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PERCEIVED LEADERSHIP ATTRIBUTES OF
CHINESE LEADERS IN TAIWAN

DISSERTATION

Presented in Partial Fulfillment of the Requirement for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Wen-hsia Yeh, B.A., M.A.

* * * * *

The Ohio State University
1998

Dissertation Committee:
Dr. Anthony Olinzock, Adviser
Dr. Ray Ryan
Dr. Darrell Parks

Approved by

Dr. Anthony Olinzock, Adviser

Department of Educational Studies
College of Education
ABSTRACT

This research determined and compared the perceived leadership attribute factors of 310 Taiwanese leaders who participated in a KMT Convention that took place on July 22 to August 2, 1996, in Taipei, Taiwan. It also examined differences in perceived leadership attribute factors based on participants’ demographic variables. Implications were made as suggestions for the Sun Yat-sen Institute to: 1) design leadership development training programs to instill visionary, action-oriented and intellectual skills and characteristics in its leaders; 2) help female leaders develop and improve assertiveness and inner leadership skills; 3) become a more effective learning organization by utilizing the five learning disciplines as specified by Senge (1994); 4) vary teaching strategies to maximize learning; 5) restructure its educational goal; 6) train leaders with abilities which fit future societal needs; and 7) fund workshops for motivating members’ leadership potentials. Leadership training programs to be developed should consider Taiwanese culture but should also be based on internal culture as well as external climate.

The Leader Attributes Inventory (LAI) developed by Moss, Johansen & Preskill (1991) and six demographic questions were used to collect the data. Since 78%-94% of the variations in variables remained unexplained, other crucial variables need to be
identified. A future study that will focus on variables for personality traits is recommended. Since there are many variables that may influence individual leadership attributes and which might have intervened with the findings of this study, variables should be controlled by random selection, using a larger frame for further study. A qualitative study is also suggested to investigate whether mean ratings can be verified by a panel of experts.

A similar study could be replicated with American participants to examine how time and environmental factors may influence leadership attribute factors. Such future study should review the validity of each of the categories as related to its upper levels by using factor analysis. The demographics of the participants should not be as important as focusing on the leadership attribute factors. Factor analysis may also determine how the Chinese translation of the LAI may differ from the English version.
Dedicated to my mother
ACKNOWLEDGMENTS

My gratitude goes to my adviser, Dr. Anthony Olinzock, for his continual guidance and encouraging words that motivated me to complete this dissertation. I thank my dissertation committee members, Dr. Ray Ryan and Dr. Darrell Parks. Their suggestions and recommendations were essential to the completion of this work. I am also deeply appreciative of the help given me by Dr. Don McKay and Dr. Larry Miller. Their support and advice made this process a very enlightening experience.

I offer my sincere recognition to Ms. Josephine White, who lovingly offered her assistance to me in memory of her beloved husband, Dr. Thomas White. She provided spiritual guidance and support during times of discouragement and distress as well as her technical help in formulating this work. Without her assistance and encouragement this work would not have been completed in such a timely manner. I am especially grateful to my friend, Dr. Carman Sanogo, who inspired and helped me with the development of my proposal. I also extend grateful recognition and appreciation to other dear friends who provided invaluable assistance in the completion of this work: Dr. Fong-mei Law, for her expert assistance with my research and for making data analysis such an enjoyable task; Sarah Chiang for her diligent efforts in creating the figures used in this work; and to Su-Fong Huang for making the administration of the test instrument possible at the Sun Yat-sen Institution on Policy Research and Development Convention.
All of my family deserves my deep appreciation for their loving and inexhaustible support. I am especially thankful for my mother, who, in spite of the little amount of education she received because of the era and culture in which she was brought up, always emphasized the value of education to me. She taught me by her example of hard work and self-sacrifice and for this I am eternally grateful. I also thank my father and parents-in-law for their encouragement and love. I am very blessed to have Dow-Min and Dow-Ann as very giving, loving, understanding, independent and humorous children. They continually provided emotional and physical support in making me a happy and proud mother while I was doing such time-consuming work. My deepest love and appreciation is given to my husband, Chia-Hung, for his love, understanding, and encouragement. His continual support and assistance made me secure in the knowledge that nothing could hold me back in achieving my goals — I had no excuse for not pursuing my doctoral degree. I would like to marry him again in my next life.
VITA

October 12, 1957 —---------------------- Born - Keelung, Taiwan

1975 —---------------------- Diploma - Tainan Girls' High School

1979 —---------------------- B.A. Western Literature and Language
   National Chung-Hsing University
   Taichung, Taiwan

   Tainan, Taiwan

1990 -1994 —---------------------- Trainer, TBR Miracle International Institute

1990 -1994 —---------------------- President, Success Business Management Consulting Company

1995 —---------------------- M. A. Business Education
   The Ohio State University, Columbus, Ohio

1995 - 1997 —---------------------- Graduate Teaching Associate in Workforce Education and Life Long Learning Program
   The Ohio State University, Columbus, Ohio
PUBLICATIONS


FIELDS OF STUDY

Major Field: Education
Minor Field: Technology Education
Minor Field: Business Education
Minor Field: Adult Education
Minor Field: Research

Studies in Business and Computer Education: Professor Anthony A. Olinzock

Studies in Adult Education: Professors Kevin J. Freer and David Stein

Studies in Research: Professors Anthony A. Olinzock, Larry Miller and J. David McCracken
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Chinese history shows that its governance has oscillated in continuous cycles of autocracy, tyranny, and anarchy for over 5,000 years. This cycle was broken by Dr. Sun Yat-sen in 1912 when he established Asia’s first democratic republic, the Republic of China (ROC). When the ROC relocated to Taiwan in 1949, the system was undeniably in grave peril. National security and political stability were naturally listed as top priorities by the decision makers. As a result, the ROC in Taiwan has been often misunderstood as a one-party authoritarian regime. Until 1987, a system of martial law and one-party rule prevailed in Taiwan (Hickey & Copper, 1996).

However, this island has managed to transform itself from an authoritarian state into a full-fledged democracy. Much of the progress in the ROC politics can be attributed to the gradual emergence of a multi-party system. The myriad political parties include the Kuomintang (KMT), the Democratic Progressive Party (DPP), the New Party and others. Some observers charge that “money politics” is undermining the island’s fledgling democracy (Hickey, 1996). Consequently, as the ruling party, the KMT needs not only to be a victorious team in all the elections under the strong multiparty competition. It must also take responsibility for promoting honest elections, ensuring
clean and efficient government, enhancing law and order, restructuring the political landscape and strengthening the multiparty political system, so as to guarantee stability and the incessant development of democracy (Hickey, 1996).

The ROC needs effective leaders who possess wisdom, vision and courage to create a positive and peaceful future for all Chinese. The ROC’s strategy for peaceful reunification derives from the 1991 Guidelines for National Unification: a short-term phase of exchanges and reciprocity; a medium-term phase of mutual trust and cooperation; and a long-term phase of consultation and unification.

The unification of China is meant to bring about a strong and prosperous nation with a long-lasting, bright future for its people. This is the common wish of Chinese people at home and abroad. After an appropriate period of forthright exchange, cooperation, and consultation conducted under the principles of reason, peace, parity, and reciprocity, the two sides of the Taiwan Strait should foster a consensus of democracy, freedom and equal prosperity, and together build a new and unified China. Based on this objective, all Chinese throughout the world would work with one mind toward its fulfillment (Hickey & Copper, 1996).

While the ROC’s economy boomed in the 1970s, it suffered a series of diplomatic setbacks that would have relegated most nations to oblivion (Lien, 1993). Many powerful nations such as the United States and Japan that had long supported the ROC switched their recognition of China’s capital from Taipei to Peking in an effort to befriend the communist regime on the Chinese Mainland for geopolitical reasons. As a result, the ROC was forced to withdraw from the United Nations in 1971; Japan recognized the Mainland regime in 1972 and the United States followed suit in 1979. These actions
deprived the ROC of a large measure of its legal status in the international community, despite its continued possession of all the prerequisites of a sovereign state.

The ROC in Taiwan has to not only make the world aware of its qualifications for membership but also to persuade the international community to reject the Mainland’s efforts against the ROC to achieve the goal of regaining its membership in the United Nations. The United Nations should recognize and support all nations of the world that are willing to adhere to its principles. The ROC should continue implementing pragmatic diplomacy to promote its national development and its position in the international community. Pragmatic diplomacy is predicated on the assumption that, in the absence of formal diplomatic ties, economic and cultural links with the international community would allow the ROC government to represent the legitimate rights of the people in the Taiwan area and to fulfill its obligations to the new world order (Lien, 1993).

Over the next ten years, six regional operation centers for the Asia-Pacific region would be organized and developed by the ROC in Taiwan in the following areas: manufacturing, sea transportation, air transportation, financial, telecommunications and media. These centers would play a key role in the region’s economic integration into the Twenty-First Century. The goal of developing Taiwan’s six regional operation centers cannot be realized overnight. It involves more than just the construction of buildings and the procurement of advanced equipment; it requires the effective leadership and the support of all sectors of its society (Liu, 1996).

Taiwan needs to become more globalized. A strong industrial leadership with a world vision, a high degree of professionalism, and a broader use of English should all be developed as soon as possible (Hu, 1995). The meeting of these challenges would be
crucial to the realization and success of the operation centers. The researcher believes
that KMT, as the ruling party of the ROC, needs to educate and to train its members to be
great communicators, negotiators, decision makers, problem solvers and action-takers.
By doing this the KMT could implement its missions of: (1) becoming a victorious team
in the multiparty competition, (2) establishing a democratic, free and equitably
prosperous China, (3) seeking the ROC's re-entry into the United Nations, and (4)
developing six regional operation centers for the Asia-Pacific region.

General Research Focus

Although the need for effective leaders of the KMT is evident, a paucity of
pertinent, up-to-date information exists that accurately portrays the effectiveness of
leaders who attend the Sun Yat-sen Institution on Policy Research and Development
conventions. These conventions are held on the average of four times annually in
Taiwan. There is a need to identify improvements needed in the KMT leaders'
management skills, personal characteristics and social skills. By identifying these needed
improvements, seminars and workshops for future conventions may be planned to
improve these three levels of leadership skills.

The general focus of this research was to determine the relationships among the
various personal skills and characteristics of leaders in Taiwan. Although some have
disputed the importance of leadership as a factor influencing the effectiveness of
organizations (Dubin, 1965), the vast sums of money spent annually on leadership
training indicate that both academic and practicing managers consider good leadership
important to organizational success (Diehn, 1982).
As the Twenty-First Century approaches, the world is undergoing enormous change — a process of great upheaval and potential. In just a few short years, the world has witnessed the dawn of a postindustrial society, the advent of the information age, the rush to computerization, the birth of biotechnology, and not the least of these changes, the human-relations revolution (Levine & Crom, 1993).

To survive in the years to come, successful organizations — in business, in government and in the nonprofit world — would have to undergo a profound cultural change. People would have to think quicker, work smarter, dream bolder, and relate to each other in very different ways. Most importantly, this cultural change would require a whole new style of leadership with leaders unlike those supervisors that most of us have worked for and some of us have perhaps become. The leaders of tomorrow would need to establish a vision and a sense of values for the organizations they wish to lead. These leaders would have to communicate and motivate far more effectively than did leaders of the past. They would have to keep their wits about them through conditions of near-constant change. And these new leaders would have to mine every ounce of talent and creativity that their organizations possess (Levine & Crom, 1993).

Leadership can be a difficult term to define. Nearly every researcher in the field has a personal definition. For this study, the researcher defined leadership as both a process and a property. The process of leadership is the use of noncoercive influence to direct and coordinate the attributes of the members of an organized group toward the accomplishment of group objectives (Jago, 1982). As a property, leadership is a set of qualities or characteristics attributed to those who are perceived to successfully employ such characteristics (Jago, 1982). Leadership, then, is the process of perceiving when
change is needed as well as the process of influencing the group by noncoercive means. These methods may include creating a vision, and utilizing methods of persuasion and example in efforts toward goal setting and goal achievement (Moss & Liang, 1990).

The property of leadership is ascribed to an individual by members of a group when the members perceive the individual to possess certain qualities or characteristics. Members of the group allow an individual to lead -- to influence them -- when the individual's behaviors match the group's ideas about what good leaders should be and do in that context. Since leadership as a property lies in the eye of the beholder, only those who are so perceived are leaders. The specific properties of leadership depend upon the qualitative nature of the behaviors accepted by a particular group as evidence of leadership. Given this concept, the perceptions of potential followers -- subordinates or peers in formal organizations -- are of primary importance when assessing the effectiveness of leadership (Moss & Liang, 1990).

Simply put, leadership is probably the most important determinant of an organization's success. The following story illustrates the importance of leadership. In 1984, the New United Motors Manufacturing Incorporated (NUMMI) was formed as a partnership between General Motors and Toyota. The management of the plant was turned over to Toyota. The workforce remained the same. The Toyota management team brought new leadership to the plant. Previously, the employees were managed solely by the numbers, treated as machines, and only had short-term orientations. The new management team recognized the employees as individuals with talents and abilities and led an effort based on a long-term goal of creating customer satisfaction. Thus, they restructured the workforce as teams with group leaders and provided extensive training to
all employees. They created an environment based on mutual trust and high expectations. Today NUMMI is thriving, having recently added the production of Toyota pickup trucks to its successful Corolla, Prizm, and Nova lines of compact cars. Furthermore, the turnaround occurred very quickly (Womack, Jones and Roos, 1990).

Leadership is also critical outside the business world. Look at the effect that Abraham Lincoln had on slavery; Martin Luther King, Jr. on the Civil Rights Movement and Dr. Sun Yet-sen on the revolutions to establish the Republic of China. Leadership is also critical for communities, towns, social clubs, churches, sports teams, and the successful operation of all organizations. Without leadership, the best ideas and plans are likely to fail. In managing, no matter how competent a person is as a decision maker or how creative he/she is as an individual, ultimate success will depend upon the ability to lead others. The best ideas often end up in the board room trash can because there was inadequate leadership pushing for their adoption and implementation (Bounds, Dobbins and Fowler, 1995).

However, to be effective leaders in today's rapidly changing world require a delicate, fourfold balancing act (Bennis, 1996). First, leaders must be able to relate skillfully to the managers and workers inside their organization who look to them for guidance, encouragement, and motivation. Second, they must be able to take full advantage of the external environment and relate skillfully to people outside their organization who are in a position to influence its success. Third, effective leaders must be able to shape and influence all aspects of the present operation of their organization — including the development of products and services, quality control systems and information systems. Finally, they must be adaptive and highly skilled in anticipating the
future; that is, in assessing and preparing for developments such as changes in customer
tastes, technologies or the global economy.

Statement of the Problem

The need for good leaders becomes especially critical in a new order leadership
(Moss, Finch and Johansen, 1991). Uncertainty and rapid change have resulted in a
return to the basics. Increasingly, people are being recognized as an organization's
greatest resource. Taiwan's political environment is in the transitional stage and calls for
effective leaders.

Currently, limited knowledge exists pertaining to leadership qualities in Taiwan.
In addition, no research has been found pertaining to the perceived leadership attribute
factors of Chinese leaders. In the United States, Jerome Moss, Jr. developed a list of 37
attributes that included three levels of Management Skills, Personal Characteristics and
Social Skills & Characteristics.

After reviewing a large number of available publications and interviewing several
leadership theorists and trainers (Moss, 1994), Moss found that while it is a leader's
behavior that directly influences group performance, it is a leader's attributes --
characteristics, knowledge, skills and values -- that shape those behaviors. A similar
study to Moss' should be conducted to determine factors related to the leadership
attributes of local Chinese and overseas Chinese.

Purpose of the Study

The central purpose of this investigation was to determine the leadership attribute
factors of participants attending the KMT Convention during July 22 to August 2, 1996,
in Taipei, Taiwan. It was intended that data from this study would contribute to the
knowledge and understanding of the leadership qualities of KMT members. In addition, the researcher envisioned that the results of this study would benefit the society of Taiwan and the Republic of China government. Thus, the study was designed to provide information for the Sun Yat-sen Institute for leadership development training programs. The researcher sought to identify the attributes of the participants’ Management Skills, Personal Characteristics and Social Skills & Characteristics to assist in the development of leadership training at future conventions.

The researcher was particularly interested in examining if there were differences in leadership attribute factors based on participants’ gender, age, occupation, educational level, living place and marital status. The researcher also investigated whether any relationships existed among the selected leadership attribute factors.

**Research Questions**

To guide this study, the researcher developed four research questions:

1. What are the demographic characteristics (gender, age, marital status, occupational level, educational level, and living place) of the participants of the Sun Yat-sen Institution on Policy Research and Development Convention in Taiwan?

2. What are the participants’ perceptions of their levels of leadership attribute factors?

3. Are there any differences in the participants’ perceptions of their leadership attribute factors based on their demographic characteristics?

4. What relationships exist among the selected leadership attribute factors?
Delimitations

The scope of this study was delimited in the following situations: a) The participants of this study only involved leaders in Taiwan and overseas Chinese scholars who were selected to participate in the ruling party convention held in Taipei, Taiwan during July 22 to August 2, 1996; b) The study only addressed the variables identified in the Leadership Attribute Inventory (LAI) (Some variables — such as IQ score, personality traits, years of management or leadership experience — were excluded from the LAI which could identify the participants' other perceived leadership attributes); c) The English version of the LAI was translated to Chinese and could have created a cultural bias; and d) A quantitative technique was used in this study for analyzing the data to be derived from the survey research. Thus, some relative information may have been excluded from the statistical testing procedure.

Limitations

The study was limited as follows: a) This survey was administered in the second week of the Convention while the participants may have already gained much knowledge and information about the current political and economic issues of Taiwan and the need for effective leadership. The results drawn from the leaders who participated in the Convention programs may have differed from leaders who do not attend the Convention. Therefore, the findings of this study may only generalize the perceptions of leadership attributes of the members of the ruling party of Taiwan and overseas Chinese scholars who participated in this research study. b) The findings were limited in terms of the honesty and completeness of the respondents in completing the self-evaluating LAI.
c) When administering the LAI to the participants, multiple individuals were involved as proctors. Different expectations from the LAI administrators may have caused a bias result.

**Definition of Terms**

For the purpose of this study, the researcher used the following definitions of terms.

**Leader.** “Leader” in this study was defined as one of the members of KMT who was selected to participate the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. The “local leaders” from Taiwan included student leaders, government officials, business representatives, professors, and leaders from non-profit organizations. “Overseas leaders” were scholars who had either earned Ph.D. degrees or were pursuing a Ph.D. degree at the time of the study. These overseas scholars were the outstanding leaders recommended and selected by KMT officials to return to Taiwan to attend the Convention because of their outstanding volunteer work and contributions to the KMT.

**Leadership.** This study used the term “leadership” as defined by Jago (1982):

“The process of leadership is the use of noncoercive influence to direct and coordinate the activities of the member of an organization toward the accomplishment of group objectives. As a property, leadership is a set of qualities or characteristics attributed to the leaders who are perceived to have successfully implemented influence to people or organizations.”

**Leadership Attribute Inventory.** The Leadership Attribute Inventory (LAI) model developed by Moss, Johansen and Preskill (1991) was modified into an instrument in the form of a questionnaire used to measure the self-assessed perceptions of leadership
attributes possessed by the participants of this study. This modified LAI included statements reflecting three levels of leadership attributes: 1) Management Skills (Organizational and Cognitive), 2) Personal Characteristics (Visionary, Action-Oriented, and Energetic) and 3) Social Skills & Characteristics (Ethical, Interpersonal, and Intellectual).

Management Skills, Personal Characteristics and Social Skills & Characteristics.

1. Management Skills: Constitutive definition. Management Skills indicated leadership attributes that depict the effort or activity necessary to direct a particular task or a total enterprise. More particularly, management skills reflect abilities possessed by an individual who works with and through people, who administers facilities, funds, materials, and other resources to achieve organizational goals (Dejnozka, 1984).

Operational definition. The Management Skills level was operationally comprised of two skill categories — Organizational and Cognitive. These two categories of attributes were made up of eight leadership attribute factors pertaining to management abilities (e.g. planning, organizing, networking, team-building, time-management, delegating, problem-solving and information management).

2. Personal Characteristics. Constitutive definition. A Personal Characteristic was defined as a trait or quality that is regarded as either present or absent in the person or thing being measured (Dejnozka, 1984). Operational definition. The Personal Characteristic level was comprised operationally of three skill categories — Visionary, Action-Oriented and Energetic. These categories of leadership attributes consisted of eleven attribute factors pertaining to personal characteristics (e.g., insightful, creative,
decisive, achievement-oriented, accountable, assertive, willing to accept responsibilities, risk-taking, persistent, enthusiastic, confident and energetic with stamina).

3. Social Skills & Characteristics. **Constitutive definition.** Social Skills, in the broader sense, pertain to the interaction of organisms in groups; in the narrower sense, describe the development of an individual to get along with others (Dejnozka, 1984). **Operational definition.** The Social Skills & Characteristics level was comprised operationally of three skill categories — Ethical, Interpersonal, and Intellectual. These categories of leadership attributes consisted of eighteen attribute factors pertaining to the social skills and characteristics (e.g., commitment to the common good, personal integrity, high values and moral standards, communication, coaching, motivation of others, use of appropriate leadership styles, sensitivity and respectful, emotional balance, trustworthiness/dependability, conflict management, ideological beliefs appropriate to the group, intelligence with practical judgment, adaptability/open-mindedness, tolerance of frustration and stress management).

**Three Principles of the People.** This philosophy represents the core of Dr. Sun Yat-sen’s political ideals. It comprises nationalism, democracy, and people’s livelihood.

**Ruling Party.** This party is the Nationalist Party of Taiwan, also called Chung-kuo Kuomintang (KMT). The chairman is President Li Teng-hui. The KMT adopts Dr. Sun Yat-sen’s Three Principles of the People as its basic approach to government and nation-building (The Republic of China Yearbook, 1997).

**The Democratic Progressive Party (DPP).** The DPP was formed in September, 1986. It is the first viable opposition party in Taiwan. The party has nearly 30,000 members (The Republic of China Yearbook, 1997).
CHAPTER 2

REVIEW OF THE LITERATURE

Purpose of the Study

The central purpose of this investigation was to determine the leadership attribute factors of leaders who will participate in the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. It was intended that the data from this study would contribute to the knowledge and understanding of the leadership qualities of the KMT members. In addition, the researcher envisioned that the results of this study would benefit the society of Taiwan and the Republic of China government. This study was designed to provide information for the Sun Yat-sen Institute pertaining to leadership development training programs.

The researcher was particularly interested in examining if there were differences in leadership attribute factors based on gender, age, occupation, educational level, living place and marital status. The researcher also investigated whether any relationships existed among the selected leadership attribute factors.
Research Questions

To guide this study, the researcher developed the following research questions.

1. What are the demographic characteristics (gender, age, marital status, occupational level, educational level, and living place) of the participants of the Sun Yat-sen Institution on Policy Research and Development Convention in Taiwan?

2. What are the participants' perceptions of their levels of leadership attribute factors?

3. Are there any differences in the participants' perceptions of their levels of leadership attribute factors based on the demographic characteristics?

