstede (1980, p. 380) relates, "what happens in practice when U.S. theories are taught abroad... is that the theories preached are not practiced." Laurent (1980) concurs that leader trainees are able to expound leadership theories, but practice leadership skills in accordance with their own cultural norms.

Figure 1 shows a diagram with three interlocking circles. The circle to the left (A) represents foreign leadership philosophy,
theories, principles or practices. The larger circle to the right (C) represents the interpersonal perceptions of an individual from a different culture. The size of the interpersonal perception circle (C) is intentionally larger, because the cultural expectations, norms, habits, and values indigenous to a person reflect a large proportion of an individual's behavior. The smaller circle (D), inside the interpersonal perception circle, represents leadership practices and philosophies indigenous to the home country or native culture of a person. The portion in the center where the circles overlap (B) represents cultural transposition and is not a fixed quantity of space. The size of area B depends upon whether there is acceptance or adoption of the foreign leadership practices or philosophy.

![Figure 1](image)

Figure 1
Cultural Transposition Model

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Comparative management research attempts to measure and analyze the contents of all three circles, especially the parameters of cultural transposition, with leaders from different countries and cultures. The old dispute regarding the universal nature of leadership rhetoric and practice presupposes that there are no major differences in leadership practices in various cultures. The professional literature does not unanimously support the universality presumption. Harris and Moran (1979), Hofstede (1980), Laurent (1980) and others mention that some of the U.S.-based leadership theories have failed to transfer to other countries.

Various intercultural methods have been developed to determine cultural impact on leadership. One approach found in the professional literature is to conduct multiple comparisons among incumbent leaders in several countries (Harbison & Myers, 1959; Haire et al., 1966; Sirotti & Greenwood, 1971; Hofstede, 1980). Another research strategy is to make comparisons between leaders from two countries (McCann, 1964; Nowotny, 1964; Azumi & McMillan, 1975; Cox & Cooper, 1977; Heller & Wilpert, 1977).

Other empirical studies make comparative investigations of leaders within one country with various samples (Cummings & Schmidt, 1972; Farris & Butterfield, 1973; Hines, 1973; Badawy, 1980; Vardi et al., 1980).

Researchers have mainly studied incumbent leaders in government, industry, education, and also health care. A limited number of studies included samples of prospective leaders—students (Morris, 1956; Bass & Franko, 1972; Shuh, 1974; Al-Tuhaih, 1977). Besides
leaders, some comparative management research investigated the attitudes of subordinates (Farriss & Butterfield, 1973; Cascio, 1974; Hofstede, 1980).

One of the most popular techniques for gathering data for comparative studies was the questionnaire survey (Haire et al., 1966; Sirota & Greenwood, 1971; Farriss & Butterfield, 1973; Hofstede, 1980). Other studies used interviews (Negandhi & Prasad, 1971) and yet others have included written exercise activities such as the "Life Goals" distributed by the International Research Group in Management (Hofstede, 1980).

French et al. (1960), Whyte and Williams (1963), Williams et al. (1965), Mulder, (1976) and others conducted behavioral studies with leaders in various countries.

Anastasi (1954) pointed out that cross-cultural research was difficult to do. According to Lindzey (1961), Ajiferuke and Bodde wyn (1970), Shuh (1974), and Segall (1979), the main problems of intercultural research were methodological problems. The methodological difficulties mentioned in the professional literature were translation problems and adequate representative sample size.

Several techniques have been devised to reduce language problems, such as back translating, decentering, and analytical conclusions.

Small sample sizes, according to Kerlinger (1973), provide a limited amount of data. Consequently, there is a tendency to encounter more errors in data analysis when the sample size is small.

Iranians seem to be one of the cultural groups rarely included in cross-cultural studies. The available information about leadership
practices in Iran has been reported predominantly by Western scholars, writers, and news correspondents (Keddie, 1972; and Moyer, 1981). Within Iran, the government in power strictly monitors and censors data about Iranians (Baraheni, 1977; Halliday, 1979; Dorman & Omeed, 1979; Forbis, 1980). Most of the information about Iran tends to focus mainly upon political and economic themes. Nyrop (1978) and Dorman and Omeed (1979) related that the published information regarding Iran tended to be inaccurate, especially the statistical data.

A small number of comparative studies have been conducted with Iranians (Goff, 1962; Al-Tuhaih, 1977; Varga, 1977; Tyler et al., 1978; Hofstede, 1980). In the majority of these studies, the researchers reported that Iranian responses differed from the responses from Western countries.

Besides empirical research, several normative comparisons between Iranians and Americans have been reported (Beeman, 1976; Blair, 1975; Harris & Moran, 1979; Forbis, 1980; Seitz, 1980). Distinct differences have been reported such as Iranians do not share the American viewpoint concerning change (Haas, 1946; and Masse, 1954). Americans tend to adhere to the attitude that they are able and obliged to make changes (Tyler, et al., 1978). In contrast, some Iranians maintain their belief in enshallah. Enshallah is a belief that life events are preordained. Relatedly, there is a lack of concern for serious planning and acceptance of the status quo. Tyler et al. (1978) interpreted enshallah as a fatalistic outlook.

Another divergency in behavior between Iranians and Americans,
noted in the professional literature, is in regard to authority. In American organizations, responsibility and authority may be delegated to subordinates whereas in Iran authority is generally withheld from experts within organizations. Even if authority needs to be evoked, Iranian leaders seem to manifest avoidance behavior to refrain from exercising their authority (Bill, 1972; and Jandaghi, 1973).

Another major difference between Americans and Iranians is in regard to deferential behaviors. Iranians are rated as more courteous than Americans (Harris & Moran, 1979). Iranians have a ta'arof system—myriad expressions and rituals for giving compliments and conveying deference (Assadi, 1980). Elair (1975, p. 78) mentioned that Iranians "take pride in their concern for other people, treating guests as 'a gift of God'." Tyler et al. (1978, p. IS-4) stated that the most important things in Iran are "family and friends."

Another distinction made between Americans and Iranians is related to the concept of time. Iranians are generally less time conscious than Americans (Beeman, 1976). Punctuality by Iranian standards means arriving a little later than the scheduled appointment (Tyler et al., 1978).

There is a lack of information about Iranian leader-subordinate relations, decision-making, planning, leader training, and other topics related to leadership.

A selected number of Iranians have been sent to be trained abroad as a means of providing trained manpower for the country. Nassefat (1970) reported that, for over a century, Iranians have received general and professional education abroad. Initially,
Iranian graduates studied in France, then in the United Kingdom. After World War II, numerous Iranian graduates were granted admission to educational programs in the United States (Nassefat, 1970).

Harbison and Myers (1959) classified Iran as a "partially developed country" because it depended upon more advanced countries, such as the United States, for technology, trained technocrats, and scientists.

The Iranian graduates who return to their homeland tend to revert to traditional leadership patterns. Nassefat (1970) reported that the Iranian sample in his study expressed the opinion that the extant administrative routines and procedures in Iran were not conducive to acceptance of foreign philosophies or skills. Cultural transposition of leadership skills and theories from the United States to Iran seems to be regarded as a "failure" (Hofstede, 1980, p. 380). The present study attempted to investigate cultural transposition among prospective Iranian leaders majoring in Engineering in American universities in the State of Michigan in terms of their attitudes toward selected U.S.-based leadership principles about authority, influence, and power. The attitudes of Iranians were compared with the attitudes of American graduate Engineering students, in the same higher educational institutions, toward the same principles.

**Summary**

For decades, researchers have been conducting comparative studies to discover the relationship between leadership and culture.
The major controversy among writers, scholars, and researchers is whether leadership is a concept which is culture bound or whether it is universal in nature. This study was another effort to investigate whether U.S.-based leadership information is generalizable among Iranian prospective leaders.

Chapter III will review the design and procedures used for the study.
CHAPTER III

DESIGN AND METHODOLOGY

Chapter III presents the design of this study and the methodology used for data collection and analysis. In the first part of this chapter the research problem is briefly reviewed. The remainder of the chapter describes and discusses the population and sample, development of the survey instrument, data collection procedures, and the reliability as well as validation indices used for this study. The chapter concludes with a summary.

Review of the Problem

The purpose of this study was to make a cross-cultural comparison between two groups, Iranian and American graduate students majoring in Engineering, in the State of Michigan, in terms of their attitudes about principles selected from the American professional literature pertaining to the leaders' use of authority, influence, and power. Attitudinal information regarding the generalizability of some U.S.-based leadership principles was sought so as to enable cross-cultural comparisons of authority, influence, and power in extant practices of Iranian leaders and American leaders.