4. What relationships exist among the selected leadership attribute factors?

A seven-part review of literature was conducted. The topic of each section is as follows: The Nature of Leadership, Theories of Leadership, Models of Leadership, Factors Related to Leadership, Political Leadership, Chinese Leadership, and The Republic of China in Taiwan.

The Nature of Leadership

The Meaning of Leadership

Many researchers have studied and attempted to define leadership in a variety of ways. Many of us may associate leadership with power, prestige, and ability to lead and direct a group of people, organization, or country. The Oxford English Dictionary (1933) notes the appearance of the word “leader” in the English language as early as the year
1300. However, the written word "leader" did not appear until the first half of the Nineteenth Century in writings about political influence and control of British Parliament (Bass, 1990).

There are almost as many different definitions of leadership as there are persons who have attempted to define the concept. Moreover, as Pfeffer (1977) noted, many of the definitions are ambiguous. The many dimensions into which leadership has been cast and their overlapping meanings have added to the confusion. Therefore, the meaning of leadership may depend on the kind of institution in which it is found (Spitzberg, 1987). Nevertheless, there is sufficient similarity among definitions to permit a rough scheme of classification. Leadership has been conceived as: the focus of group processes, a matter of inducing compliance, the exercise of influence, a set of particular behaviors, a form of persuasion, a power relation, an instrument to achieve goals, an effect of interaction, a differentiated role, an initiation of structure, and as many combinations of these definitions (Bass, 1990). Jago (1982) provides a more comprehensive definition of leadership:

"The process of leadership is the use of noncoercive influence to direct and coordinate the activities of the member of an organization toward the accomplishment of group objectives. As a property, leadership is a set of qualities or characteristics attributed to the leaders who are perceived to have successfully implemented influence to people or organizations."

Jago adds that leadership does not only constitute quality or characteristics attributed to a leader but also something that the leader does. Parnell, in 1988, includes the concept of possessing and communicating a concrete vision in leadership:
"Communicating vision is a fundamental task of leadership. Mission clarification and goal setting, therefore, are priority tasks for an effective leader. We live best by living on our hopes rather than on our fears; by looking to the future, not the past. A leader sets the tone, the motivation, and the positive attitudes about the future of an organization or the group that he or she is leading and articulates these clearly as part of the mission and goals of the organization (1988, p. 1)."

While Parnell wrote about the importance of possessing a futuristic vision and communicating that vision to people and organizations, Moss and Liang (1990) emphasized that leadership lies in the "eye of the beholder" and only those who perceived themselves as possessing leadership qualities and attributes were leaders. Moreover, Moss & Liang (1990) believe that leadership behaviors result from the interaction of the leader's attributes or characteristics, the group's or organization's attributes, the tasks involved, and the general context to which leadership is essential.

**Men, Women and Leadership**

In spite of the growing number of women in management positions, most women have reported great difficulty in breaking through the "glass ceiling." The "glass ceiling" means those invisible barriers that separate women from positions of significant corporate power. Sex discrimination laws and executive orders such as the Equal Pay Act of 1963 and Title VII of the 1964 Civil Rights Act have opened the doors to women and minorities entering the workforce. These laws do not, however, ensure that women will receive the promotion, pay, and recognition typically associated with high status occupations traditionally held by white males (Moss, Shwartz & Jensrud, 1994).
Although sex-role stereotyping impedes the elevation of women to leadership positions, the female socialization process itself contributes to reducing motivation to attain higher-level posts (Estler, 1975). On the average, women’s self-confidence is lower than that of male counterparts. According to MacCoby and Jacklin (1974), females have less confidence in their abilities across a wide variety of activities such as achieving good grades in tasks requiring manual dexterity, in solving puzzles, and in the ability to deal with emergencies. Lack of self-esteem is strongly associated with avoiding attempts to lead. But the theory that women avoid attempting to climb the executive ladder because they fear failure remains controversial (Tresemer, 1976; Wood & Greenfield, 1976; Horner, 1970; O’Leary, 1974; Zuckerman & Wheeler, 1975).

Stereotypes about women may also enhance biases in leader selection (Geis, Brown, Jennings, & Corrado Taylor, 1984; Nye & Forsyth, 1991). Geis, Brown, Jennings and Porter (1984) suggested the most general stereotype about women is that they are not autonomous and are unqualified to assume achievement-oriented responsibilities in the world. However, women, relative to men, are believed to be more “talkative,” “tactful,” and “aware of others’ feelings” (Broverman et. al., 1972, p. 63). Thus, gender stereotyping may have a differential impact on leader selection when type of leadership is manipulated (Eagly & Kanaus, 1991). While task-oriented, competitive leaders focus on task contributions and productivity, social-cooperative leaders focus on social contributions and social climate. Male group members may choose male leaders in task-oriented competitive situations. Men may be selected as social leaders less often than they are selected as task-oriented competitive leaders.
A recent study of 456 executives (355 women and 101 men) reveals some interesting differences between the ways in which both sexes approach the leadership roles. Women respondents tend to be interactive — encouraging others' participation, making them feel good about themselves and their contributions. The women made frequent references to their efforts to include others by sharing power and information. Interactive leaders "try to instill... group identity in a variety of ways, including encouraging others to have a say in almost every aspect of work, from setting performance goals to determining strategy. To facilitate inclusion, they create mechanisms to get people to participate and they use a conversational style that sends signals inviting people to get involved (Rosener, 1990)." The men in the survey described their styles as being a set of "transactions with subordinates -- exchanging reward for services rendered or punishment for inadequate performance. The men were also more likely to use power that came from their organizational position and formal authority (Rosener, 1990)."

Both the men and women claimed to have an equal mix of traits considered feminine (understanding, compassionate, sensitive, dependent), masculine (dominant, tough, assertive, competitive), and gender neutral (adaptive, tactful, sincere, efficient, and reliable). Some men led with participation and inclusion, and some women led with the emphasis on exercising their formal authority. Both styles of leading can be effective, depending on the circumstances. What is a disadvantage under one set of circumstances is an advantage under another. The "best" leadership style depends on the organizational context (Rosener, 1990). Both genders have much to learn from each other's styles.
Managers and Leaders

Warren Bennis (1989) made the following distinctions between managers and leaders:

- The manager administers; the leader innovates.
- The manager is a copy; the leader is an original.
- The manager focuses on systems and structure; the leader focuses on people.
- The manager relies on control; the leader inspires trust.
- The manager has a short-range view; the leader has a long-range perspective.
- The manager asks how and when; the leader asks what and why.
- The manager has an eye on the bottom line; the leader has an eye on the horizon.
- The manager imitates; the leader originates.
- The manager accepts the status quo; the leader challenges it.
- The manager does things right; the leader does the right things.

Employee-Centered, Production-Centered and Participative Leadership

In the late 1940s, the Survey Research Center of the University of Michigan embarked on a program to determine how leader behavior affected work-group performance and employee satisfaction. One of the major findings of this early study was that production-centered supervisors, those concerned primarily with production, are less effective in terms of measurable productivity than employee-centered supervisors, those who focused their attention on the people who do the work. Even in this early
study, it was found that employee-centered supervisors were also production-centered, exhibiting concern for high performance goals and enthusiasm for achieving them. The third type of leadership investigated by the Michigan researchers was participative leadership. These researchers concluded that subordinates who had participative leaders exhibited higher work-related satisfaction and performance (Sherman, Bohlander, and Snell, 1996).

**Consideration and Structure**

At the same time the Michigan studies were underway, researchers at The Ohio State University were studying two major dimensions of supervisory behavior — consideration and initiating structure. Consideration, like employee-centered supervision in the Michigan research, includes leaders' behaviors that encourage mutual trust, respect, and warmth between leaders and their work-group members. Examples of consideration behavior are asking about an employee's family, providing support during a challenging assignment, finding time to listen to subordinates' problems and giving help when requested. Initiating structure, like production-centered supervision in the Michigan studies, includes leader behaviors that stress task orientation, production, and organizing activities. Examples of initiating structure include assigning employees to tasks, redirecting discussions toward processes and improvement, providing guidance and instruction for tasks, sharing information, and working with employees to establish and maintain performance standards (Sherman, Bohlander, and Snell, 1996).

Initiating structure and consideration are relatively independent of one another. One way of describing leaders is by examining their combination of initiating structure and consideration behaviors in a matrix as show in Figure 1. Early research supported
the “high-high” hypothesis, which proposed that effective leaders were high on both initiating structure and consideration, and ineffective leaders were low on either initiating structure or consideration. For example, “high-high” leaders tend to have higher employee performance, less employee turnover, and fewer employee grievances than “high-low,” or “low-low” leaders.

![Diagram of leadership styles based on the Ohio State Studies]

**Figure 1: Four Leadership Styles Based on the Ohio State Studies**

**Inner Leadership**

The theory of inner leadership stresses the importance of an employee’s ability to establish and maintain constructive thought patterns (Neck and Manz, 1992; Manz and Neck, 1991; Neck and Milliman, 1994). Just as we develop both functional and dysfunctional behavioral habits, we also develop functional and dysfunctional patterns of thinking (Neck and Barnard, 1996). These mind-sets influence our perceptions, the way we process information, and the choices we make in an almost automatic way.
Two such contrasting patterns of thinking are opportunity thinking and obstacle thinking (Manz, 1992). A person who engages in opportunity thinking focuses on constructive ways of dealing with challenging situations. By contrast, a person who engages in obstacle thinking focuses on reasons to give up and retreat from problems. Research has shown that the opportunity thinker will try harder (Seligman, 1991; Neck and Manz, 1992).

Many psychologists believe that a great many life problems stem from dysfunctional thinking, particularly cognitive distortions that can undermine personal effectiveness and even lead to forms of depression. David Burns (1980) enumerated ten categories of dysfunctional thinking that people need to confront and replace with more rational thoughts:

1. All-or-nothing thinking. A situation is perceived as a complete failure if results aren’t perfect.

2. Overgeneralization. One generalizes a specific failure or bad result as an endless pattern.

3. Mental filtering. One dwells on a single negative detail, thus distorting all other aspects of reality.

4. Disqualifying the positive. One disregards rewarding experiences.

5. Jumping to conclusions. One draws negative conclusions even when there’s not enough evidence to do so.

6. Magnifying and minimizing. One exaggerates the importance of negative factors and minimizes the importance of positive factors.
7. Emotional reasoning. One allows negative emotions to influence the perception of reality.

8. "Should" statements. One talks to oneself using terms like "should," "shouldn't," "ought" and "must" in order to coerce or manipulate oneself into taking actions.

9. Labeling and mislabeling. One automatically uses negative labels to describe oneself, others, or an event: "I am a failure," "he is a cheat," "it will be a worthless training."

10. Personalization. One blames oneself for negative events or outcomes that have other causes.

The question arises, "How can we learn to engage in less dysfunctional thinking and in more opportunity thinking?" The answer is that we must learn to analyze and manage three things: internal dialogue (self talk), mental images (visualization), and beliefs and assumptions. Research has shown that by controlling these three factors, one can carry out a variety of tasks and activities -- physical and mental -- more successfully (Neck & Barnard, 1996).

A person who engages in opportunity thinking focuses on constructive ways of dealing with challenging situations. A person who engages in obstacle thinking focuses on reasons to give up. The following techniques can enhance our performance (Manz and Neck, 1991; Neck and Maze, 1992). The approach consists of five steps:

1. Observe and record our existing beliefs and assumptions, our self-talk, and our mental imagery patterns.

2. Analyze how functional and constructive these thoughts are.
3. Identify and develop more functional and constructive thoughts to substitute for any dysfunctional ones.

4. Try substituting the more functional thinking when faced with a difficult situation that comes up often.

5. Continue monitoring our beliefs, self talk, and mental images; and maintain the new, more functional ones we have adopted.

In a recent field study (Neck & Barnard, 1996), researchers compared two groups of employees — one that participated in inner leadership training and another that did not. Results revealed that the performance, confidence, and mood of training participants had improved, whereas those of nonparticipants remained the same.

Transformational Leadership

The literature review revealed that the dominant theory of leadership has been changing over the years. It went from an early search for universal leader traits, to categories of behaviors, to a view of leadership as contingencies, and now, to a focus on what Burns (1978, 1985) has called the transformational behaviors of leaders. Transformational leadership refers to a leader's success in changing an organization by building enthusiasm and commitment to the leader's vision of the organizational mission. The role of the transformational leader may be described in the following way: "The transformation can be achieved by (a) raising an awareness of the importance and value of designated outcomes, (b) getting followers to transcend their own self-interests, or c) altering or expanding followers' needs on Maslow's hierarchy of needs (Nadler & Tushman, 1990)."
Management and Leadership Styles

Four types of management include bureaucratic, autocratic, democratic, and spectator. All these types of management, except bureaucratic management, are also leadership styles. Each leadership style can have either a positive or a negative impact on subordinates, depending on the leaders' and subordinates' characteristics and the situations in which each leadership style is used.

Bureaucratic management is characterized by the manager's reliance on rules, regulations, policies, and procedures to direct subordinates. Autocratic management is a leadership style characterized by the leader's retention of all authority for decision making. Democratic management is a leadership style characterized by the leader's sharing of decision-making authority with subordinates. Spectator management is a leadership style characterized by the leader's treating subordinates as independent decision makers. Effective leaders must be able to use all three leadership styles as the need for each arises. (Plunkett, 1996).

Leadership Behaviors

Gary Yukl (1981) and his colleagues have conducted research to develop meaningful and measurable categories of leadership behaviors. Yukl's nineteen categories of leader behavior are listed below:

1. Performance emphasis. The extent to which a leader emphasizes the importance of subordinate performance, tries to improve productivity and efficiency, tries to keep subordinates working up to their capacity, and checks on their performance. Example: My supervisor urged us to be careful not to let orders go out with defective components.
2. **Consideration.** Consideration is the extent to which a leader is friendly, supportive, and considerate in his or her behavior toward subordinates and tries to be fair and objective. *Example:* When a subordinate was upset about something, the supervisor was very sympathetic and tried to console him.

3. **Inspiration.** The extent to which a leader stimulates enthusiasm among subordinates for the work of the group and says things to build subordinates' confidence in their abilities to perform assignments successfully and attain group objectives. *Example:* My boss told us we were the best design group he had ever worked with, and he was sure that this new product was going to break every sales record in the company.

4. **Praise-Recognition.** The extent to which a leader provides praise and recognition to subordinates with effective performance, shows appreciation for their special efforts and contributions, and makes sure they get credit for their helpful ideas and suggestions. *Example:* In a meeting, the supervisor told us she was very satisfied with our work and that she appreciated the extra effort we made this month.

5. **Structuring Reward Contingencies.** The extent to which a leader rewards effective subordinate performance with tangible benefits, such as a pay increase, a promotion, a more desirable assignment, a better work schedule, and more time off. *Example:* My supervisor
established a new policy that any subordinate who brought in a new client would earn ten percent of the contracted fee.

6. **Decision Participation.** Decision participation is the extent to which a leader consults with subordinates and otherwise allows them to influence his or her choices. **Example:** My supervisor asked me to attend a meeting with him and his boss to develop a new production schedule, and he was very receptive to my ideas on the subject.

7. **Autonomy-Delegation.** This is the extent to which a leader delegates authority and responsibility to subordinates and allows them to determine how to do their work. **Example:** My boss gave me a new project and encouraged me to handle it any way I thought was best.

8. **Role Clarification.** The extent to which a leader informs subordinates about their duties and responsibilities, specifies the rules and the policies that must be observed and lets subordinates know what is expected of them. **Example:** My boss called me in to inform me about a rush project that must be given top priority, and she gave me some specific assignments related to this project.

9. **Goal Setting.** The extent to which a leader emphasizes the importance of setting specific performance goals for each important aspect of a subordinate's job, measures progress toward the goals, and provides concrete feedback. **Example:** The supervisor held a meeting to discuss the sales quota for next month.
10. **Training/Coaching.** The extent to which a leader determines training needs for subordinates and provides any necessary training and coaching. **Example:** My boss asked me to attend an outside course at the company’s expense and said I could leave early on the days it was to be held.

11. **Information Dissemination.** The extent to which a leader keeps subordinates informed about developments that affect their work—including events in other work units or outside the organization, decisions made by higher management, and progress in meetings with superiors or outsiders. **Example:** The supervisor briefed us about some high-level changes in policy.

12. **Problem Solving.** The extent to which a leader takes the initiative in proposing solutions to serious work-related problems and acts decisively to deal with such problems when a prompt solution is needed. **Example:** The unit was short-handed due to illness, and we had an important deadline to meet; my supervisor arranged to borrow two people from other units so we could finish the job today.

13. **Planning.** The extent to which a leader plans how to efficiently organize and schedule the work in advance, plans how to attain work unit objectives, and makes contingency loans for potential problems. **Example:** My supervisor devised a shortcut that allows us to prepare our financial statements in three days instead of the four days it used to take.
14. **Coordinating.** The extent to which a leader coordinates the work of subordinates, emphasizes the importance of coordination, and encourages subordinates to coordinate their activities. *Example:* My supervisor had subordinates who were ahead in their work help those who were behind so that the different parts of the project would be ready at the same time.

15. **Work Facilitation.** The extent to which a leader obtains for subordinates any necessary supplies, equipment, support services, or other resources; eliminates problems in the work environment; and removes other obstacles that interfere with the work. *Example:* I asked my boss to order some supplies and he arranged to get them right away.

16. **Representation.** The extent to which a leader establishes contact with other groups and important people in the organization, persuades them to appreciate and support his or her influence with superiors and outsiders to promote and defend the interests of the work unit. *Example:* My supervisor met with the data processing manager to get some revisions made in the computer programs so they will be better suited to our needs.

17. **Interaction Facilitation.** The extent to which a leader tries to get subordinates to be friendly with each other, cooperate, share information and ideas and help each other. *Example:* The sales manager took the group out to lunch to give everybody a chance to get to know the new sales representative.
18. **Conflict Management.** The extent to which a leader restrains subordinates from dissensions, encourages them to resolve conflicts in a constructive manner, and helps settle friction and disagreements between subordinates. **Example:** Two members of the department who were working together on a project were having a dispute so the manager met with them to help resolve the matter.

19. **Criticism/Discipline.** The extent to which a leader criticizes or disciplines a subordinate who shows consistently poor performance, violates a rule, or disobeys an order. (Disciplinary actions include an official warning, reprimand, suspension, or dismissal.) **Example:** The supervisor was annoyed that a subordinate kept making the same types of errors and warned him to make a more concerted effort.

Gary Yukl (1981) and his colleagues have given us nineteen categories which clearly label just what leaders do and help us recognize these behaviors in our daily lives. Since these behaviors are quite specific, learning and implementing them can help leaders perform their jobs more effectively (Plunkett, 1996).”

**Three Types of Management Skills**

No matter how leaders are defined, they routinely must apply basic skills. According to Robert L. Katz, the basic management skills required of all leaders at every level in an organization can be grouped under three headings: human, technical, and conceptual (Katz, 1975). Leaders at different levels in an organization will use one or another of these skills to a greater or lesser degree, depending on the leaders' positions in the organization and the particular demands of their circumstances at any given time.
Human skills determine the leader's ability to work effectively as a group or team member and to build cooperative effort within the group or team he or she leads or facilitates. Human skills are also needed to coordinate the interaction between that group and all the other groups with which it comes into contact (Plunkett, 1996).

Leaders with technical skills understand and are proficient in specific kinds of activity. Any technical skill requires its practitioner to know procedures, processes, and methods. Technical skills involve specialized knowledge, analytical ability within that specialty, and facility in the use of the tools and techniques of the specific discipline (Katz, 1975).

Leaders with conceptual skills view their organizations as wholes with many parts, all of which are interrelated and interdependent. Leaders must be able to perceive themselves, their associates, teams, and sections as parts of and contributors to other sections and the entire organization. Every decision made by every leader has the potential of creating a ripple effect that may influence others outside the particular decision maker's control.

Leadership Principles

Leadership principles should govern the exercise of a leader's informal and formal authority. These principles, along with leaders' concerted efforts to acquire and develop leadership traits, practically guarantee leaders' attaining leadership status in the eyes of their peers and subordinates (Plunkett, 1996). The United States Army established eleven principles of leadership (Yukl, 1981) as:

1. Be technically proficient.

2. Know yourself and seek self-improvement.
3. Know your people and look out for their welfare.

4. Keep your people informed.

5. Set the example.

6. Let the person know what you expect. Don't let people guess at what you want from them or about how they are doing. Communicate regularly with each individual about what you expect and about what will happen when those expectations are met, exceeded, or not met.

7. Find out what your employee wants for himself or herself. Insist that each subordinate spell out goals, aspirations, and expectations.

8. Find out what your employee expects of you. What is expected in terms of help -- more frequent or less frequent contact with you? More responsibility?

9. Take being a role model seriously. Subordinates do as you do more often than they do as you say they should do. Your example provides the psychological and performance models for your group.

10. Expect others to be self-motivated, but don't count on it. People have their peaks and valleys. You may need to intercede on occasion, helping subordinates to improve, grow, and prosper.

The Basic Steps to Becoming a Leader

Rodgers & Levery (1987) presented nine basic steps to becoming an influential manager-leader:
1. Establish who is in charge. Each person in a unit within an organization must be clear about his or her authority, responsibility, and accountability.

2. Know what you want to accomplish. Define your goals, short and long term. Map out your priorities for each day. Monitor your use of time, and check on your progress regularly.

3. Know what you want each person you manage to accomplish. Set specific goals for a person to achieve, and let that person know the quality of performance expected. Judge performance on achievements, not on style.

4. Let the person know what you expect. Don’t let people guess at what you want from them or about how they are doing. Communicate regularly with each individual about what you expect and about what will happen when those expectations are met, exceeded, or not met.

5. Find out what your employee wants for himself or herself. Insist that each subordinate spell out goals, aspirations, and expectations.

6. Find out what your employee expects of you. What is expected in terms of help — more frequent or less frequent contact with you? More responsibility?

7. Take being a role model seriously. Subordinates do as you do more often than they do as you say they should do. Your example provides the psychological and performance models for your group.
8. Expect others to be self-motivated, but don’t count on it. People have their peaks and valleys. You may need to intercede on occasion, helping subordinates to improve, grow, and prosper.

9. Understand that the quality of your leadership is determined by the methods you use to motivate others. What you use and apply to others will be used and applied to you. Open, honest, and sensitive communication builds mutual trust and respect.

*Theories of Leadership*

**Great-Man Theories**

Woods (1913) studied fourteen nations’ histories for periods of five to ten centuries. The conditions of each reign studied were found to approximate the ruler’s capabilities. The brothers of men who became kings as a result of natural endowment also tended to become men of power and influence like their brothers! Woods concluded that it is a “great man” -- a man with natural leadership traits and abilities -- who makes a nation and shapes it in accordance with his abilities.

To William James (1880), the mutations of society were due to great men who initiated movement and prevented others from leading society in another direction. The history of the world, according to James, is the history of great men. Other commentators agree that “history is shaped by the leadership of great men.” Without Moses, the Jews would have remained in Egypt. Without Winston Churchill, the British would have given up in 1940. The Great-Man Theory of Leadership is embodied by military leaders, such as Douglas MacArthur, who are poissant influences in turning around faltering
business corporations. Political and social figures such as John F. Kennedy and Martin Luther King, Jr. are similar personifications of this theory.