To accomplish the stated intention of this study, a form of descriptive research was used. Ary's et al. (1972) explanation of descriptive research was regarded as most appropriate:

Descriptive research studies are designed to obtain information concerning the current status of phenomena. They are directed toward determining the nature of the situation
as it exists at the time of the study. There is no administration or control of a treatment as is found in experimental research. (p. 286)

For this study, the analytical survey, a major type of survey methodology was selected. This form of survey methodology appeared to be pertinent. As Leedy (1974) succinctly explained:

In the analytical survey approach, our purpose is . . . to take data that are essentially quantitative in nature (numerical data) and to analyze these data by means of appropriate statistical tools so that we may infer from them certain meanings which lie hidden within them, or at least to discern the presence of potentials and dynamic forces which lie within those data that may suggest possibilities of further investigation. In the analytical survey we are concerned primarily with problems of estimation and situations demanding the testing of a statistically based hypothesis. (p. 114)

Operational Definitions

The following operational definitions were used in this cross-cultural study of leadership principles:

1. American graduate student. An American graduate student is a natural-borne citizen of the United States who has graduate student status in the State of Michigan.

2. Authority. Authority is the right to act on behalf of others (Filley, et al., 1976).

3. Cross-cultural. Cross-cultural is the term used to describe a comparison or a transaction between or among different cultures (paraphrased from Samovar & Porter, 1972).

4. Culture. A culture is a system—a collectivity of individuals—who adhere to a value and maintain the value by transmitting it to younger members of the system or to others in different systems.
5. **Frequency.** Frequency is the rate of occurrence; e.g., frequently, sometimes, seldom.

6. **Importance.** Importance is the significance of specified behavior.

7. **Influence.** Influence is a relationship in which a person affects one or more others' behavior (paraphrased from Boles, 1980).

8. **Intercultural.** Intercultural is a term used synonymously with "cross-cultural" (Samovar & Porter, 1972).

9. **Iranian graduate student.** An Iranian graduate student is a natural born citizen of Iran who has graduate student status in the State of Michigan.

10. **Leader.** A leader is an individual who is recognized by others as exercising authority, influence, or power in a given situation (Boles, 1980).

11. **Leadership.** Leadership is a process in which a leader exerts authority, influence, or power over one or more others to attain group goals (Boles, 1980).

12. **Management.** Management and leadership are terms often used as synonyms (Hersey & Blanchard, 1977).

13. **Power.** Power is a relationship in which a person has the ability to apply sanctions to another (Boles, 1980).

14. **Principle.** A principle is a statement of order or relationship which is reliable and is universally accepted (paraphrased from Boles, 1980).
Population and Sample

The population for this study consisted of Iranian and American graduate Engineering students enrolled at four state universities in Michigan: Michigan State University, University of Michigan, Wayne State University, and Western Michigan University. At these four universities, counselors in the offices of International Student Services identified a total of 112 Iranian graduate Engineering students for the spring term, 1981. The Dean's office in the College of Engineering at the respective universities also identified a total of 1,053 American graduate students who were enrolled for the spring term, 1981.

The practical concerns of finance and accessibility to the student groups influenced the decision to restrict the study to the State of Michigan. Reviewing the Graduate College bulletins of universities in different regions of the United States revealed that graduate Engineering students in Michigan have basic academic preparation similar to their counterparts throughout the United States. It was anticipated that an analytical survey conducted with the two student groups would have external validity.

From each of these two groups of students, a sample large enough to provide stable estimates on which to test the hypothesis at the .05 level of significance was selected. To determine the sample size for each of the two groups of students, the formula and table developed by Krejcie and Morgan (1970) was used. On this basis, from the 112 Iranian graduate students majoring in Engineering the sample size...
should have been 86, and from 1,053 American graduate students in Engineering the sample size should have been 279. However, Spence et al. (1976) suggested that, in order to determine the difference between the means of two groups, samples of equal sizes be used for data analysis. One hundred twelve American students were asked to return the questionnaires. In total, 224 questionnaires were distributed between the two groups of American and Iranian students. The number of usable returns was 83 from Iranian and 85 from American graduate Engineering students.

Instrumentation

Since no existing commercial survey instrument—which included U.S.-based statements regarding the leaders' use of authority, influence, and power along with the two scales of importance and frequency for each leadership principle—could be found, it was necessary to develop an instrument by means of which relevant data could be obtained.

After a perusal of contemporary American professional literature relevant to the leaders' use of authority, influence, and power, a total of 45 principles was selected: 15 statements about power; 15 statements about influence; and 15 statements about authority. Each statement included in the "Selected Leadership Principles Questionnaire" was cited, although not always in the exact wording used herein, in a minimum of five publications (books, articles, etc.), in the American professional literature as shown in Appendix A. In addition to the forty-five leadership principles, five negative statements were
added to the survey questionnaire. Randomly, five statements were selected from among the forty-five principles and modified into negative statements; two negative statements about power, one negative statement about influence, two negative statements about authority. As a means of preventing response bias, the tendency to select the same point on the scale, Tuckman (1972) recommended that alternative responses be added. Therefore, negative statements were intentionally included to insure discrimination.

Initially, the "Selected Leadership Principles Questionnaire" contained 50 closed ended statements comprising three pages. The respondents were instructed to mark each of the two scales, "frequency" and "importance", for each statement. The respondents circled a response on a Likert-type three-point scale; viz., for the "frequency" scale, infrequently = 1; frequently = 2; very frequently = 3. For the "importance" scale, not important = 1; important = 2; and very important = 3. Each respondent was to express his/her attitudes about the selected principles. There was no time limit for the completion of the instrument.

Boles' (1978) "Principles of Leadership Questionnaire" was not used for this study since many statements contained substatements regarding variables of authority, influence, and power. The aforementioned questionnaire did, however, set a precedent which was followed in the design of the questionnaire for this study. The questionnaire for this study consisted of three dozen selected American leadership principles pertaining to authority, influence and power.

Definite efforts were made to respect and protect the respondents'
anonymity and the confidentiality of their responses. No personal data were requested in this survey. A color code was adopted for distributing the questionnaires: white copies of the questionnaires were disseminated among Iranian graduate students in Engineering and pink copies were given to American graduate students in Engineering. A cover letter was attached to each questionnaire reviewing the procedures used to protect the respondents' anonymity. The researcher's doctoral committee and the Human Subjects Research Committee at Western Michigan University sanctioned the measures adopted for confidential handling of the questionnaires.

To determine content validity of the "Selected Leadership Principles Questionnaire" Ary's et al. (1972) recommendation was adopted:

Content validity is essentially and of necessity based on judgement. The test marker may ask a number of experts to examine the items systematically and indicate whether or not they represent sufficiently well the theoretical universe from which they were drawn. (p. 192)

Dr. Harold W. Boles, who has publications about leadership, and other instructors affiliated with the Department of Educational leadership at Western Michigan University reviewed the questionnaire. In addition, D. James R. Sanders and Dr. James Jaksa examined the format of the questionnaire. A pilot study was conducted during class time in spring session, 1981, in the Departments of Educational Leadership, and Communication Arts and Science at Western Michigan University. American and Iranian participants, 30 in total, completed the survey. They were asked to comment on the ease of the response and the survey format. Based on the comments, some modifications were made.

A selected group of Iranian and American graduate students
answered the questionnaire in two occasions. A frequency distribution analysis was made for each item for American and Iranian students for the test retest. Kerlinger (1973) suggested that the frequency distribution data indicate how distributions of each score differed. Based on the comments and suggestions from the experts, the students, and the frequency distribution analysis, the "Selected Leadership Principles Questionnaire" was modified. In addition to semantic and syntactical changes in the questionnaire, the five negative statements were deleted. Based on the comments and extreme frequency distributions, nine other items were removed from the original survey.

The major modifications made for this study included the rewording of the directions. The 3-point scale was retained for rating both importance and frequency but modified thus: for importance, agree = 1; undecided = 2; disagree = 3. For the frequency, frequently = 1; sometimes = 2; and seldom = 3. Also the questionnaire was shortened from three pages to two pages and from 50 to 36 items with 12 statements per each leadership variable.

Subsequently, a second pilot study was conducted to investigate the reliability of the new version of the "Selected Leadership Principles Questionnaire." A test-retest procedure utilizing the Pearson product moment correlation coefficient was completed with American graduate students' responses and the responses from the two pilot studies conducted with some Iranian students. As Ary et al. (1972) explained, satisfactory reliability coefficients are those of .90 or more while coefficients below .70 do not show a high correlation. In this pilot study, the correlation coefficient for the responses
of four Americans was .76 and for the responses of four Iranians .80, which were both high reliability coefficients.

No further revision of the questionnaire was made. The use of color coding was retained for this study. Lithographic copies of the questionnaire and cover letter prepared for distribution among the two selected groups of students at the respective universities.

Data Collection Procedures

Although an introductory letter (see Appendix B) was forwarded to the dean of the college of Engineering at each university in advance, explaining the purpose of the research, research objectives and value, mailing was impossible since three of the four universities refused to provide names and current addresses for their graduate Engineering students.

The researcher made appointments with associate deans at the four universities and with representatives of various Iranian organizations at respective campuses. The administrators at three universities refused to accept the questionnaires; however, individual class instructors at the state universities and representatives of Iranian organizations consented to distribute the copies. Postage was supplied for returning the questionnaires to the researcher. Robin (1965) suggested the use of follow-up cards and letters to respondents to remind them to return the completed questionnaires. Since the researcher did not have access to mailing information, the campus representatives were contacted by telephone on two occasions.

In total, 224 questionnaires were distributed in Michigan at the
four respective state universities. A decision was made not to accept survey questionnaires after June 25, 1981. As of that date, the researcher had received a total of 206 questionnaires, or 92 percent of the 224 questionnaires that had been distributed.

The return of the questionnaires is summarized in Table 1.

Babbie (1973, p. 165) stated: "A response rate of at least 50 percent is adequate for analysis and reporting. A response rate of at least 60 percent is good. And a response rate of 70 percent or more is very good." For this study, the usable response rate was 75 percent, which was well within the acceptable range. The very high percentage of response may have been due to the survey methodology of having representatives personally distributing the questionnaires either during or after the scheduled classes.

Table 1

Return of Questionnaires

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number sent</td>
<td>224</td>
<td>100</td>
</tr>
<tr>
<td>Returned</td>
<td>206</td>
<td>92</td>
</tr>
<tr>
<td>Returned usable—Total</td>
<td>168</td>
<td>75</td>
</tr>
<tr>
<td>Returned unusable—Total</td>
<td>38</td>
<td>17</td>
</tr>
</tbody>
</table>
Data Analysis

Each of the returned questionnaires was carefully scrutinized for its postal origin, color code, comments, and missing data. The decision was made not to include partially answered questionnaires in this study. All the questionnaires are to be shredded one year after the completion of this study.

Since the intent of this study was to investigate whether significant differences existed between the attitudes of Iranian and American graduate Engineering students in the State of Michigan toward selected U.S.-based leadership principles, a $t$ test for independent samples was selected for analyzing data. Tuckman (1973) stated that a $t$ test is used to determine whether the differences between the two means is a real or a chance difference. In this study, a $t$ test was used for independent samples to ascertain whether significant attitudinal differences existed toward selected principles about authority, influence, and power with the two student groups.

Summary

This chapter has reviewed the problem, described the population and sample selected for the survey, explained the survey questionnaire that was designed as the instrument for the study, and discussed the data collection and analysis procedures. The next chapter will present a summary of the results and findings.
CHAPTER IV

RESULTS AND FINDINGS

The presentation of the results of this study is organized into two parts. First, the survey response for the Iranian and American graduate Engineering students in the State of Michigan is reported, then the research findings are discussed. This chapter concludes with an overall summary.

Survey Response

On May 25, 1981, the researcher hand delivered, in total, 260 copies of the "Selected Leadership Principles Questionnaire" to selected representatives at four state universities in Michigan, viz., Western Michigan University, University of Michigan, Michigan State University, and Wayne State University. Various representatives handled the distribution of the survey questionnaire, disseminating 224 of the questionnaires: 112 to American and 112 to Iranian graduate students majoring in Engineering.

The various campus representatives collected the surveys and forwarded them to the researcher. On June 10, 1981, and again on June 19, 1981, the researcher telephoned all representatives to request the delivery of the surveys. The data collection timetable was limited to four weeks, from May 25, 1981 until June 25, 1981, due to the available monetary resources and the class time schedules. A tentative goal for the return of the questionnaires was set at least 70 percent from both groups of graduate students.

63
Table 2 provides a summary of the survey response rates for the two groups of graduate Engineering students. The total number of questionnaires returned was 206, or 92 percent of the sample.

Table 2
Survey Response Rates

<table>
<thead>
<tr>
<th>Group</th>
<th>Action</th>
<th>Quantity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americans</td>
<td>Distributed</td>
<td>112</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Returned usable-Total</td>
<td>85</td>
<td>75.89</td>
</tr>
<tr>
<td></td>
<td>Returned unusable</td>
<td>16</td>
<td>14.28</td>
</tr>
<tr>
<td>Iranians</td>
<td>Distributed</td>
<td>112</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Returned usable-Total</td>
<td>83</td>
<td>84.10</td>
</tr>
<tr>
<td></td>
<td>Returned unusable</td>
<td>22</td>
<td>19.64</td>
</tr>
</tbody>
</table>

The number of questionnaires distributed to the two student groups was based on an estimate of the population sizes in the State of Michigan. To ascertain a difference between the means of the two student groups regarding their attitudes toward selected U.S.-based leadership principles samples of equal sizes were selected (Spence et al., 1976).

The enrollment totals for both student groups at the respective state universities were requested before the commencement of the study. Only the enrollment rates at Western Michigan University...
were immediately available. Eventually, officials at the other three universities provided the quantitative data about the two populations.

Enrollment rates of the Iranian and American graduate students in Engineering in the four state universities during the spring 1981 are listed in Table 3.

Table 3
Engineering Enrollment

<table>
<thead>
<tr>
<th>University</th>
<th>Americans</th>
<th>Iranians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan State University</td>
<td>360</td>
<td>62</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>391</td>
<td>16</td>
</tr>
<tr>
<td>Wayne State University</td>
<td>288</td>
<td>27</td>
</tr>
<tr>
<td>Western Michigan University</td>
<td>14</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4 shows the number and percent of non-respondents for each sample.

Table 4
Non-respondents

<table>
<thead>
<tr>
<th>Group</th>
<th>Quantity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americans</td>
<td>11</td>
<td>9.82</td>
</tr>
<tr>
<td>Iranians</td>
<td>7</td>
<td>6.25</td>
</tr>
</tbody>
</table>
An official inquiry was not conducted to determine why some of the questionnaires were not returned. At each of the state universities, there was, on the part of the administrators, a lack of willingness to take time out from busy schedules, a lack of interest in cross-cultural research, and/or lack of interest in assisting in educational research. Individual instructors and students were more cooperative and helpful.

The Findings

To examine the attitudes of the designated sample of American and Iranian graduate Engineering students, in the State of Michigan, toward selected U.S.-based leadership principles, the research hypothesis was postulated:

Hypothesis:

There is a significant difference in attitudes of Iranian and American graduate students in Engineering toward selected U.S.-based leadership principles about authority, influence, and power.

After the collection of the data and their analysis, the above hypothesis was supported. Statistically, there was a significant difference between the attitudes of the two samples of graduate students regarding 25 of the 36 leadership principles related to authority, influence, and power.

The results of the data analysis are shown in separate tables. Since the questionnaire consisted of 12 statements for each of the variables of authority, influence, and power with the scales of importance and frequency, there are six different tables listing
the detailed analysis of the data. Besides the detailed analysis, the overall results are also reported in separate tables.

Table 5 summarizes the analysis of data for the importance scale of the first 12 statements for the questionnaire, which were about authority.

<table>
<thead>
<tr>
<th>Item</th>
<th>Americans</th>
<th></th>
<th>Iranians</th>
<th></th>
<th></th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>.4267</td>
<td>1.253</td>
<td>.6597</td>
<td>0.207</td>
<td>.836</td>
<td></td>
</tr>
<tr>
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<td>1.071</td>
<td>.2577</td>
<td>1.265</td>
<td>.6823</td>
<td>2.455</td>
<td>.015</td>
<td></td>
</tr>
<tr>
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<td>.4110</td>
<td>1.398</td>
<td>.7147</td>
<td>2.072</td>
<td>.040</td>
<td></td>
</tr>
<tr>
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<td>.3458</td>
<td>1.205</td>
<td>.5578</td>
<td>1.385</td>
<td>.168</td>
<td></td>
</tr>
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<td>.8968</td>
<td>-2.838</td>
<td>.005</td>
<td></td>
</tr>
<tr>
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<td>.6344</td>
<td>1.277</td>
<td>.6308</td>
<td>0.307</td>
<td>.759</td>
<td></td>
</tr>
<tr>
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<td>1.082</td>
<td>.3523</td>
<td>1.735</td>
<td>.8846</td>
<td>6.309</td>
<td>.000</td>
<td></td>
</tr>
<tr>
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<td>1.012</td>
<td>.1085</td>
<td>1.361</td>
<td>.6910</td>
<td>4.608</td>
<td>.000</td>
<td></td>
</tr>
<tr>
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<td>1.165</td>
<td>.5082</td>
<td>1.542</td>
<td>.8454</td>
<td>3.517</td>
<td>.001</td>
<td></td>
</tr>
<tr>
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<td>1.965</td>
<td>.9813</td>
<td>1.855</td>
<td>.8573</td>
<td>-.768</td>
<td>.444</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1.259</td>
<td>.6391</td>
<td>2.602</td>
<td>.7147</td>
<td>12.950</td>
<td>.000</td>
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</tr>
<tr>
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<td>1.047</td>
<td>.2630</td>
<td>1.157</td>
<td>.4548</td>
<td>1.917</td>
<td>.057</td>
<td></td>
</tr>
</tbody>
</table>

For each item, the results were tabulated for both Iranian and American graduate Engineering students. The means for the two groups on each of the twelve items were reasonably close. For Americans, item five and for Iranians item 11 had the highest means. The
highest mean score for Americans was 2.329 and for Iranians was 2.602.