Trait Theories

If a leader is endowed with superior qualities that differentiate him or her from his or her followers, it should be possible to identify those qualities. This assumption gave rise to the trait theories of leadership. Kohs & Irle, 1920; Bernard, 1926; and Bingham, 1927, all explained leadership in terms of personality and character. Until the 1940s, most research about leaders and leadership focused on the individual traits of consequence. Leaders were seen to be different in various attributes and tested personality traits than were non-leaders. The question was examined (Bass, 1990): “What traits distinguish leaders from other people and what is the extent of those differences?” The following conclusions were supported by uniformly positive evidence from ten or more studies surveyed (Bass, 1990): The average person who occupied a position of leadership exceeded the average member of his or her group in the following respects: (1) sociability, (2) initiative, (3) persistence, (4) knowing how to get things done, (5) self-confidence, (6) alertness to and insight into situations, (7) cooperativeness, (8) popularity, (9) adaptability, (10) verbal facility, (11) intellectual fortitude, (12) integrity, and (13) maturity.

Situational Leadership Theory

Paul Hersey and Kenneth Blanchard developed an approach to leadership that they called the Situational Leadership Theory (Figure 2). It assumes that leaders vary their behaviors depending on what the situation demands. In Hersey and Blanchard’s theory, however, leadership behavior is broadly defined in terms of relationship behavior

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Leadership Behaviors

Figure 2: Situational Leadership

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and task behavior, and the situation is defined in terms of follower readiness and maturity. "Follower readiness" refers to both the skill level and the self-confidence possessed by the subordinate which affect the behavior of the leader. For example, as employee readiness increases, the leader’s task behavior decreases. In other words, employees with greater self-confidence and better skills require less supervision from their manager. The contribution that the Situational Leadership Theory makes to management is that it recognizes the complexity of the manager’s situation (Sherman, Bohlander, and Snell, 1996).

Path/Goal Theory

Spector and Suttell (1956) stated that valued rewards should be contingent on effective performance — this was called reinforcement leadership. Bass (1965) argued for initiation, suggesting that effective leaders “point out the paths to successful effort,” but results have been mixed. Rightfully, the theory has been modified on a continuing basis by experimental failures. According to Mitchell (1979), a analogous version calls for the leaders to provide subordinates with coaching, guidance, and the rewards necessary for satisfaction and effective performance.

The Path/Goal Theory of Leadership views the leader’s role as being to motivate the subordinates by increasing their payoffs or rewards upon the attainment of specified work-related goals. Thus, the leaders help reduce roadblocks to the goals and increase the degree of personal satisfaction that the subordinate feels about accomplishing the goals (Sherman, Bohlander, and Snell, 1996). Stogdill (1981) supports the situational and path/goal theories in finding that leadership behavior that is best suited for increasing
motivation depends on subordinate personal characteristics and task demands (Stogdill, 1981).

Self-Leadership Theory

The Self-Leadership Theory focuses on encouraging subordinates to exercise leadership for themselves. The successful manager leads by example, by giving rewards for self-leadership among subordinates, and by assisting with employee goal setting, a topic discussed earlier. In these ways, the leader teaches employees to act as their own leaders. Thus the successful leader does not appear to lead by influencing, directing, coercing, or punishing subordinates. Instead, the successful leader is one who encourages others to be self-directed and who offers rewards to subordinates who establish a pattern of self-direction (Whitmire & Nienstedt, 1991).

Theory X, Y and Z

One of the earliest contemporary management theories was proposed by McGregor in 1967 and named “Theory X and Y.” According to McGregor, organizations tend to operate in one of two ways. The organizations that subscribe to Theory X assume that employees have little ambition, desire security above all, and avoid work unless driven by threats and orders. Hierarchical structures are designed to maintain power over subordinates who must be directed, controlled, and disciplined. On the other hand, Theory Y assumes that employees are motivated in their work because they are committed to the goals of the organization, not because of threats of punishment. Organizations assuming Theory Y offer employees independence, flexibility, and the opportunity to participate in decisions that affect them, and open communication among executives and subordinates is stressed.
Theory Z offered by Ouchi (1981) blends task design, individual objectives, and organizational goals into a corporate culture that emphasizes human resources. Ouchi suggested that the most important asset of the organization is its employees — they should be involved in the organization in ways that capitalize on their ideas and abilities, and they should be included in decisions that affect their welfare. In order to increase employee morale, achieve higher quality, and improve productivity, the “quality circle” concept evolved, which provides members of the work force opportunities to meet with others in the organization to discuss problems and offer suggestions that facilitate operations. Multi-level participation in decision making, job rotation, frequent performance appraisals, and gradual promotion are central to the successful organization’s management design.

*Models of Leadership*

The Leadership Grid

The most prominent behavioral-styles model of leadership is the Managerial Grid (renamed the Leadership Grid in 1991). This model has been very popular as a basis for training managers and supervisors (Blake & Mouton, 1981). The grid, shown in Figure 3, expresses the relationship between concern for people and concern for production. By referring to the grid and identifying their own behavior in the two areas of concern, managers and supervisors are better able to understand the approach they use with their subordinates. Developers of the grid, Robert Blake and Jane Mouton (1981), emphasized that the 9.9 style of leadership (Team Management) is the best, regardless of the situation. The grid itself, however, only provides the conceptual framework. It must be implemented through participation in seminars if it is to be effective. In the seminars,
Figure 3: The Leadership Grid

1.9 - Country Club Management: Thoughtful attention to the needs of people for satisfying relations leads to a comfortable, friendly organization atmosphere and work tempo.

9.9 - Team Management: Work accomplishment is from committed people: interdependence through a "common stake" in organization purpose leads relationships of trust and request.

5.5 - Middle-of-the-Road Management: Adequate organization performance is possible through balancing the necessity to get out the work with maintaining morals of people at a satisfactory level.

1.1 - Impoverished Management: Extortion of minimum effort to get required work done is appropriate to sustain organization membership.

9.1 - Authority-Compliance: Efficiency in operations results from arranging conditions of work in such a way that human elements interfere to a minimum degree.

Source: Robert R. Blake and Anne Adams McCanse. Leadership Dilemmas-Grid Solutions (Houston: Gulf Publishing Company, 1991), 29 (First Published as the Managerial Grid Figure by Robert R. Blake and Jane S. Mouton. Reproduced with Permission.)
managers and supervisors learn to identify personal and organizational changes that are necessary and to become more effective in their interpersonal relationships and their work groups (Sherman, Bohlander, and Snell, 1996).

The Contingency Model of Leadership

Fred Fiedler (1974) and others have speculated that the effectiveness of a group or organization depends on two main factors: (1) the leaders and (2) the situations the leaders and groups find themselves in. The extent of the leader's authority and power may influence his or her ability to get things done through others. Leaders tend to be task-oriented or relationship-oriented. As illustrated in Fiedler's Contingency Model (Figure 3), leaders are primarily motivated by their tasks or their interpersonal relationships with their followers. (This is also referred to as situational leadership.) Either motivation is an appropriate focus, as determined by the leader's situation. Task-oriented leaders seek accomplishments that fortify their sense of self-esteem and competence. Relationship-oriented leaders seek the admiration and respect of their followers to meet their social and esteem needs. Both types of leaders need to be able to play both kinds of roles. The task-oriented leader may, as the need arises, adopt the relationship orientation. A relationship-oriented leader may focus on getting the job done when a crisis arises and time is short. But each will return to his or her former orientation. This flexibility marks a true leader who is destined to achieve higher authority. Not all people have this flexibility (Fiedler, 1974).

Moss Leadership Study

Jerome Moss is Professor, Department of Vocational & Technical Education, University of Minnesota, and Site Director for the National Center for Research in
Vocational Education. In his leadership training program “Preparing Leaders for the Future,” Moss and his colleagues pointed out that vocational education currently does not have the number of leaders that are urgently needed. Vocational education is now experiencing a series of changes that are rapidly and significantly altering the educational and economic environment in which it exists — changes in the nature of work, a diversity in the composition of the student body, and increasing public demand for accountability. Vocational education is also being challenged as never before in history, to justify its place in an educational system that is being called upon to provide more basic skills training, more preparation in critical thinking capacities, more science and mathematics, and a higher level of sophistication in academic subjects. Given these challenges, vocational education must begin its own transformation if it is to meet current and future needs in a changing environment (Moss, 1994).

Moss proposed that, as much as in any previous era, vocational education needs leaders. Both adjusting to change and shaping the debate in education require visionary leadership. The ultimate task of educators is the development of human potential, that is, the empowerment of people. Vocational education needs highly-motivated, competent leaders with a sense of vision and with the skill to empower others in order to effect positive change (Moss, 1994).

Despite this attention, there is no consensus in the field on a specific definition of leadership, an explanatory model of leadership behaviors, or the most useful means for measuring leadership effectiveness. There is substantial agreement that leadership is a viable construct and that it can be recognized in practice, that aspects of leadership behavior can be measured and shown to be
related to effective performance, and that educational interventions can effect the behavior of leaders.

**Leadership**

Based on the conceptualization that resulted from an extensive review of literature (Moss & Liang, 1990), leadership is viewed as a two-part process. The first part of the process is perceiving when change is needed; the second is influencing and facilitating a group's efforts, through noncoercive means, to set and achieve group goals. In vocational education, this process should lead to the accomplishment of the following six generic leadership tasks (Moss, Shwartz & Jensrud 1994):

a) Inspire shared vision and establish standards that help the group/organization achieve its stage of development. Foster unity, collaboration, and ownership, and recognize individual and team contributions.

b) Exercise power effectively and empower others to act.

c) Exert influence outside of the group/organization in order to set the right context for the group/organization.

d) Establish an environment conducive to learning.

e) Satisfy the work-related needs of members of the group/organization as individuals.

Thus, leaders facilitate the group process and empower rather than control those with whom they work. In a recent study, most vocational educators agree with this conceptualization of leadership (Moss, Finch, & Johansen, 1991). Further, to function at peak efficiency, high-performance learning organizations need formal as well as informal
leaders at all levels of the organization. It is, of course, critical that administrators be good leaders (as well as good managers), but it is also important that a number of teachers, counselors, and others be good leaders (as well as good instructors, advisors, and so forth). Consequently, Moss’ leadership study is intended to help individuals who want to improve their leadership capabilities, regardless of their particular professional roles in vocational education. It is postulated that the kinds of knowledge, skills, and attitudes to be developed by his study should be characteristic of all leaders (Moss, Finch, & Johansen, 1991).

Leadership Attributes

The second aspect of Moss' conceptualization is that leadership is seen as being in the eye of the beholder: “Only those who are so perceived are leaders.” When an individual behaves in ways that others in the group/organization believe will help them achieve desired goals, that individual is seen as a leader and is perceived to possess certain attributes. Those attributes predispose the desirable behaviors and are inferred from those behaviors. Although leader behaviors are highly situational, the attributes — the knowledge, skills, and attitudes possessed by the leader — are relatively stable. They move with the leader from one situation to another and from one group to another. That relative stability increases the likelihood that an individual seen as a leader in one situation or group will be seen as a leader in other situations and groups (Bass, 1981).

Factors Related to Leadership

A review of research conducted during the last five years has shown that 37 attributes are strongly related to the leadership performance of vocational administrators. It has shown that many of the attributes can be improved by reasonable amounts of
formal educational interventions and that both genders, regardless of ethnicity, can benefit equally from their improvement (Moss & Liang, 1990).

After reviewing a large number of available publications and interviewing several leadership theorists and trainers, Moss compiled a list of 37 attributes under the three levels of Management Skills, Personal Skills and Social Skills & Characteristics (Moss, 1994).

The Management Skills level includes the Organizational and Cognitive categories with eight leadership attribute factors: planning, organizing, networking, team-building, time-management, delegating, problem-solving, and information management.

There are three categories in the Personal Characteristics level — Visionary, Action-Oriented and Energetic. It's eleven leadership attribute factors are: insightful, creative, decisive, achievement-oriented, accountable, willing to accept responsibility, risk-taking, persistent, enthusiastic, confident and energetic with stamina.

The Social Skills & Characteristics level is composed of three categories — Ethical, Interpersonal and Intellectual. Its eighteen leadership attribute factors are: commitment to the common good, personal integrity, high values and moral standards, communication, coaching, motivation of others, use of appropriate leadership styles, tact, sensitivity/respect, emotional balance, trustworthiness, dependability, conflict management, ideological beliefs appropriate to the group, intelligence with practical judgment, adaptability/open-mindedness, tolerance of frustration and stress management.
The Thirty-Seven Leadership Attribute Factors

1. Energetic with stamina: Approaches tasks with great energy and works long hours when necessary. (Energetic category)

2. Insightful: Reflects on the relationship among events and quickly grasps the meaning of complex issues. (Visionary category)

3. Adaptable, open to change: Encourages and accepts suggestions and constructive criticism from co-workers, and is willing to consider modifying plans. (Intellectual category)

4. Creative: Looks to the future and creates new ways in which the organization can prosper. (Visionary category)

5. Tolerant of ambiguity and complexity: Comfortably handles vague and difficult situations where there is no simple answer or no prescribed method of preceding. (Intellectual category)

6. Achievement-oriented: Shows commitment to achieving goals and strives to keep improving performance. (Action-Oriented category)

7. Accountable: Holds self answerable for work and willingly admits mistakes. (Action-Oriented category)

8. Initiating: Frequently introduces new ideas. (Visionary category)

9. Confident, accepting of self: Appears secure about abilities and recognizes personal shortcomings. (Action-Oriented category)

10. Willing to accept responsibility: Willingly assumes higher-level duties and functions within the organization. (Action-Oriented category)
11. **Persistent**: Continues to act on beliefs despite unexpected difficulties. (Action-Oriented category)

12. **Enthusiastic, optimistic**: Thinks positively, approaches new tasks with excitement, and deals with challenges as opportunities. (Action-Oriented category)

13. **Tolerant of frustration**: Acts calmly and patiently even when things don't go as planned. (Intellectual category)

14. **Dependable, reliable**: Can be counted on to follow through to get the job done. (Interpersonal category)

15. **Courageous, risk-taker**: Willingly tries out new ideas in spite of possible loss or failure. (Action-Oriented category)

16. **Even disposition**: Displays a sense of humor and a stable temperament even in stressful situations. (Interpersonal category)

17. **Committed to the common good**: Works to benefit the entire organization, not just self. (Ethical category)

18. **Personal integrity**: Speaks frankly and honestly and practices espoused values. (Ethical category)

19. **Intelligent with practical judgment**: Learns quickly, and knows how and when to apply knowledge. (Intellectual category)

20. **Ethical**: Acts consistently with principles of fairness and right or good conduct that can stand the test of close public scrutiny. (Ethical category)

21. **Communication (listening, oral, writing)**: Listens closely to people at work, and organizes and clearly presents information both orally and in writing. (Interpersonal category)
22. **Sensitivity, respect:** Shows genuine concern for the feelings of others and regard for them as individuals. (Interpersonal category)

23. **Motivating others:** Creates an environment in which people want to do their best. (Interpersonal category)

24. **Networking:** Develops cooperative relationships within and outside of the organization. (Organizational category)

25. **Planning:** In collaboration with others, develops tactics and strategies for achieving organizational objectives. (Organizational category)

26. **Delegating:** Appropriately and effectively assigns responsibility and authority. (Cognitive category)

27. **Organizing:** Establishes effective and efficient procedures for getting work done in an orderly manner. (Organizational category)

28. **Team-building:** Facilitates the development of cohesiveness and cooperation among the people at work. (Organizational category)

29. **Coaching:** Helps people develop knowledge and skills for their work assignments. (Interpersonal category)

30. **Conflict management:** Brings conflict into the open and uses it to arrive at constructive solutions. (Interpersonal category)

31. **Time management:** Schedules own work activities so that deadlines are met and work goals are accomplished in a timely manner. (Organizational category)

32. **Stress management:** Effectively deals with the tension of high pressure work situations. (Intellectual category)
33. Appropriate use of leadership styles: Uses a variety of approaches to influence and lead others. (Interpersonal category)

34. Ideological beliefs are appropriate to the group: Models and demonstrates belief in the basic values of the organization. (Interpersonal category)

35. Decision-making: Makes timely decisions that are in the best interest of the organization by analyzing all available information, distilling key points, and drawing relevant conclusions. (Action-Oriented category)

36. Problem-solving: Effectively identifies, analyzes, and resolves difficulties and uncertainties at work. (Cognitive category)

37. Information management: Identifies, collects, organizes, and analyzes the essential information needed by the organization. (Cognitive category)

Supported research has shown that 14 attributes best explained the variance in leader performance (Moss & Liang, 1990) and/or were consistently considered by the former participants of 17 leadership programs to have been most useful to them in their leadership activities (Moss, Jensrud, & Johansen, 1992; Leske, Berkas, & Jensrud, 1992). The 14 attributes are as follows:

1. adaptable, open to change
2. insightful
3. team-building
4. willing to accept responsibility
5. motivating others
6. communication
7. visionary
Although all successful leaders should demonstrate the same attributes, individual differences due to a variety of factors (i.e., socialization processes of females and males) tend to create particular strengths as well as developmental needs among attributes. Eleven additional attributes whose further development is likely to be helpful to most underrepresented groups have been identified through a review of the literature (Moss, Shwartz & Jensrud 1994). Those attributes are as follows:

1. tolerant of ambiguity and complexity
2. courageous, risk-taker
3. initiating
4. achievement-oriented
5. persistent
6. conflict management
7. tolerant of frustration
8. committed to the common good
9. stress management
10. using appropriate leadership styles
11. sensitivity, respect

Leadership Attribute Factors and Demographic Variables

Demographic variables that appeared to correlate positively or negatively with leadership attribute factors were extracted from recent studies. These variables are gender, age, education levels, occupation levels, living place and marital status.

Fisher (1988) found that effective leaders: exude and engender confidence; focus on goal achievement and the accomplishment of a vision; must be willing to work longer hours than anyone else; and are independent and self-assured.

Gender

A study conducted by Gordon (1994) indicated that gender was the only demographic characteristic that had a significant influence on the leadership factors of college of education students. In the study of how gender affects differences in their management skills Loden (1991) found that, compared with male leaders, female leaders prefer and tend to behave in terms of an alternative feminine leadership model characterized by cooperativeness, collaboration of managers and subordinates, lower control for the leader, and problem solving based on intuition and empathy as well as rationality.

On the average, women’s self-confidence is lower than that of male counterparts (MacCoby & Jacklin, 1974). Females will predict lower performance for themselves than warranted by their intelligence and present themselves as dependent and incompetent (Ireson, 1976; Vaught, 1965; Crandall, et. al., 1962). Larwood and Wood (1977) agreed that women have been found to differ from men in traits of consequence to leadership such as self-esteem, need for achievement, fear of success, need for power,
need for dominance, risk preference, competitiveness, and dependence. The claim that women avoid attempting to climb the executive ladder because they fear failure remains controversial (Tresemer, 1976; Wood & Greenfeld, 1976; Horner, 1970; O'Leary, 1974; Zuckerman & Wheeler, 1975). Women who see themselves in roles conflicting with homemaking may have an additional source of psychological withdrawal from the organization (Terhune, 1970; Wall, 1976).

When differences in personal characteristics between the genders were examined, Powell (1990), Shakeshaft (1987), Nieva & Gutek (1981) and Bartol & Martin (1986) found male and female leaders exhibit similar amounts of task-oriented and people-oriented behavior. Little difference was found between the needs, values, and leadership styles of male and female managers. Rozier (1996) found that females preferred to use a transformational supervisory style more than the men did but males used more masculine leadership traits. Shield (1975) and Wittig (1976) could find no support for any differences in intellectual characteristics except possibly in spatial visualization (important in math and science).

Some studies investigated the social skills between male and female leaders. They found female leaders with more social skill competence than male leaders (Henkin, 1996, Karnes and D’ilio, 1986). Studies conducted by Skoe and Diessner (1994) and Arlow (1991) indicated that females are more ethical and socially responsible than males. However, Ogilby (1995) found that no gender differences appeared in ethical issues. Lowe (1988) found that females experienced a greater frequency of stress than males. Etzion’s research (1988) indicated that male professionals are better able to integrate work success with private life than their female counterparts. For men, work and non-
work success are compatible, while for women they seem to conflict. When Korabic, Baril & Watson (1993) examined gender differences in conflict management styles, they found that among participants without managerial experience, women rated themselves as more integrating, obliging, and compromising than did men. There were differences in the way that subordinates evaluated male and female supervisors who used similar styles. Dominating was more negatively related, and obliging more positively related to subordinates' perceptions of effectiveness for their female leader than for their male leaders. Kaldenberg (1995) examined gender differences in work attitudes and professional commitment for a group of professionals. The results of the study reflected that females were as committed to their careers as males and reported the same work/family conflict as the men. However, men and women, even when engaged in similar activities, possessing the same capabilities, and sharing the same views and preferences, still live in different social contexts and face different dynamics (Durchholz, 1977; Wethington et al., 1987).

The studies above found that gender differences exist in levels of management skills, personal characteristics and social skills. However, when Sorenson did a survey of experienced managers regarding gender, psychological type, and conflict style preference in 1995, he found that males were “thinkers” and females were “feelers.” This result indicated that psychological type might be a better indicator of conflict management style than gender. There were no gender differences in conflict management style among experienced managers and no gender differences in the style used by supervisors during role play nor in the outcomes they attained (Kaldenberg, 1995). Miner (1974) found no difference between sexes in the motivation to manage. Female executives were similar to
male executives in self-esteem, motivation, and mental ability (Morrison & Sebald, 1974). Recent literature on leadership and gender has supported the concept that an effective leader cannot be defined by gender or gender-related traits (Cimperman, 1986). Kanter (1977) also indicated that there was no research evidence that made a case for gender differences in either leadership aptitude or style.

Age

For centuries, thinkers have speculated about the association between a person's age and exceptional accomplishment (Simonton, 1988). According to human developmental theorists (Erikson, 1963; Levinson, 1978; Super, 1977; and Gould, 1978, 1984), age development groupings can be observed as occurring in conjunction with certain exhibited behaviors common to those groups. Each theorist more or less places the groupings in the following categories:

1. Leaving the family, selecting an occupation, achieving economic independence, and acquiring personal identity (ages 18-30).

2. Achieving responsibility in the community, positions of authority in the work place, as well as the first emotional awareness that death is inevitable (ages 31-41).

3. A settling period occurs in which there is an adjustment in the philosophy of life and the inability to maintain economic or social standards of living (ages 41-50).

4. A decrease in interests and drives precipitates excessive reliance on things from the past with an increase in rigid thinking and a decrease in physical strength (ages 50 and beyond).
Bellingrath (1930), Finch (1932), Baldwin (1932), Garrison (1935), Reemmelin (1938), and Hunter & Jordon (1939) found leaders to be younger than their followers. Leaders were found to be older than followers by Gowin (1918), Nutting (1923), Goodenough (1930), Buttgereit (1932), Parten (1933), Partridge (1934), Moore (1935), Newstetter (1938), and Zeleny (1939). Gowin (1915) found outstanding executives to be 12.2 years older on the average than less effective executives.