Table 6 provides the summary analysis of importance scale ratings related to influence statements.

Table 6
Summary Analysis of Importance Scale Ratings for Influence Statements

<table>
<thead>
<tr>
<th>Item</th>
<th>Americans Mean</th>
<th>SD</th>
<th>Iranians Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
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<td>.2577</td>
<td>1.108</td>
<td>.3128</td>
<td>0.856</td>
<td>.393</td>
</tr>
<tr>
<td>14</td>
<td>1.753</td>
<td>.4605</td>
<td>1.458</td>
<td>.7208</td>
<td>-3.170</td>
<td>.002</td>
</tr>
<tr>
<td>15</td>
<td>1.106</td>
<td>.3787</td>
<td>1.663</td>
<td>.8305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2.224</td>
<td>.9178</td>
<td>1.422</td>
<td>.6270</td>
<td>-6.597</td>
<td>.000</td>
</tr>
<tr>
<td>17</td>
<td>2.306</td>
<td>.9132</td>
<td>1.494</td>
<td>.8020</td>
<td>-6.117</td>
<td>.000</td>
</tr>
<tr>
<td>18</td>
<td>2.118</td>
<td>.5651</td>
<td>1.217</td>
<td>.5421</td>
<td>-10.540</td>
<td>.000</td>
</tr>
<tr>
<td>19</td>
<td>2.341</td>
<td>.9070</td>
<td>2.060</td>
<td>.9416</td>
<td>-1.970</td>
<td>.051</td>
</tr>
<tr>
<td>20</td>
<td>2.247</td>
<td>.9374</td>
<td>1.169</td>
<td>.4078</td>
<td>-9.628</td>
<td>.000</td>
</tr>
<tr>
<td>21</td>
<td>1.929</td>
<td>.5298</td>
<td>1.590</td>
<td>.7814</td>
<td>-3.299</td>
<td>.001</td>
</tr>
<tr>
<td>22</td>
<td>1.365</td>
<td>.5946</td>
<td>2.145</td>
<td>.8714</td>
<td>6.790</td>
<td>.000</td>
</tr>
<tr>
<td>23</td>
<td>1.024</td>
<td>.1525</td>
<td>1.289</td>
<td>.6350</td>
<td>3.748</td>
<td>.000</td>
</tr>
<tr>
<td>24</td>
<td>1.024</td>
<td>.1525</td>
<td>1.542</td>
<td>.7699</td>
<td>6.090</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results are shown for both American and Iranian graduate students in Engineering. Item 19 shows the highest mean score for Americans and item 22 the highest mean score for Iranians. The overall mean scores for the two groups on each of the twelve items were also reasonably close.
A summary analysis of importance scale ratings for power statements is presented in Table 7.

### Table 7

**Summary Analysis of Importance Scale Ratings for Power Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Americans</th>
<th></th>
<th>Iranians</th>
<th></th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>1.082</td>
<td>.3846</td>
<td>1.590</td>
<td>.7657</td>
<td>5.453</td>
<td>.000</td>
</tr>
<tr>
<td>26</td>
<td>1.365</td>
<td>.7692</td>
<td>1.434</td>
<td>.6284</td>
<td>0.636</td>
<td>.526</td>
</tr>
<tr>
<td>27</td>
<td>1.341</td>
<td>.7328</td>
<td>1.639</td>
<td>.7898</td>
<td>2.531</td>
<td>.012</td>
</tr>
<tr>
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<td>1.988</td>
<td>.9940</td>
<td>1.627</td>
<td>.8655</td>
<td>-2.513</td>
<td>.013</td>
</tr>
<tr>
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<td>1.412</td>
<td>.7120</td>
<td>1.446</td>
<td>.7691</td>
<td>0.297</td>
<td>.766</td>
</tr>
<tr>
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<td>1.059</td>
<td>.2825</td>
<td>2.012</td>
<td>.9304</td>
<td>9.029</td>
<td>.000</td>
</tr>
<tr>
<td>31</td>
<td>1.506</td>
<td>.5261</td>
<td>1.410</td>
<td>.7657</td>
<td>-.951</td>
<td>.343</td>
</tr>
<tr>
<td>32</td>
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<td>.4537</td>
<td>2.084</td>
<td>.8724</td>
<td>7.940</td>
<td>.000</td>
</tr>
<tr>
<td>33</td>
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<td>.4902</td>
<td>1.566</td>
<td>.6661</td>
<td>-.505</td>
<td>.614</td>
</tr>
<tr>
<td>34</td>
<td>1.482</td>
<td>.5027</td>
<td>1.337</td>
<td>.6301</td>
<td>-1.651</td>
<td>.101</td>
</tr>
<tr>
<td>35</td>
<td>1.224</td>
<td>.5428</td>
<td>1.458</td>
<td>.8009</td>
<td>2.224</td>
<td>.027</td>
</tr>
<tr>
<td>36</td>
<td>1.965</td>
<td>.9691</td>
<td>1.337</td>
<td>.5691</td>
<td>-5.101</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results are indicated for the two groups of Iranian and American graduate students in Engineering. Item 28 shows the highest mean score for Americans and item 32 indicates the highest mean for Iranians. The overall mean scores for the two groups of students do not show great differences.

The statistical findings for the frequency scale of 12 authority statements included in the questionnaire are contained in Table 8.
Table 8
Summary Analysis of Frequency Scale
Ratings for Authority Statements

<table>
<thead>
<tr>
<th>Item</th>
<th><strong>Americans</strong></th>
<th></th>
<th><strong>Iranians</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>t</td>
<td>p</td>
</tr>
<tr>
<td>1</td>
<td>1.788</td>
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<td>1.361</td>
<td>.5314</td>
<td>-5.292</td>
<td>.000</td>
</tr>
<tr>
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<td>1.188</td>
<td>.3932</td>
<td>1.566</td>
<td>.5673</td>
<td>5.050</td>
<td>.000</td>
</tr>
<tr>
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<td>1.800</td>
<td>.4309</td>
<td>1.639</td>
<td>.6548</td>
<td>-1.892</td>
<td>.060</td>
</tr>
<tr>
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<td>1.894</td>
<td>.4089</td>
<td>1.398</td>
<td>.6036</td>
<td>-6.255</td>
<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>1.329</td>
<td>.4973</td>
<td>1.663</td>
<td>.6491</td>
<td>3.740</td>
<td>.000</td>
</tr>
<tr>
<td>6</td>
<td>1.188</td>
<td>.4754</td>
<td>1.289</td>
<td>.4821</td>
<td>1.366</td>
<td>.174</td>
</tr>
<tr>
<td>7</td>
<td>1.200</td>
<td>.4024</td>
<td>1.659</td>
<td>.5539</td>
<td>5.882</td>
<td>.000</td>
</tr>
<tr>
<td>8</td>
<td>1.035</td>
<td>.1856</td>
<td>1.614</td>
<td>.6014</td>
<td>8.475</td>
<td>.000</td>
</tr>
<tr>
<td>9</td>
<td>1.094</td>
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<td>1.916</td>
<td>.6844</td>
<td>9.936</td>
<td>.000</td>
</tr>
<tr>
<td>10</td>
<td>1.165</td>
<td>.4590</td>
<td>1.904</td>
<td>.7091</td>
<td>8.037</td>
<td>.000</td>
</tr>
<tr>
<td>11</td>
<td>1.059</td>
<td>.2367</td>
<td>1.916</td>
<td>.7020</td>
<td>10.650</td>
<td>.000</td>
</tr>
<tr>
<td>12</td>
<td>1.224</td>
<td>.4466</td>
<td>1.386</td>
<td>.5140</td>
<td>2.182</td>
<td>.030</td>
</tr>
</tbody>
</table>

The mean scores of the two student groups show that, in terms of group judgment of the frequency with which each of the dozen authority statements might be observed in their countries, both student groups mostly rated the principles in the range between "frequently" and "sometimes." A comparison of the mean scores shows that the highest mean score was 1.894 for Americans for item four pertaining to the necessity of authority for the functioning of an organization. In contrast, the highest mean score of Iranians was 1.916 for both items nine and eleven. Item nine dealt with a leader using authority to enforce his/her will and item eleven was related
to authority not being fixed in an organization. The responses for both items were skewed toward the higher scale under frequency, which is "sometimes" or "seldom."

A summary analysis of frequency scale ratings for influence statements is contained in Table 9.

Table 9

Summary Analysis of Frequency Scale Ratings for Influence Statements

<table>
<thead>
<tr>
<th>Item</th>
<th>Americans Mean</th>
<th>SD</th>
<th>Iranians Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>1.059</td>
<td>.2825</td>
<td>1.386</td>
<td>.4897</td>
<td>5.312</td>
<td>.000</td>
</tr>
<tr>
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<td>.2577</td>
<td>1.627</td>
<td>.5568</td>
<td>8.337</td>
<td>.000</td>
</tr>
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<td>1.747</td>
<td>.6957</td>
<td>5.115</td>
<td>.000</td>
</tr>
<tr>
<td>16</td>
<td>1.706</td>
<td>.4856</td>
<td>1.518</td>
<td>.6692</td>
<td>-2.089</td>
<td>.038</td>
</tr>
<tr>
<td>17</td>
<td>1.765</td>
<td>.4537</td>
<td>1.627</td>
<td>.6384</td>
<td>-1.620</td>
<td>.107</td>
</tr>
<tr>
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<td>.4902</td>
<td>1.723</td>
<td>.6498</td>
<td>-0.736</td>
<td>.462</td>
</tr>
<tr>
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<td>.5306</td>
<td>1.904</td>
<td>.7261</td>
<td>2.019</td>
<td>.045</td>
</tr>
<tr>
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<td>.5049</td>
<td>1.337</td>
<td>.5691</td>
<td>-3.734</td>
<td>.000</td>
</tr>
<tr>
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<td>.5281</td>
<td>-1.125</td>
<td>.262</td>
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<tr>
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<td>1.400</td>
<td>.5164</td>
<td>1.807</td>
<td>.5938</td>
<td>4.746</td>
<td>.000</td>
</tr>
<tr>
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<td>.4836</td>
<td>1.518</td>
<td>.5918</td>
<td>2.689</td>
<td>.000</td>
</tr>
<tr>
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<td>.3376</td>
<td>1.578</td>
<td>.5869</td>
<td>6.095</td>
<td>.000</td>
</tr>
</tbody>
</table>

Considering the mean scores of the two student groups in terms of group judgment of the frequency of the dozen influence statements, a high degree of homogeneity is apparent between the mean scores of the two groups for all the items.
A summary analysis of frequency scale ratings for power statements is included in Table 10.

Table 10

Summary Analysis of Frequency Scale Ratings for Power Statements

<table>
<thead>
<tr>
<th>Item</th>
<th>Americans Mean</th>
<th>Americans SD</th>
<th>Iranians Mean</th>
<th>Iranians SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
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<td>.6034</td>
<td>3.671</td>
<td>.000</td>
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<tr>
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<td>.6195</td>
<td>-3.340</td>
<td>.001</td>
</tr>
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<td>.5569</td>
<td>1.783</td>
<td>.6448</td>
<td>0.958</td>
<td>.339</td>
</tr>
<tr>
<td>28</td>
<td>1.459</td>
<td>.5886</td>
<td>1.699</td>
<td>.7111</td>
<td>2.385</td>
<td>.018</td>
</tr>
<tr>
<td>29</td>
<td>1.424</td>
<td>.4971</td>
<td>1.614</td>
<td>.6777</td>
<td>2.089</td>
<td>.039</td>
</tr>
<tr>
<td>30</td>
<td>1.353</td>
<td>.4807</td>
<td>1.819</td>
<td>.5662</td>
<td>5.759</td>
<td>.000</td>
</tr>
<tr>
<td>31</td>
<td>1.600</td>
<td>.5164</td>
<td>1.554</td>
<td>.6099</td>
<td>-5.25</td>
<td>.600</td>
</tr>
<tr>
<td>32</td>
<td>1.659</td>
<td>.4769</td>
<td>1.855</td>
<td>.5211</td>
<td>2.552</td>
<td>.012</td>
</tr>
<tr>
<td>33</td>
<td>1.600</td>
<td>.4928</td>
<td>1.855</td>
<td>.5871</td>
<td>3.057</td>
<td>.003</td>
</tr>
<tr>
<td>34</td>
<td>1.435</td>
<td>.4987</td>
<td>1.819</td>
<td>.6833</td>
<td>4.167</td>
<td>.000</td>
</tr>
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<td>1.153</td>
<td>.3621</td>
<td>1.687</td>
<td>.6233</td>
<td>6.233</td>
<td>.000</td>
</tr>
<tr>
<td>36</td>
<td>1.600</td>
<td>.5164</td>
<td>1.711</td>
<td>.5745</td>
<td>1.316</td>
<td>.190</td>
</tr>
</tbody>
</table>

The mean scores of the two groups of Iranian and American Engineering students in terms of group judgment of the frequency of the last 12 items of the questionnaire, which were power principles, were rather close. Item 26 had the highest mean (1.729) for Americans while item 33 had the highest mean (1.855) for Iranians. Both groups of students mostly selected "frequently" and/or "sometimes" for their responses for these items.
In terms of the attitudes of the two student groups regarding the importance of each of the three variables, the mean scores are displayed in Table 11. The range of possible scores for each variable was from 12 to 36; the lower the score, the more important the principles were rated.

Table 11
Mean Scores for the Importance Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Americans Mean</th>
<th>Americans SD</th>
<th>Iranians Mean</th>
<th>Iranians SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>15.73</td>
<td>1.52</td>
<td>18.67</td>
<td>2.98</td>
</tr>
<tr>
<td>Influence</td>
<td>20.51</td>
<td>3.40</td>
<td>18.16</td>
<td>3.26</td>
</tr>
<tr>
<td>Power</td>
<td>17.27</td>
<td>2.41</td>
<td>18.94</td>
<td>3.84</td>
</tr>
</tbody>
</table>

The highest mean score for the Americans on the importance rating of the variables was 20.51 for the influence statements, while the lowest, 15.73, was for the importance of the authority statements. The highest mean score for Iranians was 18.94 for the importance rating for power statements, while their lowest mean score was 18.16 for the importance rating of the influence statements.

The mean scores for the importance scale of the questionnaire showed that American graduate students tended to perceive authority first, power second, and influence third in terms of the importance of the selected principles. On the other hand, the means for Iranians indicated that they tended to perceive influence first, authority
second, and power third in terms of the importance of the principles.

The mean scores of the attitudes of the same groups regarding the frequency rating of the three variables of authority, influence, and power are summarized in Table 12. The range of possible scores for each variable was from 12 to 36; the lower the score, the more frequently the principles were perceived to be practiced.

Table 12
Mean Scores for the Frequency Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Americans Mean</th>
<th>Americans SD</th>
<th>Iranians Mean</th>
<th>Iranians SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>15.96</td>
<td>1.74</td>
<td>19.29</td>
<td>2.96</td>
</tr>
<tr>
<td>Influence</td>
<td>17.58</td>
<td>1.85</td>
<td>19.42</td>
<td>2.88</td>
</tr>
<tr>
<td>Power</td>
<td>18.08</td>
<td>3.10</td>
<td>20.78</td>
<td>3.20</td>
</tr>
</tbody>
</table>

In terms of the frequency rating of the selected leadership principles, the highest mean score for Americans was 18.08 for the statements about power; their lowest mean score was 15.96 for the statements about authority. The Iranian sample had the highest mean score, 20.78, on the frequency rating of the power statements, while their mean score for the frequency rating for the selected authority statements was 19.29.

The mean scores for the frequency scale showed that both American and Iranian graduate students who participated in this study tended to perceive authority first, influence second, and power third.
in terms of the frequency with which they would experience the principles. However, the overall mean was higher for Iranian students than for the American students. The higher mean scores of the Iranian students indicated that Iranians perceived the selected principles as being less prevalent in leadership practices in Iran.

A *t* test for the independent groups was used to analyze the means as related to each group of students. The *t* test was selected for the statistical treatment because this study involved comparison of the means of the attitudes of two independent groups regarding the two rating scale for each of the three variables.

The findings related to the overall comparison of the two student groups toward the U.S.-based leadership principles are displayed in Table 13.