Psyco-social theorists have attempted to explain intrinsic motivational differences based on the aging process, degree of mastery over psycho-social conflicts, and their interactive effect on one’s career (Pelz & Andrews, 1966; Erikson, 1963; Levinson, 1978; Valliant, 1977; Neugarten, 1968, 1979; Gould, 1978, 1984; Hall, 1980; Tough, 1978; and Cross, 1981). All of these theorists agree that “behavior changes as one ages.” Some changes, such as patience and wisdom, which come from experience, are thought to be positive. Other changes, such as reduced physical strength, reaction time, and willingness to change one’s ways are viewed to be more negative characteristics associated with the older employee.

Older leaders grew up in systems which were more prescriptive and mechanistic-like (Burns & Staker, 1961 and Gilbert, et. al., 1990), having less expectations for them to facilitate group interaction and decision making than did younger leaders. Younger leaders are more self-directed, group-focused, and organic. Older managers show more reluctance to take risks (MacCrimmon & Wehrung). Gilbert, et. al., (1990) found that the differences in leadership effectiveness based in the age of the leaders are not strong. Age was found to be a factor in two dimensions: older leaders tended to delegate more effectively (Delegation) than younger employees, while younger leaders seemed to be
more attentive (Calming Influence) to their workers. No differences were found in the leaders' age in Fellowship or Straightforwardness. Associations were found between two dimensions within the Relationship category and Leader Age. Young leaders were rated higher than older leaders in off-the-job relationships (Friendship and Enjoyableness). No difference was found in Outreach Behavior and Leader Age. Ackerson and Brown did not find leaders and followers to be differentiated on the basis of age. Terborg, et. al., (1977) also found age accounted for very little in attitudes toward women as managers.

Simonton reported (1988) that we have an abundance of leaders who served in office at quite varying ages -- Alexander the Great began his conquests at age 22, whereas Louis XIV launched the War of the Spanish Succession at age 63. However, Blondel (1980) indicated that very few of the world's political leaders attained power before age 40. Katzenbach (1996) found change leaders who are managers surviving downsizing and organizational restructuring by making a big difference in the growth and performance of their colleagues and their companies. They do not look, sound, or act like the managers of the past. They are younger and more diverse in gender and race. A study conducted by MacEvoy (1994) indicated that change leaders' ages ranged from in the 20's to 50's. They sought out novelty, stimulation, and information and were sociable and self-confident. They were more likely than average to use technology and communication systems. Warr and Pennington (1994) produced findings that revealed younger workers were perceived to make more cognitive demands and to have greater energy and faster pacing in jobs. The older worker was often underutilized on the job. Employers tended to offer the older worker less training and promotional opportunities than their younger counterparts. Yet older workers tend to find greater meaning in work
itself (Gilbert, et al., 1990). Findings showed that older men and younger women indicated higher stressful work style scores than younger men and older women (Schonwetter, 1993). Similarly, a study conducted with teachers indicated that younger teachers experienced a greater number of stressful events than older teachers (Russell, 1987).

**Educational Level**

Leaders are found, with a high degree of uniformity, to make better than average scholastic grades than nonleaders. Leaders are found to be more intelligent than their followers Caldwell (1920), Bellingrath (1930), Buttgereit (1932), Baldwin (1932), Ackerson (1942). Nutting (1923) found that leaders had poorer scholastic records. Research done by Kohs (1920), Bellingrath (1930), Eichler (1934), Courtenary (1938) indicated no difference was found between leadership and education background.

Henkin (1996) found that there was a positive association between social skill competence and higher education levels. Terborg, et al., (1977) found that the amount of education one obtained was related to more favorable attitudes of women as managers; especially in regard to the amount of college education one obtained. Higher education levels were associated with lower mortality in men and women (Sorlie, Backlund and Keller, 1995). MacCrimmon & Wehrung (1990) found postgraduate managers took more risks.

Powell (1990) did a research study about how job commitment and educational level are related in the managerial ranks. The results indicated that educational level was positively associated with commitment. Greater job satisfaction, more meaningful work, and greater utilization of skills also were positively associated with stronger commitment.
Occupation Level

Stogdill, Shartle, Wherry and Jaynes (1955) concluded that executive performance would vary with respect to the type of position, level of position within the organization's structure, and type of organization. Consistent with this finding, there was little research found to compare leadership traits within different occupations.

Skill as a leader and in relating to others is an important requirement at all levels of management for all careers (Stogdill, 1981). Real change leaders (Katzenbach, 1996) are more likely to have non-business backgrounds. They delegate less, do more real work, and get their hands much dirtier than those of their predecessor professional managers. Stevens did a survey (1993) and evaluated seven professions based upon prestige, honesty and ethical standards. University professors were rated lower than doctors, dentists, pharmacists, and clergy. Arlow's research (1991) indicated that business students were no less ethical than nonbusiness students. Terborg, et. al., (1977) found gender differences interacted with work status. Part-time employed men rated women possessing traits necessary for success as managers higher than did men who were employed full time. Gordon's research reflected that the education majors surveyed felt that they possessed high levels of leadership ability (1994). According to Brinkley and Byers (1982), "Members in student organizations have made splendid opportunities for engaging in good democratic leadership, but students may need training in performing the duties expected of them as leaders." Hohmann, Hauker and Hohmann (1982) reported that young people acquire leadership skills through group membership and dynamics of cooperation. Fitzpatrick (1976) advocated organizational leadership training for Vocational Industrial Clubs of America (VICA) students in which students take part
in meetings, make speeches, chair meetings, assist in solving problems at the group level, vote on issues concerning the organization and participate in skilled competition.

Historically, students have learned leadership skills at the local, district, state and national levels through purposeful development of citizenship and competition skills (Gordon, 1994).

Even though the majority of educators may not regard leading and teaching as synonymous, most would freely admit that teaching inherently involves leading (Lynch & Strodl, 1991). Berliner (1983) likened teachers to executives and suggested that they must perform nine executive functions to be successful in their classrooms and schools: planning, communicating goals, regulating the activities of the workplace, creating a pleasant environment for work, educating new members of the work group, relating the work of the site to other units in the system, supervising and working with other people, motivating those being supervised, and evaluating the performance of those being supervised.

In addition to the obvious leadership behaviors they display in their classroom, teachers have formal leadership roles in the schools (Pellicer & Anderson, 1995). Department chairpersons, team leaders, curriculum coordinators, consultants, and cooperating teachers are just a few of the important formal leadership roles filled by teachers. Hatfield, Blackman, Claypool, and Master (1987) estimated that from 10% to 20% of the teaching staff are engaged in leadership roles designated by more than 50 titles.

MacCrimmon & Wehrung (1990) found that banking executives took less risks than executives employed in other fields. More successful executives took more risks
and wealthier managers also took more risks. CEOs took more risks than middle managers. Higher authorities took greater risks while those with more seniority took fewer risks. Small firm managers also took more risks than managers in large corporations.

**Marital Status**

Gosman's study (1993) disputed the hypothesis that marital status influenced women's professional advancement in male-dominated fields. Terborg, *et al.*, (1977) found marital status accounted for very little in attitudes toward women as managers. Marital status was found to be predictive of scores on emotional exhaustion -- women evinced greater depression than men only among married couples (Russell, 1987).

Among the unmarried, it is men who show poorer mental health (Gove & Tudor, 1973; Gove, 1978; Radloff, 1975). Gove and Tudor (1973) and Gove (1978) attribute the higher rates of mental illness among women to recent changes in the social roles of females, particularly married females, in modern societies. Because married women today are expected to contribute to the family income in addition to performing traditional "feminine' tasks in the household, their daily lives may involve significantly more stress than those of men. The unmarried, lacking the additional pressures of having to support and manage a family, show less differentiation between male and female roles.

Some theorists argue that the performance of multiple roles has positive effects on psychological well-being (Sieber, 1984; Toits, 1983; and Wethington & Kessler, 1989). This role expansion perspective suggests that multiple roles enhance mental health because they expand rather than constrict an individual's resources, rewards, energy, and commitment, and they result in a sense of ego gratification and security (Marks, 1977;
Research has found that married women are in better mental health if they work outside the home (Kessler & McRae, 1982; Ross, et al., 1983). However, for married women especially, incumbency simultaneously in the roles of mother, wife, caretaker, and worker may be problematic for mental health. Men can typically avoid such conflicts because their primary identity is that of breadwinner for the household (Wu & DeMaris, 1996). Sortie, Backlund and Keller (1995) found that all the single categories (widowed, divorced, separated, and never married) involved higher mortality rates than the married category.

**Living Place**

Triandis (1980) pointed out that leadership in specific locations requires examining the various institutions of the selected culture. National boundaries, rather than cultural boundaries, determine leadership and management in educational institutions, legal forces, political parties, and business considerations of consequence. Cultural boundaries are likely to have a greater impact on individuals' values, sentiments, ideals, language, and role models (Stogdill, 1981). In many ways, leadership in the United States is influenced by its cultural emphasis on individualism, action rather than contemplation, pragmatism, and equalitarianism.

**Political Leadership**

**Political Leaders**

With respect to the public sector of leadership, Bell, Hill, and Wright (1961) identified categories of: formal leaders (who hold official positions, either appointed or elected); reputational leaders (who are believed to be influential in community or national
affairs); social leaders (who are active participants in voluntary organizations); and influential leaders (who influence others in daily contacts).

According to Bass (1990), political theorists, from Plato onward, had explanations, either explicit or implicit, and prescriptions for leadership. Marxism-Leninism, with its focus on economic determination of the course of history coupled with the dictatorship of the proletariat, laid out strong messages about who shall lead and what is expected of the leadership. Nazi ideology was centered on the Fuhrreprinzip. According to the Nazis, unquestioning obedience and loyalty to superiors produced the order and prosperity that was to be shared by those who were identified as worthy by race to participate in the New Order. The other races were to be enslaved or exterminated. Like kings with divine rights and like the emperor of China who pursues the will of Heaven, the national dictator could do no wrong, so each successive level of leadership below him was equally infallible. Superiors' decisions were to be obeyed, not questioned. In contrast, leaders espoused in the democratic world of constitutionally elected representatives who are responsible to their constituencies make decisions based on the vote of the majority while the rights of the minority are respected and protected.

**Chinese Leadership**

*Confucianism and Politics in Traditional China*

Confucianism has been identified as the major cultural factor that explains the economic success of the Asian Five Dragons (Hong Kong, Japan, Singapore, South Korea, and Taiwan). Chen (1993) proposed the impact of Confucianism on the organizational communication in these nations, based on the four key principles of Confucian teaching: the hierarchical relationship, the family system, "Jen" (benevolence),
and the emphasis on education. The Confucian emphasis on education at all levels has become one of the most important characteristics of Chinese culture (Chen, 1993).

Chen (1993) explains that Confucianism is a social philosophy stressing that people must learn to live together in a harmonious and orderly fashion within the confines of society. In order for man to reach his greatest development and potential in society, he must cultivate the spirit of "Jen" (sympathy or benevolence). Jen expresses the notion that the actions of one person will inevitably affect the feeling and interests of others and that it is necessary for one being to enter into and share the feeling of another. It is a kind of mutual affection and understanding that evolves from a commonality of background and interests. Jen also includes the feeling that one must first always think of the needs and desires of others and the desire to help others to achieve their ends.

According to Confucius, "Do not do to others what you do not wish yourself."

Confucius urged man to devoted himself to a life of "right action" as defined in the duties and obligations found in the five basic relationships that exist in every society. These relationships are government and citizen; father and son; elder brother and younger brother; husband and wife; and friend and friend. All of these relationships except the last involve the authority of one person over another. The inferior owes obedience and loyalty to the superior, while the superior owes loving responsibilities to the inferior (Metraux, 1991).

Confucianism gives the scholar a very high place in China. In the past, education was the key to political and social rank; one could only get a high local or national political post by passing a series of rigorous exams. At the same time, Confucian officials were obliged to speak out against injustice, even if the consequences were
torture and death. A Confucian government was to look out after the welfare of the people and to lead them as a role model of virtue. At least in theory, emperors or ministers who neglected their duties were to be reprimanded by the scholar-officials (Metraux, 1991).

According to Lau (1977), Far Eastern cultures have a less-differentiated view of reality — X does not cause Y; rather X and Y affect each other. There is also less abstract thinking. The consequences are a less clear allocation of responsibilities and less organized planning in Chinese firms. At the same time, Confucian principles resulted in perceptions of managers as linchpins, mediating the effectiveness of the work environment on their subordinates (Shenkar & Ronen, 1987). Gill (1983) found that Chinese managers in Singapore described themselves as significantly more reserved, serious, conservative, assertive, trusting, group dependent, and relaxed than did comparable North American and British managers. Wilkinson (1964) noted that Confucian China emphasized good manners, good form, and classical cultural training for governmental service.

Taiwan in the 1990s is still influenced by traditional Confucian ideology. Taiwanese officials assert that their retention of many elements of Confucian tradition makes their government the true heir to the legacy of Chinese civilization because the Mainland regime has abandoned its ties to the past by adopting communism and denouncing Confucianism (Chen, 1993).

The Tao of Leadership

Lau Tzu’s Tao Te Ching is one of China’s best loved books of wisdom. It was originally addressed to the sage and to the wise political ruler of the Fifth Century.
However, even more important is the fact that Tao Te Ching persuasively unites leadership skills and the leader’s way of life and it is of value to anyone who aspires to a leadership position, whether within the family or group, church or school, business or military, politics or government administration (Heider, 1985).

*Tao Te Ching* means, “The Book (Ching) of How (Tao) Things Happen or Work (Te).” The book itself has three topics: (1) Natural Law, or How Things Happen, (2) A Way of Life, or How to Live in Conscious Harmony with Natural Law, and (3) A Method of Leadership, or How to Govern or Educate Others in Accordance with Natural Law.

Some of the principles of the *Tao Te Ching* and their adaptations presented by John Heider are as follows:

All behavior consists of opposites or polarities. If I do anything more and more, over and over, its polarity will appear. Knowing how polarities work, the wise leader does not push to make things happen, but allows process to unfold on its own. The leader teaches by example rather than by lecturing others on how they ought to be. The leader knows that constant interventions will block the group’s process. The leader does not insist that things come out a certain way (Moss’ Leadership Attribute Factor — Insightful or Accept Responsibility).

The leader can act as a warrior or a healer. As a warrior, the leader acts with power and decision. That is the YANG or masculine aspect of leadership. Most of the time, however, the leader acts as a healer and is in an open, receptive, and nourishing state. That is the feminine or YIN
aspect of leadership. The leader who knows when to listen, when to act, and when to withdraw can work effectively with nearly anyone, even with other group leaders, perhaps even with the most difficult group members (Moss' Leadership Attribute Factor — Use Appropriate Leadership Styles).

Too much force will backfire. Constant intervention and instigation will not make a good group. They will spoil a group. The best group process is delicate. It cannot be pushed around. It cannot be argued over or won in a fight. The leader who tries to control the group through force does not understand group process. Force will cost leaders the support of the members. The wise leader stays centered and grounded and uses the least force required to act effectively. The leader avoids egocentricity and emphasizes being rather than doing (Moss' Leadership Attribute Factor — Ideological Beliefs Appropriate to the Group).

Nobody has all the answers. The wise leader has learned how painful it is to fake knowledge. Being wise and not wanting the pain, the leader does not indulge in pretending (Moss' Leadership Attribute Factor—Confident or Self-Accepting). At birth, a person is flexible and flowing. At death, a person becomes rigid and blocked. The rigid group leader may be able to lead repetitious and structured exercises but can’t cope with lively group processes. Whatever is flexible will tend to grow. Whatever is rigid will die. Leaders should be open-minded and willing to change (Moss’ Leadership Attribute Factors — Adaptive, Open, Flexible).
The Republic of China in Taiwan

Economic Development

Taiwan, just a speck on the world map and home to the ROC, has only scarce natural resources and a very dense population. However, the people on this island, diligent and persistent, have carved out a brave new world on the eve of the Twenty-First Century (Lee, 1996). Since 1949, the ROC in Taiwan has progressed from a war-ravaged, economically backward state to one of the most dynamic economies of the world, an accomplishment universally referred to as “an economic miracle.”

Over the period of 1954 to 1994, the average annual economic growth rate was 8.6%. During the same period, the average GNP for each person reached US $11,604, up from $117, ranking the ROC 25th in the world in per capita GPN. In 1994, Taiwan’s total GPN was US $244.7 billion, 19th in the world. Its import and export trade value for 1994 totaled US $178.4 billion, which was ranked as 14th in the world. The accumulation of foreign exchange at the end of 1994 amounted to US $92.5 billion, second only to Japan. According to forecasts by the World Bank, by the year 2020 Taiwan’s economic power will rise in rank from 19th to 10th in the world (Chiang, 1996).

The people of the country enjoy social pluralism, universal education, religious freedom and enviable affluence. What is even more laudable is that in a recent process known as “a quiet revolution,” constitutional reform has been accomplished gradually and peacefully. In March, 1996, the people elected their president and vice president by direct popular vote for the first time in Chinese history, formally ushering in a new democratic era of “popular sovereignty (Lee, 1996).”
Taiwan's Ruling Party:

The National Party of Taiwan, also called Chung-Kuo Kuomintang (KMT) is the current ruling party. The chairperson is President Li Teng-hui. The KMT adopted Dr. Sun Yat-sen's "Three Principles of the People" as its basic approach to government and nation-building. Of these principles the KMT elected to concentrate its energies on the problems of the peoples' livelihood, while adopting an economic approach in the sphere of political participation and democratization. Judging from the results of following this strategy for almost forty years, especially when compared with some of the neighboring countries which initially paid more attention to democratization, it is clear that the strategy adopted by the ROC leaders was indeed a wise one (The Republic of China Yearbook, 1997).

As the ruling party, the KMT recommends members to fill important posts in the government and to ensure that the executive powers granted to the government ultimately serve the welfare of the people, advocating a prosperous economy and a just society. The Sun Yat-sen Institution on Policy Research and Development is the main and highest training institute of the KMT. Four conventions are held each year for more than 1,000 participants — local Taiwanese and overseas Chinese scholars. As conceived by the KMT, the purposes of the conventions are to develop participants' leadership effectiveness in order to increase the likelihood that KMT members will 1) perceive opportunities to behave as leaders, 2) grasp those opportunities, and 3) succeed in achieving the tasks of leaders in a wide variety of situations in professional and political roles (The Republic of China Yearbook, 1997).
CHAPTER 3

METHODS

The central purpose of this research was to determine the leadership attribute factors of Taiwanese leaders who participated in the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. The study examined if there were any differences in leadership attribute factors based on gender, age, occupations, educational level, living place and marital status. The researcher also examined whether relationships existed among the selected leadership attribute factors.

Participants

There were 310 Chinese leaders (260 from local Taiwan, and 50 representatives of scholars from overseas) attending the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. All the participants of this convention met criteria established by the KMT based on performance, contributions, and leadership. They included government officials, business people, professors, teachers, student leaders, professionals and leaders from non-profit organizations. These participants were prepared to assume leadership roles and responsibilities for their communities to create positive changes and to benefit the society of Taiwan and the Chinese government.
Process of Developing the Instrument

The Leader Attributes Inventory (LAI) and six demographic questions were used in this study to collect the data. The LAI model developed by Moss, Johansen & Preskill (1991) included 37 leader attribute factors. The test-retest reliability correlation coefficients (administered after a three week interval) ranged from .53 to .89 and the average coefficient was .76. All of the leader attributes of LAI were found to be strongly related to perceived leader effectiveness. Strongly related \( (r = .56 \text{ to } .82) \) to the leadership performance of vocational administrators as measured by subordinates’ perceptions of the extent to which the aforementioned six leadership tasks have been achieved (Moss & Liang, 1990; Moss, Johansen, & Preskill, 1991). These results indicated that the LAI had a construct validity.

The LAI model had three levels, namely: Management Skills, Personal Characteristics, and Social Skills & Characteristics. The Management Skills level included two categories: (1) Organizational (e.g., planning, organizing, networking, team-building, and time-management); and (2) Cognitive Skills (e.g., delegating, problem-solving, and information management). The Personal Characteristics level included the categories of (1) Visionary (e.g., insightful and creative); (2) Action-Oriented (e.g., decisive, achievement-oriented, accountable, willing to accept responsibility, risk-taking, persistent, enthusiastic, and confident); and (3) Energetic (e.g., energetic with stamina). The Social Skills & Characteristics level include the categories (1) Ethical Skills (e.g., commitment to the common good, personal integrity, and high values and moral standards); (2) Interpersonal (e.g., communication, coaching, motivation of others, use of appropriate leadership styles, sensitivity/respect, emotional
balance, trustworthiness/dependability, conflict management, and ideological beliefs appropriate to the group); and (3) Intellectual (e.g., intelligence with practical judgment, adaptability/open-mindedness, tolerance of frustration and stress management).

The content validity of the Chinese translation instrument was reviewed by a panel of experts who determined the utility of Moss’s model of Leader Attribute Inventory in the leadership traits of Chinese leaders. The panel of experts was made up of research methodology instructors, professors of leadership studies, senior members of the KMT, executive leaders of companies and graduate students at The Ohio State University. A Chinese translation of the instrument was developed and a field test was administered to a group of native Chinese speakers. The field-test participants were asked to respond to statements related to their perceptions of their leadership attributes and to record the length of time it took them to complete the survey. They were asked to provide comments on the ambiguity of terms, sentences, and the organization of the instrument. The LAI was revised and updated based on the findings of this field test. The survey instrument was translated into Chinese and back-translated into English to ensure that both English and Chinese versions were comparable. Demographic questions included age, gender, living place (Taiwan or overseas), educational level, occupation, and marital status.

Administration of the Instrument

The LAI was administered at the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. Human subject clearance was submitted to The Ohio State University’s Department of Human Subjects for approval that was granted on July 16, 1996 (Appendix C). Part One of the questionnaire solicited demographic information
about the participants of the Convention. Part Two consisted of 37 statements related to the participants' perceptions of their levels of their leadership attributes. Respondents were instructed to indicate their perceived leadership attributes by indicating their level of agreement most descriptive to their feelings toward each statement. Respondents were told that there were no right or wrong answers, but that their opinions mattered, and, therefore, they should respond honestly, indicating how they felt about themselves in relation to each item. Available responses were based on a Likert-type scale as follows (Spector, 1992): “one” indicated “strongly disagree,” “two” indicated “disagree,” “three” indicated “slightly disagree,” “four” indicated “slightly agree,” “five” indicated “agree,” and “six” indicated “strongly agree.” After the collection of survey questionnaires, data was coded and inputted for computer statistical analysis.

Data Analysis

The data collected was analyzed using the SAS statistical package at The Ohio State University. Percentages, means, and standard deviations were used to describe the data. The alpha level was established at a priori .05. The Pearson Product Moment Correlation Coefficient was used to describe relationships among leadership attribute factors. The Univariate F (ANOVA) was used to test the significant differences of the 11 dependent variables (Management Skills, Personal Characteristics, Social Skills & Characteristics, Organizational, Cognitive, Visionary, Action-Oriented, Energetic, Ethical, Interpersonal, and Intellectual) among the demographic variables (gender, age, marital status, occupational level, educational level, and living place) of the participants. If significant differences were found, the Tukey post hoc test was used for further examination.
Results were interpreted and presented in tabular form. The variables of gender, occupation, living place (Taiwan or overseas) and marital status were assumed to be nominal data. The variable of age was assumed to be interval data. Criteria used to analyze the Pearson Product Moment Correlation Coefficient was described by Davis (1971) and shown in Table 1.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.70 or higher</td>
<td>Very strong relationship</td>
</tr>
<tr>
<td>.50 to .69</td>
<td>Substantial relationship</td>
</tr>
<tr>
<td>.30 to .49</td>
<td>Moderate relationship</td>
</tr>
<tr>
<td>.10 to .29</td>
<td>Low relationship</td>
</tr>
<tr>
<td>.01 to .09</td>
<td>Negligible relationship</td>
</tr>
</tbody>
</table>

Table 1: Interpretation of Pearson Product Moment Correlation Coefficients
CHAPTER 4

FINDINGS

Purpose of the Study

The central purpose of this investigation was to determine the self-assessed levels of 37 selected leadership attribute factors of 295 leaders who participated in the KMT Convention during July 22 to August 2, 1996, in Taipei, Taiwan. The researcher sought to compare the relationships of these 37 factors as reported by the participants and to identify differences based on the demographic characteristics (gender, age, occupation, educational level, living place and marital status) of the participants.