**Table 13**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Americans</th>
<th></th>
<th>Iranians</th>
<th></th>
<th>df</th>
<th><em>t</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>53.51</td>
<td>6.082</td>
<td>55.77</td>
<td>7.839</td>
<td>166</td>
<td>2.095*</td>
</tr>
<tr>
<td>Frequency</td>
<td>51.62</td>
<td>4.606</td>
<td>59.49</td>
<td>7.023</td>
<td>166</td>
<td>8.600*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Critical value of *t* = 1.64

As shown in Table 13, the mean scores for the two groups of graduate students—in terms of their attitudes regarding the
importance of the selected U.S.-based principles for leaders in their respective countries, viz., the United States and Iran—were 53.51 for Americans and 55.77 for Iranians. The range of possible scores was 36 to 108; the lower the score, the more important the principles were rated.

The mean scores on the frequency with which the selected U.S.-based principles about authority, influence, and power are experienced in extant practices of leaders in their respective countries for the two groups were 51.62 for Americans and 59.49 for Iranians. The range of possible scores was 36 to 108; the lower the score, the more frequently the principles were perceived to be practiced.

Overall comparison of the mean scores for both student groups indicated that there was a slightly wider margin between their frequency mean scores as compared to their importance mean scores.

The value of t obtained for the overall difference between the two groups led to the rejection of the null hypothesis at the .05 level of significance. Thus, the results indicate that a statistically significant difference did exist between American and Iranian graduate Engineering students, in the State of Michigan, in terms of their attitudes toward selected U.S.-based leadership principles. This supported the research hypothesis stated on page 66 of this section.

The statistical results of the t test for the two student groups in terms of their attitudes toward U.S.-based statements about authority are contained in Table 14. The results indicate a statistically significant difference in attitudes between Americans and
Iranians. American graduate Engineering students would seem more in agreement with the importance and frequency of the U.S.-based authority principles than Iranians.

**Table 14**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Americans</th>
<th></th>
<th>Iranians</th>
<th></th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportanCe</td>
<td>15.73</td>
<td>1.52</td>
<td>18.67</td>
<td>2.98</td>
<td>166</td>
<td>8.09*</td>
</tr>
<tr>
<td>Frequency</td>
<td>15.96</td>
<td>1.74</td>
<td>19.29</td>
<td>2.96</td>
<td>166</td>
<td>8.86*</td>
</tr>
</tbody>
</table>

*Significance at the .05 level
Critical value of $t = 1.64$

Regarding the attitudes of the two groups of students toward selected authority principles, there was less homogeneity among Iranian responses than among those of Americans.

The $t$ value as related to attitudes of the two student groups toward the U.S.-based influence statements is displayed in Table 15. A statistically significant difference was again found between the two student groups.
Table 15

\( t \) Value for Independent Groups, Attitudes toward Selected Influence Statements

<table>
<thead>
<tr>
<th>Scale</th>
<th>Americans Mean</th>
<th>SD</th>
<th>Iranians Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>20.51</td>
<td>3.40</td>
<td>18.16</td>
<td>3.26</td>
<td>166</td>
<td>-4.56*</td>
</tr>
<tr>
<td>Frequency</td>
<td>17.58</td>
<td>1.85</td>
<td>19.42</td>
<td>2.88</td>
<td>166</td>
<td>4.94*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Critical value of \( t = 1.64 \)

The obtained value of \( t \), for the comparison of the two groups toward U.S.-based power statements, shown in Table 16, was found to be significantly different.

Table 16

\( t \) Value for Independent Groups, Attitudes toward Selected Power Principles

<table>
<thead>
<tr>
<th>Scale</th>
<th>Americans Mean</th>
<th>SD</th>
<th>Iranians Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>17.27</td>
<td>2.41</td>
<td>18.94</td>
<td>3.84</td>
<td>166</td>
<td>3.38*</td>
</tr>
<tr>
<td>Frequency</td>
<td>18.08</td>
<td>3.10</td>
<td>20.78</td>
<td>3.20</td>
<td>166</td>
<td>5.55*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Critical value of \( t = 1.64 \)

In summary, a statistically significant difference was found to exist at or below .05 level between the attitudes of the sample

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of American and Iranian graduate Engineering students regarding:
(a) the importance of the U.S.-based leadership principles for extant
leaders' practices relative to authority, influence, and power and
(b) the frequency with which the selected U.S.-based leadership
principles about authority, influence, and power were perceived to
operate among leaders in the respective countries.

Summary

In this particular study, an investigation of the probability
of attitudinal differences between American and Iranian graduate
Engineering students in the State of Michigan was conducted. A sta­
tistically significant difference at or below the .05 level was
found to exist between the attitudes of the two groups.

The next chapter elaborates on the results of this attitudinal
research, describes some implications for further research, and
provides some recommendations for further research.
CHAPTER V
SUMMARY, FINDINGS AND THEIR IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study followed by a discussion of the potential usefulness of this study to those concerned with educational leadership. In addition, recommendations are included for possible future research.

Summary of the Study

The purpose of this study was to compare the attitudes of two graduate student samples; viz., Americans and Iranians in Engineering studies at Michigan State University, University of Michigan, Wayne State University, and Western Michigan University regarding the "frequency" and "importance" of leadership principles selected exclusively from the American professional literature. These principles were in terms of leaders' use of authority, influence, and power.

The primary objective of this study was to find answers to the following six research questions:

1. What are the attitudes of the samples toward the importance of some selected U.S.-based principles about authority for leaders in their respective countries?

2. What are the attitudes of the samples toward the importance of some selected U.S.-based principles about influence for leaders in their respective countries?

3. What are the attitudes of the samples toward the importance of some selected U.S.-based leadership principles about power for
leaders in their respective countries?

4. What are the attitudes of the samples in terms of the frequency with which they experience some selected U.S.-based leadership principles pertaining to authority in their respective countries?

5. What are the attitudes of the samples in terms of the frequency with which they experience some selected U.S.-based leadership principles pertaining to influence in their respective countries?

6. What are the attitudes of the samples in terms of the frequency with which they experience some selected U.S.-based leadership principles pertaining to power in their respective countries?

A 36-item, self-administered, two-page survey questionnaire was distributed by campus representatives (i.e., class instructors and Iranian graduate students majoring in Engineering) on the four campuses to the two samples: (1) Iranian graduate Engineering students; and (2) American graduate Engineering students. During the period of May 25 through June 25, 1981, 168 usable responses, or 75 percent of the 224 distributed questionnaires were received.

To test the hypothesis of this study, a t test of independent samples at the .05 level of significance was used.

Discussion of the Findings

The two samples did not agree about the importance of the selected American-based leadership principles. Nor was there agreement between the two student groups regarding the frequency of the same
U.S.-based statements in terms of their occurrence in extant leadership practices in the United States and Iran respectively.

The American students agreed more with both the importance and the frequency of the 36 leadership principles, which were selected from the United States publications. On the other hand, Iranian graduate Engineering students were in less agreement about the overall frequency and importance of the statements.

Certain items in this survey were found to be significantly different in terms of the means for the two samples. On the other hand, the means of eleven principles (authority principles, 1, 4, 6, and 12; influence principles 1 and 7; and power principles 2, 5, 7, 9, and 10) were considered not to be significantly different. No definite patterns could be found in terms of the responses of the two samples of students to these leadership principles.

Implications

A search of the U.S.-based professional literature revealed a plethora of information about leaders' use of authority, influence, and power. However, only a paucity of publications mentioned that American leadership principles pertaining to the aforementioned variables may be culture-bound or have limits to their application to leadership conditions in non-Western countries, such as Iran. Recent comparative management research studies supported the premise that the U.S.-based leadership theories, principles, and practices are not universally applicable to all non-Western countries (Farris & Butterfield, 1973; Tyler et al., 1978; Hofstede, 1980).
Since graduates may be future leaders (Arasteh, 1962; and Nyrop, 1978), a case could be made for the inclusion of a cross-cultural leadership component as a part of training programs for American and international students. In contrast, American theories and practices often are stressed as the norm and standard for which prospective leaders should strive.

American leadership principles, indigenous to and possibly valid for the cultural context of the United States and various other Western countries—such as the United Kingdom, Canada, Australia, and Northern Europe (Hofstede, 1980)—may not be so relevant for the extant practices in non-Western countries, viz., Iran, as indicated in this study. If an update of empirical findings concerning the significant similarities and differences between cultures is not possible in the format of training programs for prospective leaders, at least the data and information about authority, influence, and power need to be identified as being possibly valid for only a specified culture instead of being promoted as universal.

Investigation of leadership principles endemic to particular cultures may help to initiate dialog and comparative analyses in training programs for incumbent and prospective leaders from the United States and other countries.

Implications for Further Research

Inasmuch as the current findings of this study indicate that there were statistical significant differences in attitudes toward selected American leadership principles between American and Iranian
prospective leaders majoring in Engineering in the State of Michigan, a number of implications for further research seem clear. It is suggested that this study be replicated in other geographic areas with non-U.S. prospective leaders enrolled in training programs such as educational leadership, business administration, management, and/or engineering. A similar study might also be feasible with populations of Iranian leaders from various professions who are residing in Iran and abroad. Their attitudes toward selected leadership principles might assist in providing more insight for understanding existing similarities and differences between Western and non-Western cultures regarding aspects of leadership.

This study might even be replicated with leader incumbents from other Middle Eastern countries such as Saudi Arabia, Iraq, Libya, Jordan, etc. In addition, cross-cultural studies which compare the attitudes of various cultural groups might provide useful information for educators. Comparisons could be made between the attitudes of American and Middle Eastern leaders and prospective leaders who are in their native countries, as well as those who have relocated abroad, regarding selected leadership principles indigenous to extant leadership practices in the Middle East.

Additional cross-cultural information could assist in determining whether congruence exists between perceived and actual behaviors manifested by such leaders regarding authority, influence, and power.

Furthermore, investigation involving samples of Iranian subordinates may indicate whether or not Iranian leaders' behavior in terms of authority, influence, and power are perceived to be congruent
with leadership principles.

The "Selected Leadership Principles Questionnaire" should be further field tested to assist in developing and designing a questionnaire as a tool for cross-cultural comparative research.

Limitations of the Study

Although statistical significant differences were found to exist between the two samples in their perceptions of importance and frequency of 25 out of 36 U.S.-based selected leadership principles, these results must be carefully interpreted in the context of this study since it had some methodological limitations.

First, this study was not conducted with a nationwide sample. In this study, all the respondents were attending state-run institutions of higher education. The reported results pertain to the attitudes of the samples within Michigan and were limited to students in only one field of study, viz., Engineering. Although plans had been made to randomly select participants using mailing lists, these plans were abandoned when mailing information was not available to the researcher by three of the four designated universities. Instead, campus representatives distributed the questionnaires among the available students in those classes in which teachers were willing to cooperate.

Efforts were made to standardize the procedures for the distribution of the questionnaire. No personal data were collected about individuals constituting the two samples. There were no markings on the questionnaires specifying that any of the principles were
from any particular country, so as not to bias the respondents.

Since the intent of this study was to compare the attitudes of the two populations, a .05 level of significance was chosen to set the probability of type I error of incorrectly rejecting the null hypothesis. An analysis of the data showed that the two group means were different at a statistically significant level, but were actually close at the same end of every scale. The difference between two group means was not extreme in any cases.

Conclusion

This study suggested that there was a statistically significant difference between the two groups of Iranian and American graduate Engineering students in terms of their attitudes toward 25 of 36 selected leadership principles; those relating to authority, influence, and power. However, comparison of the means revealed that the scores for the two samples were within comparatively close ranges.

This empirical research, investigating whether American-based principles were perceived by American and Iranian prospective leaders as generalizable to their two cultural settings, was intended to test beliefs about the universal nature of some selected U.S.-based leadership principles.

Regarding the limitations of principles, Fox (1979) expressed the belief that:

Stated principles for a given setting do not improve our understanding; they hide it. What is needed are more detailed guidelines for specific contexts and more direct attention to specific problems affiliated with particular contexts. . . . The fault is not in principles, but in a
view that any general principles can act as guidelines for the practice of a craft that is so context bound. (p. 30)

Further comparative research seems warranted to investigate the generalizability of U.S.-based principles about leadership with current and prospective leaders from non-Western countries to empirically substantiate whether American leadership tenets are culture-bound or not.

Meantime, those who teach "principles" may need to caution students that some or all of such statements may apply only to certain cultures or subcultures. It is believed that many U.S. professors do so now, but some do not.
APPENDIX A

Sources of Questionnaire Statements
American scholars and researchers have proposed statements about authority, influence, and power. Each statement used in the questionnaire designed for this study has been cited, although not always in the exact wording used herein, in a minimum of five U.S.-based sources such as books, articles, etc. Provided below are the questionnaire statements along with the sources.

Authority Statements

1. A person who has authority has the right to take action that will affect the organization (Peabody, 1962; Peterson, 1962; Stogdill, 1974; Filley et al., 1976; Sergiovanni & Starratt, 1979).

2. A leader is not the only person in an organization who has authority (Merton, 1957; Bennis, 1959; Stogdill, 1959; Bavelas, 1960; Koontz & O'Donnell, 1965).


5. It is more difficult to acquire additional authority than to acquire more influence or power (Simon, 1950; Meeth & Hodgkinson, 1971; Leavitt, 1972; Filley et al., 1976; Boles, 1980).

6. Subordinates value the authority of a person who is competent in performing tasks (Peabody, 1962; Peabody, 1964; Phillips...
et al., 1979; Sergiovanni & Starratt, 1979; Stogdill, 1974).


8. The amount of authority exerted depends upon whether it is needed (Barnard, 1938; Campbell, 1956; Peabody, 1962; Stogdill, 1974; Boles, 1980).

9. A leader can enforce his/her will by using the legal authority of his/her position (Fiedler, 1967; Graen et al., 1970; Ashour, 1972; Chemers & Shrzypek, 1972; Filley et al., 1976).

10. More authority is attributed to a leader when a group task is not structured (Koontz & O'Donnell, 1968; Heller & Yukl, 1969; Yukl, 1971; Filley et al., 1976; Boles, 1980).

11. Authority is not fixed in an organization (Tannenbaum, 1956; Simon, 1957; Gibb, 1969; Stogdill, 1974; Scott, 1978).

12. Authority can be delegated within an organization (Peabody, 1962; Hollander, 1964; Stogdill, 1974; Pfeffer, 1978; Boles, 1980).

Influence Statements

13. A person who is recognized as a leader exercises influence (Hollander & Julian, 1969; Scott & Cummings, 1973; Stogdill, 1974; Filley et al., 1976; Boles, 1980).

14. It is legitimate for a leader to exercise influence on matters related to task performance (Davis, 1954; Raven & French, 1958; Torrance, 1959; Schein, 1962; Stogdill, 1974).

15. The more influence a leader has with subordinates, the more
risk he/she can take in making decisions in an organization (Tannenbaum, 1962; Hollander & Julian, 1969; Scott & Cummings, 1973; Stogdill, 1974; Filley et al., 1976).


17. Influence is more accepted from a powerful member of a group (Zander, 1953; Ziller, 1955; French & Snyder, 1959; Stogdill, 1974; Kotter, 1979).

18. There is personal risk when an individual attempts to exert influence in a group (Marquis, 1962; Kogan & Wallach, 1964; Clark, 1971; Scott & Cummings, 1973; Boles, 1980).

19. A person's influence is prescribed by his/her position in an organization (Tannenbaum, 1962; Maier, 1963; Filley & Grimes, 1967; Scott & Cummings, 1973; Filley et al., 1976).

20. Influence of any individual depends upon the person's relations with the group members (Fiedler, 1967; Hollander & Julian, 1969; Scott & Cummings, 1973; Stogdill, 1974; Filley et al., 1976).


22. A leader has more influence on the group than has on any other group member (Shartle, 1951; Cartwright, 1965; Stogdill, 1974; Hollander 1978; Kotter, 1979).

23. As a group gets larger the influence of each member over a decision tends to decline (Thomas & Fink, 1963; Maier, 1965; Yukl,
1971; Scott & Cummings, 1973; Filley et al., 1976).


**Power Statements**

25. One who has power has the ability to employ sanctions (Bierstedt, 1950; Etzioni, 1959; French & Raven, 1959; French et al., 1960; Stogdill, 1974).

26. A person who has power tends to gain more power (Stogdill, 1974; Korda, 1975; Filley et al., 1976; Kotter, 1979; Boles, 1980).

27. Holding a power position tends to desensitize one to the feelings of others (Scott & Cummings, 1973; Korda, 1975; Leavitt, 1978; Brown & Keller, 1979; Boles, 1980).

28. A person who is able to manipulate the emotions of others has power over them (Etzioni, 1964; Korda, 1975; Filley et al. 1976; Kotter, 1979; Boles, 1980).

29. Power is exercised through communication (Korda, 1975; Brown and Keller, 1979; Cathcart & Samovar, 1979; Kotter, 1979; Boles, 1980).

30. The person having the most power in an organization is not easily replaced (Lipset et al., 1956; Dubin, 1957; Mechanic, 1962; Scott & Cummings, 1973; Stogdill, 1974).

31. Power tends to be synonymous with status (Sward, 1933; Goldberg, 1955; Ghiselli, 1959; Medow & Zander, 1965; Stogdill, 1974).

32. A person who has prestige has power (Bellingrath, 1930;
Tryon, 1939; Miller & Dollard, 1941; Ackerson, 1942; Stogdill, 1974).