The researcher was particularly interested in identifying the self-assessed attributes of the participants as a basis for the development of strategies for the improvement of their leadership abilities. It was the intention of the researcher that data from this study would contribute to the knowledge and understanding of the leadership qualities of KMT members. Thus, the researcher anticipated that the results of this study would benefit the society of Taiwan and the Republic of China government by providing information to assist the Sun Yat-sen Institute in developing its leadership training programs.
Research Questions

The researcher developed the following research questions to conduct this study:

1. What are the demographic characteristics (gender, age, marital status, occupational level, educational level, and living place) of the participants of the Sun Yat-sen Institution on Policy Research and Development Convention in Taiwan?

2. What are the participants' perceptions of their levels of leadership attribute factors?

3. Are there any differences among the participants' perceptions of their levels of leadership attribute factors based on the demographic characteristics of gender, age, occupation, educational level, living place and marital status?

4. What relationships exist among the participants' perceptions of their possession of the 37 selected leadership attribute factors?

This chapter reports the findings of this study. The sections of this chapter include: a) the participants' demographic characteristics, b) a descriptive analysis of the participants' perceptions of their possession of leadership attribute factors, and c) a discussion of the findings.

Demographic Characteristics

Useable data was returned by 295 of the 310 respondents (95%). Respondents included 253 from Taiwan, while 42 represented scholars from overseas. The demographic characteristics investigated involved: gender, age, occupational level,
living place, educational level, and marital status. Table 2 shows the frequency distribution and percentages of the sample population among these demographic characteristics.

More than one half of the participants, 53.9%, was female while 46.1% were male. The participants' ages were grouped into four categories. The majority (69.5%) of the participants was between the ages of 30 to 50. Most (70.2%) of the participants, had leadership experience in their occupational fields; 17.6% were students training to become leaders and 12.2% were housewives serving appointments with the KMT. The majority (85.8%) of the participants, were local Taiwanese, while 14.2% were overseas Chinese. The majority (76.3%) of the participants had college degrees, while 23.7% had a high school education or less. The majority (70.8%) of the participants was married. Single participants, 29.2% of the population, included those who were never married, divorced, or widowed.

Descriptive Analysis of Leadership Attribute Factors

The Leadership Attribute Inventory (LAI) consisted of 37 leadership attribute factors that were divided into three levels, and eight categories. The Management Skills level included two categories of attributes: Organizational and Cognitive. The Personal Characteristics level included the three categories of attribute factors: Visionary, Action-Oriented and Energetic. The third level of leadership attribute factors was Social Skills & Characteristics and its three categories of leadership attribute factors were Ethical, Interpersonal and Intellectual. Participants responded to 37 statements to reflect their perceptions of their leadership attribute factors by using a six-point, Likert-type scale.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>136</td>
<td>46.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>159</td>
<td>53.9</td>
</tr>
<tr>
<td>Age</td>
<td>Under 30</td>
<td>54</td>
<td>18.3</td>
</tr>
<tr>
<td></td>
<td>30-40</td>
<td>110</td>
<td>37.3</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>95</td>
<td>32.2</td>
</tr>
<tr>
<td></td>
<td>over 50</td>
<td>36</td>
<td>12.2</td>
</tr>
<tr>
<td>Occupational Level</td>
<td>Student</td>
<td>52</td>
<td>17.6</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>79</td>
<td>26.8</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>51</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>36</td>
<td>12.2</td>
</tr>
<tr>
<td></td>
<td>Industrial</td>
<td>13</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Professional</td>
<td>28</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>36</td>
<td>12.2</td>
</tr>
<tr>
<td>Living Place</td>
<td>Taiwan</td>
<td>253</td>
<td>85.8</td>
</tr>
<tr>
<td></td>
<td>Overseas</td>
<td>42</td>
<td>14.2</td>
</tr>
<tr>
<td>Educational level</td>
<td>Under High School</td>
<td>13</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>57</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>41</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>56</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>80</td>
<td>27.1</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>48</td>
<td>16.3</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>86</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>209</td>
<td>70.8</td>
</tr>
</tbody>
</table>

Table 2: Frequency Distribution and Percent of Participants’ Demographic Characteristics
There was a range of disagreement or agreement choices available to the participants, with a response of “one” indicating “strongly disagree,” while a response of “six” indicated “strongly agree.” The higher response number on the Likert scale indicated the stronger degree of the participants’ perceptions of their possession of specific leadership attribute factors. The researcher used the following table (Table 3) for interpreting the means of the LAI.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.41 to 6.00</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>4.41 to 5.40</td>
<td>Agree</td>
</tr>
<tr>
<td>3.41 to 4.40</td>
<td>Slightly agree</td>
</tr>
<tr>
<td>2.41 to 3.40</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>1.41 to 2.40</td>
<td>Disagree</td>
</tr>
<tr>
<td>1.00 to 1.40</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Table 3: Interpretation of the Means of the Leadership Attribute Inventory

Table 4 presents the distribution of the means and standard deviations of the responses to the 37 statements related to leadership attribute factors. When the researcher compared the three levels of the leadership attribute factors, it was found that the participants reported the highest mean of 4.95 (Agree) for the Management Skills level, and the lowest mean of 4.75 (Agree) in the Personal Characteristics level.

When the researcher compared the means of the eight categories of leadership attribute factors, it was found that participants reported the highest mean of 5.08 (Agree) in the Ethical category and the lowest mean of 4.72 (Agree) in the Visionary category of leadership attribute factors. When the researcher compared the responses to all of the
<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Skills</td>
<td>4.95</td>
<td>0.56</td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 25 Planning</td>
<td>5.01</td>
<td>0.75</td>
</tr>
<tr>
<td>Q 27 Organizing</td>
<td>5.13</td>
<td>0.76</td>
</tr>
<tr>
<td>Q 28 Team Building</td>
<td>5.04</td>
<td>0.69</td>
</tr>
<tr>
<td>Q 24 Networking</td>
<td>5.00</td>
<td>0.78</td>
</tr>
<tr>
<td>Q 31 Time Management</td>
<td>4.92</td>
<td>0.88</td>
</tr>
<tr>
<td>Q 26 Delegating</td>
<td>4.74</td>
<td>0.98</td>
</tr>
<tr>
<td>Cognitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 36 Problem-Solving</td>
<td>4.95</td>
<td>0.83</td>
</tr>
<tr>
<td>Q 37 Information Gathering &amp; Managing</td>
<td>4.82</td>
<td>0.93</td>
</tr>
<tr>
<td>Personal Characteristics</td>
<td>4.88</td>
<td>0.80</td>
</tr>
<tr>
<td>Visionary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 2 Insightful</td>
<td>4.72</td>
<td>0.70</td>
</tr>
<tr>
<td>Q 7 Accountable</td>
<td>4.65</td>
<td>0.89</td>
</tr>
<tr>
<td>Q 35 Decision-Making</td>
<td>4.68</td>
<td>0.91</td>
</tr>
<tr>
<td>Action-oriented</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 6 Achievement-Oriented</td>
<td>4.84</td>
<td>0.88</td>
</tr>
<tr>
<td>Q 8 Assertive, Initiating</td>
<td>4.91</td>
<td>1.04</td>
</tr>
<tr>
<td>Q 9 Confident</td>
<td>4.92</td>
<td>0.98</td>
</tr>
<tr>
<td>Q 10 Willing to Accept Responsibility</td>
<td>3.84</td>
<td>1.22</td>
</tr>
<tr>
<td>Q 11 Persistence</td>
<td>4.75</td>
<td>0.96</td>
</tr>
<tr>
<td>Q 12 Enthusiastic</td>
<td>4.79</td>
<td>0.89</td>
</tr>
<tr>
<td>Q 13 Energetic with Stamina</td>
<td>5.03</td>
<td>0.90</td>
</tr>
<tr>
<td>Social Skills &amp; Characteristics</td>
<td>4.89</td>
<td>0.49</td>
</tr>
<tr>
<td>Ethical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 17 Committed to the Common Good</td>
<td>5.13</td>
<td>0.87</td>
</tr>
<tr>
<td>Q 18 Personal Integrity</td>
<td>5.11</td>
<td>0.87</td>
</tr>
<tr>
<td>Q 20 Highest Value &amp; Moral Standard</td>
<td>4.96</td>
<td>0.81</td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 14 Trustworthy, Dependable</td>
<td>4.89</td>
<td>0.55</td>
</tr>
<tr>
<td>Q 16 Emotional Balanced</td>
<td>4.68</td>
<td>0.55</td>
</tr>
<tr>
<td>Q 17 Communication</td>
<td>5.07</td>
<td>0.80</td>
</tr>
<tr>
<td>Q 22 Sensitivity &amp; Respect</td>
<td>4.57</td>
<td>0.96</td>
</tr>
<tr>
<td>Q 23 Motivating Others</td>
<td>4.95</td>
<td>0.78</td>
</tr>
<tr>
<td>Q 30 Conflict Management</td>
<td>5.22</td>
<td>0.81</td>
</tr>
<tr>
<td>Q 33 Use Appropriate Leadership Styles</td>
<td>5.08</td>
<td>0.79</td>
</tr>
<tr>
<td>Q 34 Ideological Beliefs Appropriate to the Group</td>
<td>4.75</td>
<td>0.92</td>
</tr>
<tr>
<td>Intellectual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q 3 Adaptable, Open to Change</td>
<td>4.88</td>
<td>0.76</td>
</tr>
<tr>
<td>Q 19 Intellectual with Practical Judgment</td>
<td>4.73</td>
<td>0.85</td>
</tr>
<tr>
<td>Q 32 Stress Management</td>
<td>4.83</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Table 4: Means and Standard Deviations of Responses to Statements Related to the Leadership Attribute Factors (n = 295).1

1 *lowest mean, **highest mean
statements, it was found that the highest mean of 5.22 (Agree) pertained to the leadership attribute factor of "Sensitivity and Respect," while the lowest mean of 3.84 (Slightly Agree) was for the leadership attribute factor of "Persistent."

**Gender.** The data presented in Table 5 indicates that the means for leadership attribute factors by gender ranged from 4.52 (Agree) to 5.28 (Agree). Thus, the participants agreed with all of the thirty-seven statements, regardless of their gender. Males reported the highest mean of 5.28 (Agree) in the Energetic category of leadership attribute factors, while they reported the lowest mean of 4.87 (Agree) in the Intellectual category. Females reported the highest mean of 5.08 (Agree) in the Ethical category, while they reported the lowest mean of 4.52 (Agree) in the Visionary category of leadership attribute factors. Although males reported higher means than females reported in all the categories except Ethical, none of the differences were significant.

**Age.** The data presented in Table 6 indicate that the means for perceived leadership attribute factors by age ranged from 4.42 (Agree) to 5.30 (Agree). Thus, the participants, regardless of their ages, agreed with all of the thirty-seven statements. The participants who reported the highest means for the Energetic category of leadership attribute factors were those under the age of 30, with a mean of 5.30 (Agree), and those between the ages of 30 to 40, with a mean of 5.11 (Agree). The participants who reported the lowest means in the Visionary category were those under the age of 30, with a mean of 4.75 (Agree), and those between the ages of 30 to 40, with a mean of 4.76 (Agree). The participants who reported the highest means in the Ethical category were
<table>
<thead>
<tr>
<th>Variables</th>
<th>Male (n=136)</th>
<th>Female (n=159)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Management Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>5.09</td>
<td>0.56</td>
</tr>
<tr>
<td>Cognitive</td>
<td>5.07</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>5.12</td>
<td>0.68</td>
</tr>
<tr>
<td>Personal Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>4.94</td>
<td>0.46</td>
</tr>
<tr>
<td>Action-oriented</td>
<td>4.96</td>
<td>0.58</td>
</tr>
<tr>
<td>Energetic</td>
<td>4.88</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>5.28</td>
<td>0.76</td>
</tr>
<tr>
<td>Social Skills &amp; Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical</td>
<td>4.98</td>
<td>0.49</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>5.08</td>
<td>0.70</td>
</tr>
<tr>
<td>Intellectual</td>
<td>5.02</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>4.87</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Table 5: Means and Standard Deviations of Leadership Attribute Factors by Gender

those between the ages of 41 to 50, with a mean of 5.15 (Agree), and those over the age of 50, with a mean of 5.06 (Agree). The participants who reported the lowest means in the Action-Oriented category were in the group whose age were over 50. The highest means in the Ethical category was for the age group 41-50. The participants between the ages of 41 to 50 reported a mean of 4.68 (Agree) in the Action-Oriented category, and those who were over 50 reported a mean of 4.42 (Agree). Although all of the age groups reported different means in all leadership attribute categories, none of the means were significantly different.
<table>
<thead>
<tr>
<th>Variables</th>
<th>under 30 (n=54)</th>
<th>30-40 (n=110)</th>
<th>41-50 (n=95)</th>
<th>over 50 (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Management Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>5.04</td>
<td>0.79</td>
<td>4.95</td>
<td>0.73</td>
</tr>
<tr>
<td>Organizational</td>
<td>4.95</td>
<td>0.66</td>
<td>5.04</td>
<td>0.52</td>
</tr>
<tr>
<td>Management</td>
<td>4.97</td>
<td>0.66</td>
<td>5.02</td>
<td>0.52</td>
</tr>
<tr>
<td>Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>4.75</td>
<td>0.69</td>
<td>4.76</td>
<td>0.74</td>
</tr>
<tr>
<td>Action-oriented</td>
<td>4.92</td>
<td>0.60</td>
<td>4.77</td>
<td>0.56</td>
</tr>
<tr>
<td>Energetic</td>
<td>5.30</td>
<td>0.63</td>
<td>5.11</td>
<td>0.87</td>
</tr>
<tr>
<td>Ethical</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Social Skills &amp;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual</td>
<td>4.84</td>
<td>0.52</td>
<td>4.77</td>
<td>0.59</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>4.96</td>
<td>0.63</td>
<td>4.88</td>
<td>0.50</td>
</tr>
<tr>
<td>Social Skills</td>
<td>4.94</td>
<td>0.53</td>
<td>4.87</td>
<td>0.48</td>
</tr>
<tr>
<td>Marital Status. The data presented in Table 7 indicate that the means for leadership attribute factors by marital status ranged from 4.67 (Agree) to 5.28 (Agree). Thus, the single and married participants agreed with all thirty-seven leadership attribute statements. Single participants reported the highest mean of 5.28 (Agree) in the Energetic category, while they reported the lowest mean of 4.83 (Agree) in the Intellectual category. Married participants reported the highest mean of 5.06 (Agree) in the Ethical category, while they reported the lowest mean of 4.67 (Agree) in the Action-Oriented category. Although single participants reported higher means than married participants in all eight categories, none of the differences were significant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7: Means and Standard Deviations for Leadership Attribute Factors by Marital Status.

Occupational Level. The data presented in Table 8 indicate that the means for leadership attribute factors by occupational level ranged from 4.44 (Agree) to 5.29 (Agree). Thus, the participants agreed with all of the statements regardless of their occupation levels. The participants who reported the highest mean for the Energetic category were students, with a mean of 5.21 (Agree), teachers, with a mean of 5.29 (Agree), business leaders, with a mean of 4.89 (Agree) and industrial leaders, with a mean of 5.23 (Agree). The participants who reported the highest means for the Ethical category were those who were government leaders, with a mean of 5.17 (Agree), and professional.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Student (n=52)</th>
<th>Teacher (n=79)</th>
<th>Government (n=51)</th>
<th>Business (n=36)</th>
<th>Industrial (n=13)</th>
<th>Professional (n=28)</th>
<th>Housewife (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Skills</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
</tr>
<tr>
<td>Organizational</td>
<td>4.99</td>
<td>0.62</td>
<td>5.03</td>
<td>0.51</td>
<td>5.02</td>
<td>0.56</td>
<td>4.91</td>
</tr>
<tr>
<td>Cognitive</td>
<td>4.96</td>
<td>0.62</td>
<td>5.04</td>
<td>0.54</td>
<td>4.87</td>
<td>0.96</td>
<td>4.99</td>
</tr>
<tr>
<td>Personal</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
</tr>
<tr>
<td>Characteristics</td>
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<td>4.73</td>
<td>0.59</td>
<td>4.68</td>
</tr>
<tr>
<td>Visionary</td>
<td>4.76</td>
<td>0.69</td>
<td>4.82</td>
<td>0.67</td>
<td>4.67</td>
<td>0.80</td>
<td>4.77</td>
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<td>Actio-oriented</td>
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<td>4.76</td>
<td>0.56</td>
<td>4.70</td>
<td>0.62</td>
<td>4.62</td>
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<tr>
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<td>0.64</td>
<td>5.16</td>
<td>0.76</td>
<td>4.89</td>
</tr>
<tr>
<td>Social Skills &amp;</td>
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<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
<td>SD</td>
<td>M_</td>
</tr>
<tr>
<td>Characteristics</td>
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<td>0.50</td>
<td>4.97</td>
<td>0.46</td>
<td>4.87</td>
<td>0.54</td>
<td>4.78</td>
</tr>
<tr>
<td>Ethical</td>
<td>5.03</td>
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<td>5.20</td>
<td>0.57</td>
<td>5.17</td>
<td>0.66</td>
<td>4.82</td>
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<tr>
<td>Interpersonal</td>
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<td>0.58</td>
<td>4.96</td>
<td>0.54</td>
<td>4.90</td>
<td>0.59</td>
<td>4.79</td>
</tr>
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<td>4.89</td>
<td>0.43</td>
<td>4.70</td>
<td>0.63</td>
<td>4.74</td>
</tr>
</tbody>
</table>

Table 8: Means and Standard Deviations for Leader Attribute Factors by Occupational Level
leaders, with a mean of 5.15 (Agree). The participants who reported the lowest means for the Visionary category were those who were student leaders, with a mean of 4.76 (Agree), government leaders, with a mean of 4.67 (Agree), industrial leaders, with a mean of 4.44 (Agree), and professional leaders, with a mean of 4.70 (Agree). The participants who reported the lowest means for the Action-Oriented category of leadership attribute factors were teachers, with a mean of 4.76 (Agree), and business leaders, with a mean of 4.62 (Agree). Although participants in all the occupational levels reported different means in each category of leadership attribute factors, none of the differences were significant.

**Educational Level.** The data presented in Table 9 indicate that the means for leadership attribute factors by educational level ranged from 4.42 (Agree) to 5.46 (Strongly Agree). Thus, the participants agreed with all of the statements regardless of their level of education. The three higher means for the Ethical category were reported by participants with educational levels of Under High School, High School and College. Leader participants with an educational level of Under High School reported a mean of 4.87 (Agree); while participants with an educational level of High School reported a mean of 5.05 (Agree); and participants with an educational level of College reported a mean of 5.06 (Agree).

The higher means for the Energetic category were reported by participants with educational levels of University, Master’s Degree and Ph.D. Degree. Participants with an educational level of University reported a mean of 5.18 (Agree); while leaders with Master’s degrees reported a mean of 5.24 (Agree); and participants Ph.D. degrees reported a mean of 5.46 (Strongly Agree).
<table>
<thead>
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<th>Under High (n=13)</th>
<th>High School (n=57)</th>
<th>College (n=41)</th>
<th>University (n=56)</th>
<th>Master (n=80)</th>
<th>Ph.D (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Management Skills</td>
<td>4.82</td>
<td>0.62</td>
<td>4.71</td>
<td>0.56</td>
<td>4.92</td>
<td>0.46</td>
</tr>
<tr>
<td>Organizational Skills</td>
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<td>4.79</td>
<td>0.56</td>
<td>4.96</td>
<td>0.42</td>
</tr>
<tr>
<td>Cognitive Skills</td>
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<td>4.47</td>
<td>0.88</td>
<td>4.78</td>
<td>0.74</td>
</tr>
<tr>
<td>Personal Characteristics</td>
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<td>4.63</td>
<td>0.61</td>
</tr>
<tr>
<td>Visionary</td>
<td>4.51</td>
<td>0.55</td>
<td>4.52</td>
<td>0.75</td>
<td>4.48</td>
<td>0.75</td>
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<tr>
<td>Action-Oriented</td>
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<td>0.72</td>
<td>4.42</td>
<td>0.68</td>
<td>4.66</td>
<td>0.64</td>
</tr>
<tr>
<td>Energetic</td>
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<td>0.77</td>
<td>4.44</td>
<td>1.21</td>
<td>4.85</td>
<td>0.69</td>
</tr>
<tr>
<td>Social Skills &amp; Characteristics</td>
<td>4.71</td>
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<td>4.76</td>
<td>0.50</td>
<td>4.78</td>
<td>0.44</td>
</tr>
<tr>
<td>Ethical</td>
<td>4.87</td>
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<td>5.05</td>
<td>0.74</td>
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<td>0.57</td>
</tr>
<tr>
<td>Interpersonal</td>
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<td>4.77</td>
<td>0.59</td>
<td>4.78</td>
<td>0.47</td>
</tr>
<tr>
<td>Intellectual</td>
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<td>0.49</td>
<td>4.65</td>
<td>0.50</td>
<td>4.72</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Table 9: Means and Standard Deviations for Leader Attribute Factors by Educational Level
The lower means for the Intellectual category were reported by participants with the educational levels of Under High School and Master’s Degree. Participants with an educational level of Under High School reported a mean of 4.49 (Agree), while participants with Master’s degrees reported a mean of 4.81 (Agree).

The lower means for the Action-Oriented category of leadership attribute factors were reported by participants with Ph.D. degrees, with a mean of 4.98 (Agree), and by participants with an educational level of High School Degree, with a mean of 4.42 (Agree). The lower means for the Visionary category were reported by participants with the educational levels of College and University. Participant leaders with an educational level of College reported a mean of 4.48 (Agree), and leaders with an educational level of University reported a mean of 4.63 (Agree). Although the participants with Ph.D. degrees tended to report higher means in all eight categories than participants with other educational levels reported, the differences were not significant.

Living Place. The data presented in Table 10 indicates that the means for leadership attribute factors determined by the participants’ living place ranged from 4.70 (Agree) to 5.21 (Agree). Thus, the participants agreed with all the statements regardless of where they resided. Participants from Taiwan reported the highest mean of 5.08 (Agree) in the Ethical category, while they reported the lowest mean of 4.70 (Agree) in the Action-Oriented category. The participants from overseas reported the highest mean of 5.21 (Agree) in the Energetic category, while they reported the lowest mean of 4.86 (Agree) in the Visionary category. Although overseas participants tended to report higher means than participants residing in Taiwan in all eight categories, the differences were not significant.
### Table 10: Means and Standard Deviations for Leadership Attribute Factors by Living Place.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Taiwan (n=253)</th>
<th></th>
<th>Overseas (n=42)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Management Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>4.93</td>
<td>0.56</td>
<td>5.05</td>
<td>0.56</td>
</tr>
<tr>
<td>Cognitive</td>
<td>4.85</td>
<td>0.81</td>
<td>5.11</td>
<td>0.69</td>
</tr>
<tr>
<td>Personal Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visionary</td>
<td>4.72</td>
<td>0.57</td>
<td>4.92</td>
<td>0.50</td>
</tr>
<tr>
<td>Action-Oriented</td>
<td>4.70</td>
<td>0.61</td>
<td>4.86</td>
<td>0.67</td>
</tr>
<tr>
<td>Energetic</td>
<td>5.00</td>
<td>0.92</td>
<td>5.21</td>
<td>0.81</td>
</tr>
<tr>
<td>Social Skills &amp; Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical</td>
<td>4.87</td>
<td>0.48</td>
<td>5.00</td>
<td>0.48</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>5.08</td>
<td>0.65</td>
<td>5.10</td>
<td>0.80</td>
</tr>
<tr>
<td>Intellectual</td>
<td>4.88</td>
<td>0.54</td>
<td>5.00</td>
<td>0.56</td>
</tr>
<tr>
<td>Energetic</td>
<td>4.75</td>
<td>0.53</td>
<td>4.97</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Management Skills Level. As illustrated in Table 11, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status in the Management Skills level of leadership attribute factors. This model leaves 90.3% of the variation unexplained, and may indicate that some other "crucial variables" will need to be identified to further explain the variation.
<table>
<thead>
<tr>
<th>Source</th>
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<th>Mean Square</th>
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<th>Pr.&gt;F</th>
</tr>
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<td></td>
<td></td>
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<td>0.12</td>
<td>0.40</td>
<td>0.75</td>
</tr>
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<td>0.67</td>
<td>2.26</td>
<td>0.13</td>
</tr>
<tr>
<td>Occupation</td>
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<td>0.19</td>
<td>0.63</td>
<td>0.70</td>
</tr>
<tr>
<td>Living Place</td>
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<td>0.12</td>
<td>0.39</td>
<td>0.53</td>
</tr>
<tr>
<td>Educational Level</td>
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<td>0.29</td>
<td>0.96</td>
<td>0.44</td>
</tr>
<tr>
<td>Marital Status</td>
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<td>0.28</td>
<td>0.94</td>
<td>0.33</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>91.53</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0963

Table 11: ANOVA Table for the Dependent Variable Management Skills Level

Organizational Skills Category. As shown in Table 12, there were no main effects in any of the independent variables of gender, age, occupational level, living place, educational level, and marital status in the means of the Organizational Skills category of leadership attribute factors.

<table>
<thead>
<tr>
<th>Source</th>
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<th>Mean Square</th>
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</tr>
<tr>
<td>Gender</td>
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<td>0.58</td>
<td>1.91</td>
<td>0.17</td>
</tr>
<tr>
<td>Occupation</td>
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<td>0.23</td>
<td>0.77</td>
<td>0.59</td>
</tr>
<tr>
<td>Living Place</td>
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<td>0.16</td>
<td>0.16</td>
<td>0.52</td>
<td>0.47</td>
</tr>
<tr>
<td>Educational Level</td>
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<td>0.59</td>
<td>0.12</td>
<td>0.39</td>
<td>0.86</td>
</tr>
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<td>Marital Status</td>
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<td>0.35</td>
<td>1.13</td>
<td>0.29</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>84.52</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0669

Table 12: ANOVA Table for the Dependent Variable Organizational Skills Category
Cognitive Skills Category. As illustrated in Table 13, the Cognitive Skills category of leadership attributes was impacted by the educational levels of the subjects. The results of a post hoc test revealed that there were significant differences in the Cognitive Skills category among some of the participants when grouped by educational levels. There was no significant effect upon the other independent variables dependent upon the participants' Cognitive Skills. This model leaves 85% of the variation unexplained, and may indicate that some other "crucial variables" will need to be identified to further explain the variation.

The data presented in Table 14 show the least square means and standard errors of Cognitive Skill scores by educational level. The probabilities associated with individual comparisons were presented. There were significant differences in Cognitive Skills means between participants with Master's degrees (LSM = 5.17) and participants with the educational level of High School (LSM = 4.54); between participants with Master's degrees (LSM = 5.17) and participants with the educational level of University (LSM = 4.74); between participants with Ph.D. degrees (LSM = 5.23) and participants with the educational level of University (LSM = 4.74); and between participants with Ph.D. degrees (LSM = 5.23) and participants with the educational level of High School (LSM = 4.81).

Personal Characteristics Level. As shown in Table 15, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status by the Personal Characteristics level of leadership attribute factors. This model leaves 85% of the variation unexplained, and
<table>
<thead>
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<th>Mean Square</th>
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<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
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<td>0.64</td>
<td>1.12</td>
<td>0.34</td>
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<tr>
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<td>0.99</td>
<td>0.99</td>
<td>1.72</td>
<td>0.19</td>
</tr>
<tr>
<td>Occupation</td>
<td>6</td>
<td>2.06</td>
<td>0.34</td>
<td>0.60</td>
<td>0.73</td>
</tr>
<tr>
<td>Living Place</td>
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<td>0.03</td>
<td>0.03</td>
<td>0.05</td>
<td>0.82</td>
</tr>
<tr>
<td>Educational Level</td>
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<td>7.91</td>
<td>1.58</td>
<td>2.76</td>
<td>0.02</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1</td>
<td>0.13</td>
<td>0.13</td>
<td>0.22</td>
<td>0.64</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>159.06</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.1504  
0.0002

Table 13: ANOVA Table for the Dependent Variable Cognitive Skills Category
<table>
<thead>
<tr>
<th>Edu. Level</th>
<th>Cognitive LSMEAN</th>
<th>Std Err LSMEAN</th>
<th>Edu. Level i/j</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Under High School</td>
<td>4.81</td>
<td>0.26</td>
<td>1</td>
<td>0.25</td>
<td>0.96</td>
<td>0.79</td>
<td>0.22</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>2. High School</td>
<td>4.54</td>
<td>0.16</td>
<td>2</td>
<td>0.25</td>
<td>0.09</td>
<td>0.27</td>
<td>0.0030</td>
<td>0.0050</td>
<td></td>
</tr>
<tr>
<td>3. College</td>
<td>4.83</td>
<td>0.16</td>
<td>3</td>
<td>0.96</td>
<td>0.09</td>
<td>0.62</td>
<td>0.08</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>4. University</td>
<td>4.74</td>
<td>0.13</td>
<td>4</td>
<td>0.79</td>
<td>0.27</td>
<td>0.62</td>
<td>0.0049</td>
<td>0.0050</td>
<td></td>
</tr>
<tr>
<td>5. Master</td>
<td>5.17</td>
<td>0.12</td>
<td>5</td>
<td>0.22</td>
<td>0.0030</td>
<td>0.08</td>
<td>0.0049</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>6. Ph.D</td>
<td>5.23</td>
<td>0.16</td>
<td>6</td>
<td>0.19</td>
<td>0.0050</td>
<td>0.07</td>
<td>0.0050</td>
<td>0.70</td>
<td></td>
</tr>
</tbody>
</table>

Table 14: Least Square Means, Standard Errors, and Probabilities for comparisons among Educational Levels for the Dependent Variable Cognitive Skills. (Entry in table under Probabilities is: Probability > |T|, under Ho: LSMEAN (i) = LSMEAN (j).)
Table 15: ANOVA Table for the Dependent Variable Personal Characteristics Level

may indicate that some other “crucial variables” will need to be identified to further explain the variation.

Visionary Category. As shown in Table 16, the results of ANOVA for the Visionary category showed main effects upon the demographic characteristics of gender and living place. As shown in Table 17, Males reported a significantly higher mean (LSM = 4.95) in the Visionary category than reported by females (LSM = 4.58). As shown in Table 18, participants who lived overseas reported a significantly higher mean (LSM = 4.81) in the Visionary category than reported by participants who lived in Taiwan (LSM = 4.72). The model leaves 83% of the variation unexplained, and may indicate that some other “crucial variables” will need to be identified to further explain the variation.
<table>
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<tr>
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<th>Mean Square</th>
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<th>Pr. &gt; F</th>
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</thead>
<tbody>
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<td>Total</td>
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<td>143.21</td>
<td></td>
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<td>0.23</td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>1.86</td>
<td>0.62</td>
<td>1.44</td>
<td>0.23</td>
</tr>
<tr>
<td>Gender</td>
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<td>4.46</td>
<td>4.46</td>
<td>10.37</td>
<td>0.001</td>
</tr>
<tr>
<td>Occupation</td>
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<td>4.03</td>
<td>0.67</td>
<td>1.56</td>
<td>0.16</td>
</tr>
<tr>
<td>Living Place</td>
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<td>0.15</td>
<td>0.35</td>
<td>0.05</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>4.16</td>
<td>0.83</td>
<td>1.93</td>
<td>0.09</td>
</tr>
<tr>
<td>Marital Status</td>
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<td>0.45</td>
<td>0.45</td>
<td>1.05</td>
<td>0.31</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>119.29</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(R-Square = 0.1670)  

Table 16: ANOVA Table for the Dependent Variable Visionary Category

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visionary LSMEAN</th>
<th>Std Err</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.95</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.58</td>
<td>0.09</td>
<td></td>
</tr>
</tbody>
</table>

Table 17: Least Squares Means and Standard Errors for Comparisons Between Males and Females for the Dependent Variable Visionary Skills.

<table>
<thead>
<tr>
<th>Living Place</th>
<th>Visionary LSMEAN</th>
<th>Std Err</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>4.72</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Overseas</td>
<td>4.81</td>
<td>0.14</td>
<td></td>
</tr>
</tbody>
</table>

Table 18: Least Squares Means and Standard Errors for Comparisons Between Leaders Living in Taiwan and Leaders Living Overseas for the Dependent Variable Visionary Skills Category.

**Action-Oriented Category.** As shown in Table 19, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status by the Action-Oriented category of leadership attribute factors. This model leaves 88% of the variation unexplained, and may indicate
that some other "crucial variables" will need to be identified to further explain the variation.

<table>
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<tr>
<th>Source</th>
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<td>Total</td>
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<td>108.36</td>
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<td></td>
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<td>1.40</td>
<td>0.47</td>
<td>1.36</td>
<td>0.26</td>
</tr>
<tr>
<td>Gender</td>
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<td>0.36</td>
<td>0.36</td>
<td>1.06</td>
<td>0.30</td>
</tr>
<tr>
<td>Occupation</td>
<td>6</td>
<td>1.34</td>
<td>0.22</td>
<td>0.65</td>
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<td>0.17</td>
<td>0.17</td>
<td>0.50</td>
<td>0.48</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>2.78</td>
<td>0.56</td>
<td>1.62</td>
<td>0.16</td>
</tr>
<tr>
<td>Marital Status</td>
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<td>0.27</td>
<td>0.80</td>
<td>0.37</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>95.11</td>
<td>0.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.1223  0.0001

Table 19: ANOVA Table for the Dependent Variable Action-Oriented Category.

**Energetic Category.** As shown in Table 20, the Energetic category showed a main effect upon the demographic characteristic of occupation. As shown in Table 21, a significant difference in the Energetic category of leadership attribute factors was found when the researcher compared housewife respondents to respondents in other occupations. Housewife participants responded less strongly than the other groups of participants responded to the leadership attribute factors in the Energetic category. Independent variables of gender, age, occupational level, living place, educational level, and marital status accounted for approximately 22% of the variability in the Energetic category. This model leaves 78% of the variation unexplained and may indicate that some other unknown "crucial variables" would explain the variation.
Table 20: ANOVA Table for the Dependent Variable Energetic Category

<table>
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<th>Mean Square</th>
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<th>Pr. &gt; F</th>
</tr>
</thead>
<tbody>
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<td>239.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
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<td>1.09</td>
<td>0.36</td>
<td>0.54</td>
<td>0.66</td>
</tr>
<tr>
<td>Gender</td>
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<td>0.004</td>
<td>0.004</td>
<td>0.01</td>
<td>0.94</td>
</tr>
<tr>
<td>Occupation</td>
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<td>13.54</td>
<td>2.26</td>
<td>3.36</td>
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<tr>
<td>Living Place</td>
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<td>0.04</td>
<td>0.06</td>
<td>0.81</td>
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<td>Educational Level</td>
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<td>6.28</td>
<td>1.26</td>
<td>1.87</td>
<td>0.10</td>
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<td>Marital Status</td>
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<td>1.22</td>
<td>1.22</td>
<td>1.82</td>
<td>0.18</td>
</tr>
<tr>
<td>Error</td>
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<td>186.18</td>
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<td></td>
</tr>
</tbody>
</table>

R-Square = 0.2236

Social Skills & Characteristics Level. As shown in Table 22, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status by the Social Skills & Characteristics level of leadership attribute factors.
<table>
<thead>
<tr>
<th>Occup. Level</th>
<th>ENTSKIL LSMEAN</th>
<th>Std Err LSMEAN</th>
<th>Occ lev i/j</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student</td>
<td>4.90</td>
<td>0.1611</td>
<td>1</td>
<td>0.1535</td>
<td>0.10</td>
<td>0.48</td>
<td>0.10</td>
<td>0.47</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>2. Teacher</td>
<td>5.21</td>
<td>0.1584</td>
<td>2</td>
<td>0.15</td>
<td>0.61</td>
<td>0.46</td>
<td>0.48</td>
<td>0.53</td>
<td>0.0013</td>
<td></td>
</tr>
<tr>
<td>3. Government</td>
<td>5.30</td>
<td>0.16</td>
<td>3</td>
<td>0.10</td>
<td>0.61</td>
<td>0.23</td>
<td>0.70</td>
<td>0.30</td>
<td>0.00001</td>
<td></td>
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<tr>
<td>4. Business</td>
<td>5.07</td>
<td>0.18</td>
<td>4</td>
<td>0.48</td>
<td>0.47</td>
<td>0.23</td>
<td>0.24</td>
<td>0.94</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>5. Industrial</td>
<td>5.40</td>
<td>0.25</td>
<td>5</td>
<td>0.10</td>
<td>0.48</td>
<td>0.70</td>
<td>0.24</td>
<td>0.28</td>
<td>0.0018</td>
<td></td>
</tr>
<tr>
<td>6. Professional</td>
<td>5.09</td>
<td>0.20</td>
<td>6</td>
<td>0.47</td>
<td>0.53</td>
<td>0.30</td>
<td>0.94</td>
<td>0.2788</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>7. Housewife</td>
<td>4.51</td>
<td>0.19</td>
<td>7</td>
<td>0.16</td>
<td>0.0013</td>
<td>0.0001</td>
<td>0.0091</td>
<td>0.0018</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Table 21: Least Squares Means, Standard Errors, and Probabilities for Comparisons among Occupational Levels for the Dependent Variable Energetic Characteristics. (Entry in Table under Probabilities is: Probability > | t | under Ho: LSMEAN (i) = LSMEAN (j).
Table 22: ANOVA Table for the Dependent Variable Social Skills & Characteristics Level.

<table>
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<tr>
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<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Pr. &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>294</td>
<td>69.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>1.04</td>
<td>0.35</td>
<td>1.52</td>
<td>0.21</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
<td>1.75</td>
<td>0.19</td>
</tr>
<tr>
<td>Occupation</td>
<td>6</td>
<td>0.87</td>
<td>0.15</td>
<td>0.64</td>
<td>0.70</td>
</tr>
<tr>
<td>Living Place</td>
<td>1</td>
<td>0.30</td>
<td>0.30</td>
<td>1.30</td>
<td>0.25</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>1.17</td>
<td>0.23</td>
<td>1.02</td>
<td>0.40</td>
</tr>
<tr>
<td>Marital Status</td>
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<td>0.15</td>
<td>0.15</td>
<td>0.68</td>
<td>0.41</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>63.24</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0867

Ethical Category. As shown in Table 23, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status by the Ethical category of leadership attribute factors.

Interpersonal Category. As shown in Table 24, the results of ANOVA for Interpersonal category showed an effect upon the independent variable of gender. As shown in Table 25, the male participants reported a significantly higher mean (LSM = 5.06) in the Interpersonal category when compared with the Interpersonal category mean (LSM = 4.87) reported by the female participants.
<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Pr.&gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>294</td>
<td>131.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>1.57</td>
<td>0.52</td>
<td>1.17</td>
<td>0.32</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.25</td>
<td>0.25</td>
<td>0.57</td>
<td>0.45</td>
</tr>
<tr>
<td>Occupation</td>
<td>6</td>
<td>2.92</td>
<td>0.49</td>
<td>1.09</td>
<td>0.37</td>
</tr>
<tr>
<td>Living Place</td>
<td>1</td>
<td>0.07</td>
<td>0.07</td>
<td>0.15</td>
<td>0.70</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>1.73</td>
<td>0.35</td>
<td>0.78</td>
<td>0.57</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1</td>
<td>0.58</td>
<td>0.58</td>
<td>1.30</td>
<td>0.25</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>123.29</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0611

Table 23: ANOVA Table for the Dependent Variable Ethical Category.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Pr.&gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>294</td>
<td>87.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>1.12</td>
<td>0.37</td>
<td>1.28</td>
<td>0.28</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>1.14</td>
<td>1.14</td>
<td>3.90</td>
<td>0.05</td>
</tr>
<tr>
<td>Occupation</td>
<td>6</td>
<td>0.90</td>
<td>0.15</td>
<td>0.51</td>
<td>0.80</td>
</tr>
<tr>
<td>Living Place</td>
<td>1</td>
<td>0.17</td>
<td>0.17</td>
<td>0.57</td>
<td>0.45</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>1.06</td>
<td>0.21</td>
<td>0.72</td>
<td>0.61</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1</td>
<td>0.09</td>
<td>0.09</td>
<td>0.30</td>
<td>0.59</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>80.99</td>
<td>0.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0762

Table 24: ANOVA Table for the Dependent Variable Interpersonal Category.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Interpersonal skills LSMEAN</th>
<th>Std Err</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5.06</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.87</td>
<td>0.07</td>
<td></td>
</tr>
</tbody>
</table>

Table 25: Least Square Means and Standard Errors for Comparisons Between Male and Female for the Dependent Variable Interpersonal Category.
**Intellectual Category**. As shown in Table 26, there were no main effects upon any of the independent variables of gender, age, occupational level, living place, educational level, and marital status by the Intellectual category.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Pr. &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>294</td>
<td>80.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>1.11</td>
<td>0.37</td>
<td>1.40</td>
<td>0.24</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.08</td>
<td>0.08</td>
<td>0.31</td>
<td>0.58</td>
</tr>
<tr>
<td>Occupation Level</td>
<td>6</td>
<td>0.90</td>
<td>0.15</td>
<td>0.57</td>
<td>0.76</td>
</tr>
<tr>
<td>Living Place</td>
<td>1</td>
<td>0.92</td>
<td>0.92</td>
<td>3.50</td>
<td>0.06</td>
</tr>
<tr>
<td>Educational Level</td>
<td>5</td>
<td>1.86</td>
<td>0.37</td>
<td>1.41</td>
<td>0.22</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1</td>
<td>0.03</td>
<td>0.03</td>
<td>0.12</td>
<td>0.73</td>
</tr>
<tr>
<td>Error</td>
<td>277</td>
<td>73.13</td>
<td>0.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square = 0.0874

Table 26: ANOVA Table for the Dependent Variable Intellectual Category.

Correlation coefficients ranging from .23 to .96 were found among the eleven dependent variables. All correlations were significant at p. ≤ 0.001. The data indicate that a low association (r = .23) between the Ethical and Energetic categories of leadership attribute factors existed. A very strong association (r = .96) exists between the Management Skills level and the Organizational Skills level.

An analysis using the Pearson Product Moment Correlation Coefficient was interpreted with the criteria described by Davis (1971) and is shown in Table 27.
As shown in Table 28, the lowest association ($r = .23$) is between the Ethical and Energetic categories. The following factors had a very strong relationship ($r = .70$ or higher):

- Management Skills level and Organizational category ($r = .96$)
- Management Skills and Social Skills & Characteristics levels ($r = .80$)
- Personal Characteristics and Social Skills & Characteristics levels ($r = .74$)
- Social Skills & Characteristics level and Organizational category ($r = .75$)
- Organizational and Interpersonal Skills categories ($r = .75$)
- Cognitive category and Management Skills level ($r = .80$)
- Visionary category and Personal Characteristics level ($r = .82$);
- Action-Oriented category and Personal Characteristics level ($r = .95$)
- Ethical category and Social Skills & Characteristics level ($r = .73$)
<table>
<thead>
<tr>
<th>Management Skills Level</th>
<th>Personality Characteristic Level</th>
<th>Social Skills Characteristic Level</th>
<th>Organization Category</th>
<th>Cognitive Category</th>
<th>Visionary Category</th>
<th>Action-Oriented Category</th>
<th>Energetic Category</th>
<th>Ethical Category</th>
<th>Intellectual Category</th>
<th>Interpersonal Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Skills Level</td>
<td>1.00</td>
<td>0.69</td>
<td>0.80</td>
<td>0.96</td>
<td>0.80</td>
<td>0.62</td>
<td>0.63</td>
<td>0.34</td>
<td>0.54</td>
<td>0.55</td>
</tr>
<tr>
<td>Personality Characteristic Level</td>
<td>0.69</td>
<td>1.00</td>
<td>0.74</td>
<td>0.59</td>
<td>0.70</td>
<td>0.82</td>
<td>0.95</td>
<td>0.54</td>
<td>0.42</td>
<td>0.60</td>
</tr>
<tr>
<td>Social Skills &amp; Characteristic Level</td>
<td>0.80</td>
<td>0.74</td>
<td>1.00</td>
<td>0.75</td>
<td>0.67</td>
<td>0.65</td>
<td>0.69</td>
<td>0.33</td>
<td>0.73</td>
<td>0.80</td>
</tr>
<tr>
<td>Organization Category</td>
<td>0.96</td>
<td>0.59</td>
<td>0.75</td>
<td>1.00</td>
<td>0.59</td>
<td>0.50</td>
<td>0.56</td>
<td>0.28</td>
<td>0.54</td>
<td>0.50</td>
</tr>
<tr>
<td>Cognitive Category</td>
<td>0.80</td>
<td>0.70</td>
<td>0.67</td>
<td>0.59</td>
<td>1.00</td>
<td>0.70</td>
<td>0.60</td>
<td>0.37</td>
<td>0.39</td>
<td>0.49</td>
</tr>
<tr>
<td>Visionary Category</td>
<td>0.62</td>
<td>0.82</td>
<td>0.65</td>
<td>0.56</td>
<td>0.70</td>
<td>1.00</td>
<td>0.62</td>
<td>0.38</td>
<td>0.28</td>
<td>0.54</td>
</tr>
<tr>
<td>Action-Oriented Category</td>
<td>0.63</td>
<td>0.95</td>
<td>0.69</td>
<td>0.56</td>
<td>0.60</td>
<td>0.62</td>
<td>1.00</td>
<td>0.39</td>
<td>0.43</td>
<td>0.55</td>
</tr>
<tr>
<td>Energetic Category</td>
<td>0.34</td>
<td>0.54</td>
<td>0.33</td>
<td>0.28</td>
<td>0.37</td>
<td>0.38</td>
<td>0.39</td>
<td>1.00</td>
<td>0.23</td>
<td>0.30</td>
</tr>
<tr>
<td>Ethical Category</td>
<td>0.54</td>
<td>0.42</td>
<td>0.73</td>
<td>0.54</td>
<td>0.39</td>
<td>0.28</td>
<td>0.43</td>
<td>0.23</td>
<td>1.00</td>
<td>0.45</td>
</tr>
<tr>
<td>Intellectual Category</td>
<td>0.55</td>
<td>0.60</td>
<td>0.80</td>
<td>0.50</td>
<td>0.49</td>
<td>0.54</td>
<td>0.55</td>
<td>0.29</td>
<td>0.45</td>
<td>1.00</td>
</tr>
<tr>
<td>Interpersonal Category</td>
<td>0.80</td>
<td>0.69</td>
<td>0.95</td>
<td>0.75</td>
<td>0.66</td>
<td>0.61</td>
<td>0.65</td>
<td>0.28</td>
<td>0.62</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Table 28: Pearson-r Correlation Coefficients Among Leadership Factors. All Correlations were significant at the 0.0001 level.
• Intellectual category and Social Skills & Characteristics level ($r = .80$)
• Interpersonal category and Social Skills & Characteristics level ($r = .95$)
• Interpersonal category and Management Skills level ($r = .80$).