33. A person with low power overestimates a leader's capacity to exercise power (Jacobson, 1972; Stogdill, 1974; Korda, 1975; Brown & Keller, 1979; Kotter, 1979).

34. Over a period of time, power shifts within an organization (Thompson, 1956; Landsberger, 1961; White, 1961; Goldner, 1970; Scott & Cummings, 1973).


36. A person with power has the capacity to change others in some manner (Presthus, 1960; Etzioni, 1961; Schein, 1965; Katz & Kahn, 1966; Filley et al., 1976).
APPENDIX B

Correspondence to the Deans
April 27, 1981

Lawrence Von Tersch  
Dean of College of Engineering  
Michigan State University  
East Lansing, MI 48824

Dear Dean Von Tersch:

Mr. Reza Assadi, one of my doctoral advisees, will be phoning you soon to see if he may have permission to visit engineering classes soon for purposes of securing volunteer respondents to a questionnaire.

As you will note from the appended description of Mr. Assadi's study, he wishes to ascertain if leadership principles gleaned from United States literature sources are perceived in similar fashion by Iranian and American students. We believe the study to be an important pilot study for a larger one to be undertaken to make leadership internationally and interdisciplinarily teachable. A proposal for a foundation grant for a three-year project has been submitted for the larger study.

We are proposing to use engineering students in this study because that is the field in which there are the largest numbers of Iranian students enrolled in Michigan universities.

This study has been approved by our University Human Subjects Committee, and a copy of that approval is appended, also.

Any cooperation accorded Mr. Assadi by you and the professors of your college will be greatly appreciated. He will likely not be in any one classroom more than ten minutes.

Thank you.

Sincerely,

Harold W. Boles  
Professor

HWB: rjm
Dear Reader:

This letter will briefly inform you about Mr. Reza Assadi's doctoral research study for the Department of Educational Leadership at Western Michigan University, Kalamazoo, Michigan.

Title: A cross-cultural Study of Some Selected Leadership Principles.

Abstract: Numerous statements regarding leaders' use of power, influence, and authority have been formulated from observations and research of American leaders. Such leadership statements in the professional literature are implicitly considered as "universals" generalizable to different cultures and countries without any prior intercultural comparative study to substantiate the universal aspects of leadership statements. This proposed research study is designed to survey graduate students in Engineering in Michigan, specifically Americans and Iranians, to determine whether their attitudes are the same or different regarding some selected U.S.-based leadership principles.

Research Objective: A questionnaire will be used to survey the attitudes of American and Iranian graduate students in Engineering in Michigan to sample their attitudes on the selected American leadership principles.

Significance of Study: This proposed study will provide data about the universal validity of some selected leadership statements among the limited sample of graduate students in Engineering. In addition, this study will help to identify, if there are any, cultural differences in regard to the leaders' use of authority, influence, and power.

Relevant Information: The Human Subjects Review Committee at Western Michigan University has reviewed and approved the proposal for this study. The Awards and Fellowship Committee at Western Michigan University has awarded a grant for the pursuit of this study. Dr. Harold Boles, professor of Educational Leadership at Western Michigan University, is the project advisor.
June 12, 1981

Dr. Stanley K. Stynes, Dean
College of Engineering
Wayne State University
Detroit, MI 48202

Dear Dean Stynes:

Could you please supply us with the numbers of Iranian and American graduate students enrolled in graduate classes in engineering during the present term?

This information is needed for an Iranian student who is doing a cross-cultural study for his dissertation.

Your prompt attention to this matter will be greatly appreciated.

Thank you.

Sincerely

Harold W. Boles
Professor

HWB:rjm
APPENDIX C

Letters Received from the Universities
Professor Harold W. Boles  
College of Education  
Western Michigan University  
Kalamazoo, MI 49008  

Dear Professor Boles:

Your letter of March 31, 1981, has been forwarded to the Graduate School for reply. The Dean has reviewed your request concerning the provision of names and addresses of United States and Iranian graduate students currently enrolled in engineering graduate degree programs. I regret to say that we are unable to provide this information to you, both because of the cost factors involved as well as the potential for infringement on individual privacy. In this connection we are bound to observe the Family Educational Rights and Privacy Act as well as the Michigan Freedom of Information Act. Though it is uncertain, it appears that your request would cause us to violate one or both of these laws. I regret that we are unable to assist you in this matter.

With best wishes,

Sincerely,

Duncan M. Perry, Director  
Graduate Academic Records

DMP:bw

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June 26, 1981

Professor Harold W. Boles  
College of Education  
Western Michigan University  
Kalamazoo, MI 49008

Dear Professor Boles:

In response to your letter of 12 June to Dean Stynes, our Division of Institutional Research shows we have 27 Iranian graduate students out of a total foreign graduate count of 150. Our records also show 288 American students in the engineering graduate program. Please note that the American count also includes students with permanent visas, some of which may be Iranian.

Sincerely,

Edward R. Fisher  
Associate Dean

ERF:gl
July 1, 1981

Mr. Reza Assadi  
Goldsworth Valley Y-3  
Kalamazoo, MI  49008

Dear Mr. Assadi:

In response to your inquiry, the total number of graduate students enrolled in the College of Engineering for the Spring Term 1981 was 544 -- 16 of whom were from Iran.

Best wishes to you as you finish your dissertation.

Sincerely yours,

Elaine Harden

EH:ln
APPENDIX D

Cover Letter

and

Selected Leadership Principles Questionnaire
Dear Reader:

Thank you very much for your time and cooperation.

Please read the instructions on the attached questionnaire, then fill it out. The questionnaire is for doctoral research about leadership and the results will be used for this purpose only.

Your cooperation will be greatly appreciated.

Kindest regards,

Reza Assadi, Doctoral Student
Department of Educational Leadership
Western Michigan University

Dr. Harold W. Boles, Project Advisor
Department of Educational Leadership
Western Michigan University
Selected Leadership Principles Questionnaire

Directions: Please read each statement. Respond to both of the scales by circling your choices on this questionnaire.

Importance: Assume that you are a leader in your country, indicate whether you agree, are undecided, or disagree with the importance of the statements.

Frequency: Assume that you are a leader in your country, indicate how frequently you would experience what is described in the statements.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>Frequency</td>
</tr>
<tr>
<td>1. A person who has authority has the right to take action that will affect the organization.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>2. A leader is not the only person in an organization who has authority.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>3. Crisis increases a leader's authority.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>4. Authority is necessary for the functioning of an organization.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>5. It is more difficult to acquire additional authority than to acquire more influence or power.</td>
<td>2 3</td>
</tr>
<tr>
<td>6. Subordinates value the authority of a person who is competent in performing tasks.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>7. Rules and procedures make clear who has authority.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>8. The amount of authority exerted depends upon whether it is needed.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>9. A leader can enforce his/her will by using the legal authority of his/her position.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>10. More authority is attributed to a leader when a group task is not structured.</td>
<td>1 2 3</td>
</tr>
<tr>
<td>11. Authority is not fixed in an organization.</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

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12. Authority can be delegated within an organization.

13. A person who is recognized as a leader exercises influence.

14. It is legitimate for a leader to exercise influence on matters related to task performance.

15. The more influence a leader has with subordinates, the more risk he/she can take in making decisions in an organization.

16. Influence depends upon the esteem granted to a person.

17. Influence is more accepted from a powerful member of a group.

18. There is personal risk when an individual attempts to exert influence in a group.

19. A person's influence is prescribed by his/her position in an organization.

20. Influence of any individual depends upon the person's relations with the group members.

21. Influence depends upon persuasion rather than on coercion.

22. A leader has more influence on the group than on any other group member.

23. As a group gets larger, the influence of each member over a decision tends to decline.

24. The effectiveness of a leader is dependent on being influential.

25. One who has power has the ability to employ sanctions.

26. A person who has power tends to gain more power.

27. Holding a power position tends to desensitize one to the feelings of others.
28. A person who is able to manipulate the emotions of others has power over them. | 1 2 3 | 1 2 3 |
29. Power is exercised through communication. | 1 2 3 | 1 2 3 |
30. The person having the most power in an organization is not easily replaced. | 1 2 3 | 1 2 3 |
31. Power tends to be synonymous with status. | 1 2 3 | 1 2 3 |
32. A person who has prestige has power. | 1 2 3 | 1 2 3 |
33. A person with low power overestimates a leader's capacity to exercise power. | 1 2 3 | 1 2 3 |
34. Over a period of time, power shifts within an organization. | 1 2 3 | 1 2 3 |
35. An effective leader uses power. | 1 2 3 | 1 2 3 |
36. A person with power has the capability to change others in some manner. | 1 2 3 | 1 2 3 |


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