Summary of the Findings

After the data analysis, the researcher summarized the findings as follows:

1. The Leadership Attribute Inventory included three levels, eight categories, and thirty-seven factors. The three levels were: (1) Management Skills (its two categories were Organizational and Cognitive); (2) Personal Characteristics (with three categories consisting of Visionary, Action-Oriented and Energetic); and (3) Social Skills & Characteristics (with three categories comprised of Ethical, Interpersonal, and Intellectual).

   Among the three levels, the participants reported the highest mean in the Management Skills level and the lowest mean in the Personal Characteristics level. Among the eight categories, the participants reported the highest mean in Ethical and the lowest mean in Visionary. Regarding the 37 individual statements of the Leadership Attribute Inventory, the highest mean was for the factor of “sensitivity and respect,” while the lowest mean was for the factor of “persistent.”

2. Males reported the highest mean in the Energetic category, while they reported the lowest mean in the Intellectual category. Females reported the highest mean in the Ethical category, while they reported the lowest mean in the Visionary category. Although the means reported by males tended to be higher than means reported by females in all categories, with the exception of the Ethical category, the differences were not significant.
3. When the researcher compared the Energetic category to the other ten dependent variables, it was found that the Energetic category received the highest means for the groups under the age of 30 and between the ages of 30 to 40. When the researcher compared the Visionary category to the other ten dependent variables, it was found that the Visionary category received the lowest means for the groups of participants who were under the age of 30 and between the ages of 30 to 40. When the researcher compared the Ethical category to the other ten dependent variables, it was found that the Ethical category received the highest means for the groups of participants who were between the ages of 41 to 50 and over the age of 50. When the researcher compared the Action-Oriented category to the other ten dependent variables, it was found that the Action-Oriented category received the lowest means for the groups of participants who were between the ages of 41 to 50 and over the age of 50. Although the groups reported different means in each category, the differences were not significant.

4. Among the eleven dependent variables, single participants reported the highest mean in the Energetic category, while they reported the lowest mean in the Intellectual category. Married participants reported the highest mean in the Ethical category, while they reported the lowest mean in Action-Oriented category. Although single participants had higher means than married participants in each category, the differences were not significant.

5. When the researcher compared the Energetic category to the other ten dependent variables, it was found that the Energetic category received the highest means for the occupational levels of student, teacher, business and industrial. When the researcher compared the Ethical category to the other ten dependent variables, it was
found that the Ethical category received the highest means for the occupational levels of government and professional. When the researcher compared the Visionary category to the other ten dependent variables, it was found that the Visionary category received the lowest means for the occupational levels of student, government, industrial and professional. When the researcher compared the Action-Oriented category to the other ten dependent variables, it was found that the Action-Oriented category received the lowest means for the occupational levels of teacher and business. Although the groups reported different means in each category, the differences were not significant.

6. When the researcher compared the Ethical category to the other ten dependent variables, it was found that the Ethical category received the highest means for the educational levels of Under High School, High School and College. When the researcher compared the Energetic category to the other ten dependent variables, it was found that the Energetic category received the highest means for the educational levels University, Master's Degree and Ph.D. Degree. When the researcher compared the Intellectual category to the other ten dependent variables, it was found that the Intellectual category received the lowest means for the educational levels of Under High School and Master's Degree. When the researcher compared the Action-Oriented category to the other ten dependent variables, it was found that the Action-Oriented category received the lowest means for the educational levels of Ph.D. Degree and High School. When the researcher compared the Visionary category to the other ten dependent variables, it was found that the Visionary category received the lowest means for the educational levels of College and University. Although the participants with a Ph.D. degree tended to report higher means than other participants in all eight categories, the differences were not significant.
7. Participants who lived in Taiwan reported the highest mean in the Ethical category, while they reported the lowest mean in the Action-Oriented category. The participants who lived overseas reported the highest mean in the Energetic category, while they reported the lowest mean in the Visionary category. Although participants who lived overseas tended to report higher means in all eight categories than participants who lived in Taiwan, the differences were not significant.

8. These models leave from 78% to 92% of the variations unexplained and may indicate that some other "crucial variables" will need to be identified to further explain the variations.

9. There was a main effect upon the educational levels by the Cognitive Skills category. The post hoc test showed that there were significant differences in the means of the Cognitive Skills category between Master's degree participants and high school participants, between Master's degree participants and university participants, between Ph.D. degree participants and university participants, and between Ph.D. degree participants and high school participants.

10. The results of ANOVA for the Visionary category showed effects upon the demographic characteristics of gender and living place. Males reported a significantly higher mean in the Visionary category than reported by females. Participants who lived overseas reported a significantly higher mean in the Visionary category than reported by participants who lived in Taiwan.

11. There was a main effect upon the Energetic category mean as reported by participants in the occupation of housewife. Housewife respondents reported a
significantly different mean in the Energetic category compared to the mean reported for the Energetic category by participants in the other occupational categories.

12. The results of ANOVA for the Interpersonal category showed a main effect upon the demographic characteristic of gender. The male participants reported a significantly higher mean for the Interpersonal category when compared to the mean reported by female participants for the Interpersonal category.

13. Correlation coefficients ranging from .23 to .96 were found among the eleven dependent variables. All correlations were significant at the $p \leq 0.001$. The data indicated that a low association ($r = .23$) existed between the Ethical and Energetic categories. A very strong association ($r = .96$) was found between the Management Skills level and the Organizational category.
Summary

The central purpose of this research was to determine the perceived leadership attribute factors of Taiwanese leaders who participated in the KMT Convention on July 22 to August 2, 1996, in Taipei, Taiwan. Numerous groupings of the participants' self-reported ratings of leadership skills and characteristics were compared based on gender, age, occupation, educational level, living place and marital status. Relationships between selected leadership attribute factors were also examined.

The Leader Attributes Inventory (LAI) and six demographic questions were used in this study to collect the data. The LAI model developed by Moss, Johansen & Preskill (1991) included 37 leader attributes factors. The LAI model had three levels: (1) Management Skills, (2) Personal Characteristics, and (3) Social Skills & Characteristics. The Management Skills level included the two categories of (1) Organizational (e.g., planning, organizing, networking, team-building and time-management), and (2) Cognitive Skills (e.g., delegating, problem-solving and managing information). The Personal Characteristics level included the categories of (1) Visionary (e.g., insightful, and creative.), (2) Action-Oriented (e.g., decisive, achievement-oriented, accountable,
willing to accept responsibility, risk-taking, persistent, enthusiastic, and confident), and (3) Energetic (e.g., energetic with stamina). The Social Skills & Characteristics level included the categories of (1) Ethical Skills (e.g., commitment to common good, personal integrity, and high values and moral standards), (2) Interpersonal Skills (e.g., communication, coaching, motivation others, use of appropriate leadership styles, tact/sensitivity/respect, emotional balance, trustworthiness/dependability, conflict management, and ideological beliefs appropriate to the group), and (3) Intellectual (e.g., intelligence with practical judgment, adaptability/open-mindedness, tolerance of frustration, and stress management). The demographic questions solicited specifications of the participants' age, gender, living place (Taiwan or overseas), educational level, occupation, and marital status.

Respondents were asked to indicate their perceived leadership attributes by indicating their level of agreement most descriptive to their feelings toward the statements. Available responses were based on a Likert-type scale as follows (Spector, 1992): “one” indicated “strongly disagree,” “two” indicated “disagree,” “three” indicated “slightly disagree,” “four” indicated “slightly agree,” “five” indicated “agree,” and “six” indicated “strongly agree.” Useable data was returned from 295 of the 310 respondents.

Conclusions

The first research question was, “What are the demographic characteristics (gender, age, marital status, occupational level, educational level, and living place) of the participants of the Sun Yat-sen Institution on Policy Research and Development Convention in Taiwan?”
This question was analyzed using percentages. More than one-half (53.9%) of the participants were females while 46.1% were males. The participants were distributed across four age categories: under 30 (18.3%), 30 to 40 (37.3%), 41 to 50 (32.2%) and over 50 (12.2%). The majority (69.5%) of the participants was between the ages of 30 to 50. In terms of the occupational level of the participants, the majority (70.2%) of the participants had leadership experience in their professional fields (teacher, government, industrial and professionals); 17.6% of the student leaders and 12.2% of the housewives reported having had some leadership experience.

The majority (85.8%) of the participants were local Taiwanese, while 14.2% were overseas Chinese. The percentage of participants with college degrees was 76.3% while 23.7% had a high school education or less. The majority (70.8%) of the participants was married. Single participants (29.2%) included those who were never married, divorced, or widowed.

Since this question only addressed the demographic characteristics of the participants without comparisons of their leadership attributes, the findings related to this question were presented as statistical data to be used in responding to the third research question in this study: “Are there any differences in the participants’ perceptions of their levels of leadership attribute factors based on the demographic characteristics?”

The second research question was, “What are the participants’ perceptions of their levels of their leadership attribute factors?”

Self-evaluated ratings of leadership attribute factors of the participants were determined by their responses to 37 statements contained in the Leadership Attribute Inventory (LAI). The reported attribute results were grouped into three levels: (1)
Management Skills (with attribute categories of Organizational and Cognitive), (2) Personal Characteristics (with attribute categories of Visionary, Action-Oriented and Energetic) and (3) Social Skills & Characteristics (with categories of attributes which included Ethical, Interpersonal, and Intellectual). Respondents indicated their feelings toward the 37 questions contained in the LAI using a six-point, Likert-type scale. The researcher analyzed the participants' responses to the LAI by the use of means and standard deviations. Table 4 (Chapter 4, Page 87) charts the range of means that were assigned to reach response. Upon comparison of the three levels of the leadership attribute factors, the researcher found that, overall, participants agreed most to statements pertaining to Management Skills and agreed the least with questions pertaining to Personal Characteristics, as reflected in the means of the responses.

The means and standard deviations of the eight categories of leadership attributes -- Organizational and Cognitive Skills (under the Management Skills level), Visionary, Action-Oriented, and Energetic Characteristics (under the Personal Characteristics level), and Ethical, Interpersonal and Intellectual Skills and Characteristics (under the Social Skills & Characteristics level), -- were also determined from the responses to the LAI. Of these eight categories, the participants agreed most strongly to statements pertaining to attributes in the Ethical category. They agreed the least with statements pertaining to attributes in the Visionary category.

When the researcher compared the mean results of the response to the 37 statements, she found that the participants agreed most strongly to the statement pertaining to the attribute factor of "Sensitivity & Respect," while they agreed the least with the statement pertaining to the attribute factor of "Persistent."
Based on the data, the researcher concluded that participants perceived themselves as 1) having greatest skills in management while possessing the least personal characteristics of leaders; 2) being most ethical and least visionary; and 3) possessing the greatest attribute of sensitivity & respect with persistence being the least possessed attribute.

Table 29 presents a summary of the responses to the LAI statements in relation to the dependent variables of the three levels of attributes, the eight categories within these levels, and each of the 37 attribute factors that structured the LAI, as discussed above.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Highest Mean</th>
<th>Lowest Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Levels</td>
<td>Management Skills</td>
<td>Personal Characteristics</td>
</tr>
<tr>
<td>8 Categories</td>
<td>Ethical</td>
<td>Visionary</td>
</tr>
<tr>
<td>37 Factors</td>
<td>Sensitivity &amp; Respect</td>
<td>Persistent</td>
</tr>
</tbody>
</table>

Table 29: The Highest and Lowest Means of Each Dependent Variable

The third research question was, "Are there any differences in the participants' perceptions of their levels of leadership attribute factors based on the demographic characteristics?"

This question was analyzed using the Univariate F (ANOVA) to test the significant differences of the 11 dependent variables (the Management Skills level, the Personal Characteristics level, the Social Skills & Characteristics level, the Organizational category, the Cognitive category, the Visionary category, the Action-Oriented category, the Energetic category, the Ethical category, the Interpersonal category, and the Intellectual category) which might have existed among the
demographic variables (gender, age, marital status, occupational level, educational level, and living place). When significant differences were found, the Tukey post hoc test was applied for further analysis. Table 30 presents a summary of the results of the responses to Research Question #3. Using the following demographic data, the researcher compared the findings of her study with the findings of similar studies. Based on the comparison of the other studies, the researcher arrived at a conclusion for each demographic variable.

**Gender.** Males agreed most strongly to statements related to leadership attributes in the Energetic category while they agreed least to statements related to leadership attributes in the Intellectual category. Females agreed most strongly to statements related to leadership attributes in the Ethical category while they agreed least to statements related to leadership attributes in the Visionary category. Although males, more than females, agreed most strongly to statements related to leadership attributes in every category except Ethical, the differences were not significant. When comparing the difference of leadership attribute factors between males and females, the researcher found that the results of this study showed a significant difference in the categories of Visionary and Interpersonal. Males reported a higher mean than females in these two categories, indicating that they agreed more strongly than females did with the statements that addressed visionary and interpersonal skills.

Similar conclusions were drawn by Crandall and Katkovsky (1962), Vaught (1965), Broverman, *et. al.*, (1972), MacCoby and Jacklin (1974), and Ireson (1976). Their studies indicated that females considered themselves home-oriented rather than business-oriented and lacked self-confidence in general. These studies also found that
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Levels</th>
<th>Highest Mean</th>
<th>Lowest Mean</th>
</tr>
</thead>
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<td>Action-Oriented (4.68)</td>
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<td>(4.42)</td>
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<td>Under High S</td>
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<td>Visionary (4.86)</td>
</tr>
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</table>

Table 30: The Highest and Lowest Means of Each Independent Variables.

females were less aggressive and ambitious. These conclusions were comparable with findings in this study that indicated that females agreed less strongly to questions pertaining to the leadership attributes in the Insightful and Creative categories. Females in this study also agreed less strongly to questions pertaining to the leadership attributes
in the Interpersonal category. Other studies found that females avoided attempting to climb the executive ladder because they feared failure and suffered in roles conflicting with homemaking (Tresemer, 1976; Wood & Greenfeld, 1976; Horner, 1970; O'Leary, 1974; Zuckerman & Wheeler, 1976). The findings of this study supported the findings of the above studies.

**Age.** The participants who reported the highest mean in Energetic category were under 30 and between 30 to 40. The participants who reported the lowest mean in Visionary category were also under 30 and between 30 to 40. The participants who reported the highest mean in Ethical category were between 41 to 50 and over 50, while the same individuals reported the lowest mean in the Action-Oriented category. These findings were consistent with the findings of several studies (Erikson, 1963; Pelz & Andrew, 1966; Knox, 1974; Valliant, 1977; Gould, 1978, 1984; Levinson, 1978; Tough, 1978, Hall, 1980; and Cross, 1991). These theorists believed that behaviors tend to change with age. However, in this study the differences among the participants' leadership attribute factors based on the demographic variable of age were not significant. This finding supports research conducted by Ackerson (1942), Brown (1933), Simonton (1988), and Gibert (1991).

**Marital Status.** As reflected in the means, single participants tended to agree most strongly with statements pertaining to leadership attributes in the Energetic category, while they agreed the least with statements related to leadership attributes in the Intellectual category. Married participants tended to agree most strongly with statements pertaining to leadership attributes in the Ethical category, while they agreed the least with statements related to leadership attributes in the Action-Oriented category. Although the
single participants reported a higher mean than married participants in all eight categories, there were no significant differences.

The researcher found that singles reported higher means than married participants in the three levels and eight categories of leadership attribute factors. These findings support the findings of Gove and Tudor (1973) and Gove (1978) which concluded that married women expect to fulfill both the traditional “feminine” role and their new working roles; therefore, their daily lives might involve significantly more stress than unmarried women.

**Occupational Level.** The participants who agreed most strongly with statements pertaining to leadership attributes in the Energetic category were those with occupational levels of student, teacher, business and industrial. The participants who agreed most strongly with statements pertaining to leadership attributes in the Ethical category were those with occupational levels in government and professional. The participants who agreed least with statements pertaining to leadership attributes in the Visionary category were those with occupational levels of student, government, industrial, and professional. Teachers and business participants least agreed to statements pertaining to leadership attributes in the Action-Oriented category. The differences in the above comparisons were not significant.

Housewives reported a lower Energetic mean than students, teachers, government, business, industrial and professional participants. The researcher concluded that leadership and motivation in females should be encouraged rather than discouraged. This conclusion supports the findings of Bartol (1978). He differentiated between female managers and females in general and pointed out that career-oriented women saw
themselves as more broadminded, dominating, efficient, and independent than noncareer females. Also, Terhune (1970) and Wall (1976) indicated that role conflict with full-time housewives could be a source of psychological withdrawal from the organization.

**Educational Level.** The researcher found differences existed in the Energetic category when comparing the leadership attribute factors among leaders with different occupational levels. Housewives agreed least with statements pertaining to leadership attributes in the Energetic category. The other participants in the occupational levels of student, teacher, government, business, industrial and professional rated this statement higher score.

The participants who agreed most strongly with statements pertaining to leadership attributes in the Ethical category were those with educational levels of under high school, high school and college. The participants who agreed least with statements pertaining to leadership attributes in the Energetic category were those with the educational levels of University, Master's Degree and Ph.D. Degree. The participants who agreed least with statements pertaining to leadership attributes in the Intellectual category were those with educational levels of Under High School and with Master's degrees. The participants who agreed least with statements pertaining to leadership attributes in the Action-Oriented category were those with educational levels of High School and Ph.D. Degree. The participants who agreed least with statements pertaining to leadership attributes in the Visionary category were those with the educational levels of College and University. Although the participants with Ph.D. degrees tended to agree (more than other participants) with statements pertaining to leadership attributes in all
eight categories, the differences in the means of their responses and those of others were not significant.

When comparing the different leadership attribute factors among different educational background groups, the researcher found a significant difference existed in the Cognitive category. Participants with Ph.D. degrees had higher mean scores than participants with high school and university degrees. Participants with Master’s degrees reported higher means than participants with high school and university degrees.

The researcher recommended that the leaders should be encouraged to continue their education through the Ph.D. level, since Cognitive Skills can contribute to developing leadership attributes. In the Cognitive category, participants with Ph.D degrees reported higher means than participants with high school and university education levels. Participants with Master’s degrees reported higher means than participants with high school and university education levels. The researcher feels that the potential leaders should be encouraged to pursue graduate studies. This belief is consistent with Miller, 1997, who states that the educational purpose of graduate work (especially for doctoral degree programs) in many institutions, is to provide comprehensive research training. Cognitive Skills are enhanced by comprehensive research training obtained in doctoral degree programs. Research moves us toward the solutions to problems (Miller, 1997).

Living Place. The participants from Taiwan reported the highest mean in the Ethical category, while the same individuals reported the lowest mean in the Action-Oriented category. The participants from overseas reported the highest mean in the Energetic category, while they reported the lowest mean in the Visionary category.
The only significant difference in the means was in the Visionary category for the overseas leaders and their Taiwanese counterparts. The researcher found that overseas participants tended to report higher means than Taiwanese participants in all three levels and eight categories. This finding supports the research of Stogdill (1981). He indicated that cultural boundaries were likely to impact on values, sentiments, ideals, language, and role models. In comparison with other countries, Stogdill (1981) indicated that leadership in the United States emphasized individualism, action rather than contemplation, pragmatism, future-oriented focus and equalitarianism. The future-orientation culture may influence the development of visionary characteristics. Therefore, when Taiwanese participants lived overseas for a few years, their leadership attribute factors tended to become different from those of Taiwanese participants who lived in their home country.

The fourth research question was, "What relationships exist among the selected leadership attribute factors?"

This question was analyzed using the Pearson Product Moment Correlation Coefficient which was interpreted using the criteria described by Davis (1971) to describe relationships among leadership attribute factors. Correlation coefficients in this study range from .23 to .96 among the eleven dependent variables of leadership attribute factors. The data suggested that a low association between the Ethical and Energetic ($r = .23$) existed. A person's ethics and energetic characteristics are not significantly related. However, a strong association was found between Management Skills and Organizational Skills ($r = .96$). The researcher believes it is possible that Organizational Skill will increase if Management Skill is improved.
Implications

From the results of this study, the researcher presents the following implications as suggestions for the Sun Yat-sen Institute to design a leadership development training program and for the KMT to improve the educational system in Taiwan. If the KMT wants to survive in the political competition and keep its position as a ruling party, it cannot merely maintain the status quo. Rather, it should be adaptive to changes and focus on becoming stronger and more competitive. Coping with change begins with the individual. Therefore, the implications of this study can be recommendations for the Sun Yat-sen Institution on Policy Research and Development Convention.

First Implication: "The training program should instill visionary characteristics, action-oriented skills and intellectual skills and characteristics in leaders or potential leaders." Several groups of participants (such as females, those under the age of 30, those in the student, industrial, government, and professional occupations, those having college and university educational levels, and overseas participants) reported the lowest mean in the Visionary category. However, vision plays an important role, not only in the start-up phase of an organization, but throughout the organization's entire life cycle. Vision is a signpost pointing the way for all who need to understand what the organization is and where it intends to go (Bennis, 1992). The researcher believes that one possible reason for this low mean could be have been influenced by the socialistic influence of government. The Chinese culture is influenced by its political socialist system. The socialist party sees individuality as a threat to its existence and hence it strives to inhibit the its development.

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The cultural view of individuals and government as being separated should transform into one of unity. The barrier between individuals and government should be erased by the creation of a common vision for optimal progress. In order to enhance corporate goals, an organization should utilize its most important resource — its people — by the development of a shared vision. Emphasis should be placed on nurturing individuals' inner leadership through workshops and seminars that address methods of establishing and maintaining constructive thought pattern.

Leadership must originate from self-analysis, resulting in a definition and acceptance of what is really important to one's value system. Future participants of KMT conventions should be encouraged to develop their cognitive and visionary leadership characteristics by acquiring experiences overseas, expanding their education level — particularly in graduate research studies — and increasing their personal growth. Barlow pointed out that personal qualities are more important than specific or specialized abilities (1981). In the leadership arena, character counts. People are not derailed from positions because of a lack of technical competence; people are derailed because of a lack of evidence of judgment and character (Bennis, 1996).

These are times when the society seems to unravel at great speed, when selfishness, violence, and a meanness of spirit seem to be rotting the goodness of our communal life. The remedy must lie in how individuals prepare particularly the young to manage our emotional life with intelligence, handle our relationships smoothly and care about our communal life. Consequently, this study supports the argument for the importance of emotional intelligence (Coleman, 1995) which includes self-control, zeal and persistence, and the ability to motivate one's self. However, several groups of
participants (such as those between 41 to 50 and over 50, those married, those in occupational categories of teacher and business, those with educational levels of High School, Master's Degree and Ph.D Degree, and Taiwan participants) reported the lowest mean in the Action-Oriented category. Thus, action-oriented skills are important attributes to be reinforced by training. Substantial Relationships ($r = .55$ to $.65$) were found between the categories of Action-Oriented and the Organizational, Cognitive, Visionary, and Intellectual and Interpersonal skills and characteristics. Therefore, the researcher would recommend training to enhance action-oriented skills, since the action-oriented skills are related to these other five skills and characteristics. The action-oriented skills may be increased by promoting these five skills and characteristics. Stogdill (1981) indicated that the relationship of intelligence to leadership shows an extreme discrepancy between the intelligence of potential leaders and that of their followers. However, several groups of participants (such as males, single participants, teachers, and those with the educational level of Under High School) reported the lowest mean in Intellectual. Thus, the Intellectual characteristic is another important attribute to be reinforced by training.

**Second Implication:** “Helping female leaders build their self-assertiveness and instill their inner leadership is an urgent need.” In this study, female and housewife participants reported low means in most of the categories. Levine's study (1977) identified the motive to avoid success for women as the reason that they typically scored lower than men on achievement. Thus, success involves deep conflicts for women. Many of them apparently believe that competing with, and especially doing better than their male peers will make them unpopular. Success is not feminine; girls and women
look for other sources of self-esteem (Levine, 1977). One possible reason for this stereotype is mainly because of the wrong perception of sex-roles and self-limiting beliefs. One possible reason for such underachievement and frustration is simply that women do not know how to achieve their full potential. It might be that they do not know how to apply themselves for maximum performance and happiness. A person who engages in opportunity thinking might focus on constructive ways of dealing with challenging situations. By contrast, a person who engages in obstacle-thinking focuses on reasons to give up and retreat from problems (Manz, 1992). Thus, there is an urgent need to harness the amazing power of female participants' minds to help them build self-assertiveness, self-confidence and exhibit their inner leadership.

Third Implication: "KMT should keep improving and become a learning organization." The participants tended to report the highest mean in the Ethical category and the lowest mean in the Visionary category. This may be because Asians grow up in an environment that emphasizes authority, discipline, respect, and reverence for family, age and status (Aviel, 1996). Confucian emphasis on education at all levels has become one of the most important characteristics of Chinese culture (Chen, 1993). Chen proposed the impact of Confucianism on the organizational communication, based on the four key principles of Confucian teaching: the hierarchical relationship, the family system, "Jen" (benevolence), and the emphasis on education. Consequently, Chinese culture values an ordered system or institution that is arranged according to seniority in age or generation. Ethical leadership has been seen as a process both of inquiry — asking questions about what is right and what is wrong — and as a mode of conduct — setting an example for others about the rightness or wrongness of particular actions (Guy, 1990).
However, the ethical standard should balance not only obeying the institutions of the party but also respecting the will of the people. If the KMT does not try to break through old notions that have been criticized by people, improve its political and governmental images and gain the peoples' support for the future elections, it might become a minority party instead of a ruling party. Every organization, at its essence, is a product of how its members think and interact (Senge et. al., 1994). Once the KMT starts to become conscious of how it thinks and interacts, and begins developing capacities to think and interact differently, the organization will begin to change for the better. These changes will ripple out and reinforce a growing sense of capabilities and confidence. Thus, the researcher encourages the KMT to keep improving by becoming a learning organization. When the KMT begins utilizing the five learning disciplines - life programs of study and practice (Senge et. al., 1994): (1) to expand members' personal capacity, (2) to hold and seek a vision, (3) to reflect and inquire, (4) to build collective capabilities, and (5) to understand systems. The researcher believed that KMT should be able to improve quality, cope with change, and create an energized, committed party organization for competitive advantages.

**Fourth Implication:** "The Institute needs to vary teaching strategies to maximize learning." Participants of adult programs learn best when new information/skills build on past knowledge and experience. Adults are more motivated to learn when a variety of teaching methods is used. They learn both in independent, self-reliant modes and in interdependent and collaborative ways (Boyle, 1981, and Apps, 1991). As a result, from researcher's points of views, planners can choose the most appropriate format or combination of formats so that a wide range of styles and conditions for learning can be
accommodated. Planners of convention programs can utilize case studies, group
dynamics, brainstorming and motivational games to enhance the Action-Oriented,
Visionary and Energetic categories. Planners and administrators of the Institute need to
acquire more knowledge and receive on-the-job training to be able to coordinate a more
effective convention program and implement these strategies.

**Fifth Implication:** "The Institute needs to restructure its educational goal." This study indicated that participants who were members of the KMT tended to have the lowest mean in the Personal Characteristics level. This may be because they spent much of their formative years in the knowledge-based and technical-related learning. Management skills are technical and teachable, while personal characteristics are traits that are both inherited and learned through life experiences. The results learned through life experiences are difficult to control. Non-technical skills (personal characteristics) are more abstract and vague to teach than technical skills (management skills). Because of strong competition in the entrance exams for high schools, colleges and universities, this is especially true for the education in Taiwan that focuses on technical skills. In modern education, an important lesson is frequently overlooked — learning how to live. Students are seldom taught how to live in harmony with themselves and others, to value and incorporate balance in their lives and to be deliberate about the things they want to experience and influence (Orem & Demarest, 1994).

**Sixth Implication:** "The Institute should train leaders or potential leaders with abilities which fit future society needs." Willier (1995) pointed out that leadership should be more important in the future; however, leadership will be harder. Subordinates are more autonomous — and leading them becomes a challenge. Relationships will be all-
important. Today’s solutions may be obsolete in tomorrow’s environment. Leadership will likely be determined by who is most expert on the matter at hand — not by corporate hierarchy. Those who once were enemies will find ways to work together for mutual benefit. Confrontation is out; collaboration is in (Willier, 1995). In nonprofit organizations, two ideas are poised on the cutting edge of thought and action: rebuilding community and a concomitant need to create, develop and foster a new leadership for the new century. Rebuilding and recreating a sense of community requires special people, particular skills and unique leadership traits. In addition, the next century will bring new and extraordinary requirements that leaders will need to exhibit.

The researcher supports the view of Gray that effective 21st-Century leaders should: 1) know and understand that bureaucracy is dead, 2) possess a global and holistic perspective, 3) create and communicate vision, 4) promote and initiate change, 5) disperse power, 6) manage technology and distribute information, 7) embrace and value diversity, 8) inspire and motivate 9) model integrity and ethical behavior and 10) respect and value people in the quest to rebuild and recreate a sense of community, (Gray, 1995).

All the participants of the Ruling Party in Taiwan met required criteria based on performance, contributions, and leadership. The reason that the mean of the factor “persistent” was the lowest in this study may be because not only do leaders face individual internal frustrations, but also because of other impacts of the external environment over which they have no control. However, these leaders are being prepared to assume leadership roles and responsibilities for their communities to create positive changes and to benefit the society of Taiwan and the Chinese government. The Sun Yat-
sen Institution on Policy Research and Development has been the main and highest training institute to provide various programs to the KMT members.

Three purposes of adult programs are: (1) to promote changes in the way individuals behave so their performance is enhanced, (2) to encourage the growth and development of individuals and (3) to assist adults to bring about change in societal norms and values (Boyle, 1981 and Apps, 1991). "Persistent" is the most important attribute to be strengthened by training. Napoleon once said, "Victory belongs to the most persevering. The longer individuals persist, the more convinced and determined they will become. If one thing does not work, they will try different ways and persevere until they finally succeed."

Seventh Implication: "The Institute should appropriate funds to implement leadership workshops for developing and motivating members' leadership potentials."

Compared with the other statements on the LAI, the highest mean was for the factor of "sensitivity and respect." Truly respecting others is the bedrock of motivation (Levine & Crom, 1993). Manning, the chairman of a giant U.S. advertising firm, once spoke before an audience of young professionals. "Brains and talent and energy are merely the entry fee for the race. But those attributes are not enough. To win, the golden rule that you need to know and live by is, 'Do unto others as you would have them do unto you.'"

Czech President Vaclav Havel said, "The salvation of this human world lies nowhere else but in the human heart." President Lee of the Republic of China and the Chairman of the KMT said, "Whatever I have done as president of my nation, I have done with the people in my heart." (Lee, 1995). From the penetrating views of these political leaders, we are able to discern that participants of this study can humanize the organization with the trait
of “Sensitivity & Respect,” which was the highest mean among the 37 attributes. This provides a basis that will lead to full respect for individual freedom and popular sovereignty.

Recently, President Lee and Vice President Lan established a foundation for the purpose of cultivating leaders for the KMT. President Lee identified leaders as those who are action-oriented, have visions, abilities of excellent communication and accept responsibilities. These are the attributes of people that KMT need desperately to cultivate. The rejuvenation of the KMT depends on these attributes in its leaders. Consequently, since the KMT has appropriated funds to implement leadership workshops, it must focus on executing these concepts of developing and motivating its members’ leadership potentials.

Recommendations

First Recommendation. This study was limited by the sample size. For most of the population sampled, under six demographic variables were equivalent in size; however, there remained a small percentage of variables that were highly disproportionate. Two examples are living place (Taiwan and Overseas participants), and marital status (Single and Married). This limitation of sample size may have influenced the significance of the test and even the findings. A higher number of representatives from overseas might have affected the mean just by the sheer impact of the numbers. With the overseas participants’ population so low it is difficult to discover at this point in time any discriminating relationships. Therefore, the primary recommendation is to replicate this study with increased numbers of participants, especially the representatives
of scholars from overseas. Increasing the number of overseas participants should contribute toward a more precise understanding of the current study.

Second Recommendation. Prior to the application of the LAI, no study had been conducted to determine and explore the leadership attribute factors and the selected demographic variables (age, gender, education levels, occupation levels, living place and marital status) of participants in the Convention of the Sun Yat-sen Institution on Policy Research and Development which is the main and highest training institute of the KMT. Furthermore, this study leaving 78% to 94% of the variations unexplained may indicate that some other crucial variables will be needed to further explain the variations. Therefore, a similar study on the leadership attributes of participants of the KMT convention should be conducted. Independent variables for personality traits, such as fluency of speech, intelligence, adaptability, and introversion-extroversion should be the primary focus. The same dependent variables, especially for the categories of Visionary, Action-Oriented and Intellectual should be maintained.

Third Recommendation. The design and implementation of the training programs should focus on the leadership attribute factors that the trainers wish to impact with little consideration given to the demographics of the participant population.

Fourth Recommendation. Leadership training programs under development should be based on Chinese culture but localized in Taiwan. Program planners should also consider both internal socio-political culture and external climate. The KMT has been a significant Ruling Party for fifty years since the ROC government retreated from the China Mainland. It has been involved in the intricate workings of the ROC. Nurturing and producing leaders is just one aspect of its many strategies and strongholds.
Every year approximately fifty formal conventions are conducted for targeted members of the KMT who represent 20% of the general Taiwanese population.

**Fifth Recommendation.** Most of the research about leadership traits was done shortly after World War I. Some different findings between this study and previous studies may be due to the time and environmental differences rather than cultural differences. Therefore, the study should be replicated with American counterparts and examined how time and environmental factors may influence leadership attribute factors.

**Sixth Recommendation.** Further research can be done to review and evaluate the validity of each of the eight categories as related to its upper levels of Management Skills, Personal Characteristics and Social Characteristics & Skills by Factor Analysis. Also, the use of Factor Analysis can also determine whether the structure of the Chinese translation of the LAI is different from the original English version of the LAI.

**Seventh Recommendation.** Further research should consider that there are many variables that can influence individual leadership attributes that may intervene with the findings of this study. For example, the socio-economic background, individual temperaments, maturity, birth order, personal beliefs and religion, intelligence, knowledge, working experiences, cultural differences, ethnic background, parents’ educational levels, working experiences, management-position levels, majors in schools and experiences in community involvement could impact individuals’ perceptions of their leadership attributes. Therefore, these variables should be controlled by random selection, using a large frame for further study.

**Eighth Recommendation.** Modern theories of leadership focus on organizational structure rather than individual characteristics. Weiss and Adler (1984) concluded that
the interaction of leadership qualities and situational factors make it difficult to identify universally effective personal traits. There seems to be good reasons for believing that individual behavior patterns do have an important effect on his/her leadership with the organizations. Stogdill (1955) discovered that effective leadership at lower levels in an organization was heavily dependent upon the degree to which it was practiced at higher levels. Ouchi and Maguire (1975) found subordinates using the same control methods as their superiors. It may well be impossible to define specific traits that will work in every leadership situation. No matter what his or her individual leadership qualities, a leader may be found to be effective in one situation but ineffective in another. Therefore, further study could include both leaders and their subordinates as the subjects of the study, in order to compare leaders' self-reported perceptions with their subordinates' perceptions of the leaders' attributes.

**Ninth Recommendation.** Since the total setting in which the phenomenon occurs is never the same, to predict or control the setting is impossible. Attempts to break a complex phenomenon into parts and to study these parts separately cannot succeed. Therefore, conducting a qualitative study could be useful to see if these mean ratings might be substantiated by a panel of experts observing or evaluating these leadership attributes in real life roles.
LIST OF REFERENCES


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APPENDIX A

LEADERSHIP ATTRIBUTE FACTORS
APPENDIX B

SURVEY QUESTIONNAIRE
A SURVEY ON LEADERSHIP ATTRIBUTES

Directions:
Read each statement carefully. Please check a number from the scale to show how much you agree or disagree with each statement and check in the correct box for each item.

<table>
<thead>
<tr>
<th>SCALE</th>
</tr>
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<td>1 = Strongly Disagree</td>
</tr>
<tr>
<td>2 = Disagree</td>
</tr>
<tr>
<td>3 = Little Disagree</td>
</tr>
<tr>
<td>4 = Little Agree</td>
</tr>
<tr>
<td>5 = Agree</td>
</tr>
<tr>
<td>6 = Strongly Agree</td>
</tr>
</tbody>
</table>

Example:
The best leader is the best follower.

1. I approach my work with great energy and have the stamina to work long hours when necessary.

2. I reflect on the relationships among events and grasp the meaning of complex issues quickly.

3. I encourage and accept suggestions and constructive criticism from my co-workers and am willing to consider modifying my plans.

4. I look to the future and create new ways in which the organization can prosper.

5. I am comfortable handling vague and difficult situations where there is no simple answer or no prescribed method for proceeding.

6. I am committed to achieving my goals and strive to keep improving performance.

7. I hold myself answerable for my work and am willing to admit my mistakes.

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8. I readily express my opinion and introduce new ideas.

9. I feel secure about my abilities and recognize my shortcomings.

10. I am willing to assume higher-level duties and functions within the organization.

11. I continue to act on my beliefs despite unexpected difficulties and opposition.

12. I think positively, approach new tasks with excitement, and view challenges as opportunities.

13. I am patient and remain calm even when things don’t go as planned.

14. I can be counted on to follow through to get the job done.

15. I am willing to try out new ideas in spite of possible loss or failure.

16. I have a sense of humor and an even temperament even in stressful situations.

17. I work to benefit the entire organization, not just myself.

18. I am honest and practice the values I espouse.

19. I learn quickly and know how and when to apply my knowledge.

20. I act consistently with principles of fairness and good conduct that can stand test of close public scrutiny.
21. I listen closely to people with whom I work and am able to organize and clearly present information both orally and in writing.

22. I genuinely care about other's feelings and show concern for people as individuals.

23. I create an environment where people want to do their best.

24. I develop cooperative relationships within and outside of the organization.

25. I work with others to develop tactics and strategies for achieving organizational objectives.

26. I am comfortable assigning responsibility and authority.

27. I establish effective and efficient procedures for getting work done in an orderly manner.

28. I facilitate the development of cohesiveness and cooperation among the people with whom I work.

29. I help people with whom I work develop knowledge and skills for their work assignments.

30. I bring conflict into the open and use it to arrive at constructive solutions.

31. I schedule my own work activities so that deadlines are met and work goals are accomplished in a timely manner.

32. I am able to deal with the tension of high pressure work situations.

33. I use appropriate approaches to influence and lead others.
34. I believe in and model the basic values of the organization.

35. I make timely decisions that are in the best interest of the organization by analyzing all available information, summarizing key points, and drawing relevant conclusions.

36. I effectively identify, analyze, and resolve problems at work.

37. I am able to identify, collect, organize, and analyze the essential information needed by my organization.

THANKS FOR COMPLETING THE SURVEY!!!
Please return the survey to Ms. Judy Yeh
領導特質調查問卷

指導教授：安東尼歐林札克博士（Dr. Anthony Olinzock）
編製者：葉雯霞（美國俄亥俄州立大學教育研究所）

領導特質問卷

填答說明：

1. 本卷的過程，由於個人的年齡、性別、教育、工作及生活背景的差異，而產生不同的領導特質。因此您的答案無所謂對與錯，請依據您的經驗與看法在____內填入號碼。每題都寫，請不要遺漏。

2. 詢卷上請不必具名，結果僅供學術研究之用，不作個別的分析，研究者將遵守研究倫理，絕對保密。請放心據實作答，您的寶貴意見，對本研究將有非常大的貢獻，懇請撥時間填寫，謝謝您的支持與合作。

3. 請您根據以下的問題，評估你對自己領導特質的看法，
   舉例：我是一個有領導能力的人

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   答案若為贊成，則作答線上寫____。

1. 我對工作充滿熱忱，且在必要時，能有精力長時間的工作。
2. 我能快速洞悉事情的相互關係，並掌握複雜問題的頭緒。
3. 我鼓勵並接受同仁所提出的建設性批評與意見，並願意考慮適當地修訂個人的計劃。
4. 我展望未來，並提出促使單位進步的新方法。
5. 面對艱難的時代，我可以從容處理複雜及模糊的情況。
6. 我努力達成個人目標，並積極提升工作表現。
7. 我具有創造力，並為組織帶來新見解及新構想。
8. 我主動表達個人意見，並提出新構想。
9. 我肯定自己的能力，並且認清自己的缺點。
10. 在單位中，我願意承擔更高的職務與更重的責任。

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11. 不管是否有突發困難或反對意見，我依然堅持個人信念。

12. 我正面思考，情緒高昂處理新任務，視挑戰為機會。

13. 即使事情沒照原訂計劃進行，我仍然保持耐性及鎮靜。

14. 我可以被授予重任，並把事情完成。

15. 儘管有可能失敗，我依然願意嘗試新構想。

16. 在有壓力的情況下，我仍然保有幽默感及溫和的脾氣。

17. 我以組織利益為前提，並非僅為個人。

18. 我謹實並踐行我信奉的信念。

19. 我學習能力強，並且知道如何及何時去運用所學。

20. 我言行一致，並且可以接受輿論的考驗。

21. 我有對同仁傾聽的能力，並且能以口語及書面方式，有組織而且清楚地表達意旨。

22. 我誠實地在乎別人的感覺同時關懷群眾如同關懷自己。

23. 我創造一個讓同仁想要全力以赴的環境。

24. 我在單位內外，建立並發展合作的人際關係。

25. 我與他人共同商討對策，以完成組織的目標。

26. 我可以自發地授予他人責任與權力。

27. 我做事按步就班，並重視效率。

28. 我促進同仁之間的凝聚力與合作度。

29. 我幫助同仁增進其工作上所需的知識與技術。

30. 我能公開處理衝突，並且尋求建設性的解決方案。

31. 在時限內我能根據計劃適時地完成工作目標。

32. 我可以處理因工作壓力所帶來的緊張情緒，我用適當方法影響及領導他人。

33. 我用適當的方法影響及引導他人。

34. 我對組織有堅定信仰，並能以身作則。

35. 我能分析狀況釐清重點，歸納結論並適時地做出對單位最有利的決策。

36. 我能有效地分析，並解決工作上的問題。

37. 我能搜集組織及分析單位所需的重要資訊。
作答卷

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第二部份：個人基本資料

為了幫助進一步分析，請您不必具名，依實際情況寫，並在適當的格內打“√”。

1. 性別：__男 __女
2. 年齡：__30歲以下__ 31-40歲 __41-50歲 __51歲以上
3. 職業：________________________
4. 居住地區：__台灣__ 美國 __ 其它
5. 教育程度：__國中以下__ 高中（職）__ 專科
   __大學__ 醫學院 __ 碩士 __ 博士
6. 婚姻狀況：__未婚 __已婚
APPENDIX C

HUMAN SUBJECTS CLEARANCE
APPLICATION FOR EXEMPTION FROM HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD REVIEW

All research activities that will involve human beings as research subjects must be reviewed and approved by the appropriate human subjects Institutional Review Board, or receive exemption status, prior to implementation of the research.

Principal Investigator: Chunzeck Chun-hen

Academic Title: Associate Professor

Department: Work Force Education

Campus Address: 225 Hampshire Building 1

Co-Investigators: Yeh Wen-hai

PROTOCOL TITLE: Perceived Leadership Attributes of Chinese Leaders in Taiwan

* THE ONLY INVOLVEMENT OF HUMAN SUBJECTS IN THE PROPOSED RESEARCH SHOULD BE IN ONE OR MORE OF THE EXEMPTION CATEGORIES LISTED ON THE BACK OF THIS APPLICATION.

CATEGORY: (Check one or more) #1 #2 #3 #4 #5

SOURCE OF FUNDING FOR PROPOSED RESEARCH: (Check A or B)

A. OSURF: Sponsor RF Proposal/Project No.

B. Other (identify)

EXEMPTION STATUS:  APPROVED  DISAPPROVED**

JUL 16 1996

** Principal Investigator must submit a protocol to the appropriate Human Subjects IRB.

IMPORTANT NOTICE TO INVESTIGATORS: Exempting an activity from review DOES NOT absolve the investigator of the responsibility of ensuring that the welfare of human subjects in the activity is protected and that methods used, and information provided, to gain subject consent are appropriate to the activity.
PANEL OF EXPERTS

Dr. Chi-En Hwang
Department of Psychology, Cedarville College
Cedarville, OH

Dr. Li-Ling Kuo
Professor of Sociology
Taiwan Normal University
Taipei, Taiwan

Dr. Richard Sun
Engineering Supervisor
Aero-Thermal Department
Chrysler Technology Center

Dr. Fang-Mei Law
Research Specialist
The Ohio State University
Columbus, OH

Mr. Shi-Sen Shiu
Associate Professor
Counseling Education
National Kaohsiung Institute of Technology
Kaohsiung, Taiwan

Mr. Jr-Gang Cheng
General Manager
Success Business Consulting Company
Tainan, Taiwan